Dube

India since Independence

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Social Report on India 1947-1972

Editor

S C Dube

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Edited by
Satish Saberwal

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India since Independence

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Social Report on India 1947-1972

Editor
S.C. DUBE



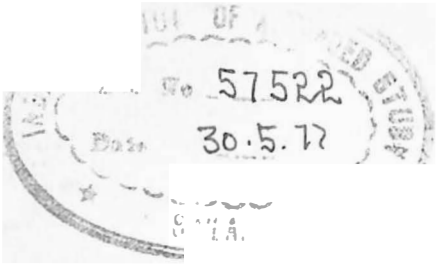
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ISBN 0 7069 0481 8

1V02D1304



Rs 75

301.240954
85131

Library IIAS, Shimla
301.240954 D 851.3 1
00057522

Printed at Prominent Printers, K-9, Naveen Shahdara, Delhi-110032

PREFACE

This book is the outcome of the fusion of interest and collaboration of effort in future-oriented research on the part of two major research institutions—the Indian Council of Social Science Research and the Indian Institute of Advanced Study. In this general area the Council has an active and wide-ranging programme covering social indicators, social trends, and, generally, questions of the quality of life; the Institute is engaged in analytical and reflective exercises on alternative futures for India. A retrospective study of major developments and significant trends in the country, during the first twenty-five years of its independence, fitted into the programmes of both. *India since Independence* is the result of their cordial and understanding cooperation.

I was invited by the Indian Council of Social Science Research to plan, coordinate, and edit a social report on India: 1947-72. Towards the completion of this project adequate financial support and full academic freedom was assured by the ICSSR. The Indian Institute of Advanced Study became a partner in this endeavour and placed at its disposal its considerable resources—library, research and secretarial assistance, and partial support towards the cost of publication. Having identified the authors to whom studies were assigned, the ICSSR, the IIAS, and the editor left them free to develop their argument within the given framework: for the selection of facts, the modes of analysis, and the conclusions, they alone are responsible; neither the sponsoring institutions nor the editor should be assumed to have endorsed their views.

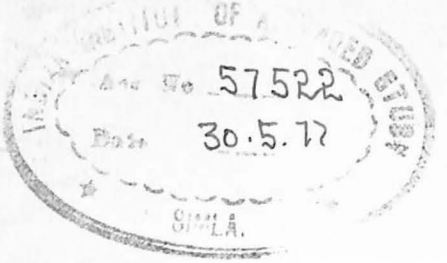
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A task of this magnitude could not have been completed without

the cooperation of the authors whose contributions enrich this volume. To keep the book within a manageable size and to enhance its utility for non-specialist readers, it was essential to subject most contributions to editorial cuts, abridgments, and some rewriting. In doing so I have made every effort to preserve the flavour and distinctiveness of their style. I am grateful to the authors for their sensitivity and responsiveness to the needs of the undertaking.

The Indian Council of Social Science Research has set for itself the commendable ideal of recognizing and respecting the autonomy of scholars to whom it assigns special tasks: I bear witness to it. Mr J. P. Naik was an unfailing source of support and encouragement.

With some hesitation I record my thanks to Professor S. Nurul Hasan, Union Minister of Education, for the keen interest he has evinced in this project. His interest was primarily personal and scholarly, although as the Chairman of the Governing Body of the Indian Institute of Advanced Study also, he extended full support to the endeavour.

It is difficult to acknowledge individually the assistance received from many colleagues at the IIAS. I shall mention only S.K. Sood, J. C. Kaushal, G. L. Sharma, S. K. Arora, and N. K. Maini who shared the chores of typing and retyping, of comparing copy and checking proofs. Professor S. R. Mehrotra was informally associated with the project since its inception, but his help was especially valuable in seeing it through the press.

India since Independence is an objective social report on the country's performance and trends during the first twenty-five years of its independence. It is positive in outlook, but also unsparingly critical. It is hoped that the book will provide material for reflection and action towards redesigning India's future.

Indian Institute of Advanced Study
1 March 1977

S.C. DUBE

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INTRODUCTION

S. C. Dube

This book is about the first twenty-five years of independent India: in Nehru's eloquent phrase, about the country's tryst with destiny and the redemption of pledges made to the people. These twenty-five years may be only a moment in India's long history, but they have been years of sharp and often dramatic contrasts. They have witnessed many changes in the mood of the people; the spectrum has ranged from euphoria to despair, from ecstasy to anguish, and from faith to cynicism. During the first quarter century of its independence the country was put to severe and agonizing tests on more than one occasion. Relentless pressures, from within and from without, put its viability as a nation on trial. There were reversions to primordial loyalties giving rise to a series of infra-nationalisms, proto-nationalisms, and sub-nationalisms, and yet in the face of deepening crises—when it mattered most—there was always a return to the assertion of a genuine nation-ness. To many it is a miracle that India has survived as a nation. In the economic and social fields, during this period, the country has registered some definite gains, but the gap between promise and performance has always remained conspicuous. Embedded in these years are several utopias for a brave new world in India that did not materialize, a number of ambitious development plans that did not take off, and many pledges to the people that remained unredeemed. The interplay of light, shadow, and darkness during this period has been baffling.

For India this has been a long mile—the course has been tor-

tuous, the speed-breakers have been unprecedented, and the burden has been too heavy to be carried in one stride. The changes in the magnitude and dimensions of social and economic problems and in the society's perception of them were so quick that quite often the planning and administrative apparatuses were taken unawares and found themselves unprepared to cope with them. Add to this the contradictions and incompatibilities latent within the national system and the uncertainties of a manifestly unjust world order. Together, these factors do not provide an alibi for failure, but they do illustrate the complexities of the situation as well as the range and intractability of the problems involved. These difficulties notwithstanding, the country has moved forward on most fronts. The infrastructure created and some of the foundations laid will serve it well, whatever transformational ideals and social objectives it chooses to adopt.

Failures are more visible than successes. That is why perhaps even some of the more perceptive observers of the Indian scene have played the gains in a low key and have tended to magnify the absence—or, at any rate, the slowness—of accomplishment. Some of their criticism is valid, the progress certainly has not been as impressive as it might have been. India still has miles to go and many promises to keep, but the effort that has gone into nation building and economic development should not be disparaged. The profile of India, in the opening chapter of its history as a free country, is not one of stagnation and decay; it is characterized by search and endeavour. The search for objectives has been there, however clouded and fumbling it may have been. Evidence of endeavour is also not lacking, though it has not had a firm sense of direction nor the degree of resoluteness one may have desired. And there undeniably is some solid achievement.

The contributions brought together in this volume make a retrospective survey of the major developments and trends in Indian society during the first twenty-five years of its independence. The effort has been to present a balanced appraisal of endeavour and achievement. Though it mainly offers cross-sectional studies of the extent and the directions of change, this book has been inspired by a living concern for the future. By design it has avoided futuristic exercises involving a series of projections, forecasts, and predictions: its principal focus is on emerging trends and on their implications for the future. The central assumption underlying this

attempt is that a critical contemplation of the contemporary social reality is essential for designing a preferred future.

Towards a Preferred Future

Depending upon one's cognitive map and belief pattern, one can look at the future in many different ways.

A group, or society, may have unquestioning faith in the eventual return of a golden age. A culture may share a deeply ingrained belief that the wheel of time follows a pre-ordained course, inevitably involving decline and decay but always leading to the re-emergence of a state of perfection.

On a more simplistic level, there may be a faith in the appearance of a saviour who would repair the damages caused to society by the frailties and failings of man and restore to the social order its faultless pristine purity. In small but globally distributed groups—in the past as well as in the present—there have been cults founded on the belief that their gods are dispatching ships laden with a cargo of all the good and the desired things.[1]

Such orientations to the future assign an essentially passive role to man and society: what is to happen, whether good or bad, will happen anyway and without the intervention of man. The flow of time is assumed to have its own logic which dictates changes in the social order; man is at best an inactive spectator, a victim of its malevolence or a beneficiary of its bounty. Or there is a belief in supernatural intervention, hopefully to bring about changes for the good. But the date of the delivery of the much desired cargo always remains tantalizingly uncertain—not too remote to evoke apathy, nor too close to be exposed to the risk of being proved false.

There have been in the past some men of remarkable oracular capacities,[2] they had a long-range vision of the future. Several of

[1]Cargo cults have been reported by anthropologists working in many different island societies. Comparable cults are also found among tribal groups encapsulated within larger societies.

[2]The earliest known work of this type is the *Book of the Dead* written in Egypt around 3,500 B C. The trend continued, although not all records of this nature have been preserved. In many societies there was a definite tendency to recognize and articulate the inadequacies of the "present" and to outline an ideal "future." Of course, these efforts were not based on rigorous and systematic analyses of present trends and their implications for the future. Nor did they represent serious thinking in cause and effect terms towards designing a

their predictions about the future have seemingly come true, but nearly all of them have had one snag or the other. They are so vaguely worded and are capable of being put to so many divergent interpretations that it is difficult to relate them to specific points in time, to specific groups of men, or to specific sequences of events. There have also been others whose visions have transcended the present and who have looked deep into the future. It is incredible but true that some of their forecasts have proved right: but only some, others have gone wide off the mark. A number of major science fiction writers can be put in this category.[3] They had a great deal to say about the shape of things to come; some of their projections came amazingly close to what actually happened. But nearly all of them were silent about the mechanics of the transformations they had projected. Determinants and instrumentalities never figured either prominently or in sufficiently clear detail in their works. Some of the fantasies of yesterday have indeed proved to be the facts of today and some more may emerge as the facts of tomorrow, but not offered in a cause and effect framework they provide little understanding of the processes implicit in the emergence of the new order. And a great many of their prophecies are in the realm of pure fantasy; the known laws of science rule out the possibility of their ever emerging as realities.

To the modern mind the golden age and the wheel of time make sense only in a metaphorical sense. It does not accept the idea of divine intervention either in solving the tangled problems of contemporary man and his social order or in the ability of such intervention to deliver the gifts of affluence and continued prosperity. Oracles and crystal-gazers—old and new—can offer it little comfort, for it is convinced that the problems both of *being* and of *becoming* require a manifold and constant effort on the part of man. He can make or unmake himself; both survival and the enrichment of life require ceaseless vigilance and relentless endeavour.

---

future. They rested on intuition and plausible though superficial arguments.

Several religions—Buddhism, Christianity, Hinduism, Islam, Judaism—have literature containing long-range predictions about the destiny of man. Minor religious orders appear to have specialized in such oracular pronouncements.

[3]H.G. Wells and Jules Verne are good examples. Some of those who followed them were more sophisticated.

Today mankind has a very real concern for its future.[4] There are deeply disturbing signs of a threat to its very survival. Population explosion, rapid exhaustion of non-renewable natural resources, growing atmospheric pollution, and alarming ecological imbalances, are all menacing signs. They point to a bleak future of possible confusion and chaos and even to the ultimate destruction of human civilization. Equally significant are the disharmonies and imbalances in the world order and a manifestly unequal and unjust distribution of the control over natural resources and technological processes. This has led to a serious state of instability that poses challenges which must be met with imagination and insight if mankind has to survive. Within the nations themselves—both developed and developing—there are inner contradictions: the performance of the established order is unable to match the new urges of the people and the aspirations they have acquired. This difference between performance capability and the revolution of rising expectations generates a series of baffling problems.

These problems cannot be brushed aside. To do so would be to invite disaster. The threats to survival need competent diagnosis and urgent remedial action. The crumbling world order requires re-structuring on the foundations of justice and equality. Above everything else, every country must endeavour to set its own house in order. Global action is necessary, but it should not imply de-emphasizing national effort.

It is conceded that mankind has utilized the infinite potential of science and technology only partially. Science and technology are capable of contributing more not only to man's capacity for survival but also to his building a better future for himself. But they operate within a framework of motivations and incentives rooted in the structure and values of society. In order to be productive they need efficient organization and imaginative management. More important perhaps is a clear definition of purpose behind scientific and technological endeavour and the adequacy of

[4]This awareness was heightened in the mid-sixties. The concern for the future became nearly obsessive. It is estimated that in a decade some 30,000 new entries were made in the bibliography of literature on the future. There were significant refinements in methodology and scientific procedures for forecasting were evolved. Futurology became respectable; several well-endowed institutions were set up to carry out on-going programmes on this subject.

social controls to prevent it from misdirection. Doubtless, science and technology have the capacity to sustain human society and to enable it to develop, but they can easily be put to destructive uses as well. They can contribute enormously towards building a new order with a promise of enrichment of the quality of life for everyone, but it would be only wishful thinking to assume that they can do so on their own power. The human factor is important and our efforts in the fields of structural modifications of society, of bringing about necessary value transformations, and of providing a thoughtful base for science and technology to serve mankind will require a herculean effort. Limitless faith in the ability of science and technology to solve all human problems is not really adequate to cope with the infinitely complex total reality.

On the other hand, there are some who have written off mankind as a lost cause and who feel that human societies will move from crisis to crisis, each succeeding crisis being one of greater magnitude and complexity than the preceding one. These recurrent crises will leave mankind in a tangled mess and ultimately lead to its destruction. These cheerless prophecies discount the potential of man to adjust and adapt himself to the needs of survival. Mankind can respond creatively to the threats to its existence. Its capacity to do so should not be underrated.

Of course, any effort towards freezing the world and its different parts at the present levels of development will not do. The "limits to growth theory," with all its imperfections, merits serious consideration, but it would be absurd to advise only the Third World to pay heed to its compelling logic. The deprived will not accept it. The "lifeboat theory," suggesting that the developed countries concentrate on their own survival and help only those who demonstrate an unmistakable will and capacity to survive, but leave alone the many underdeveloped countries whose situation is anyway beyond possibility or hope of repair, represents a pathological state of mind.[5] Such thinking reflects a callous indifference to the

[5]In the on-going dialogue on development and on man's future, the concept of a "national triage" has figured prominently from 1974 onwards. The French word *triage* refers to the procedure of sorting out battle casualties for medical and surgical attention. Those who can be saved by immediate attention are taken care of; those who are in too serious a condition can be left unattended. The notion can be applied to sick and afflicted nations also. Discussing the

suffering and the misery of an overwhelmingly large proportion of mankind. A philosophy of this type, if it is allowed to prevail, will only succeed in precipitating a dangerous crisis.

There are many who believe that the human condition has been mishandled but who, at the same time, also do not find cause for despair. What is needed most today is reflection followed by action. Problems of survival and of redesigning the future have to be contemplated in their global as well as national contexts. Because of its pathologies and dysfunctions the world order is as much in need of repair as the intra-national systems which suffer from inadequacies of thought and action. At both levels the task involves two major components—first, a critical assessment of the existential reality, and second, normative reflection on what it ought to be. In operational terms these two components are closely interlinked; together they will provide a base for action.

It is comparatively easy to make estimates of population growth and of the volume of additional requirements of the growing human family. This could be done for each country individually or for the world as a whole. One could forecast the increased needs in terms of food, water for human consumption and irrigation, clothing, housing, and energy for the estimated increase in human population. It would not be too difficult, given the acceptance of certain premises, to work out the inputs required for the education, medical care, and entertainment needs of the population. Problems of pollution and public order can also be anticipated with a fair degree of accuracy. Such exercises, though necessary, are not enough. They inevitably have to make certain assumptions. In doing so one discovers that the number of intervening variables is perplexingly large: the intangibles and imponderables, implicit in the process, are too many. They involve consideration of a series of delicate and complex issues. Can the perceived needs be met without redefining the social goals? For this a "good life" must be defined. The available institutional means may not be adequate for

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ethics of food relief, the Forrester group of MIT has arrived at the conclusion that food aid to developing countries will be unethical if it leads to further population growth in recipient countries and results in denial of food to those elsewhere committed to population control (see report of Jay Forrester's address to a Scientific Conference at Franklin Institute, Philadelphia, in *New York Times*, 17 October 1974).

the realization of the new objectives. As such, alternative paths should be found. An assessment of the costs and injuries of this change will be necessary. The entire range of organizational and motivational factors will also have to be kept in mind.

We have some fairly reliable forecasts of global needs, but a satisfactory definition of "minimum needs" has so far eluded us. Country profiles of the need structure are also being built up step by step,[6] but some of the assumptions underlying them are open to question. A major drawback in most of these studies is that they are not related to the emerging trends in society and do not take sufficient account of the changing perceptions of the people in respect of their needs. The gap between the desired and the desirable on the one hand, and between the desired and the possible on the other, is often left unbridged.

In thinking about a preferred future social analysis can make a limited though significant contribution. Meaningfully and imaginatively handled studies will not only expand our awareness about the present, but will also make us more literate about the possibilities for the future. Raising of consciousness in respect of the elements to be designed into the future will be an important function of such studies.

As a first step, diagnostic social analysis can offer a balanced appraisal of the social situation. Beginning at a critical point of time in the past, significant developments and major trends can be brought out in clear relief. Identification of trends is essential for determining future alternatives. The analytical aspects of such a retrospective review can be related to a series of meaningful questions. What kinds of goals had the society set for itself? Did it move towards their realization? In the process, were there any goal transfers? Was there a significant gap between promise and performance? And if so, why? Answers to these questions would be helpful in assessing past effort and also in determining the value of current effort. At any rate, they would be a necessary step towards identification of the parameters of performance. The very least that we can learn from them is how the future will shape itself if there is no intervention or manipulation to give it a particular direction.

[6]For example, the *Second India* studies sponsored by the Ford Foundation and a number of reports produced by the Committee on Science and Technology project the needs of India in a number of fields in the years to come.

Logically this should lead to an examination of the need for a redefinition of goals and for setting new social objectives dictated by changes in the social environment.

At this point one can start envisioning workable utopias and thinking about alternative paths of development. For each of the projected paths, a careful consideration of its feasibility and of its proximate and ultimate costs and benefits would be essential. From here one could move on to preparing blueprints for action.

It is not suggested that such exercises by themselves will solve the problems of any country or of the world, but they will certainly illuminate the path to action. They will provide at least the advantage of moving from a known position to a desired destination, with a fair estimate of the difficulties and of the costs involved in the options that we pick up.

Social Report on India: The Framework

This volume attempts to survey the changing social scene in India from 1947 to 1972. Intended as a social report, it seeks to examine the social situation as it was on the eve of India's independence and as it was twenty-five years later. The major developments taking place and the trends emerging in the intervening years have been examined in some depth. What we get in consequence is a profile of changing India, bringing out with some clarity not only the direction and the volume of change but also the changing perceptions in regard to them. The book neither attempts any startling projections nor does it make any dramatic forecasts. It presents an account of endeavour and achievement and focuses on the tasks that remain undone.

On 15 August 1947, India joined the community of free nations. From this day it could govern its own destiny and, subject to the constraints of the world order, take decisions about its future. It could set its own objectives and devise appropriate strategies to achieve them. This date provides a convenient point to begin the survey.

Those invited to contribute to this volume were provided with a broad framework and asked to follow closely the general guidelines evolved for the report. First, they had to succinctly but adequately describe the situation in respect of the allotted theme, as it was when India attained national independence Second, they

were called upon to trace significant developments in the given field in the last twenty-five years. There was particular emphasis on their bringing out, as clearly as possible, the major trends visible during this period. By implication they were expected to assess whether the society had moved toward or away from the goals it had set for itself and also if, in the process, there were any meaningful goal transfers. Third, they were also required to indicate possible trends that were likely to manifest themselves as India moved towards the year A.D. 2001. With varying emphases, all contributions included in the volume have attended to the first two tasks. But in respect of the third, i.e., the likely trends in the next quarter century or so, many of them have hesitated to hazard an unequivocal guess. In retrospect, one can understand their hesitation and difficulty. When these papers were being written the world order was under a great strain and the country itself was in turmoil. In a period of uncertainty they did not like to play the oracle. The Delphic probe failed to extract significant intuitive forecasts of possible futures.

By design this report was restricted to these three tasks; although the different essays in it do offer perceptive insights regarding the need for goal redefinition and also about alternative paths. These emerge more clearly in the report as a whole. Again by design, this social report had to cover the period of only twenty-five years. No effort was made to update it by bringing it as close as possible to the time of publication, for it is difficult to write with objectivity and candour on very recent happenings.

A part of this report is devoted to key sections of India's population, another to key sectors of its life, and yet another to summary appraisals.

Appropriately it opens with a demographic profile of India, considering different aspects of the country's population. In a sense this profile links up with most of the contributions included in the volume. The next two essays present the rural and the urban contexts of change. The rural-urban dichotomy and linkages come up for discussion in several essays that follow. Together the first three contributions provide the necessary background for the studies focused on important segments of the population and some significant areas of national life.

The next four essays are devoted to the minorities, the scheduled castes and the scheduled tribes, the youth, and women. There is

some necessary overlap among these essays themselves and between them and the three preceding ones. The integrative dimension of nation building has been in the forefront of India's national priorities. The country appears to have adopted a policy of stabilized cultural pluralism and has made a special effort to bring about the integration of the minorities, as well as of the scheduled castes and the scheduled tribes, into the national mainstream without detriment to their individual cultural identities. As such, a consideration of their problems and prospects was regarded as essential. Besides, the scheduled castes and the scheduled tribes are a special constitutional responsibility of the government and the society. What was happening to them had to be looked into carefully. Two other elements chosen for separate treatment are the youth and women. Demographically the youth constitute a large and important segment of India's population. The restiveness and ferment noticeable in this section needed analysis. And no profile of changing society in India could be complete without an assessment of what was happening to women. Women are no longer the neglected other half, they are playing an increasingly important role in India's national life. Changes in attitudes towards them and in the roles that they play affect the society as a whole.

At this point, we turn our attention to specific problem areas and review their progress, or lack of it. In a way, the essays on education and communication supplement each other, for the processes involved in both the areas are aimed at enlarging the cognitive map and at bringing about attitudinal change. Of course, formal education is better geared to imparting skills than communication through the mass media, although the latter are also striving hard to take up this function. Both education and communication have an important role to play in national reconstruction and social change. The next two essays are devoted to literature, culture and the arts—to aesthetic expression and creativity. In a largely illiterate country the reach of literature is limited, and culture (narrowly defined) and the arts remain confined to a small section of the country's population. It is essential to consider the poverty of culture in relation to the culture of poverty. Questions of public health and population control are considered in an independent contribution. The health needs of an impoverished society acquire a special significance. The size and quality of the population affect developments in nearly all walks of life. This

essay has to be read along with the demographic profile presented in the beginning. Urbanization in a predominantly rural country presents a set of unique problems. Large urban agglomerations tend to become festering sores. The dimensions of their problems change as steps are contemplated and taken to attend to them. The creation of new towns poses challenging problems of planning and management. These questions have been considered in an independent contribution. The next essay is devoted to the growth of science and technology and to their social impact. In quantitative terms science and technology have registered an impressive growth in India, quality-wise they also have some significant achievements to their credit. The question of their orientation and social relevance, however, still remains important. The essay that follows is devoted to a consideration of the problems implicit in the need for the maintenance of public order. It considers quantitative changes in the volume of public disorder and seeks to examine their implications for the present as well as for the future.

The last three essays offer summary appraisals. Two of them critically consider India's strategies of economic development and nation building. The last essay attempts an overview of change and indicates areas for reflection and action.

In sum, it has been our effort to present an analytical account of India's performance during a traumatic phase of its independence. This mixed record of achievement and failure has significant pointers for reorientation of policy. There are indications that some goals need redefinition, that many strategies require refinement, and that fresh thinking is needed on the choices and the options available to the country with respect to alternative paths to development. It is our hope that this book will contribute, in some measure, towards raising and enlarging consciousness with regard to India's problems and will enable the emergence of a holistic view of them. In the social science field itself, we hope, it will provide benchmarks for a more meaningful discussion of social indicators and trends, of issues of the quality of life and social development, and of the entire range of problems implicit in the designing of a preferred future.

INDIA: A DEMOGRAPHIC PROFILE

J.N. Sinha

According to the 1971 census India has a population of 548 million. With respect to population, it ranks second among all the countries of the world.

India has a federal structure with twenty-two states and nine union territories. Apart from being separate administrative entities, with well defined powers and responsibilities these units show great diversity of climate, natural resources, language, culture, and religion. While this chapter is focused on the demographic aspects of Indian society at the national level, an attempt will also be made to analyze inter-state variations in demographic trends in view of these diversities.

Demographic Situation in India[1]

The transfer of power from the British to the Indian people for setting up a self-governing country in 1947 was accompanied by the decision to divide India into two independent countries, viz., the Indian Union and Pakistan. The reasons for the partition of the country are well known. While Pakistan chose to adopt the status of a communal state by emphasizing its Muslim character, India declared itself a secular democracy; it accommodated 37.5 million Muslims, constituting roughly one-tenth of her population, besides other small but nonetheless significant religious and cultural minorities.

[1]The basic sources of data for this selection are: Davis (1951), Government of India (n.d.) and Vakil (1950).

The partition fanned the flames of communal passions, resulting in massacres and the exodus of large numbers of the minority communities from one country to the other. Nearly six million non-Muslims were compelled to move from West Pakistan to India, and 6.5 million Muslims migrated from East Punjab,Delhi, and other border states in India to West Pakistan. Similar disturbances led to the in-migration of about four million non-Muslims from East Bengal to West Bengal. The Muslims who migrated from West Bengal to East Bengal numbered only one million. Thus there was a net influx of nearly 2.5 million displaced persons into India by 1950.

As a result of the partition, India has nearly 81 per cent of the total population of undivided India numbering 337 million, and nearly 77 per cent of the total area. The density of population per square mile in India was 276 compared with 222 in Pakistan. India's population is relatively more urban, about 13.8 per cent of the population residing in urban areas as against only 8.6 per cent in Pakistan.

Compared with Pakistan, India is somewhat handicapped in terms of the quality of agricultural resources. The cultivated area per head is about the same in the two countries, but India was handicapped in terms of its share in irrigated area. Of the 70 million acres of irrigated land in undivided India after the partition, India had 48 million acres or 68 per cent and Pakistan got 22 million acres or 32 per cent. India's share in the more productive sources of irrigation was even lower; for example it got only 45 per cent of the area irrigated through government canals in undivided India. India lost some of the best wheat and cotton growing areas to West Pakistan and the rich jute growing areas to East Pakistan. Indian agriculture thus suffered a relative loss, and the food situation which became unfavourable due to the Second World War further deteriorated as a result of the partition.

India enjoyed a comparative advantage in industry in terms of the location of the major industries as well as mineral resources within her boundaries. The textile industry, however, suffered an initial setback because of the loss of the sources of supply of raw materials. The economy of the border states also encountered difficulties on account of the differences in the skill composition of the refugees who came in and the evacuees who moved out. About half the earners who came from West Pakistan and an even larger pro-

portion from East Bengal, were in trade and services and they first settled in cities. This inflated the growth rate of urban population to over 41 per cent between 1941 and 1951, the highest recorded so far; at the same time, the Muslims who left India were mainly cultivators and artisans. The border states of India suffered as a result of the exodus of urban and rural artisans with skills in weaving, leatherwork, engineering, and so forth. This is reflected in a drop in the proportion engaged in manufacturing industries and an abnormal relative rise in trade and services in the Punjab.

Apart from the partition, a striking feature of the political system before independence was the existence of two parts: (1) British India which was under the direct administration of the British rulers, and (2) the princely states which enjoyed varying degrees of administrative autonomy. The two parts had independent systems of vital registration. Fortunately, the census was conducted on a uniform basis by the Government of India so that the census data are available on a comparable basis. By 1950, these princely states were federated into the Union so that the sovereign democratic Republic of India, inaugurated in 1950, comprised all parts of the Indian Union including the princely states.

Population Trends and Policies Since 1947

After India became a republic, the first population census was conducted in 1951. The population, according to the 1951 census, was 357 million. This figure excludes the population of Jammu and Kashmir and the tribal areas of Assam. When estimates for these areas are added the total goes up to about 362 million. The number enumerated at the 1961 census was 439 million. The inter-censal growth rate of population,was thus about 21.5 per cent in the decade 1951-61. The annual (compound) rate of population growth was over 1.9 per cent, which surpassed the growth rate of 1.3 per cent per annum experienced in the preceding three decades. This upset the calculations of the Second Five Year Plan of India; it was based on the assumption of an extrapolated rate of 1.4 per cent per annum. The last decade recorded a further acceleration; the absolute increase was 109 million and the rate of growth was as high as 24.8 per cent. The annual (compound) rate of growth in 1961-71, about 2.25 per cent, is the highest recorded in the demographic history of India. It is significant to note, however, that it falls short

of the rates of population growth in a number of other less developed countries where it ranges from 2.5 per cent to 3.5 per cent per annum. As international migration is negligible, the tendency towards an accelerated growth of population in India is the obvious result of a precipitate decline in the death rate unaccompanied by corresponding changes in the birth rate.

An interesting feature of India's demography is the disparate size of different states in terms both of the number of people and of the area in which they live. At one extreme, Uttar Pradesh has a population as large as 88 million (roughly one-sixth of the country's total population) in 1971; at the other extreme, Himachal Pradesh has barely 3.5 million people. Among the relatively large states which have a population of more than 40 million, we have Bihar, West Bengal, Tamil Nadu, Madhya Pradesh, and Andhra Pradesh, in addition to Uttar Pradesh. Of these, the first four are also the most populous having a density ranging from 300 to 500 persons per square kilometre as against the all-India average of 178. The highest density(549) is however, recorded by Kerala which has a population of about 21 million.

Inter-state variations in the rate of population growth in the decades 1951-61 and 1961-71 are of even greater interest from the point of view of assessing the current demographic situation and also providing a basis for projections into the future. The relevant data are presented in Table 1. The growth rates in 1951-61 in Andhra Pradesh, Bihar, Orissa, Tamil Nadu, and Uttar Pradesh were well below the national average of 21.5 per cent, while those in Assam, and West Bengal exceeded 30 per cent. Until these growth rates are split into their components—net migration, birth and death rates—it would be hazardous to attempt their analytical interpretation. One fact, however, stands out prominently to warrant an observation at this stage. All the states except Tamil Nadu, with relatively low rates of growth, are economically backward in 1951-61, as suggested by the data on literacy and levels of industrialization presented later in this chapter. These states, however, show marked increases in the growth rates between 1961-71. Uttar Pradesh, Bihar, and Andhra Pradesh, which account for more than one-third of India's population, still show growth rates of 20 to 21 per cent which is below the national average. If it is due to the unexploited potential of mortality reduction, efforts for development in the future may result in sustaining a

high rate of population growth for some time.

TABLE 1
GROWTH RATES OF POPULATION

State	*Decennial Growth rates*		*Exponential Growth rates*	
	1951-60	*1961-71*	*1951-60*	*1961-71*
Andhra Pradesh	15.70	20.92	14.7	19.2
Assam	34.50	34.70	30.1	30.2
Bihar	19.80	21.30	18.2	19.5
Gujarat	26.90	29.40	24.1	26.1
Haryana	0.0*	31.30	0.0	27.6
Kerala	24.30	26.30	22.4	23.6
Madhya Pradesh	24.20	28.70	21.9	25.6
Tamil Nadu	11.90	22.30	11.3	20.3
Maharashtra	23.60	27.40	21.4	24.5
Mysore	21.60	24.20	19.7	21.9
Orissa	19.80	25.00	18.2	22.6
Punjab	25.90	21.00	23.3	19.2
Rajasthan	26.20	27.80	23.5	24.8
Uttar Pradesh	16.70	19.80	15.6	18.2
West Bengal	32.80	26.90	28.8	24.1
All India	21.50	24.80	19.7	22.5

*Figure combined with Punjab.

SOURCE: 1. State-wise growth rates 1951-60. *In* A. Bose, ed. *Patterns of population change in India, 1951-71*. Delhi: Allied Publishers.

2. Decennial growth rates 1961-71. *In* Census centenary 1972. *Pocket book of population statistics*. New Delhi: Registrar General and Census Commissioner.

Components of population growth

The growth rate of population is the sum of the rates of natural increase and net migration. The rate of natural increase is the difference between the birth rate and the death rate; net migration is the balance of immigration and emigration. Since the net migration between India and other countries is negligible, it is ignored in the component analysis of population growth at the all-India level. However, inter-state migration, which is sizeable in some states of India, is taken into account in the analysis at the state level.

Mortality

As already observed, the accelerated growth of population in India during the last two decades can be mainly attributed to the rapid drop in mortality. Famines and epidemics on a large scale are events of the past. The output of food only doubled in the last two decades as against an increase of a little over 50 per cent in the total population. There are still recurrent droughts and floods in some parts of the country, but improvements in the system of food distribution have rendered starvation deaths a rare phenomenon. Similarly, public health administration has been sufficiently strengthened to overcome epidemics by preventive as well as curative measures. Nothing like the great influenza epidemic of 1919, which decimated over four million lives, has occurred during the last five decades. Cholera, smallpox, and plague caused roughly three deaths per thousand of population in 1921-30; they account for now only 0.5 death per thousand of population. Malaria, which affected vast sections of India's population, took a toll of almost two million lives every year until 1953 when the national malaria control programme got underway. It has now been virtually eradicated. But under-feeding and malnutrition still result in diminished resistance and heavy incidence of numerous deficiency and infectious diseases among a not inconsiderable section of the population. The loss of human life on account of these diseases, however, is being progressively reduced by relatively simple and inexpensive methods made possible by recent advances in medical science. The achievements are clearly reflected in the mortality statistics presented in Table 2.

The crude death rate is the number of deaths per thousand of population. It may be compiled from the vital statistics maintained by the public health departments of different states under the system of compulsory registration of births and deaths. But these statistics are known to be notoriously defective on account of under-reporting in most parts of the country. Fairly reliable estimates of birth and death rates may be obtained, however, by the application of analytical techniques to the census data on growth rates and age distribution of population. Since the mid-sixties the Registrar General and Census Commissioner of India has instituted a system of sample registration which provides the basis for more reliable and refined measures of fertility and mortality. While these measures suffer from sampling and non-sampling errors, they are

TABLE 2
VITAL RATES AND NET MIGRATION RATES

State	*Birth rates*		*Death rates*		*Rate of natural increase per annum*		*Net migration rate per annum*	
	1951-60	*1969-72*	*1951-60*	*1969-72*	*1951-60*	*1969-72*	*1951-60*	*1969-72*
Andhra Pradesh	39.7	35.2	25.2	15.4	1.45	1.98	0.02	−0.06
Assam	49.3	32.7	26.9	17.2	2.24	1.55	0.83	1.47
Bihar	43.4	38.1	26.1	14.9	1.73	2.32	0.09	−0.37
Gujarat	45.7	40.3	23.5	16.7	2.22	2.36	0.19	0.35
Haryana	—	42.1	—	10.4	—	3.17	—	−0.41
Kerala	38.9	31.2	16.1	9.0	2.28	2.22	−0.04	0.14
Madhya Pradesh	43.2	30.8	23.2	16.8	2.00	1.40	0.19	0.96
Tamil Nadu	34.9	32.0	22.5	12.6	1.24	1.94	0.11	0.09
Maharashtra	41.2	32.5	19.8	13.0	2.14	1.95	0.0	0 50
Mysore	41.6	36.2	22.2	17.0	1.94	1.92	0.03	0.27
Orissa	40.4	33.6	22.9	11.2	1.75	2.24	0.07	0.02
Punjab	44.7	31.6	18.9	18.0	2.58	1.36	−0.25	0.64
Rajasthan	42.7	31.2	19.4	15.3	2.33	1.59	0.02	0.89
Uttar Pradesh	41.5	44.2	24.9	22.7	1.66	2.15	−0.10	−0.33
West Bengal	42.9	29.9	20.5	9.4	2.24	2.05	0.64	0.36
All India	41.7		22.8		1.89			

SOURCE: Data for 1951-61: *Patterns of population change in India, 1959-61.*
Data for 1969-72: *Sample registration bulletin*, Vol. VIII, No. 1, April 1974. New Delhi: Ministry of Home Affairs.

a fair approximation to the real magnitudes.

The technique used for estimating death rates until 1961 involved estimation of survivorship ratios of persons of age x in one census to age x+10 in the following census (the intercensal duration being a decade in India), with due adjustment for age misreporting through mathematical smoothing devices (Government of India 1954). Recently, death rates and other measures of mortality have been estimated by the use of quasi-stable population techniques. A constant population growth rate combined with unaltered fertility and mortality produces a stable age composition. Given the growth rate and the cumulative distribution of population up to specific ages, the stable population models given by Coale and Demeny may be used to obtain the death rate that would obtain under conditions of perfect stability. Further, an adjustment factor may be applied to take account of quasi-stability introduced by a falling death rate (United Nations 1967).[2]

According to the estimates of the census actuary, the average death rate declined from 27.4 in 1941-50 to 22.8 in 1951-60. The sample registration data show a further decline to 16.3 in 1969-72. The census actuary estimate for 1951-60, however, is expected to err on the low side since it is based on the infant mortality rates obtained from the national sample survey in its fourteenth round (1958-59) without making adjustment for the possible under-enumeration of the events. An alternative exercise for 1951-60 based on the quasi-stable population method gives an estimate of 25-66 (Visaria 1964). A similar exercise based on one per cent sample data on age distribution obtained from the 1971 census shows that the death rate may be around nineteen in the decade 1961-70. (Rele and Sinha 1973). It is not possible to claim absolute precision for any of these estimates since they are based on assumptions which involve an element of arbitrary judgement. They, however, point unmistakably towards a declining trend in the death rate, even if the extent of decline cannot be precisely estimated.

The data presented in Table 2 also show that there are significant inter-state variations in death rates. Since the estimates have an unknown element of bias which tends to get magnified at the disaggregated level of states relative to that at the national level, the

[2]For details of the quasi-stable population method for estimating vital rates see United Nations (1967).

data may be used for indicating only broad orders of magnitudes. It may be noted, however, that nearly all the states share the declining trend in mortality. There are, however, variations in the ranking of different status in order of death rate from one period to another. However, as expected, states like Assam, Bihar, Orissa, Madhya Pradesh, and Uttar Pradesh, which are known to be relatively backward, ordinarily show higher death rates, while the relatively developed states of Punjab, West Bengal, Kerala, Tamil Nadu, and Maharashtra register comparatively low rates.

It may be mentioned that variations in death rate may arise out of differences in age composition as well as those in mortality at specific ages, a population with an older age composition will show a higher death rate. To eliminate the effects of changes in age composition, we present in Table 3 two statistics: the probability of surviving up to specific ages (ix) and the average number of years that a person expects to live after attaining a specific age (ex).

Table 3 shows a striking improvement in the survival probabilities of children. Out of a thousand male children born, 700 would

TABLE 3
EXPECTATION OF LIFE

(*a*) *Males*

Age	*Percentage living at age x*			*Mean after life-time at age x*		
x	*1941-50*	*1951-60*	*1961-70*	*1941-50*	*1951-60*	*1961-70*
0	100.00	100.00	100.00	32.45	41.89	47.1
5	70.04	77.61	80.92	40.86	48.72	53.0
15	61.03	73.86	78.31	36.24	40.99	44.6
45	38.8	54.1	61.8	17.63	19.2	21.4
60	21.99	32.33	41.41	10.13	11.77	13.0

(*b*) *Females*

0	100.00	100.00	100.00	31.66	40.55	45.6
5	63.07	77.54	80.03	40.91	47.01	51.8
15	59.01	73.13	76.67	36.56	39.61	43.9
45	36.2	48.2	58.2	18.61	19.9	21.8
60	21.31	29.53	39.43	11.33	12.98	13.4

SOURCE: 1. Census of India 1951, Life Tables.
2. Census of India 1961, Life Tables.
3. Census of India 1971, Life Tables, paper 2, 1974.

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have survived up to the age of five according to the mortality conditions prevailing in 1941-50; the number rose to 776 in 1951-60 and to 809 in 1961-70. The number surviving to the age of five out of a thousand female births was 681, 775, and 800 in the three consecutive decades. The probability of survival up to the age of fifteen increased from 61 per cent in 1941-50 to about 74 per cent in 1951-60 and to 78 per cent in the last decade among males; the corresponding figures for female children were 59, 73, and 77 per cent. A similar trend towards improvement is noted at more advanced ages, forty-five and sixty in the case of both males and females.

The analysis of trends in survival ratios brings out a few facts of analytical interest. First, while there is a progressive improvement in the survival prospects, the gains are less marked until the age of five. The proportion of male children surviving to the age of fifteen rises by about 26 per cent between 1941-50 and 1961-70 (from 610 to 780 out of 1000 births), but the ratio of children surviving up to the age of five rises by only 16 per cent during the same period. This suggests a relatively slow decline in the incidence of mortality during infancy and the early years of childhood. Second, while female children show lower survival probability compared with males, the gap is virtually closed in 1961 to 1970. However, as we move from age fifteen to age forty-five (the near end of the child bearing period), the gap between survival ratios among males and females remains significant and virtually unaltered, suggesting relatively higher attrition rates of women in childbearing ages among the latter on account of maternal mortality.

Mean expectation of life at birth is a good summary measure of mortality (independent of variations in age composition). According to official estimates, it registered a rise from thirty-two years for males in 1941-50 to forty-two years in 1951-60 and to forty-seven years in the last decade; the corresponding figures for females are somewhat lower, being 31.5, 40.5, and 45.6 years. Assuming that all males enter the labour force by the age of fifteen and retire when they are sixty, they would expect to live about twenty-six years of economically active life, i.e., the difference between expectation of life at age sixty minus that at age fifteen, and ten years in retirement in 1941-50. In 1961-70, the expected duration of economically active life rose to 31.6 years and that after retire-

ment increased to thirteen years. Thus between 1941-50 and 1961-70 there is a gain of six years in the economically productive period of man's life. It falls short, however, of the increase in the life expectancy at birth, which is as large as fourteen years. This discrepancy is reflected in the increased burden of child dependency, as will be seen later.

It may be noted that the expectation of life at birth in India is still very low not only in relation to the levels in developed countries like the USA, UK, Sweden, and Japan which crossed the seventy years mark around 1970, but also by comparison with countries at comparable levels of economic and social development such as Ceylon and Thailand where it reached close to sixty years in the early sixties, largely as a result of new and relatively inexpensive improvements in public health and medical facilities. Since the benefits of the new technology of death control can be realized by moderate increases in expenditure on public health and medicine, India holds the promise of more rapid reduction in mortality than that experienced so far.

Reference has already been made to the persistence of relatively high incidence of infant mortality, i.e., the number dying within one year per thousand births. While it is influenced by recent advances in medicine, the pace of its reduction also depends on a number of other factors like environmental sanitation, nutrition of mothers, and maternity facilities which are highly sensitive to socio-economic development. There are no firm estimates of the rate of infant mortality in India. Available data from various sources, however, suggest that the decline in the incidence of infant mortality has been somewhat low and the rate was as high as 139 in 1961 and 130 around 1970 (Chandrasekhar 1972, Jain 1967, Registrar General of India 1971).[3] Thus it is still more than twice as high as that prevailing in other less developed countries of Asia such as the Philippines and Thailand. Further, within the country, it varied from 110 to 186 according to Jain's estimates for the period 1951-60 and was significantly above 150 in the backward states of north-eastern and central India. The sample registration data for 1969 shows a similar pattern of inter-state variations and a range from 57 to 179 in rural areas.

[3]For various estimates of infant mortality rates, see Chandrasekhar (1972), Jain (1967), and the Registrar General of India (1971).

Fertility

The registration of births in India is also known to be very defective. The birth rate, i.e., the number of births per thousand of population, has to be estimated by indirect methods such as the reverse survival and the quasi-stable population techniques. The census actuary estimates obtained by the reverse survival method show a birth rate of 39.9 in 1941-50, 41.7 in 1951-61, and 41.1 in 1961-71. The corresponding estimates for the three consecutive decades obtained by the quasi-stable method are 43.1, 40.4, and 40.0. However, an alternative exercise by Visaria for 1951-61, based on the quasi-stable method, gives a birth rate of 44.9. On the basis of a careful examination of the estimates obtained by a variety of methods, Rele concludes that the birth rate in India was in the neighbourhood of 45 in 1951-61 and close to 41 in 1961-71 (Rele 1974). This indicates a small decline in the birth rate.

Table 2 also presents data on birth rates by states. The estimates for 1951-60 show that Assam, Bihar, Gujarat, and Madhya Pradesh record high birth rates relative to the national average, while Kerala and Tamil Nadu show strikingly low birth rates. The rates around 1970 are based on the sample registration data and are not strictly comparable with those obtained for the preceding decade. Kerala and Tamil Nadu show a decline over the decade as well as much lower birth rates relative to the national average. Other states also show a decline (with the sole exception of Uttar Pradesh), but the trends have to be interpreted with caution on account of change in the basis of estimates. A part of this decline, however, is due to the change in the age-sex-marital status distribution of the population. The number of females per thousand males declined from 941 in 1961 to 930 in 1971, and the percentage of currently married women in the reproduction ages 15-44 to total population fell from 18.0 per cent to 17.3 per cent.

The gross reproduction rate (GRR, i.e., the replacement ratio of mothers in each generation or, to put it more simply, the number of girls born to a mother on the completion of her reproductive period) is a pure measure of fertility, unaffected by changes in age and sex composition. Rele estimates a GRR of 2.92 for the census year 1961 and 2.77 for 1971. He further notes that the decline has taken place largely after 1966, his estimate for 1966-70 being 2.77 as against 2.89 for the quinquennium 1961-66 (Rele 1974: 346).

It is striking to note that the GRR in India is more than double that in developed countries like the USA and UK where it is 1.26 and 1.28 respectively.

Interesting results emerge from the analysis of the cumulative proportion of live births to total live births by age of mother and by parity (birth order). About 82 per cent of all births are completed by the age of thirty-four. Again, the fourth and lower births account for the major proportion of all births. This implies that elimination of the fifth and higher order births can only make a limited dent into the birth rate in India.

The emergence of fertility differentials in a population generally marks the early phase of declining fertility. The national sample survey and the sample registration system have both consistently shown lower birth rates in urban areas compared with those in rural areas since 1960, but the differences virtually disappear as adjustment is made for the differences in age-sex-marital status composition of the urban and rural population (Rele 1974:347). Significant differentials in fertility by religion, economic status, and education have been observed in sample surveys conducted from time to time in different parts of the country (Driver 1963, Majumdar 1960, Sinha 1957, Visaria 1974). Muslims invariably show higher fertility than Hindus. Fertility is inversely related to income but only beyond a threshold level. Education has the most pronounced effects, graduate women reporting an average completed family size of two to three as against an average of about six for the illiterate.

Net migration

The data on death rates in states presented in Table 2 are differenced from their respective birth rates to give the rates of natural increase. The estimates of net migration are obtained by differencing the rates of natural increase from the exponential rates of growth. In 1951-61, Assam, West Bengal, Gujarat, and Madhya Pradesh recorded substantial gains in population on account of in-migration, of these the first two had to absorb large numbers from Bangladesh. Punjab, Tamil Nadu, Uttar Pradesh, and Kerala lost population due to out-migration. Since the vital rates around 1970 are at best rough approximations, there is no basis for obtaining a firm estimate of natural increase and net migration for 1961-70. However, a comparison of these rates with

the rates of population growth suggests that the pattern of inter-state migration in 1961-71 remained almost unaltered in direction though not in magnitude as in 1951-61 with the two major exceptions of Kerala and Tamil Nadu which changed from net out-migrating to in-migrating states (Premi 1974).

Age and sex composition

The persistence of high birth and death rates results in a bottom heavy age pyramid. As may be seen from Table 4, about 38 per

TABLE 4
PERCENTAGE DISTRIBUTION OF POPULATION BY BROAD AGE GROUPS

Age group	*Males*			*Females*		
	1951	*1961*	*1971*	*1951*	*1961*	*1971*
0-14	37.1	40.9	41.9	37.9	41.2	42.2
15-59	57.4	53.6	52.2	56.3	53.0	51.8
60+	5.5	5.5	5.9	5.8	5.8	6.0
All ages	100.0	100.0	100.0	100.0	100.0	100.0

SOURCE: 1. Census of India 1951, Life Tables.
2. Census of India 1961, Age Tables.
3. Census Centenary 1972. *Pocket book of population statistics.*

cent of the population was in the age group 0-14. Since the declining trend in mortality is relatively more favourable to younger persons, the population in the age range 0-14 recorded small gains in 1961 and 1971. According to the 1971 census, we had over 230 million children, forming roughly 42 per cent of the total population.

The country shows a higher ratio of males in the total population and, surprisingly enough, a rising tendency towards masculinity. There were 946 females for every thousand males in 1951. The population fell to 941 in 1961 and further to 930 in 1971. The deficiency of females is more pronounced in the north and north-west regions, the sex ratio in 1971 being as low as 865 in Punjab, 867 in Haryana, 879 in Uttar Pradesh, 891 in West Bengal, and 911 in Rajasthan. The low sex ratio in India, which is unlike the situation in western countries, has been the subject of much speculative discussion. On the basis of fragmentary evidence and personal

judgement, excess female mortality and, to some extent, low sex ratio at birth are put forward as the main explanatory hypotheses (Visaria 1967).

Marital status

The data on marital status by age and sex are presented in Table 5.

TABLE 5
MARITAL STATUS BY AGE AND SEX

(*a*) *Males*

Age group	*Never married*			*Married*			*Widowed and divorced*		
	1951	*1961*	*1971*	*1951*	*1961*	*1971*	*1951*	*1961*	*1971*
All ages	48.55	52.95	55.17	46.36	42.97	41.50	5.09	4.08	3.15
0-14	95.64	98.08	98.64	4.27	—	—	0.10	—	—
15-19	—	76.14	82.14	—	23.27	17.46	—	0.52	0.20
20-24	—	43.84	50.00	—	54.60	48.60	—	1.50	0.93
15-24	54.21	60.20	—	44.56	38.80	—	1.27	1.00	—
25-44	9.72	9.34	8.97	85.04	86.61	87.89	5.23	4.05	2.99
45-54	3.87	3.26	2.99	83.20	85.84	88.89	13.00	10.90	8.20
55-59	—	2.91	2.54	—	80.88	85.07	—	16.15	11.94
60+	—	2.86	2.38	—	69.06	74.40	—	27.23	22.62
55-64	3.30	2.91	—	74.81	77.68	—	22.00	19.41	—
65+	2.72	2.81	—	62.25	64.28	—	35.21	32.89	—

(*b*) *Females*

All ages	38.76	42.36	45.17	48.41	46.31	45.67	12.82	11.34	9.13
0-14	90.47	94.87	96.63	9.33	—	—	0.20	—	—
15-19	—	29.19	42.61	—	69.57	56.05	—	1.16	0.72
20-24	—	5.97	8.80	—	91.76	89.35	—	2.37	1.39
15-24	17.27	17.01	—	80.00	81.29	—	2.74	1.70	—
25-44	2.33	1.17	1.04	84.64	88.85	92.27	13.03	9.88	6.69
45-54	1.23	0.48	0.51	59.77	61.70	71.07	38.93	37.31	28.93
55-59	—	0.42	0.34	—	48.60	58.62	—	50.89	41.38
60+	—	0.41	0.38	—	23.72	29.94	—	75.81	69.38
55-64	1.05	0.42	—	38.62	38.08	—	60.33	61.49	—
65+	9.65	0.40	—	25.44	19.12	—	73.51	80.47	—

SOURCE: 1. Census of India 1951, Vol. 1, part II-A, Demographic Tables.
2. Census of India 1961, Vol. 1, part II-C(i), Social and Cultural Tables.
3. Census of India 1961, Vol. 1, part I-C (ii), Subsidiary Tables.
4. Census Centenary 1972. *Pocket book of population statistics.* New Delhi: Registrar General and Census Commissioner.

While marriage remains an almost universal phenomenon, especially among females, it is interesting to note that there is a progressive increase in the proportion of never-married to all persons during the last twenty years. The proportion of never-married among males rose from 48.5 per cent in 1951 to 52.9 per cent in 1961 and to 55.2 per cent in 1971. Among females, the proportion of never-married rose from 38.8 per cent in 1951 to 42.3 per cent in 1961 and to 45.2 per cent in 1971. This rise is not due to lifetime celibacy or spinsterhood; it is mainly due to changes in age composition and rising age at marriage. The census of 1951 reported about 10 per cent girls married by the age of fourteen, the corresponding proportion is not available from the 1961 and 1971 census. The proportion of never-married was about 32 per cent among girls in the age group fifteen to twenty-four in both the 1951 and 1961 censuses. For 1961 and 1971 a detailed breakup by five year age groups is available. The 1961 census shows that 70 per cent of the girls were married in the age group fifteen to nineteen as against only 23 per cent married boys in this age group. The corresponding proportions obtained from 1971 census data are 56 per cent and 17.5 per cent. These figures suggest a distinct tendency towards a rise in age at marriage. However, nearly all women and about 91 per cent of men were married in the age group twenty-two to forty-four. At the same time, 10 per cent of women were widowed in this age group in 1951. The proportion of widows declined to 6.7 per cent in 1971. The decline in the proportion of the widowed is mainly due to the improved survival prospects of the couples and maybe to a minor extent, to an increase in widow remarriage.

Religion, castes and tribes

The cultural diversity of the country's population is reflected in the presence of people from almost every religion in the world and numerous castes and tribes. The data on major religions are given in Table 6. They show that Hindus constitute by far the dominant majority. They formed nearly 84 per cent of the total population in 1951. Their growth rate in succeeding decades has been somewhat low relative to the total population so that their proportion declined to 83.4 per cent in 1961 and to 82.7 per cent in 1971. Muslims, who are the most important single minority community, formed about one-tenth of the total population in 1951. Their

decennial growth was about 5 percentage points higher than that of the total population in 1951-61 as well as 1961-71, so that their

TABLE 6
DECENNIAL GROWTH AND PERCENTAGE DISTRIBUTION OF TOTAL POPULATION BY RELIGION 1951-71

Religion	*Percentage Increase*		*Percentage of population*		*Distribution*
	1951-61	*1961-71*	*1951*	*1961*	*1971*
Hindus	20.29	23.71	83.98	83.45	82.72
Muslims	25.61	30.84	9.91	10.68	11.21
Christians	27.38	33.67	2.35	2.44	2.60
Sikhs	25.13	32.38	1.74	1.79	1.89
Others	4.68	20.09	2.02	1.64	1.58
Total	21.51	24.75	100	100	100

SOURCE: 1. Census of India 1953, paper 2, Religion.
2. Census of India 1961,Vol. I, paper 2-47, Social and Cultural Tables.
3. Census Centenary, 1972. *Pocket book of population statistics.*

share in total population rose to 10.7 per cent in 1961 and to 11.2 per cent in 1971. Christians and Sikhs have also been growing at comparatively higher rates; their respective proportions were 2.3 and 1.7 per cent in 1961, and rose to 2.6 and 1.9 per cent by 1971. It may be mentioned here that the change in proportions of religions other than Hindu may not be all due to differences in natural increase. Since they are proselytizing religions, it may be in part due to conversions; though the magnitude of this process is not known, it is not likely to be significant in post-independence India.

Our censuses do not provide data on all castes. Separate data are available, however, for the scheduled castes and scheduled tribes who constitute the weaker sections of the community and are given special protection under the constitution. The relevant data, presented in Table 7, show that the scheduled castes comprised 14.4 per cent of the total population in 1951 and the scheduled tribes roughly 5.4 per cent. Their respective shares showed some fluctuations in 1961 and 1971. This may be partly conceptual. Between them, the two groups account for roughly one-fifth of the total population.

TABLE 7
DECENNIAL GROWTH AND PERCENTAGE SHARE OF SCHEDULED CASTES AND SCHEDULED TRIBES IN TOTAL POPULATION
1951-71

	Percentage Increase 1951-61	*Increase* 1961-71	*Percentage* 1951	1961	*Shares of S.C. and S.T.* 1971
1. Scheduled castes	23.08	20.10	14.41	14.39	13.78
2. Scheduled tribes	55.90*	24.12	5.38	6.81	6.79
Total: (1)+(2)	34.30	21.78	19.79	21.20	20.57

*The abnormally high rate may be due to under-enumeration in 1951.

SOURCE: 1. Census of India 1953, page 4.

2. Census of India, Vol. I, part V-A (ii), Special Tables for Scheduled Castes and Scheduled Tribes.

3. Census Centenary 1972. *Pocket book of population statistics.*

Rural-urban distribution of population

While there has been a progressive increase in the number as well as proportion of people residing in urban areas, the country continues to remain predominantly rural. Urban areas accounted for only 20 per cent of the total population in the country even in 1971. The urban population has been growing at a relatively rapid rate (Table 8), but in view of its small proportion to the total population, it has not made any effective impression on the process of urbanization. The numbers in urban areas increased by 41 per cent in 1941-51, but this rate was inflated because of the influx of refugees after the partition of the country. If we knock off this abnormal influx, the urban growth rate is reduced to 35 per cent. The increase in the next decade, 1951-61, was 26 per cent, but if adjustment is made for a more rigorous definition of urban areas in the 1961 census, the comparable figures would show a growth rate of only 34 per cent. The decade 1961-71 recorded the largest increase, being over 38 per cent. The percentage of urban population rose from 17 per cent in 1951 to 18 per cent in 1961 and to 20 per cent in 1961.

It is striking to note that there has been a much faster increase in the population of cities with 100,000+ population (Table 8A). The proportion of the urban population living in Class I cities (100,000+) rose from 42 per cent in 1951 to 48 per cent in 1961

and to 52 per cent in 1971. The percentage of urban population in all the big towns, i.e., Class I, II and III combined has risen from 70 per cent in 1951 to 80 per cent in 1971.

TABLE 8
GROWTH OF URBAN POPULATION

	Number (in millions)	*% increase*
1941	44.15	—
1951	62.4	41.4*
1961	78.9	26.43**
1971	109.1	38.22

*Abnormal influx of refugees 6%. Normal migration 35%.

**Unadjusted. The adjusted figure after taking note of def. changes is 21.23 m. and the growth rate is 34.01%.

SOURCE: A. Bose, *Studies in India's urbanization*, New Delhi: Tata McGraw-Hill.

It should also be noted that there are large inter-state variations in the levels of urbanization. Compared with the all-India average of 20 per cent, people in urban areas, Assam, Bihar, and Orissa reported less than 10 per cent of their respective population in urban areas. At the other extreme, Maharashtra tops the list with

TABLE 8A
PERCENTAGE DISTRIBUTION OF URBAN POPULATION BY CLASS OF TOWN

	I	*II*	*III*	*IV*	*V*	*VI*	*% of urban population to total population*
1941	35.4	11.8	17.7	16.3	15.4	3.4	13.9
1951	41.8	11.1	16.7	14.0	13.2	3.2	16.1
1961	48.4	11.9	18.5	13.0	7.2	1.0	18.0
1971	52.4	12.2	17.4	12.0	5.2	0.8	19.9

SOURCE: Same as in Table 8.

31.3 per cent of urban to total population, followed closely by Tamil Nadu with a proportion of 30.3 per cent. Gujarat, West Bengal, Mysore, and Punjab are also well above the national average.

The backwardness of the scheduled castes and the scheduled

tribes is reflected in the place of their residence. In 1951, 10 per cent of the scheduled castes and only 2.5 per cent of the tribes lived in urban areas. The proportion of the scheduled castes residing in urban areas moved up to 10.7 per cent in 1961 and to about 12 per cent in 1971. There has been, however, no rise in the proportion of the tribal population living in urban areas.

Literacy and levels of education

The 1951 census shows that less than a quarter of males and only 8 per cent females were literate in the sense of being able to read as well as write with understanding. Table 9 shows that during the last two decades there has been a substantial progress in literacy. The proportion of literate males rose to 34 per cent in 1961 and to 39 per cent in 1971. The proportion of literate females, however, remains significantly low, from 13 per cent in 1961 to 19 per cent in 1971. As expected, urban areas have a considerable edge over the rural areas in the levels of literacy. In 1971 the proportion of literacy among males was 61 per cent in urban areas as against 24 per cent in rural areas. A similar discrepancy is observed among females; the proportion of literate females being 42 per cent and 13 per cent in urban and rural areas respectively.

TABLE 9
PERCENTAGE OF LITERATE POPULATION BY SEX

	Males			*Females*		
	1951	*1961*	*1971*	*1951*	*1961*	*1971*
All areas	23.54	34.46	39.45	7.62	12.96	18.72
Rural areas	19.02	29.09	33.76	4.87	8.55	13.17
Urban areas	45.05	57.50	61.28	12.34	34.51	42.26

SOURCE: 1. Census of India 1951. paper 5, 1954. Literacy and Education Standards 1951 Census.
2. Census of India 1961. Vol. 1, part II-C (i), Social and Cultural Tables.
3. Census Centenary 1972. *Pocket book of population statistics.*

There are wide variations in the levels of literacy attained by different states. The proportion of literates among males was as high as 67 per cent in Kerala, about 50 per cent in Maharashtra and Gujarat, above 40 per cent in West Bengal, Mysore, and Punjab. On the other hand, Andhra Pradesh, Bihar, Madhya

Pradesh, Uttar Pradesh, and Rajasthan had less than one-third literacy among males. The range is even wider for females, more than half the females being literate in Kerala as against one-tenth or less in Bihar, Madhya Pradesh, Rajasthan, and Uttar Pradesh. The proportion of literates among females is close to one-quarter in Punjab, Maharashtra, and Gujarat.

The detailed breakup of literacy by levels of education, available from the 1961 and 1971 censuses, presented in Table 10 yields some interesting results. While 34 per cent males were literate in 1961, and 39 per cent in 1971, the proportion which had attained education of a recognized standard was only 13 per cent and 25 per cent respectively. Taking matriculation as the minimum qualification of an educated person, only 3 per cent males had attained this standard in 1961 and about 6 per cent in 1971. The proportion of females with this standard of education was distressingly low, being only 4.4 per cent in 1961. However, it rose to 11 per cent in 1971; being almost two and a half times the level a decade earlier. The proportion with matriculation and higher level of education also rose from 0.6 per cent in 1961 to 1.7 per cent in 1971.

TABLE 10
PERCENTAGE DISTRIBUTION OF POPULATION BY LEVEL OF EDUCATION

	Percentage (Male)	*Percentage (Female)*	*Percentage (Male)*	*Percentage (Female)*
	1961	*1961*	*1971*	*1971*
Illiterate	65.6	87.0	61.1	81.7
Literate (without educational level)	21.3	8.6	13.8	7.4
Primary or junior basic	10.0	3.8	19.2	9.2
Matriculation and above	3.1	0.6	5.9	1.7
Total	100.0	100.0	100.0	100.0

SOURCE: 1. Census of India 1961, Vol. 1, part II-B(i), General Economic Tables. 2. Census Centenary 1972. *Pocket book of population statistics.*

Analysis of trends in the educational levels of people brings out a few outstanding facts. First, the levels of literacy continue to

remain relatively very low in rural areas and backward states. Second, while the progress of literacy has been very slow, there has been a relatively rapid increase in the proportion of persons with recognized levels of education, especially that up to matriculation and higher levels. Third, progress in the higher education of women has been comparatively rapid, although the proportions still remain low relative to males.

An important point worth noting is the provision of free education and scholarships to students belonging to the scheduled castes and the scheduled tribes. This is reflected in the progress of literacy in these groups. In 1961 only 10 per cent of the scheduled castes and 8 per cent of the scheduled tribes were literate. This represents about half of the literacy rate shown by the entire population. By 1977, the proportion of literates rose to 14.4 per cent in the case of scheduled castes and 11.1 per cent in the case of scheduled tribes.

Working status: employment and unemployment

In every society, there is one part of the population that earns a living to support the other that is disabled for productive work by age, physiological characteristics, and social convention. Among the former a few live on income from property, but the bulk of them obtain their income from productive work and are known as workers. They comprise the labour force. The ratio between workers and the total population is known as worker participation rates.

In 1951, 39 per cent of all persons comprised workers. Since men are the chief bread winners over large parts of the country, they invariably report much higher proportions in the work force. About 54 per cent of all men, as against only 23 per cent of women, were enumerated in the work force in the 1951 census. The corresponding proportions were 57 per cent and 28 per cent according to the 1961 census. The 1971 census reported significantly lower participation rates. It was 52.5 per cent for men and only 12 per cent for women (which is less than half that observed in the preceding decades).

The erratic trends in the participation rates noted above are mainly due to definitional changes (Sinha 1972 a). The 1951 census classified the entire population into "self-supporting persons," "earning dependents," and "non-earning dependents." All persons

earning *regular* and non-casual income were classified either as "self-supporting persons" or "earning dependents." The former comprised those whose earnings were adequate at least for their own maintenance, while the income of the latter was insufficient for their support. The two together comprise the work force, if a minor fraction living on income from sources other than work are excluded. In 1961 a person was classified as a "worker" if he or she was engaged in productive work in the reference period. In the 1971 census, all persons were divided into broad mainstreams of activity, viz., as workers and non-workers "according to the type of main activity that the person returns himself as engaged in mostly."

A close look at the concepts and definitions of workers suggests the possibility of under-enumeration in 1951 as well as 1971. In 1951, the application of the income criterion led to the omission of "unpaid family workers." The 1971 census left the determination of working status to the subjective judgement of the respondents and, since non-working status of women is a mark of social superiority among the lower strata who constitute the bulk of the population, it led to a serious under-enumeration bias and a landslide in the number of female workers from 59 million in 1961 to 31 million in 1971.

The industrial working force presents a rather static view, the proportion of male work force dependent on agriculture and allied pursuits having remained nearly 70 per cent from 1951 to 1971, even though national income nearly doubled and per capita income increased by about 33 per cent during this period. Intra-sectoral changes, however, show distinct signs of improvement (Sinha 1972 b). The increase in the proportion of employees who are paid wages in non-agriculture to all workers from 13 per cent in 1951 to 16.3 per cent in 1961 suggests an improvement in the quality of non-agricultural employment. The proportion of the male work force in manufacturing industries showed a negligible increase from 9.7 per cent in 1951 to 10.1 per cent in 1961. The rise in the proportion of wage employment from 27 per cent to 37 per cent in these industries during the same period and the change in its structure in favour of modern groups like chemicals, metallurgy, and engineering, again suggest qualitative improvement. Similarly, structural improvements are indicated by the relative rise in the progressive services (public, professional, and business services) from 3.92

to 4.95 per cent as against a fall in the proportion of person services from 2.9 per cent to 2.4 per cent. Again the number of workers in mechanized transport doubled during the decade. These improvements, however, do not rule out a possible deterioration in the employment structure in some regions of the country.

The vicissitudes of the decade 1961-71—the Indo-Pakistan war in 1965, a severe drought in 1966, and the recession in the following two years—have led to virtual economic stagnation. While the distortions arising out of changes in census concepts and definitions prevent a rigorous comparative analysis of the employment structure based on the data of the 1961 and 1971 censuses, a broad dimensional view at best suggests a stationary pattern. The data obtained from the Directorate of Employment Exchanges show that between 1966 and 1971 employment in the public sector increased from 9.4 million to 10.7 million, the services alone accounted for about one-half of this increase. Employment in organized private enterprises showed, on the other hand, a nominal decline from 6.1 million to 6 million during the same period.

Women in working force

Interesting results emerge from the analysis of data on female workers. There are significant rural-urban differences in participation rates. According to the 1961 census, 31.5 per cent of all women comprised the work force in rural areas as against only 11 per cent in urban areas. Educated women have shown a high propensity to be in the work force, the proportion of women with matriculation or a higher level of education in all areas was as high as 27 per cent in 1961. In urban areas, the proportion of women in the working force rose from 20 per cent among matriculates to 31 per cent among graduates and 74 per cent among those with technical degrees.

The proportion of female workers in agriculture was as high as 82 per cent in 1961, compared with 70 per cent for men. About 8 per cent of women were in manufacturing industries, mainly concentrated on food, textiles, leather, and ceramics. It is also interesting to note that over four-fifths of all women in manufacturing are in household industries as against less than half in the case of men.

Another striking feature of female employment is the absolute fall in the numbers engaged in construction trade and personal

services in the decade 1951-61; the respective numbers having dropped from about 3.1 lakhs, 11.6 lakhs and 13 lakhs in 1951 to 2.4 lakhs, 2.8 lakhs and 11.4 lakhs in 1961. It may be noted that women outside agriculture are mostly engaged in industries and services which are likely to lose in relative importance with economic development. At the same time, these are the categories of employment which generally yield low wages and also give relatively low social status. Education and health comprise two promising areas where employment of women more than doubled in the decade 1951-61, but they account for less than 1 per cent of the female work force. It is, therefore, highly probable that the proportion of women in the work force will continue to decline with economic development for some time (Sinha 1972 b).

Unemployment

The unemployed comprise those who are looking for work in the specified reference period. Since self-employment is the dominant pattern of productive organization, especially in the rural areas, it is no wonder that work sharing arrangements are improvised so that all members share the work in the family enterprise even if it could be managed with equal efficiency by fewer members. This gives rise to widespread disguised unemployment, while visible unemployment is negligible. It is, therefore, no wonder if the 1961 census (which collected comprehensive data on employment) reports an open unemployment rate of only 0.52 per cent among rural males as against 3.25 per cent among urban males. The corresponding proportions for females are still lower, being only 0.11 per cent and 1.48 per cent.

It is striking to note that there is a progressive increase in the incidence of unemployment among the educated, the proportion rising from 1.03 per cent among literate males without any educational level to 2.76 per cent among those with primary or junior basic education and 5.75 per cent among those with matriculation and higher levels of education.

We have noted that while literacy remains relatively low among women, higher education (matriculation and higher levels) is rising at a faster pace, though the absolute magnitudes are as yet small. Also an increasing proportion of educated women want to participate in production work. It is unfortunate, however, that a much larger proportion of them suffer from unemployment. According to

the 1961 census, about 14.4 per cent of women with matriculation or higher levels of education were unemployed. This is more than double the proportion unemployed among men with corresponding levels of education. In Kerala and West Bengal, the incidence of educated unemployment among women was as high as 36 per cent and 18 per cent respectively.

Population policy

India is the first country to adopt a positive population policy. The First Five Year Plan observed:

> The pressure of population is already so high that a reduction in the rate of growth must be regarded as a major desideratum. To some extent, improvement in living standards and more wide-spread education, especially among women, will themselves tend to lower the rate. But positive measures are also necessary for inculcation of the need and techniques of family planning.

The approach underlying the population policy in the First Plan remained virtually unaltered in the Second Plan, except for an increase in the outlay for family planning programmes from Rs 0.65 million in the First Plan to Rs 5 crores in the Second Plan. The gravity of the problem was more fully appreciated by the framers of the Third Plan when they observed that the 1961 census showed an excess of as much as 7 million over what until then was considered a high estimate of 431 million. It was in the light of these results that the plan came out with a more pronounced population policy. It stated:

> A large part of the increase in output is absorbed by the growth of population. Improvement in conditions of health and sanitation will further lower the death rate . . . and may for a time even tend to raise the birth rate. The objective of stablizing the growth of population over a reasonable period must therefore be at the very centre of planned development. The programme of family planning, involving intensive education, provision of facilities, and advice on the largest scale possible and widespread popular effort in every rural and urban community, has therefore the greatest significance.

In the early phase of the Third Plan, there was a fundamental change in the approach to the family planning programme. Until 1963 the approach was essentially "clinical." An increasing number of clinics were opened to provide people easy access to modern means of contraception. Late in 1963 the approach was modified with the introduction of extension education. With this modification, emphasis was placed on motivating people in favour of family planning through extension services by family workers and primary health centres and subcentres.

By the time of the Fourth Plan the position had become even more acute. This Plan provided for an outlay of Rs 2860 million which was almost ten times that in the Third Plan. A distinctive feature of the Plan is to set a time-bound target, viz., the reduction of the birth rate from 39 to 25 in a period of ten to twelve years.

The draft Five Year Plan provides not only for an enhanced outlay—over Rs 500 crores—but also a fundamental change in the approach by integrating the family planning services with welfare services covered under the rubric of the minimum needs programme. The programme seeks to integrate most of the basic social services, including education and public health services, with family planning, and nutrition for children, expectant, and nursing mothers. It is essentially sound in principle. However, if we take a close look at the provision for any one item in the plan, we realize that it will be ineffective if it is diffused thinly over the entire population. The amount allotted for supplementary nutrition, for example, is Rs 500 crores for five years or an average of Rs 500 million per year. Assuming that it is allocated fifty-fifty between children and mothers, both expectant and nursing, who number roughly 40 million, the amount per mother works out to a normal sum of Rs 6 per year. Evidently, a sizeable dent into the problem would necessitate identification of the backward regions and weaker sections and concentration of the limited resources on these groups with a view to providing them a balanced as well as adequate package for dealing with their problems (Sinha 1974a).

Our family planning programmes seem to have made an impact, though not very powerful, on people's attitudes and the practice of contraception and on the average fertility rate. A glance at Table 11 shows that over 16 per cent of reproductive couples are currently protected from the risk of conception. It is also officially claimed—though the claim is open to dispute on various grounds—

TABLE 11
SOCIO-ECONOMIC INDICATORS AND CONTRACEPTIVE PRACTICES

State	*Per capita income in Rs (1961 prices)*	*Percentage of literates to total population*		*Percentage of couples protecited up to March 1973*			
		1961	*1971*	*Steriliza-tion*	*IUD inser-tions*	*C.C. User*	*All methods*
	(*1*)	(*2*)	(*3*)	(*4*)	(*5*)	(*6*)	(*7*)
Andhra Pradesh	287.01	21.19	24.56	15.4	0,6	0.6	16.6
Assam	333.34	27.47	28.81	6.5	1.3	0.2	8.1
Bihar	220.69	18.40	19.79	6.7	0.9	0.1	7.8
Gujarat	393.39	30.45	35.72	25.5	0.9	1.5	17 9
Kerala	314.86	46.85	60.16	16.4	2.5	0.3	19.2
Madhya Pradesh	285.35	17.13	22.12	11.2	1.4	0.9	13.5
Maharashtra	468.54	29.82	39.08	21.3	0.6	1.5	23.4
Mysore	304.71	25.40	31.54	9.8	1.2	0.6	11.6
Orissa	276.22	22.66	26.12	13.0	2.9	1.3	17.2
Punjab	451.31*	26.74	33 39	11.5	6.0	7.3	24.8
Rajasthan	267.43	15.21	18.79	5.0	1.1	0.7	6.8
Tamil Nadu	334.09	31.41	39.39	15.9	1.2	0.6	17.7
Uttar Pradesh	297.35	17.65	21.64	5.9	1.4	0.4	7.7
West Bengal	464.32	29.28	33.05	10.2	0.7	0.7	11.6
All India	334.54	24.03	29.34	11.3	1.4	2.3	15.0

*It includes Haryana.

SOURCE: 1. *Family planning in India, Year book 1972-73.*

2. J.N. Sinha, Economic policies and population growth. Paper presented at the seminar on India's population future. Bombay: International Institute of Population Studies.

that about 16 million births have been averted as a result of these programmes and the birth rate has been reduced from 41.7 in 1961 to 35.5 as in March 1974 (Seal 1974). The SRS data adjusted for under enumeration may give a figure close to 38 but even as such it suggests a small decline in birth rate in recent years. An interesting point thrown up by Table 11 is that there are striking inter-state variations in the percentage of couples protected and they systematically show a close association between indicators of socio-economic development like income and literacy. Such a relationship obviously suggests complementarity between the growth and equity promoting elements in development strategy and birth-reduction policies.

Demographic Prospects

Population projections

While the pitfalls of population projections are well recognized, it is nevertheless necessary for perspective planning to build up such projections on as plausible a set of assumptions as the available data permit. For this purpose we need population by age and sex, as obtained from the 1971 census and assumptions about

Table 12
POPULATION ACTUALS FOR 1971, AND ESTIMATES FOR 1974, 1979, 1984 AND 1986

(*Population in millions*)

Year	*Males*	*Females*	*Total*
1971	283.4	263.5	546.9
1974	301.0	280.2	581.2
1979	329.5	307.3	636.8
1984	354.1	331.7	685.8
1986	363.9	341.3	705.2

Source: Office of the Registrar General, Government of India, New Delhi, 1973.

improvement in the life expectation at birth and the corresponding age-sex specific mortality rates as well as changes in fertility in birth rates at successive dates in the future.

The provisional Life Tables for India show an annual increase in

life expectation at birth close to 0 5 years per annum, which is appreciably lower than the optimistic figure of 0.9 per year assumed in the official projections. It is assumed that the experience of the decade 1961-70 will continue in the future. Fertility changes from the most unpredictable of the growth components. The projections adopted for the draft Five Year Plan are based on the assumption that the birth control targets will be realized so that the birth rate will fall to 30 by 1978-79 and 25 by 1983-84. These projections are given in Table 12.

Reviewing the projections in the draft Five Year Plan, Raghavachari is of the view that the underlying assumption of fertility decline is target-oriented and over-optimistic. He himself considers that the assumption based on probable performance, which ordinarily falls short of targets, is likely to be closer to reality. While he presents six alternative projections to indicate the possible range of population in the future, we reproduce in Table 13 the projection based on what he considers to be the most plausible course of future fertility. According to the latter set, the birth rate will decline from 39.4 in 1966-70 to 32.9 in 1976-80 to 27.1 in 1986-90,

TABLE 13
PROJECTED POPULATION OF INDIA

(*Population in millions*)

Year	*Males*	*Females*	*Persons*
1971	283.4	263.6	547.0
1976	313.5	292.1	605.6
1981	345.3	322.9	668.2
1986	378.6	355.4	734.0
1991	412.6	388.6	801.2
1996	448.7	423.9	872.6
2001	485.3	460.1	945.4

SOURCE: S. Raghavachari, Population projections, 1976-2001. *In* A. Bose, ed. *Population in India's development*. Delhi: Vikas Publishing House.

and to 25.7 in 1996-2000; death rates for the corresponding quinquennia will be 16.9, 13.2, 10.6, and 9.7. While the projections show a progressive decline in growth rate, it will be as high as 1.6 per cent per annum even towards the close of the present century.

Age composition

As expected, the declining rate of population growth will give us the benefit of reduced burden of child dependency. The proportion of children, as shown in Table 14, 0-14 will decline from 41.5 in 1971 to 38.1 in 1981, to 34.2 in 1991, and to 31.8 in 2001. This will be accompanied by a progressive increase in the proportion of persons in working ages from about 53 per cent in 1971 to over 60 per cent by 2001. Of course, we will have to carry a somewhat higher burden of old age (60+) whose proportion to the total population will rise from 5.2 per cent in 1971 to 7.6 per cent in 2001.

TABLE 14
PERCENTAGE DISTRIBUTION OF THE PROJECTED POPULATION OF INDIA BY BROAD AGE GROUPS, 1971-2001

Year	*0-14*		*15-59*		*60+*	
	Males	*Females*	*Males*	*Females*	*Males*	*Females*
1971	41.3	41.6	53.4	53.2	5.3	5.2
1976	39.9	40.3	54.7	54.5	5.4	5.2
1981	37.4	37.9	56.9	56.7	5.7	5.4
1986	35.6	36.2	58.3	58.0	6.1	5.8
1991	34.0	34.4	59.4	59.3	6.6	6.3
2001	31.8	31.8	60.6	60.6	7.6	7.6

SOURCE: Same as in Table 13.

Rural-urban composition

For projecting urban population, Raghavachari assumes a some-

TABLE 15
RURAL-URBAN BREAKUP OF THE PROJECTED POPULATION, 1971-2001

(*Population in millions*)

Year	*Total*	*Rural*	*Urban*
1971	547	438	109
1976	605	477	128
1981	668	518	150
1986	734	558	175
1991	801	596	205
1996	872	633	239
2001	945	667	278

SOURCE: Same as in Table 13.

what faster pace of urbanization in the future than what was observed in the last two decades until it reaches an asymptote. By using the mathematical device of the logistic curve (Raghavachari 1974), he projects the urban and rural population as shown in Table 15. The projections indicate a marked tendency towards accelerated growth of urban population. It is striking to note, however, that even by the end of this century, India will remain a predominantly rural country, with only 30 per cent of her people living in urban areas.

Labour force projections: change in size and structure

Given the population projections by age and sex, labour force projections are obtained by multiplying various population groups by corresponding age-sex specific participation rates. It has already been noted that the 1971 data on the labour force are distorted by a defective conceptual framework. We have therefore adopted the participation rates from the 1961 census with suitable adjustment for the impact of socio-economic changes (Sinha 1974 b). Increasing enrolment into schools and colleges will delay entry into the labour force, while growing economic prosperity may induce early retirement. Economic prosperity may also lead to the withdrawl of women from low paid occupations which account for the bulk of their employment, though this tendency may be partly counteracted by an increase in female education and the higher propensity of educated women to be in the labour force.

The aggregate labour force is expected to grow from 213 million (excluding child labour, i.e., workers aged fourteen and below) in 1971 to 268 million by 1981, to 333 million by 1991, and to 399 million by A.D. 2001. The proportion of persons in the labour force would be about 40 per cent from 1961 to 1981. It will rise, however, to 41.5 per cent in 1991 and to 42.4 per cent in 2001.

Employment is a function of output. The draft Five Year Plan envisages an annual increase of national income at the rate of 5.5 per cent and of income from agriculture at the rate of 3.9 per cent. Serious doubts have been expressed about the feasibility of these targets. If we take a slightly lower target of an annual increase of 5 per cent in national income and 3 per cent in agricultural income, and assume that productivity in the non-agricultural sector will rise by 2.5 per cent per annum, the projected structure of the labour force will emerge as follows:

TABLE 16
PROJECTED STRUCTURE OF LABOUR FORCE

Year	*Agriculture*		*Non-agriculture*	
	No. in millions	*Percentage*	*No. in millions*	*Percentage*
1971	149	70	64	30
1981	181	68	86	32
1991	202	60	131	40
2001	215	54	184	46

It may be seen from the above projections that 65 million additional workers will be piled up in the overcrowded agricultural sector between 1971 and 2001. Agriculture will continue to hold the major proportion of workers; 54 per cent even after three decades. Productivity in agriculture in 1970-71, a year of good harvest, was only 42 per cent of that in the non-agricultural sector. It will record only a marginal relative gain in the three decades to follow.

To sum up, while birth rates have shown some decline in recent years, and the tendency is likely to gain momentum with the spread of family planning as envisaged in our official policies, death rates will also fall, though at a slower rate, as a result of improvements in health and living standards. The net outcome will be an increase of about 400 million persons between 1971 and 2001 and the persistence of a growth rate as high as 1.6 per cent per annum at the end of the century. The proportion of children will decline from 42 per cent to about 30 per cent during the same period. Persons in active ages will rise relatively faster and these will be an addition of 185 million persons to the labour force. Of these, 65 million will have to be absorbed in agriculture, implying an addition of roughly 44 per cent to the existing work force in agriculture. Since the scope for expansion of net sown area is very limited, under-employment will persist in agriculture unless there is a substantial increase in labour intensification through appropriate technological changes and land reforms.

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INDIAN SOCIETY: THE RURAL CONTEXT*

T.N. Madan

Misconceptions about the Indian village are many and varied. It has often been said, for instance, that the rise and fall of empires and kingdoms in India's long history hardly affected the lives of people at the village level.[1] This is both true and false. If one has in mind the caste and kinship basis of the social order when one talks of the village, the fact of continuity without major structural changes may not be seriously disputed.[2] Moreover, the existence of rural settlements may be traced back not only to Vedic times, but also to the pre-historic mounds of Baluchistan and lower Sind.

*I owe thanks to S.C. Dube for asking me to write this paper and for his comments on an earlier draft of it. Sherna Banerjee provided research assistance. Mukul Dube, P.C. Joshi and Satish Saberwal pointed out the need for clarifying some points in what is a very condensed text. To them all I am indebted for their help. I have been able to keep track of studies of rural life in India over the years through the munificence of the Wenner-Gren Foundation for Anthropological Research, Inc.

[1]The most famous of such statements is Charles Metcalfe's famous Minute of 1830: "The village communities . . . seem to last where nothing else lasts. Dynasty after dynasty tumbles down; revolution succeeds to revolution; Hindu, Pathan, Moghal, Maratha, Sikh, English are masters in turn; but the Village Communities remain the same . . . " (*quoted* in Dutt 1950a: 386-88). Dumont (1966: 67-89) has conclusively shown the element of idealization of the so-called Indian village community in the writings of some British civil servants including Metcalfe.

[2]In fact, such a perspective may lead one legitimately to question whether the village, apart from caste and the family, is really a crucial element of Indian society. Thus, Dumont (1957: 25) confidently asserts: "India, sociologically speakingly, is not made up of villages."

Indian villages today have a pattern of settlement and an occupational structure which have remained substantially unchanged for many centuries.

Nevertheless, it would be patently false to assert that the vicissitudes of history have left the Indian village unaffected. A significant change that Muslim rule brought about was in the relationship between the village on the one hand and the urban centres and the ruling classes on the other. The villages began to be drained in a manner unknown earlier. Agricultural produce, handicrafts, and even the craftsmen themselves were drawn into urban markets but hardly anything flowed back into the village. Karl Marx's characterization of the revenue collection activities of Indian governments as "the plunder of the interior" (Marx and Engels 1959: 16) is largely justified.

Throughout Indian history, up to the disintegration of the Mughal empire, the notion of land as a commodity, which might be bought and sold, had remained alien to the thinking of the people and the rulers alike. Various persons held different kinds of rights in land but nobody really owned it. Land revenue was the sovereign's share; it was neither a rent nor exactly a tax. It was the Mughals' usurping viceroys in the provinces who were the first rulers ever to claim sole ownership of the land under their jurisdiction. Their claims, though often brutally enforced, lacked the sanction of tradition.

Village India under British rule

Then came the British. It has been convincingly argued by some scholars that the British never understood Indian society and its social, cultural and economic institutions. It was kingdoms rather than individual villages which had been the units of administration under Muslim rule. The British did not understand this and their policies gave the village an importance it did not have earlier. The socio-economic structure of the English village, with its feudal pattern, and some of the central notions of classical economic theory (such as the importance of profits for capital formation) were the main factors contributing to this incomprehension on the part of India's new rulers.

The British encountered two types of villages in India and the revenue policy which they adopted in respect of them, helped to make this distinction even more manifest than before. On the one

hand there were villages, mostly in northern and eastern India, where the notion of joint ownership of land prevailed. These generally were villages conquered or established by the ancestors of the then owners. On the other hand, there were villages in central, western and southern India, where the notion of ownership in common was absent.

The British began their administrative activities in Bengal, and there they encountered a shadowy figure in whom they saw the landowner but who was, in fact, a usurper of the kind mentioned above. Desirous of ensuring a stable, if not an ever-increasing revenue income from their expanding territories in India, the British resorted to "permanent settlement" in Bengal in favour of the landowners. They thus brought into existence a class of parasitical landlords, many of whom did not even deign to live in the villages they owned, let alone take any interest in their welfare. These predatory zamindars were primarily interested in what they could get out of the villages. As a class they provided the socio-economic base of British rule in India.

Efforts to extend the same policy in other parts of India were abandoned after protests from Madras, Bombay and the Central Provinces by senior administrators like Metcalfe, Elphinstone, Malcolm and others who raised the banner of self-sufficient village republics of India. The outcome of this rather spurious debate was that, in the south, settlement deals were entered into by the British government with individual landholders, the ryots, without conferring upon the latter the proprietory rights in the soil like those of the zamindars of the north. The two types of land tenure came to be called zamindari and ryotwari respectively.

The practice of collecting land revenue in cash, started by Akbar, was continued by the British. Increasing population pressure on land led to high rents. Payment of the so-called "home charges" by the British Indian government necessitated the sale of agricultural produce to European countries. A shift from food to cash-cropping took place, and India, which had been a major exporter of textiles and other finished goods, was now reduced to selling only agricultural raw materials. The Indian village was thus drawn more deeply into the world market, with the terms of trade often unfavourable to it.

Monetary transactions made their inroads into the countryside. The commercialization of agricultural property was soon followed

by the arrival of machine-made European (mostly British) goods, including textiles, resulting in at least some decline in rural handicrafts. Later, during the nineteenth century, British policies resulted in the thwarting of industrialization. Instead of the farmer or the millowner, it was the landowner, the moneylender and the trader—often one and the same person—who flourished. The moneylenders now began to accept land from farmers in redemption of debts and not in cash or crops only, as in the past. Though the contribution of wasteful customary expenditure to the process of destitution may not be minimized, it would be legitimate to say that land alienation and rural indebtedness, two of the major scourges of twentieth century India, had their germs planted then.

Apart from the damage it did to the rural economy, British rule generally weakened such solidarity of the village as did exist by taking over some of the judicial and administrative functions of caste and village panchayats. The consequences of this phase of alien rule for the Indian village may be summed up as a drastic alteration in the social fabric of society without any changes for the better in the processes and levels of agricultural production, or in the techniques of rural handicrafts.

The immediate consequence of British rule in India, according to Karl Marx, had been the breakdown of "the entire framework of Indian society" and its impoverishment. He castigated the English for their selfishness, stupidity and crimes. Taking a long-term view of British rule, however, he saw it as "the unconscious tool of history," helping to bring India back into the mainstream of social development (Marx and Engels 1959: 20). Marx's Indian contemporaries, less concerned with a communist revolution or a socialist future, or with the white man's historical role, were inevitably more oppressed by their own burden of the present. They documented how, with the impoverishment of the Indian village, the economic base of the country had been narrowed, resulting in, as Romesh Dutt put it, poverty of a magnitude "unparalleled in any civilized country" (1950a: vi).

While most Indians suffered from the iniquities of colonial rule, none groaned more under its burden than the villager. Jawaharlal Nehru, an Indian belonging to a rich urban family, has recorded how embarrassed, ashamed, and distressed he felt when he confronted poor peasantry for the first time, in 1920, not too far away

from his urban home in Allahabad (see Norman 1965: 53ff.).

Village India and the nationalist movement

That the Indian peasantry should have, in Nehru's phrase, rolled into the national movement was inevitable; it was given to Gandhi, however, to set it rolling.[3] He had a natural and deep capacity for empathy with the villager. "I can only think in terms of the millions of villagers and can only make my happiness dependent upon that of the poorest amongst them, and want to live only if they can live" (quoted in Moore Jr. 1967: 375-76). Gandhi's view of the traditional Indian village was itself a product of the kind of misconceptions that were mentioned at the beginning of this essay. He wrote in 1939: "A country whose culture is based on non-violence will find it necessary to have every home as much self-contained as possible. . . . The home-life, that is the village, was undisturbed by the periodical visitations by barbarous hordes. Maine has shown that India's villages were a congeries of republics" (quoted in Ganguli 1973: 146).

Gandhi under-emphasized class differences, defended the traditional division of labour, and laid all the emphasis at his command on the conflicting interests of villagers and town-dwellers. The village was for Gandhi the symbol of human dignity and of cherished moral values. Its contemporary condition (characterized by cheerlessness, fear, decrepit dwellings, insanitary and unhygienic conditions, unemployment, etc.) was an aberration that had to be corrected. By contrast, urban-industrial settlements were considered by him parasitical and a menace not only to the village, but to all that is good, moral and noble in man.

Rabindranath Tagore also evoked an image of the self-sufficient Indian village lying at the very heart of India's past cultural and

[3] "He sent us to the villages, and the countryside hummed with the activity of innumerable messengers of the new gospel of action. The peasant was shaken up and he began to emerge from his quiescent shell. The effect on us was different but equally far-reaching, for we saw, for the first time as it were, the villager in the intimacy of his mud hut, and with the stark shadow of hunger always pursuing him. We learnt our Indian economics more from these visits than from books and learned discourses. The emotional experience we had already undergone was emphasized and confirmed and henceforward there could be no going back for us to our old life as our old standards, howsoever much our views might change subsequently" (Nehru 1964: 383).

educational life. Gandhi's and Tagore's palaeocentric vision of the India of tomorrow, rural rather than urban, agricultural rather than industrial, traditional rather than modern, did not find favour with forward-looking nationalists like Nehru; but even they placed the peasantry in the very centre of the national movement. "India means the peasantry," Nehru said, " [and] the measure of the strength of our national movement will be the measure of their adherence to it"(Norman 1965: 204). Nehru was responsible for many of the concrete fact-finding and policy-oriented activities of the Indian National Congress in respect of the peasantry. Unlike Gandhi and Tagore, he maintained that in reshaping the village, India could learn from the example of other countries such as China (with its cooperative villages) and the Soviet Union (with its concern for industrialization), and generally benefit from advances in science and technology and from a democratic, socialist and secular ideology.

Meanwhile, the Indian village was becoming increasingly destitute. Stagnant agriculture, rising population, epidemics, and famines were the characteristic problems of villages during the first half of the twentieth century. Peasant movements, such as those in Champaran and Bardoli, became part and parcel of the larger national movement. Poverty, unemployment and under-employment, indebtedness, land alienation, and exploitation by outsiders were some of the major problems of the Indian countryside which the Indian National Congress agitated about and discussed at its sessions. The responsibility for the destitution of the Indian village was laid principally at the door of the colonial government and its land revenue policy. The Indian land-owners, so highly visible by virtue of their large estates and their support to the British government, became a marked target.

The Indian Village since Independence

As is well known, the attainment of independence by India, and the creation of Pakistan in 1947, were accompanied by unprecedented upheavals. The government and the national leadership had their hands full with maintaining law and order, resettling millions of refugees, and the making of the Constitution. Despite such preoccupations, land reforms were launched in the different provinces, in redemption of the promises given by Gandhi, Nehru, and all the

other major leaders of the Congress. The situation regarding land tenure systems in the country was very complex. There were different kinds of landowners, several types of tenants and share-croppers, and millions of landless agricultural labourers constituting about a quarter of the country's labour force.

Land reforms

Despite the above difficulties, within seven years (that is, by 1954) the first phase of land reforms had been completed by almost all the states in the Union. It took the form of the abolition of intermediary tenures through the enactment of legislation which included provision for the payment of compensation to expropriated landlords. The spurious class of landlords of different types and descriptions (such as *zamindars*, *jagirdars*, and *talukdars*) who had arisen in British India and, under the aegis of the British government, in the "native states," thus suffered a drastic change in its fortunes but it was not wholly liquidated. The landlords could still retain considerable land for "self-cultivation" which did not, in fact, mean exactly that, but merely ruled out the use of tenants; wage labour, or tenantry disguised as wage labour, could be employed. The law was far from perfect in this respect. By now, however, intermediaries have been practically banished all over the country, and about twenty million tenants pay revenues directly to the state governments. This in itself has been a major achievement.

By the time this phase of land reforms was completed, two major developments affecting the fortunes of the Indian village had taken place. The country commenced its First Five Year Plan in 1951 and, in the same year, launched its community development programme which included an agriculture extension service. The main purpose behind these and other programmes was to secure social justice for the villager and to increase agricultural productivity. The concept of land reforms was now broadened to include regulation of rents, conferral of security of tenure on tenants leading eventually to ownership rights, imposition of ceilings on agricultural holdings, consolidation of holdings, and distribution of surplus land among the landless.

Many of the above objectives have already been achieved and efforts, though often only half-hearted, are continuing to achieve others. All states have laws on their statute books fixing the rate of rent at between 20 and 33 per cent of the gross produce. (In

Andhra Pradesh and Jammu and Kashmir, however, rentals of up to 40 and 50 per cent are permitted in certain cases.) There has been much less success in the fixation of ceilings on the ownership of agricultural land, but efforts in this connection are continuing. The ceiling level has often been high, provisions for exemption from the application of the law have been liberal, and the scope for circumventing the law (through, for instance, mala fide transfers and fictitious partitions) has been wide. In all these years, the amount of land that has become available as a result of the enforcement of ceilings has been just a million hectares.

The areas of obvious failure are highlighted by the continued insecurity of tenure of tenants and share-croppers in many parts of the country, and by the very slow progress made in the effort to bring about consolidation of holdings, or to make any headway with cooperative farming. With respect to the security of tenure, though it is true that one can no more evict tenants by snapping one's fingers, as it were, circumvention of laws has been rather easy. Share-croppers, disguised as casual farm hands, are still working on as much as 10 per cent of the total cultivated area in the country. They are obliged to part with a large portion of the produce they raise, often much higher than the fixed ceilings. The statute book has been unable to bring about the required changes in this regard in the absence of social awareness regarding their desirability and feasibility. Although further legislative efforts to lower the ceilings and to strictly enforce the laws have been made more recently, the feeling that performance has fallen far short of the promise is widespread and, what is more, valid. Myrdal's judgment of land reforms as "mini-reforms or an outright sham" (1971: 102) is a harsh overstatement, but there is a hard kernel of truth in it.

What has gone wrong? Some analysts maintain that though the ideological thrust behind land reforms was anti-landlord and pro-peasant, distortions arose even at the time of legislation as a result of the political influence and cleverness of the superior proprietors. Those upper layers of tenantry which benefited from the abolition of large landed estates found it expedient to join hands with the former landlords. This new community of interests found tacit support in the upper caste middle class dominated leadership of the Congress party and among the officials who

administered the reforms, for many of these politicians and administrators were themselves substantial landowners. Constitutional provisions guaranteeing property rights were also invoked by the interested parties.

Consequently, the poorer sections of the rural population today find themselves worse off than before. Their exploitation at the hands of landowners continues as before but the traditional paternalistic relationship institutionalized as *jajmani*, which had long provided them some security, has been considerably weakened. The crux of the problem has been succinctly summed up by Ladejinsky: "unless those who work the land own it, or are secure on the land as tenants, all the rest is likely to be writ in water" (quoted in Myrdal 1971: 119). It is obvious that land reforms by themselves have so far proved inadequate in reducing socio-economic inequalities in village India.

A word may be said here about voluntary efforts to secure land for the landless. *Bhoodan* and *gramdan* attracted much attention in the fifties, but the success of these programmes was far less than seemed to be the case. Of around five million acres of land donated, only about a quarter could be distributed by the mid-sixties. The land was often of poor quality and the donor's claims of ownership were disputed in numerous instances. In any case, the movement remained confined to a few pockets in the country and failed to make a real impact on the lot of the Indian villager, though it certainly made headlines in the national and the world press. The lofty idealism required to make such programmes a success is not a common virtue in India or anywhere else.

Even before the *bhoodan* movement took shape, there was widespread realization in political and government circles that what was needed was a holistic approach to the transformation of the social, economic and political organization of the Indian village. This realization found expression in community development and allied programmes such as cooperation and, some time later, in new ventures in the field of local government.

Community development and cooperation

The imperative need to seek not merely a rise in agricultural productivity, but a total transformation for the better in the socio-cultural and economic life of the villagers was sought to be fulfilled through the community development programme, which was

launched in 1952 under the First Five Year Plan. Gandhi had said that "independence must begin at the bottom" (quoted in Ganguli 1973: 157), that is at the grass-roots level of village life, and that the endeavour must be to seek the welfare of everybody. Land reforms had been an effort of the leadership to introduce a major change in society from the top. Community development represented a combination of these two approaches. The role of government would first be to stimulate the villagers to draw up their priorities in problem-solving and then to help them financially and by providing organizational support. In other words, the people were to be helped to help themselves. They were to be taught to develop a community perspective embracing the whole village, which would replace the usual caste or family perspective. Gandhi's and Tagore's ideas on rural reconstruction, American methods of extending to the villagers scientific knowledge and supplying them material aid for the improvement of agriculture, and the British notion of paternalism in administration—these provided the philosophy and the initial drive behind this nationwide and truely massive programme. As Arnold Toynbee (1958: 104-07) put it, community development in India was one mighty effort to wake up a long-asleep Rip van Winkle, namely the peasantry.

The immediate model for the programme was provided by a pilot project undertaken by an American architect, Albert Mayer, in Etawah in 1948. One of the principal contributions of this project was to delineate and develop the role of the multipurpose village level worker, specially trained in rural extension work. Further experimental projects were undertaken in 1952 with American financial aid and technical collaboration. Out of these early projects emerged the notion of the block of approximately a hundred villages as the unit of development, with its hierarchy of officials including the village level worker and his companion the social education organizer, serving five to ten villages, and their superviser, the block development officer. The notion of a three-stage developmental process was also evolved with tapering financial provisions from stage to stage. The expectation was that, beginning with the less intensive national extension service focused mainly on improvements in agriculture and irrigation, after five years, each block would enter its second and more intensive stage of development. At the end of ten years, it was hoped the villages in the block would be sufficiently motivated to look after them-

selves, designing and executing their own programmes with the help of funds raised by themselves. By now the entire country has been brought under the programme. In 1973 there were 199 projects in stage I, 1,417 in stage II, and 2,354 in post-stage III, making a total of 5,103 blocks.

After unbounded early enthusiasm and optimism, it started becoming increasingly clear that the community development programme was too ambitious for both the aspirations and the preparedness of the people and also for capital and trained human resources available in the country. Within five years, evaluation reports drew attention to the fact that while satisfactory progress had been achieved in "constructional programmes," "institutional programmes" had lagged behind targets, and that attempts to change social and organizational attitudes had been largely unsuccessful (P.E.O. 1957). The hope that the villagers would take over the responsibility for the programme at the end of the second stage was not being realized. Consequently, many of the visible achievements of stage I—paved streets, wells, school buildings, etc.—were neglected and soon fell into disrepair. If anything, the people's earlier habits of self-reliance and mutual help seemed to have been somewhat eroded by increasing their dependence on government subsidies and technical support. The traditional panchayats had not proved particularly helpful in implementing and nurturing the projects.

A veteran journalist, Kusum Nair, travelled all over the country in 1958-59 and came to the conclusion that it may be easier sometimes to build a massive modern steel plant than to bring about a change in villagers' attitudes to life, work and society (1961: xxiii). She also pointed out that in a large and internally diverse country such as India, common valuations were hard to come by; centrally conceived government plans, therefore, evoked different kinds of response from different regions and from different strata of people in the same region. She found a lack of agreement among the villagers of India even on so central a notion of planned development as the desirability of an ever-rising standard of living. There was, thus, a lack of fit between the community development programme's emphasis on the articulation of "felt needs" and the widely-held Indian notion, endorsed by Gandhi, of the morality of "limitation of wants."

It had also become clear by the end of the First Five Year Plan that community development had not succeeded in displacing those

traditional caste and family-based loyalties which have always claimed the Indian villager's first attention. Far from fostering a community perspective, the programme had strengthened the new elites generated by land reforms and, consequently, had accentuated social and economic inequalities in rural society. The agricultural extension service also had turned out to be far more useful to substantial landowners than to those with "handkerchief plots" or no land at all.

The unequal distribution of gains has become an abiding feature of development efforts on behalf of the rural poor of this country. Some regions, and some sections of the population in each region, have generally derived greater benefits from government activities than others. This is true of land reforms and community development and also of rural cooperatives and nationalized banks.

Today four out of five villages are covered by cooperatives. The assets of these institutions have more than quadrupled during 1962-71 to about thirteen hundred crore rupees. Moreover, their reliance on their own resources, as compared to the funds made available to them by the Reserve Bank for their lending operations, has gradually increased. And yet, barring a few states (notably Andhra Pradesh, Gujarat, Maharashtra, and Punjab) the poorer sections of the rural population still have to depend on usurers. Even in Punjab, there have been allegations that rich and clever farmers are able to manipulate cooperative societies in various ways (including the creation of fictitious members) to corner the available finance.

Since the nationalization of major banks in 1969, the number of their branches has more than doubled from 8,000 to 17,000, and half of the new branches (4,500) have been opened in rural areas. Consequently, the number of bank branches in the villages increased from 1,860 in 1969 to 5,933 by the end of 1973. But hardly 9 per cent of the bank credit goes to agriculture. What is worse, two-thirds of all agricultural credit goes to the owners of large farms and only one-third to small or medium-sized farmers (defined as those who obtain less than Rs 10,000 of credit). According to this pattern, Rs 750 crores out of the Rs 1,000-1,200 crores that are expected to be available during the next five years, will go to the big farmers. This is hardly going to contribute to social justice in rural India.

Panchayati raj

The National Development Council set up a special committee (under the chairmanship of Balvantray Mehta) in 1957 to study the inadequate performance of the community development programme and to make recommendations for its future development. The committee was also asked to examine the structure of district administration with a view to evolving an effective system of local self-government geared to the development effort. It came to the conclusion that the failure of the programme had been the result of its remoteness from the people whom it was intended to serve and of its almost total dependence upon officials, high and petty, distant and local. The committee therefore advised that people's support for the programme must be mobilized in a big way and that the best way to do so would be through the creation of local institutions based on the traditional concept of *panchayat*.

Though Ambedkar had reviled the Indian village, calling it "a sink of localism, a den of ignorance, narrow-mindedness and communalism" (quoted in Tinker 1963: 97), the Constituent Assembly had finally inscribed the concept of village *panchayat* in article 40 of the Constitution. Nobody had done very much about it thereafter. Following the recommendations of the Mehta Committee, however, *panchayati raj* became the kingpin of the government's policy for the democratic decentralization of power and for the revitalization of the community development programme. The responsibility for development was now to be placed upon the shoulders of the people's own representatives.

There was considerable resistance to this major change in the pattern of power from the bureaucracy, but support from politicians of many shades and hues (Gandhians, followers of Jayaprakash Narayan, and others) and from the general public was overwhelming. Above all, Nehru gave it his blessings. In many speeches and addresses he stressed that power and authority must be transferred to elected *panchayats* and that the fear that the villagers would make mistakes must not be allowed to come in the way: "Let them make a million mistakes," he said, "[but] let us give power to *panchayats*" (quoted in Kothari 1970: 133). The *panchayat* thus became the principal pillar of democracy and development in the Indian village from 1957 onwards.

By the end of the Fourth Five Year Plan almost the entire country had been brought under *panchayati raj*. Meghalaya and Naga-

land alone remained outside it. There is considerable variation among other states, some of them (such as Jammu and Kashmir) having only the *gram* (village) panchayat, while others have a two-, three- or four-tier system. There are now 221,270 village *panchayats* in the country and 98 per cent of the rural population comes under their jurisdiction. Above them there are 3,871 *panchayat samitis* and 233 *zila parishads*. Changes in the organization of *panchayati raj* in the light of experience have been made in some states and more are being contemplated. The crucial question that must be answered is, what has *panchayati raj* achieved?

Judging from the perspective of the community development programme and of economic development generally, *panchayati raj* has not been a spectacular success. The reasons for its failure seem to be fairly simple. On the one hand, *panchayati raj* focuses on the collective effort of the community, but production is on an individual or family basis: the gap between the two perspectives is wide. On the other hand, the process of economic planning tends to view problems and their solutions from a macro-perspective—in terms of the state, the region or the country—but the vision of *panchayats* is local. Those who had expected *panchayati raj* to do away with political competition and bring about "communitarian democracy" have also been disappointed. It did not result in decision-making by consensus. To many, participation in *panchayati raj* was merely a convenient point of entry into the larger arenas of state and national politics, relatively remote from the village they pretended to want to serve.

What *panchayati raj* has achieved is to provide institutional means through which the policies of a remote Planning Commission can be executed at the village or block level after making the necessary adaptations in them to suit local conditions. More importantly, its achievement has been to bring power down to the village and to give the village-level politician a stake in the total political system. If parliamentary democracy has become somewhat parochialized and distorted in the process, the village and the caste, and communal groups constituting it have also been decompressed. If democratic politics has become caste-ridden, the castes too have become politicized and are taking on new roles which are functional to the working of a democratic form of government. *Panchayati raj* has introduced the politics of opportunity and participation into the Indian village and in this

respect it has opened the way for significant change.

A price has had to be paid, however, for the benefits of *panchayati raj*. The traditional power structure of the village based on an alliance between high castes and landlords has been undermined by the combined effect of land reforms and *panchayati raj*, but not wholly. The hold of old dominant castes may have been loosened, but caste coalitions have taken their place. A new elite has emerged from the middle rungs of the social hierarchy which derives its power from economic and numerical strength. The depressed sections of the rural population have generally remained as bereft of economic advantage and political power as before. Even when their participation in political processes—for example, voting—has been impressive, it has often been more a result of external mobilization than of the assertion of their own rights. As may be expected, such mobilization benefits those who operate it—the new leaders—more than those who are mobilized.

In sum, community development and *panchayati raj* have undoubtedly brought about a revolution of rising expectations and made the villagers aware of their political and economic rights. The social and ecohomic structure of the village, however, is still essentially inegalitarian, and the full benefits of people's participation in developmental and political activities remain to be realized.

Panchayati raj is an experiment of vast potential for the realization of the objectives of political, economic and social development. In fact, no other institutional arrangement has been suggested that might take its place. Unfortunately, there is some flagging of interest visible as is illustrated by, for instance, the merger of the Union Ministry of community development and *panchayati raj* in that of food and agriculture. The reasons for this unhappy turn of events seemingly include the following: the urban bias of the country's intelligentsia which makes them doubt that the villagers are capable of any solid achievements; the spreading tentacles of the bureaucracy which defeat all efforts to decentralize the execution of policies; rivalries between politicians of the village, state and national levels, which result in the downgrading of the village-based political worker; lack of material and trained manpower resources.

Panchayati raj can still be an effective instrument for the coordination and execution of policies at the village level and can act as a bridge between villagers and the various levels of government.

India inherited from the British the "steel frame" but she could have had no use for the ideology which went with it. So, she chose to embark upon the totally novel experiment, with no precedent in Indian history, of "mud-and thatch village democracy" (Tinker 1963: 133). If the initial steps have been faltering, there is yet no reason to fear that she has not chosen well.

The "green revolution"

About a decade after the inauguration of *panchayati raj*, a new wind began to blow over some parts of the Indian countryside. This happened none too soon: the country had the misfortune of suffering extensive crop failures and famine conditions in the mid-sixties; planning for development was diagnosed as having entered a period of crisis.

It was clear that a strong urban bias in India's planning during the first three plans had resulted in an overwhelming emphasis upon industry at the cost of agriculture. Land reforms and community development had failed to substantially increase agricultural productivity or to markedly improve the lot of the villager. Some farmers had undoubtedly struck it rich and ploughed their increased incomes into trade and even industry—in other words, they had turned businessmen and capitalist-farmers—but the phenomenon had left the vast majority of villagers unaffected. By 1960-61 about 10 per cent of the rural population of India provided a larger market for industrial consumer goods than all the urban buyers put together. At the same time, however, about 40 per cent of them lived below the poverty line.

Early during the Third Five Year Plan an "intensive agricultural district programme" was launched in all the states. Its objective was two-fold: in the short run, to help in increasing agricultural production by the adoption of a package of improved practices, in the long run, to enable the poor villager to share in the prosperity he would have helped to bring about. By now 30,000 villagers and 8 million hectares of land have been covered by the "intensive agricultural areas programme."

These efforts took a dramatic turn with the introduction of high yielding varieties of cereals. This development was sudden and significant enough to have earned the name of the "green revolution." In 1966-67, just under two million hectares were sown with the miracle seeds; today this area has grown to an impressive

twenty million hectares. It is, of course, wheat-growing under the new conditions which has been the most successful and Punjab has led the way. It has been pointed out by some people that what the country has experienced is not a total green revolution but only a wheat revolution. Rice areas, such as Andhra Pradesh and Tamil Nadu, have also benefited though to a lesser extent. Hybrid *bajra* is a third promising crop but maize and *jowar* have not yet achieved a technological breakthrough. Wherever the efforts have been successful, yields have multiplied two to threefold and multiple cropping has been resorted to. The use of fertilizers has increased four to six-fold and pesticides, farm machinery, storage space, etc., are in great demand. Incomes, too, have multiplied several times. The "green revolution," it seemed, might transform Indian agriculture from a seasonal activity to a full-time business. The prospect has looked bright, but already many problems have raised their heads.

Though the new technology is essentially neutral to scale, it is by now obvious that some of the inputs—fertilizers, water, pesticides, etc.—are beyond the reach of the small farmer. Farmers with ten acres or more of land are better able to exploit the situation; this is indicated by the fact that some regions with relatively large landholdings such as Punjab (and within Punjab, Ludhiana) have done better than others (such as Bihar) where small farmers preponderate, rural poverty is deeper and more widespread, and rural credit scarce. In Punjab it has been estimated that only 10 to 20 per cent of farmers have been able to participate in and benefit from the high-yielding varieties of cereals; and not more than 10 per cent of the small farmers are involved in it. The gulf between big and medium farmers on the one hand and small farmers on the other has widened, though the evidence about this is not conclusive.

The rich farmers spend a portion of their inflated incomes in conspicuous consumption, while share-croppers and landless labourers find themselves excluded from the new prosperity. The real wage rate for agricultural labour has been declining in most places. Compared to the others, the "rock-bottom" classes of rural society have either remained stagnant or have progressed very little. Owing to more intensive agriculture, the demand for labour has not fallen (though it will in the event of indiscriminate mechanization); the nature of this demand has, however, changed and labourers

with better experience and superior skills are preferred. This has eroded the old ties between landowners and their labourers and transient labour has become more important than ever before in the economic life of the affected villages. Consequently, there is resentment and unrest among the local workers against both the landowners and the transients.

Social and economic inequalities have become not only more harsh but also less bearable, as the traditional scheme of values has itself been gradually eroded by new opportunities for individual enterprise. Agrarian unrest is not the result of the "green revolution" everywhere, having preceded it by many years in some areas;[4] nor has it everywhere erupted into violent clashes between the opposed classes. The reason, it seems, is that share-croppers and landless labourers are not equally well-organized in all places, and that they are dependent for their mobilization on political parties whose fortunes keep fluctuating. A commentator (Sharma 1973: 96) has compared the "green revolution" to the watermelon, green outside and red inside; whether the fruit will be cut open when it is red and ripe, or allowed to rot away, depends upon the political leadership available in the countryside, and the prospects on this score, he says, are not bright.

To sum up what has been said so far regarding the developments since 1947. Several major attempts have been made to reshape the Indian village through the introduction of economic and political changes. The progress has been halting, a few footsteps at a time rather than giant strides forward. It is sobering to reflect that each of the four major rural development programmes of independent India described above began on a note of high enthusiasm and promise, but within less than five years it was found lacking in several significant respects, necessitating rethinking of aims and strategies, reformulation of plans and renewal of effort.

Thus, the programme of land reforms, begun soon after independence, has yet to be completed and its full promise is yet to be realized. Intermediaries have been practically eliminated from the

[4]*The Times of India* in its issue of 7 May 1874, reported what is called "the very first strike" of agricultural workers, "the pending war between farmers and their labourers." It further said that "the masters had met the attack with the stringest measures of resistence" (*Times of India*, 7 May 1974, New Delhi edition, page 4, column 8, under the heading "A Hundred Years Ago"). Though the area is not identified, it probably was somewhere in western India.

Indian rural scene and some progress has been made towards ensuring security of tenure. Reasonable ceilings on landholdings are, however, still to be accomplished. The recent revival of interest in legislative measures in this regard has yet to bear tangible fruit.

The community development programme set out to minister to the village community and discovered castes; it sought to discover "felt needs" and almost unconsciously planted "imputed wants" in the countryside. The effort was to change the villages with the consent of the people. And the people, it was discovered, often do not want what is being offered, or ask for what cannot be given to them. They may want, as Kusum Nair and the Block Development Officer from Chittur discovered, an aerodrome! In short, centralized planning has been found to be not exactly the best instrument of securing the people's participation at the grass-roots level in the development effort. In fact, it is precisely those aspects of community development which were to involve the voluntary contribution in effort and in money from all classes of the rural people that have had the least success.

The community development programme has, however, aroused expectations and has had considerable success in the field of agricultural extension. Similarly, *panchayati raj* has succeeded but only partially and in terms more of its unintended than its intended consequences. It has made people aware of the power of the secret ballot and of the strength of numbers, but has not yet delivered power into their hands. The weaker sections of the countryside lack resourceful leaders from among themselves who might organize them to secure a fair deal. Needless to add, such leadership, though an important factor, will not by itself succeed in bringing about a revolutionary change in the power structure. For this to happen, a structural change in the relations of production seems imperative.

Finally, the "green revolution" also had its progress stalled by a variety of forces. Technological change without institutional reform has been found to worsen socio-economic inequalities and to foster tensions. Further, it has been found that the traditional ethos and skills of agricultural communities, such as the Jats of north India, are obviously an important input for realizing the potential of the new agriculture, but are not easily transferred to other groups. The unavailability in the required measure, and at reasonable prices, of other inputs such as fertilizer, water, diesel oil, and electricity has acted as a spoke in the wheel. The programme of propagating high-

yielding varieties of cereals has hardly begun in the country; it has not failed. The task is to broaden the technological break-through wherever possible and to translate it into a socio-economic revolution. Water-scarce areas such as the Deccan are, however, unlikely ground for this technology. Improvements in dry land agriculture can no longer be postponed and must be given equal, if not greater attention than the programme for wet areas.

Economic planning, political development and social change

A distinguishing characteristic of contemporary social change in the developing countries, including India, is the bestowal of a high value upon it by their intellectuals and political elites. Moreover, economic planning in some measure and the development of "modern" political institutions have come to be relied upon as the two principal instruments for fashioning the new society.

We have so far confined ourselves in this chapter to an examination of some selected aspects of economic planning and political development in India in the context of the Indian village. While the efforts made have been considerable, the immediate pay-off in economic and political terms has not always been impressive or in the desired direction. The very poor, living on a diet deficient even in calories, still account for at least half of our rural population but the rural voters do not yet make up a similar proportion of the rural electorate. In other words, from whichever angle we look at the Indian village--the economic or the political—one half of its residents are not participants in the gains made since independence. Meanwhile, the rural population has grown at the rate of over 20 per cent in each of the two decades since independence, from 299 million in 1951 to 439 million in 1971, acting as a heavy depressor on the development effort.

Nevertheless, the social changes that have occurred in these last twenty-five years are far-reaching. There is convincing evidence that the village is broadly responsive to economic stimuli and that the villager generally displays a high level of rational decision making in the economic field. In other areas of socio-cultural life, changes have been slower and of a mixed nature. There is no uniformity about the precise manner in which economic and non-economic factors interact. To cite an example, different studies have come to almost opposite conclusions as to whether education is a crucial variable in explaining differences in the degree of receptivity

to innovations among farmers. Likewise, there is no clear pan-Indian pattern of social mobility. Similar social groups in different parts of the country opt for different mobility paths, some choosing the political and others the economic path. Even more problematic is the evaluation of on-going social change: thus Louis Dumont (1970: 218) maintains with considerable force that what we have recently witnessed is "change *in* the society and not change *of* the society."

In view of the foregoing considerations, it is rather premature to write in definitive terms on the nature and significance of social change in the last twenty-five years: but an attempt might be made to describe it in general terms. We will present below some of its facets as one glimpses them in the works of social anthropologists who have studied and described many villages in this country in recent years.

The shrinking village

The over-optimistic Karl Marx had predicted that modern industry and the railways would dissolve caste, the basis of traditional social organization in India (Marx and Engels 1959: 34). All "modern" Indians from Marx's time till today, including very notably Jawaharlal Nehru, have subscribed to this belief. Caste is, however, still with us and so are our villages, now over half a million in number; but the winds of change are indeed blowing over them. The Indian village is now more exposed to outside influences than ever before—through railways, roadways, and the radio, and these have almost wholly eroded whatever autonomy it may have had.

The self-contained village republic was a myth. Even as anthropologists busied themselves with the single village, treating it as an isolable whole, they discovered its "extensions": pilgrim routes, marriage networks, caste brotherhoods, patron-client relations, etc., which obviously had traditionally acted as centrifugal forces. Under British rule, the administrative and economic "frontiers" penetrated deeper into the Indian village than they had ever done before. This process of penetration was also employed by the Indian National Congress under Gandhi's perceptive leadership. It has proceeded further since independence.[5] The agricultural

[5]The notion of "frontier" has been employed by Bailey (1957) to describe the gradual opening of an Oriya village in response to administrative and

extension service, compulsory primary education and universal adult suffrage have drastically eroded the isolation of the Indian village.

What happens in the Indian village today is often determined by events far beyond its mud walls; regional, national, and international happenings impinge upon the lives of villagers with astonishing rapidity. The current "oil crisis" has affected them no less severely than city-dwellers; they are clamouring for cheaper and more abundant diesel oil, kerosene and fertilizer. In short, outside influences are resulting in an all-round shrinking of the village. Not that there will be fewer villages and villagers in tomorrow's India: in fact, by present estimates there will be a hundred million more villagers in 1981 than there were in 1971; what is more, they are likely to form a larger proportion of the total population than now owing to an overall fall in the urban fertility rate. And yet, as villagers they are going to be less distinct than in the past. A principal reason for this course of events is the deeper mutual involvement of rural and urban economies, with the latter dominating the former, and the greater homogenization of culture.[6]

Economic changes have appeared not only in the garb of market forces and new farming practices but have also pushed the monetization of rural economic transactions almost to the limit. New "ritually-neutral" occupations have become available in the villages and in urban areas to migrant villagers and rural commuters. Urban

economic intervention. It is also implicit in a remarkable and humane work of fiction, Raja Rao's *Kanthapura* (1938), which anticipated a great deal of social anthropological work on the Indian village. Another major work of fiction, the Hindi novel *Rag Darbari* by Shrilal Shukla (1968) describes the seamy side of the village under the impact of external agencies. The scene of action in Rao's novel is rural Mysore, that of Shukla's rural Uttar Pradesh.

[6]D.P. Mukerji saw this clearly at the very beginning of planning in India. In an article entitled "Man and Plan in India," he wrote (in 1953): "Villages are a geographical fiction kept going by the myth-making, nostalgic propensities of romantics. They do not exist today as nuclei of power or foci of self-sufficient freedom, because the villagers have no active influence on the state (except for voting—and we know how it is manipulated by urban politicians), because the prices of the goods they produce are fixed and manipulated by urban markets and urban interests, because nearly all of the older attitudes, customs, habits, etc., are being modified, and the new vital attitudes are being set by the urban ones" (1958: 61).

employment in white collar occupations has become a symbol of high social status. Patterns of consumption—goods, services, and recreation—have also begun to change with the availability of money and machine-made goods on a larger scale than before. These changes are being accompanied by new ideas about human dignity, egalitarianism and levels of living. Consequently, cracks have appeared in the traditional social organization.

The changing caste system

Recent changes have probably been nowhere more in evidence than in the country-wide weakening (even destruction in some areas) of the traditional pattern of relations—generally known as *jajmani*—between landowners on the one hand and tenants, artisans, and service castes on the other. Villagers are increasingly unwilling to engage in activities which do not fetch a fair return or which are demeaning; the fact that they may be traditional is no longer considered sufficient justification for their continuation. The unconditionality of mutual rights and obligations between patrons and clients is being replaced by the calculatedness of contractual transactions or is even being reduced to a master-servant relationship, involving harsher exploitation than before. Consequently, competition and conflict are very much in evidence.

The implications of these developments are comprehensive, denoting changes in political and economic relations between castes and also in moral and religious values. Once cherished beliefs and practices are being jettisoned as superstitions. Traditional concepts of the nature of man and work are losing their power over the minds of people and bonds between groups are thus being loosened. The resultant moral isolation is sometimes countered through adherence to reformist sects which seem to be enjoying a vogue in some places; more often it is left unattended at the cost of visible decline in the quality of social life. Thus, the changes in the foundations of society—in moral beliefs and in intercaste relations—turn out to be a mixed bag.

The caste system in the Indian village has been subject to the impact of economic planning, political development, and egalitarian ideologies. As stated earlier, land reforms, community development and the new agricultural technology have helped the middle-rung peasantry to emerge as a new force in the countryside. It is

they who have benefited most from the expansion of educational opportunities and rural-urban commerce. Above all, it is they who have established themselves as the new leaders in the political arena. Even when traditional village leaders—the old landlords or upper-caste elders—succeed in retaining power, they are dependent upon the support of the new leaders and are compelled to manipulate the electoral machinery accordingly. The leaders may be old, but the basis of leadership is new, and so are the values by which it is legitimized and the political and judicial frameworks within which it operates.

Caste today has become a vehicle of interests and values such as political power and economic gain. Democracy and secularism, which were not a part of the world view of the traditional institutions and modern aspirations, are found together in a state of juxtaposition rather than as a new synthesis. Thus, members of a caste in a village may be divided among themselves in terms of education, work income, residence, and socio-economic status generally. Political interests may unite or divide them into factions, or persuade them to form coalitions with other castes or to fight against them. The fact that they still marry endogamously recedes into the domain of domestic relations. As for their having a common ritual rank, this has become relatively unimportant for nearly everybody except the Harijans. Social and domestic life are thus characterized by what has been called "compartmentalization."

Caste barriers have fallen in many places or have been transformed into class antagonisms. Cultural homogenization has increased in the villages and sartorial, dietary, and linguistic boundary-markers between different groups are becoming blurred. Social and economic inequalities have not become less harsh, however; in many places they have deepened, as between the propertied classes and the landless, and tensions seem to have entered the very soul of the village. In areas which have experienced considerable agricultural development, such as Punjab, Haryana and west Uttar Pradesh, the traditional high caste-based landowning class, feudal in character, is being replaced by a more broad-based profit-oriented class for whom land ownership is not so much a way of life as a mode of enterprise.

It has also been noticed that middle-rung castes (generally from among the ranks of peasantry) who have made some economic

gains continue to seek to raise their social status by imitating the traditional life style of the locally dominant and prestigious caste or community (the process has been called "sanskritization"); at the same time the latter try to maintain the social distance between themselves and the aspirants for high status by modernizing (or "westernizing") their own way of life. One of the consequences has been a proportionately high rate of upper caste migration to urban areas. Social mobility—climbing and passing—is much in evidence but without radically altering the inegalitarian structure of social relations.

The lot of Harijans, particularly where they are very poor, numerically weak, and lacking in leadership, has registered little change. The constitutional provision outlawing the practice of untouchability has not exactly been a resounding success. The Constitution, in fact, has created a dilemma for the low castes and other backward communities: whether to take shelter under the special privileges—most notably "reservation" (or quotas) in legislatures, civil services, educational institutions, etc.—or to completely disown the traditional social matrix which has spawned them as non-privileged offspring. There are pockets in the country—Punjab and Haryana, for instance—which point to other possibilities. Not to speak of urban areas, where untouchability might be expected to lose its sting in another generation or so, even in rural areas "Chamars do not run any more [on the orders of their social superiors]" (Kessinger 1974: 219).

Thus, we find that caste has neither disappeared nor remained unchanged. Its nature has been transformed; in familiar Indian fashion it has died and come to birth again in a different incarnation. The traditional caste system has broken down but castes survive as ethnic units and seek to find place in a new politico-economic framework. The process of change, indeed, follows no straight path. The truth of the foregoing statement comes out equally forcefully when we consider the impact of economic change on the traditional family organization.

The changing family

The Hindu joint family has been held responsible for many of the ills of Indian rural society. With its pooling of incomes it was said to encourage laziness and discourage enterprise; the law of inheritance associated with it, permitting the partition of joint

estates, was counted as one of the major causes of fragmentation of land; and so forth. The experience of the last few generations has been that neither has the joint family seriously obstructed the play of emerging economic forces nor has it disintegrated under their impact. Wherever the nature of economic opportunities, or economies of scale, have seemed to favour the retention of joint families, they have generally survived. Similarly, whenever the fact that different members of a family are earning from different sources and at different rates has proved too much of a strain, families have broken up. Further, in the context of new economic opportunities, it has been observed that the effective circle of kin for purposes of economic enterprise has narrowed. In short, there is evidence of considerable plasticity with respect to family and caste. There is a discernible trend in today's events towards an increase in the incidence of nuclear households. The centrality of the domestic family in village society has survived the socio-economic changes of more than a century.

In this connection it may be worthwhile to mention that, while rural migrants who take up residence in urban areas seem to abandon most of the caste restrictions while "on the job," they carry their rural familial organization with them. Though certain inevitable consequences—such as smaller household size and a somewhat changed authority pattern—have resulted from neolocal residence in urban areas, no drastic alteration of intra-familial relations in such households has been noticed. The position of women with relation to men which has changed very little in rural society—villagers have made little use of the new laws giving Hindu women rights of inheritance, for they prefer to preserve brother-sister relations outside the arena of conflicting interests—is affected only marginally by migration.

Growing individualism

It would seem from the foregoing that social change in rural India proceeds in a manner that results in a shrinkage and transformation of the functions of traditional institutions but not in their total disappearance. Thus, many new institutions do not treat the village as a unit. Pre-primary and primary schools are today found in practically every large village (the number of such schools has grown from 209,974 in 1951 to 408,927 in 1971), but higher level schools, dispensaries, post offices, cooperative societies, banks,

law courts, etc., function in a way that underplays the importance of village boundaries. The many functions of caste and the family that were characteristic of traditional rural society are similarly being disaggregated and redefined.

A general outcome of these happenings is that the individual's relations with his immediate kin and affines are becoming increasingly important; remoter kith and kin are being excluded from one's circle of obligations. An Irava villager speaking with the anthropologist Aiyappan summed up the situation succinctly: "It is becoming difficult nowadays in this village to bury a man. Everyone is so busy with his work that he considers it a bother to go for a funeral" (Aiyappan 1965: 170). To the extent to which this tendency to place one's individual interests above those of one's kinsfolk, caste and village becomes generalized, a major structural change in Indian society would be in the making. And there is evidence accumulating that such a tendency is becoming stronger even in those small, relatively backward villages where the proverbially conservative farmers live.

Meaningful and lasting social change in any society is impossible without a change in attitudes, motivations, and aspirations. Unfortunately this area has remained practically unexplored in India. From the little we know, some interesting and significant conclusions emerge. The aspiration for improvements in the very low levels of living is general and widespread. The Indian villager, it seems, perceives both happiness and anxiety in personal terms: adequate subsistence and longevity appear to be the most central concerns. Everything else seems to matter much less, and this includes the concern with the life hereafter, stereotypes about the other-worldly Indian notwithstanding. The poor villager does not entertain high aspirations nor does he set himself high goals. It has been observed, however, that the receptivity to new ideas and the level of aspiration rise perceptibly wherever the fruits of development have been experienced, even if in a small measure. An ever-changing, ever-prosperous future has appeared on the mental horizons of many Indian villagers; the task that faces us today, thereafter, is how to realize it for most of them in a reasonably short stretch of time. The future beckons: what it will actually bring is unfortunately uncertain.

The Future

Three paths into a better and happier future have been indicated to the Indian villager during the twenty-five years since independence.

Three models

First, there has been the path of peaceful planned development and sponsored social change—the path of land reforms, community development and *panchayati raj*. It has had notable successes to its credit in areas which readily lent themselves to centralized planning and external direction. One might mention as examples the expansion of primary education, control of epidemics, provision of large irrigation works, and the propagation of high-yielding varieties of cereals. It has, however, failed to make a visible dent in established privileges, or in bringing about distributive justice and the eradication of social inequalities. Altogether, "democratic socialism" has been found slow, halting, and inadequate to alleviate the sufferings of the poor and toiling rural masses of this country. Its critics see it as a facade for the perpetuation of the interests of the propertied classes.

Second, there has been the path of rural insurrection. An agrarian revolt had been mounted in Telangana in the mid-forties. This was dealt with by force, after Hyderabad was integrated in the Indian Union. Twenty years later, in 1967, when Indian agriculture was in a deep crisis and planning generally had run into a morass, and the Indian National Congress had just been voted out of power in half the states of the Union, there was a peasant uprising in Naxalbari in West Bengal. It had a dramatic impact on the thinking of the political leadership of the country but it was short-lived. Led by activists from among the ranks of the Communist Party of India-Marxist (CPI-M), it was crushed by the coalition government then in power in the state which, ironically, included the CPI-M as a constituent. The "revolutionaries"—their critics called them "adventurists"—left the party and contended that the primary condition for the emergence of a revolutionary party dedicated to the welfare of common people was the organization of armed struggle in the countryside.

The same year, "Maoist revolutionaries" led a similar peasant uprising in the Srikakulam district of Andhra Pradesh, where the

Girijan (forest-dwelling tribes) are a dominant element in the population. The strategy adopted for ending exploitation was that of "annihilation of the class enemies," namely landlords, and the seizure of agricultural land and other property through resort to guerilla tactics. Several hundred villages were under the control of the revolutionaries ("red political power") for several months and there was much violence and destruction. Before any agrarian reconstruction could be embarked upon, massive police reprisals resulted in the dispersal of the "guerillas" and the movement was abandoned. As in the case of the Naxalbari uprising, the impact of the Srikakulam revolt was felt far beyond the district and the state. Landlords retaliated with equal cruelty in some places; in the village of Venmani in east Thanjavur they burnt to death forty-four men, women, and children belonging to the ranks of low caste agricultural labourers.

The third path, that of non-violent sarvodaya and *bhoodan*, for a variety of reasons, has remained impracticable and inconsequential. It depends for its success on a level of idealism which is too lofty for the common man. Its value in drawing the attention of the people to moral imperatives and to integrity in public life may not, however, be denied. Sarvodaya, it seems to us, beckons to a utopian future and suffers from the limitations of all utopias.

There are, then, only two alternatives: gradual but peaceful transition or violent revolutionary upheaval. Recent experience suggests that violent upheavals have a tendency to spend themselves out rather rapidly. Lack of a socially conscious leadership, drawn from among the ranks of the rural masses themselves, is a major factor responsible for the negligible achievements of peasant uprisings. Another oft-mentioned factor is the apathy and passivity of the villagers. It has been suggested that the reason for this passivity is that the masses live in a cultural vacuum; old values have vanished and no firm new values have taken their place. Unless there is a cultural reawakening, people will not know what to do with power if it is given to them or if they seize it. Class struggle has to become a productive effort at cultural renewal before it can usher in the next higher stage of a socialist society. This is, as should be apparent, a problematic course of events, and the mechanics of bringing it about are not clear. Meanwhile, the ideas of the ruling class will continue to be the ruling ideas in India—exactly as Marx and Engels have said (in *The German Ideology*)

that they do. This class has not faced any serious challenge since independence.

Fifth Five Year Plan

A peaceful transition into the future through a farsighted, clear-headed and vigorous planning effort is, perhaps, still the best bet, but time is running out fast. It is to be regretted, therefore, that the Fifth Five Year Plan is almost wholly lacking in any new ideas for the future of the Indian village or on the goals and strategies of development. There is just a programme and the usual allocations of limited resources.

The notion of "growth centres," mooted during the previous plan period, is to be developed into a programme. The idea is to base development activity in micro-regions on a comprehensive assessment of the total resources of the block. A "growth centre" would be such a village as can serve as a nucleus for a hinterland of village and supply them with the needed resources—goods and services—for development. The draft Fifth Five Year Plan itself mentions the "whole village development" approach recommended by the National Commission on Agriculture: "It is felt that if the community can be enthused and stirred into common action towards development, the utilization of the growth potential will be easier and quicker from which the community as a whole will benefit" (p. 87). This goes no further than the kind of hope and expectations on which community development had been built. In fact, the scope of the new programme is much narrower, being confined to the consolidation of holdings and the optimum utilization of land and water.

The Plan points out that one of the major objectives in the immediate future is to substantially improve the level of living (as measured by per capita monthly consumption) of about twenty-five million village households constituting the lowest 30 per cent of the rural population. Whereas other sectors, such as rural industries, construction, and housing, are expected to contribute to the fulfilment of this objective, the agricultural sector itself must inevitably bear the heaviest burden. Moreover, the problems of small and marginal farmers, agricultural labourers, and "the weaker sections" will have to be attended to through special development programmes which have been spelled out in the Plan. Higher investments, more rational resource allocation, and more diversified

development activity are the principal instruments designed to achieve greater success in the Indian village. All this fails to generate much hope because past experience shows that performance never matches promise, let alone the realization of it.

Concluding remarks

What exactly will happen in the near future is difficult to foresee. Such an exercise is difficult at any time in a country as vast and internally as heterogeneous as India, where the same programmes have been known in the past to have evoked divergent reactions even within one district. The uncertainties today (1973-74) are greater than they have been at any time in the last twenty-five years. The present economic crisis is the most acute that the country has experienced since independence. The breakdown of social discipline and consequent political uncertainty have assumed menacing proportions. It seems imperative that some basic shifts in policy-formulation and plan-execution—that is, in political and administrative styles—will take place.

One emphasis bound to emerge most forcefully is that on rural development. Our experience of the recent past teaches us that agriculture will long remain the foundation of the country's economy. Industrialization can be deemed to be successful to the extent to which it strengthens rather than replaces agriculture. Gandhi's vision of India as a land of villages is as valid now as it was half a century ago. A total reversal of the current pattern of social and economic development is, however, unlikely. Excluding major disasters, natural or man-made, resulting in a totally unforeseeable turn of events, democratic planning will continue to be the main plank of the policies of most political parties. Village life in India in the foreseeable future, therefore, will continue to change along the lines already discernible. Economic development and socio-cultural modernization within a democratic framework are long-run processes, proceeding slowly and even haltingly. The path into the future is long and weary and there will be obstacles and frustrations in plenty along the way. Meanwhile, paradoxical though it may seem to some people, the shrinking village will loom large on India's political and economic horizons.

BIBLIOGRAPHICAL NOTE

The materials on which this paper is based have been drawn from a large number of books and articles. It would have been tedious and burdensome to list all of them in the text itself. I have therefore confined myself to identifying the sources of the few direct quotations. The purpose of this bibliographical note is to give a selected inventory of the principal works used. The statistical data have been drawn from the draft Five Year Plan, various other government publications, and some of the works listed below.

I. *The background.* Habib (1963) gives an excellent account of the place of the village in the wider economy and polity during the Mughal period. For the British period the principal sources used have been Baden-Powell (1957), Bagchi (1973), Bipin Chandra (1966), Dutt (1950a, b), Marx and Engels (1959), Moore Jr. (1967) and IESHA (1969). On the specialized problem of the notion of land in relation to society there are some good papers in Frykenberg (1969). Dumont (1966) is another excellent discussion of some ideas on the same theme. Gandhi's views on the village are discussed in Ganguli (1973) and Moore Jr. (1967), and Tagore's in Tagore (1962). For Nehru's views, Norman (1965) is a good source, besides his own works.

II. *The Indian village since independence.* The various Five Year Plan documents contain reviews as well as programmatic statements. For an evaluation of land reforms, Joshi (1971: 3-64), Khusro (1973: 3-32), and Myrdal (1968: II, 1901-65) provide a rounded perspective. Nanekar and Khandewale (1973) provide an up-to-date discussion of *gramdan* and *bhoodan*. The literature on community development is considerable. However, between themselves Dube (1958), Nair (1961), and Pande (1967) provide an overview covering about a decade and a half. On *panchayati raj*, Tinker (1963: 94-133) is an early assessment of potentials and achievements, and Maddick (1970) provides a detailed account. Kothari (1970) also contains insightful observations. The "crisis" in Indian agriculture and in Indian planning generally, just before the arrival of the high-yielding varieties of seeds, is discussed in Streeten and Lipton (1968). Dandekar and Rath (1971: 25-48) is the principal source of data on the magnitude of poverty. Etienne (1968) discusses agrarian change generally. Etienne (1973: 197-213), Frankel (1971), and Sharma (1973: 77-102) are three among many evaluations of the "green revolution." Beteille (1972: 122-51) and Breman (1974) provide discussions of agrarian tensions. Besides other sources already mentioned, the following contain excellent materials on social change in village India since independence: Dalton and Adelman (1971: 304-25), Epstein (1962, 1973), Gould (1967: 195-205), Ishwaran (1966), Kessinger (1974),

Mandelbaum (1970), Mellor (1968), Rao (1970), Singer (1972), Srinivas (1966), and Wiser and Wiser (1963). Any effort to provide a comprehensive bibliography of general works on this theme is, however, precluded by the limitation of space. On changes in the caste system, Dumont (1970: 217-30), Kothari(1970: 224-49), and Rudolph and Rudolph (1967: 15-154) are authoritative though not in mutual agreement. The notion of "compartmentalization" of social and ritual life has been put forward in Singer (1972: 320ff.). Pocock (1973) discusses changes in folk religion. Epstein (1962) and Vatuk (1973) respectively examine the family in a rural area and among rural migrants in a city. Kessinger (1974) has data on family change spanning a century and a quarter. Sinha (1969) contains interesting materials on the aspirations and anxieties of the Indian villager in the context of social change.

III. *The future*. Mohan Ram (1971) is a general discussion of "Maoist" type of movements in Bengal and Andhra. "Growth centres" are discussed in Sen *et al* (1971). The cultural dimension of the current economic crisis is the theme of Joshi (1974).

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INDIA: THE URBAN CONTEXT

Ashish Bose

The National Planning Committee, appointed by the Indian National Congress in 1938 under the chairmanship of Jawaharlal Nehru, divided itself into twenty-five sub-committees, two of which related to population and national housing. The committee's work was interrupted by the arrest of Jawaharlal Nehru in 1940 and also by the disruption brought about by the Second World War, and the reports of the various sub-committees were published after several years. The report of the sub-committee on population, under the chairmanship of Radhakamal Mukherji, was released in July 1948. This report clearly brought out the issue of population and poverty and the need for industrialization with a view to reducing the pressure of population on land. The sub-committee recognized that

> the growth of industrialization would mean, not only a redistribution of population as between town and country which has been proceeding silently but slowly in the last half century . . . [but] also better alternative employment, so as to take off the burden on the soil of a disproportionately large population.
>
> With a large variety of employment to the adult population that planned industrialization and economic development in all fields of the national life would provide, it would necessarily bring a diminution of the pressure on the soil side by side with increasing Services, Utilities and Amenities of life. And these in their turn would necessarily mean a higher standard of living (National Planning Committee, 1947: 15-16).

In other words, the expectation was that the progressive industrialization of the country would be able to reduce the dependence on agriculture.

After India attained independence in 1947, the Planning Commission was set up in 1950 under the chairmanship of Jawaharlal Nehru. The First Five Year Plan (1951-56) reiterated the need for reducing the pressure of population on land. The state of the Indian economy at the beginning of the First Plan was summed up by the Planning Commission as follows:

> Agriculture is still the mainstay of life for about 70 per cent of the population, and productivity in this sector is exceedingly low. The size of agricultural holdings has progressively diminished; the old cottage and small-scale industries have been decaying, and the rural population which constitutes about 83 per cent of the total suffers from chronic underemployment and low incomes. Population has increased by more than fifty per cent in the last fifty years, but the growth of alternative occupations either in the rural areas or in the towns has not been on a scale which could absorb this growing population. In the limited spheres which have registered expansion, the level of productivity and the level of incomes have naturally been higher. But, for the community as a whole, the economic development of the last few decades has brought no significant improvement in standards of living and opportunities for employment, and has perhaps accentuated to some extent inequalities of income and wealth (Government of India 1952: 12).

Unfortunately, the state of the economy in 1974, after the completion of the Fourth Five Year Plan, does not warrant any deviation from the statement made in the First Five Year Plan. The harsh truth of the last sentence quoted above cannot be denied: " . . . for the community as a whole, the economic development of the last few decades has brought no significant improvement in standards of living and opportunities for employment, and has perhaps accentuated to some extent inequalities of income and wealth." This raises the central issue in the relationship between population and poverty and the role of population distribution and urbanization in the process of economic development. The accelerating rate of population growth, the slow economic growth, and

the consequent structural stagnation of the economy call for a deeper understanding of the role of industrializaiton in a country like India.

Looking back at the period 1947-74, one cannot help observing that the hope pinned on rapid industrialization as the most important instrument of economic regeneration of the country has been belied by the actual events, our concerted efforts at planned economic development through five-year plans notwithstanding. Similarly, the hope of urbanization, bringing about modernization and social change in the country, has also not been realized. To what extent the structural stagnation of the Indian economy and society is the product of the continuation of deep-rooted historical forces and/or the consequence of our general failure in economic and social planning is a debatable point. The disillusionment with model building and mathematical economics and the recent attempts to reconsider Gandhi more seriously are developments which must be noted in this connection. Gandhi had underplayed the role of western-oriented industrialization, as also the role of urbanization. Gandhi was respected for his philosophy but not for his economics. In retrospect, it does appear to us today that Gandhi had a clear vision of the ills of Indian society and economy. It is in the fitness of things, therefore, that an eminent economist like B.N. Ganguli has reinterpreted Gandhi's social philosophy. Ganguli points out that "Gandhi's views on urbanization have been widely misunderstood in India as elsewhere" (Ganguli 1973: 187). Gandhi looked upon urbanization as an evil in so far as it was based on the exploitation of the countryside and was totally divorced from the rural way of life rooted in nature. Ganguli maintains that it is from this angle that one should interpret Gandhi when he said, "I regard the growth of the cities as an evil thing, unfortunate for mankind and the world, unfortunate for England and certainly unfortunate for India. The British have exploited India through its cities. The latter have exploited the villages. The blood of the villages is the cement with which the edifice of the cities is built." Explaining his stand further, Gandhi said, "I want the blood that is inflating the arteries of the cities to run once again in the blood-vessels of the villages; I do not want to depopulate the cities and send the city folk back to the villages. All I want is that they should re-adjust their lives so as to cease to sponge upon the poor village folk and make to the

latter what reparation is possible, even at this later hour, by helping to resuscitate their ruined economy." (*Quoted in* Ganguli 1973: 187.)

We have referred to the views of the National Planning Committee and Gandhi at the very outset to bring out the relevance of the wider issues in interpreting the statistics on urbanization in India. In the absence of such a perspective, one is obsessed with the dimensions and the magnitude of change rather than the value system which is responsible for such change or lack of change. India did not, of course, start with a clean slate in 1947 and therefore the hangover of the British rule is a factor which must be adequately considered in interpreting the developments subsequent to 1947. This is even more so when one considers the growth of cities and towns or the pattern of human settlement which is a legacy of the past and reflects a long-term phenomenon and cannot be modified or changed radically in spite of the best intentions of the planners and policy-makers. Perhaps the best description of urbanization under British rule is given in the following terse prose of William Digby, "There are two Indias: the India of the Presidency and the chief provincial cities, of the railway systems, of the hill stations . . . . There are two countries: Anglostan, the land especially ruled by the English, in which English investments have been made and Hindustan, practically all India fifty miles from each side of the railway lines." (Digby 1901: 291-2.)

In fact, what Digby said about India as a whole, namely, the polarization between Anglostan and Hindustan is also true of individual cities in India. Jawaharlal Nehru was the chairman of the Allahabad municipality for two years (1921-23). In his autobiography he devotes a whole chapter to municipal work. His experience gives valuable insights into the working of municipal bodies during British rule in India. To quote him at length:

> Most Indian cities can be divided into two parts: the densely crowded city proper, and the widespread area with bungalows and cottages, each with a fairly extensive compound or garden, usually referred to by the English as the "Civil Lines." It is in these Civil Lines that the English officials and businessmen, as well as many upper middle-class Indians, professional men, officials etc., live. The income of the municipality from the city

proper is greater than that from the Civil Lines, but the expenditure on the latter far exceeds the city expenditure. For the far wider area covered by the Civil Lines requires more roads, and they have to be repaired, cleaned-up, watered, and lighted; and the drainage, the water supply, and the sanitation system have to be more widespread. The city part is always grossly neglected, and, of course, the poorer parts of the city are almost ignored; it has few good roads, and most of the narrow lanes are ill-lit and have no proper drainage or sanitation system. It puts up with all these disabilities patiently and seldom complains; and when it does complain, nothing much happens. Nearly all the Big Noises and Little Noises live in the Civil Lines.

To equalize the burden a little and to encourage improvements, I wanted to introduce a tax on land values. But hardly had I made the suggestion when a protest came from a government official, I think it was the District Magistrate, who pointed out that this would be in contravention of various enactments or conditions of land tenure. Such a tax would obviously have fallen more heavily on the owners of the bungalows in the Civil Lines. But Government approves thoroughly of an indirect tax like the octroi which crushes trade, raises prices of all goods, including foodstuffs, and falls most heavily on the poor. And this most unsocial and harmful levy has been the mainstay of most Indian municipalities, though, I believe, it is very slowly disappearing in the larger cities. (Nehru 1962: 143-4.)

Unfortunately, there is little evidence to suggest that municipal administration in free India is any different from the past. The rich still continue to be subsidized by the poor. The housing and urban development policies have not resulted in reducing inequalities between the rich and the poor. In fact, according to the study by Dandekar and Rath, urban poverty has increased during 1960-61 and 1968-69. They observe:

> During the past decade, the per capita private consumer expenditure increased by less than half a per cent per annum. Moreover, the small gains have not been equitably distributed among all sections of the population. The condition of the bottom 20 per cent rural poor has remained more or less stagnant. The condition of the bottom 20 per cent urban poor has definitely deter-

> riorated and for another 20 per cent of the urban population, it has remained more or less stagnant. Thus, while the character of rural poverty has remained the same as before, the character of urban poverty has deepened further. This is the consequence of the continuous migration of the rural poor into the urban areas in search of a livelihood, their failure to find adequate means to support themselves there and the resulting growth of roadside and slum life in the cities. All the latent dissatisfaction about the slow progress of the economy and the silent frustration about its failure to give the poor a fair deal, let alone special attention, appear to be gathering in this form. Its shape today is ugly enough; allowed to grow unheeded and unrelieved, it will inevitably turn ugly and hideous. (Dandekar and Rath 1970: 44.)

In an earlier study B.V. Krishnamurti had talked of the power elite planning for people's welfare. As he put it:

> The power elite sets the standards for the style of living. . . standards which include A-type bungalows . . . air conditioned offices and bedrooms, refrigerators, limousines, air-conditioned railway and Caravelle air-travel, select clubs and restaurants. . . . (Krishnamurti 1967: 969.)

He quotes national sample survey data to show that 85.6 per cent of the urban population which belongs to the lowest income group spends 70 per cent of their earnings on food alone.

The urban developments during 1947-72 reflect, to a considerable extent, the pattern of urban development in the pre-independence era. In so far as there has been persistence of structural stagnation of the Indian economy and even an increase in the inequalities of income and wealth in the post-independence era, urban development has also reflected these unhealthy features. There are of course small segments of the economy which have witnessed remarkable change; there are areas which are pulsating with economic activity; and there are sections of the population noted for their dynamism and entrepreneurship. India today, in absolute terms, is one of the leading industrial countries of the world: urban India, in terms of population, represents one of the major urban populations in the world.

We shall now turn to some of the statistical dimensions of these

aspects. But before doing so we shall first take up the problem of explaining what the term "urban" means in the Indian context. As the focus of our study is on the period 1947-72, the 1951 census—the first census in independent India—offers the starting point for our presentation of the statistics on urbanization. Comparisons of the extent of urbanization over time can be misleading unless adequate note is taken of the modifications in the definition of "town" adopted from one census year to another.

Some Problems of Definition

In the Indian censuses the definition of "town" remained more or less the same for the period 1901-51 and it was only in 1961 that several modifications were introduced to make the definition more satisfying from the statistical point of view. An interesting feature of the Indian census has been the latitude given to census superintendents with regard to the classification of places on the borderline of "rural" and "urban." We shall discuss this aspect first and then refer briefly to the impact on urbanization of the new definition of "town" adopted in 1961.

> According to the General Report of the Census of India, 1901, town includes: (1) every municipality of whatever size; (2) all civil lines not included within municipal limits; (3) every other continuous collection of houses, permanently inhabited by not less than 5,000 persons, which the Provincial Superintendent may decide to treat as a town for census purposes. (Census of India 1901: 21.)

Thus, the primary consideration in deciding whether or not a particular place is a town was the administrative set-up and not the size of its population. Not all municipalities, civil lines areas, and cantonments have a population of over 5,000, and yet these were classified as towns. At the same time, all places with a population of 5,000 and over were not necessarily rated as towns There were over-grown villages with populations of over 5,000 and the census superintendents had the discretion to treat them either as villages or as towns. The census superintendents also had the discretion to treat as a town any place, irrespective of its administrative set-up or population size, for "special reasons." This is not quite evident

from the definition of a "town" just quoted, for clause 3 of the definition refers to places inhabited by not less than 5,000 persons. But it has been the census practice right from 1901 onwards to allow the discretionary power to census superintendents even with reference to places with populations below 5,000.

The definition of a "town" was, thus, not totally objective in as much as it was not based on a rigid statistical test. The census authorities were aware of these limitations, but they preferred administrative expediency to statistical precision.

The definition of "town" adopted in the 1951 census was similar to that of the 1901 census, but was worded more cautiously. It said:

> A town is normally an inhabited locality with a total population of not less than 5,000 persons. But places with a somewhat larger population which do not possess definite urban character may not be treated as towns. At the same time, places with a smaller population with definite urban character (including generally all municipalities and cantonments and other places having a local administration of their own) may be treated as separate towns. The decision, in marginal cases, rests with State Governments in some States and Census Superintendents in others. (Census of India 1951: 44.)

The definition of a "town" adopted in the 1961 census was much more rigorous than that followed in earlier censuses. This new definition was followed all over India as uniformly as circumstances would permit.

It must be mentioned, however, that even the 1961 census definition was not totally devoid of vagueness. To quote the 1961 Census Commissioner:

> For the first time in 1951 all census statistics were presented separately for rural and urban areas. This has been continued in 1961 as a basic stratification as fundamental as the presentation of all statistics separately for males and females. The completion of two five year plans together with such reforms as the merger of Princely States and the Reorganization of States seemed to demand a more rigid application of the tests for urbanization and the working out of a list of urban areas in

1961 that would form a series for the future. It should be remembered, however, that in every decade the Census Commissioner has tried to apply uniform eligibility tests throughout the country but the diversity of conditions prevailing in provinces and Princely States has defeated their realization to a certain extent even in 1961. To qualify for an urban area, a place should first be either a municipal corporation or a municipal area, or under a town, committee or a notified area committee or a cantonment board. In the absence of a central municipal law, these have always meant different things at different places so that a municipal town or town committee in State A, has had different standards from what obtained in State B, thus eluding comparability on all fours. In the second place, each census has adopted a number of census towns, which do not enjoy any statutory label of administration. This has been considered desirable in order to obtain a truer measure of urbanization as it is usual for an administrative label to fall some way behind actual achievement. These census towns were in 1961 determined on the basis of a number of empirical tests: (a) a density of not less than 1,000 per square mile; (b) a population of 5,000; (c) three-fourths of the occupations of the working population should be outside of agriculture; and (d) the place should have, according to the Superintendent of the State, a few pronounced urban characteristics and amenities, the definition of which, although leaving room for vagueness and discretion, was yet meant to cover newly-founded industrial areas, large housing settlements, or places of tourist importance which have been recently served with all civil amenities. Naturally enough, such a course also implied the elimination of a fair number of places which had passed muster for towns in the past and the emergence of a number of new places as towns in 1961. All cases of elimination were first referred to the State Government and its approval secured before being struck off the 1961 census list of towns. All cases of fresh inclusion were required to be referred to the Registrar General's office, with full and sufficient reasons supporting the proposal to treat a place as a town, and the concurrence of that office had to be obtained. (Government of India 1961: 51.)

The first impact of the new definition of town was a reduction in the total number of towns in India between 1951 and 1961.

There were 3,060 places classified as towns in India in 1951 (according to the 1951 census definition of a town) while there were only 2,700 places so classified in 1961 (according to the 1961 definition of town), indicating a decrease of 360 towns deleted from the list of towns in 1961. The variation can be explained as follows:

Number of towns in 1951		3,060
Less		
(i) declassified towns in 1961	803	
(ii) merged towns in 1961	54	857
		2,203
Plus new towns in 1961		497
Number of towns in 1961		2,700

Table 1 reveals the wide inter-state differences in the extent of variation in the total number of towns during the decade under

TABLE 1
NUMBER OF TOWNS IN DIFFERENT STATES OF INDIA: 1951 AND 1961

State	*1951*	*1961*	*Variation (1951-61)*
INDIA	3,060	2,700	360
Andhra Pradesh	293	223	70
Assam	27	60	33
Bihar	108	153	45
Gujarat	243	181	62
Jammu and Kashmir	25	43	18
Kerala	94	92	2
Madhya Pradesh	202	219	17
Madras	297	339	42
Maharashtra	383	266	117
Mysore	289	231	58
Orissa	39	62	23
Punjab	194	189	5
Rajasthan	227	145	82
Uttar Pradesh	486	267	219
West Bengal	120	184	64
Union territories and other areas	33	46	13

*There was no census in Jammu and Kashmir in 1951. There were 32 towns in 1941 of which 7 were deleted in 1961. Thus there were 25 towns in 1951 (according to the 1961 census). In 1961, 18 new towns were added.

study. In West Bengal, where the definition of a town was the same both in 1951 and 1961, the number of towns increased by 64 while in Uttar Pradesh, there was a decrease in the number of towns by 219.

Thus the new definition, while it gives a more realistic picture of urbanization than was given in earlier censuses, has created a problem of comparability over time. "Reclassification balance" as a component of urban growth has assumed added importance and unless proper adjustments are made, inferences concerning urban growth rates for the 1951-61 decade can be very misleading.

TABLE 2
ADJUSTED URBAN POPULATION OF INDIA: 1951 AND 1961

	Urban population	
	1951	*1961*
A. As per the definition of urban adopted in 1951 and 1961 (not comparable)	62,443,934	78,936,603
B. As per the 1951 census definition by hypothetically including in the 1961 population of places which were urban in 1951 but eliminated in 1961 on account of the stricter definition)	62,443,934	83,674,063
C. As per the 1961 census definition adjusted to 1951 census	60,412,796	78,936,603

SOURCE: Census of India 1961, Vol. I, part II-A (i), General Population Tables, pp. 262-63.

TABLE 3
ADJUSTED FIGURES FOR GROWTH OF URBAN POPULATION: 1951 and 1961

	Net increase (millions) 1951-61	*Per cent increase 1951-61*
A. Unadjusted	16.49	26.4
B. Adjusted (method B)	21.23	34.0
C. Adjusted (method C)	18.52	30.7

The impact of the new definition of a "town" on the growth rates is brought out by Table 2, 3, and 4, where we give our own estimates of the adjusted urban population of India.

TABLE 4
ADJUSTED FIGURES FOR PROPORTION OF URBAN POPULATION TO TOTAL POPULATION: 1951 and 1961

	Per cent of total population 1951	*Per cent of total population 1961*	*Variation in proportion*
A. Unadjusted	17.29	17.97	+0.68
B. Adjusted (method B)	17.29	19.04	+1.76
C. Adjusted (method C)	16.73	17.97	+1.24

While the 1961 census reports an urban growth rate of 26.4 per cent for the 1951-61 decade, our adjusted figure, which takes note of definitional changes, is 34 per cent (according to method B) and the adjusted figure for the proportion of urban to total population in 1961 is 19.1 per cent as against the unadjusted figure of 18.0 per cent.

In the 1971 census, the definition of a "town" was the same as in 1961. In this census, the term "town group" was abandoned; the expression "urban agglomeration" was used instead. In 1961, the concept of "town group" was not uniformly applied in all the states of India and this created several methodological problems. In 1971, the census organization attempted to adopt the concept of "urban agglomeration" uniformly in all the states. Thus the complicated problem of adjusting for definitional changes is, to a considerable extent, lessened on account of the retention of the 1961 definition of a "town" in 1971, though there are still some methodological problems concerning the comparability of data on "town group." The definition of "urban agglomeration" adopted in the 1971 census is more or less the same as the definition of the "town groups" adopted in the 1961 census. According to the definition, an urban agglomeration includes urban areas outside the municipal boundaries of a city but excludes rural pockets.

Looking back over the census history of the last seven decades, one is struck by the voluminous discussion in numerous census reports on the definition of a "town." In spite of this massive literature, at times tedious, at times amusing, but always controversial, the 1971 Census Commissioner did not reach the end of the journey. What is rural? What is urban? These are questions whose echo can

still be heard in the halls of international seminars and conferences. Every new seminar or conference only adds to the confusion.

It is interesting to note that in 1950, one of the earliest population studies of the United Nations looked into the problem of defining "urban" and "rural" populations. After almost twenty years, in 1969, another population study of the United Nations considered this problem again without arriving at any solution, in spite of the tremendous literature and data on urbanization which have emanated in the last twenty years. This study examined the "bewildering variety of 'urban' definitions" in 123 recent censuses. The feeling of helplessness in tackling this problem will be evident from the following conclusion of this study:

> The historic consideration of this subject, as well as the survey of its current features, has led to the conclusion that a definition of "urban" places cannot be devised which has unvarying relevance throughout the changes in time and diversity in local conditions. It is recognized that the "urban" phenomenon is associated with numerous aspects and, furthermore, that these aspects can coincide or overlap to a varied extent, and that not all are necessarily present at the same time. Urbanization, consequently, will not be confined to any single definition for the present purpose. Instead of a definition, the foregoing "statement of recognition" will have to be accepted as a more adequate expression to reflect the manifestations of a greatly varied and complex process.

For the time being, one must be content with this statement of recognition.

Growth of Urban Population

According to our estimate, the urban population of India in 1947 was 53 million. It represented 15.7 per cent of the total population of India. According to the 1971 census, the urban population was 109 million, representing 19.9 per cent of the total population. Thus during the period 1947-71, though the urban proportion has moved rather slowly—from 16 per cent to 20 per cent—in absolute terms the urban population has more than doubled.

The partition of India in 1947 led to great human misery: millions of refugees came from Pakistan to India; millions of refugees left India for Pakistan. In the wake of the partition, India witnessed one of the major human migrations in history representing roughly an influx of 10 million refugees into India and an exodus of a similar number to Pakistan. According to the 1951 census of India, 54 per cent of the total refugees who came to India settled in the urban areas. This implies that though only 17 per cent of

TABLE 5
PROPORTION OF REFUGEES FROM PAKISTAN SETTLED IN THE URBAN AREAS OF INDIA, 1951

State	*Percentage of refugees in urban areas to total refugees in the state*
INDIA	53.9
Uttar Pradesh	89.8
Bihar	55.7
Orissa	16.1
West Bengal	50.0
Assam	18.5
Madras	92.1
Mysore	68.4
Bombay	88.0
Saurashtra	95.0
Kutch	53.0
Madhya Pradesh	74.3
Madhya Bharat	95.5
Hyderabad	98.2
Rajasthan	46.8
Punjab	39.3
Patiala and East Punjab States Union	44.4
Delhi	94.9
Vindhya Pradesh	72.0
Himachal Pradesh	90.15

SOURCE: Computed from data given in 1951 census, paper No. 4 of 1954, Displaced Persons.

India's population was urban, a disproportionate number of refugees came to the urban areas. Of course a large number of persons also left the urban areas of India and migrated to Pakistan. According to our estimates, the net effect of such refugee migration on

urban growth was of the order of 6.2 per cent during the 1941-51 decade which witnessed on overall growth of over 41 per cent in the urban population. In Table 5 we give figures for the proportion of refugees from Pakistan settled in the urban areas in the different states of India. The impact of refugee migration was the greatest in big cities like Calcutta, Bombay, Delhi, and a large number of cities in north India.

We shall now turn to the growth of urban population during 1951-61. The overall picture for India is presented in Table 6.

TABLE 6
TOWNS IN 1951 AND 1961

Population-size	*1951*		*1961*	
	Number of towns	*Population (millions)*	*Number of towns*	*Population (millions)*
100,000 and over	76	23.73	107	35.13
50,000-99,999	111	7.62	139	9.53
20,000-49, 999	374	11.11	518	15.75
10,000-19,999	675	9.38	820	11.30
5,000-9,999	1,195	8.51	848	6.34
Below 5,000	629	2.09	268	0.89
Total	3,060	62.44	2,700	78.94

SOURCE: Census of India 1961, Vol. I, Part II-A (i), General Population Tables.

In Table 7, we present the variation in the urban population between 1951 and 1961, without making any adjustments for definitional changes. It will be observed that the urban population of India increased by 16.5 million during this period, indicating a growth rate of 26.4 per cent for the decade. The growth rate varied from 9.9 per cent in Uttar Pradesh to 121.9 per cent in Assam. The growth rate in West Bengal (which was not affected by definitional changes) was of the order of 36.0 per cent, which is roughly the adjusted urban growth rate for the country as a whole.

In Table 8 we give towns broadly grouped in terms of decrease and increase of population.

It will be recalled that the growth rate for the total population of India for the 1951-61 decade was 21.5 per cent. If the rate of natural increase in population is taken as roughly 20 per cent for the

TABLE 7
URBAN POPULATION IN DIFFERENT STATES OF INDIA: 1951 AND 1961

(*Population in millions*)

State	*1951*	*1961*	*Variation in population*	*Per cent variation*
INDIA	62.44	78.94	16.50	26.43
Andhra Pradesh	5.42	6.27	0.85	15.68
Assam	0.41	0.91	0.50	121.95
Bihar	2.63	3.91	1.28	48.67
Gujarat	4.43	5.32	0.89	20.09
Jammu and Kashmir	0.46	0.59	0.13	28.26
Kerala	1.83	2.55	0.72	39.34
Madhya Pradesh	3.13	4.63	1.50	47.92
Tamil Nadu	7.33	8.99	1.66	22.65
Maharashtra	9.20	11.16	1.96	21.30
Mysore	4.45	5.27	0.82	18.43
Orissa	0.59	1.11	0.52	88.14
Punjab	3.07	4.09	1.02	33.22
Rajasthan	2.96	3.28	0.32	10.81
Uttar Pradesh	8.63	9.48	0.85	9.85
West Bengal	6.28	8.54	2.26	35.99

SOURCE: Same as Table 6.

TABLE 8
PATTERNS OF POPULATION GROWTH: 1951-61

	Number of town groups and towns	*Per cent of urban population in 1961*
A. Decrease in population	135	2.1
B. Decade growth rate: below 50%	1,684	76.4
C. Decade growth rate: over 50%	278	16.8
D. New towns of 1961	365	4.7
	2,462	100.00

NOTE: There were 2,700 towns in 1961 but the number of town groups and towns was 2,462.

decade both in the rural and the urban areas of India, we get the following picture of urban growth:

	Number of towns	*Per cent of urban population in 1961*
1. Decade growth rate: below 20%	939	30.5
2. Decade growth rate: over 20%	1,158	64.8
3. New towns of 1961	365	4.7
	2,462	100.00

An interesting aspect of urbanization, revealed by our analysis, is the phenomenon of "declining" towns by which we mean towns which recorded a net decrease in population during 1951-61.

The slow tempo of urbanization is an unexpected phenomenon considering the general anticipation regarding a tremendous upsurge in the urban population of India prior to the 1961 census. It will be observed that the majority of "declining" towns belong to urban classes IV to VI (population below 20,000). The role of declining towns is further elaborated in Table 9.

TABLE 9
DECLINING TOWNS IN 1961

State	*No. of towns*	*Population in 1961 (in thousands)*
INDIA	153	1,876
Andhra Pradesh	17	182
Assam	1	4
Bihar	6	94
Gujarat	16	172
Jammu and Kashmir	4	10
Kerala	4	57
Madhya Pradesh	4	33
Madras	34	369
Maharashtra	10	111
Mysore	9	230
Orissa	3	18
Punjab	20	233
Rajasthan	8	142
Uttar Pradesh	9	122
West Bengal	4	62
Union territories: Goa, Daman and Diu	4	37

NOTE: For our purpose, a declining town is one which recorded an absolute decrease in population between 1951 and 1961.

The new definition adopted in the 1961 census was responsible for the declassification of 803 towns with a total population of 4.4 million. Except one town in Maharashtra (which belonged to urban class III) all these towns had a population below 20,000 (urban classes IV to VI). Fifty-four towns were merged with other cities and towns, and as a result they lost their identity in 1961.

It may be noted that most of the declassified towns had a high proportion of workers engaged in agricultural activities, which militates against the concept of "urban."

There were as many as 497 places which were labelled "towns" for the first time in 1961. Their aggregate population was 4.8 million. Of these, 36 had a population of 20,000 or more. The rest were in urban classes IV-VI (population below 20,000). West Bengal had the largest share of new towns: 66 with a population of 715 thousand, while Rajasthan's share was the smallest: 3 with a population of 13 thousand.

In Table 10 we summarize the inter-state variations in urban growth rates. The main conclusions are as follows:

1. The unadjusted rate of growth of the population of India for the decade 1951-61 was 26.4 per cent, but there was a wide variation in the state growth rates: from 9.9 per cent in Uttar Pradesh to 122.5 per cent in Assam. Treating 21.5 per cent (the rate of growth of the total population of India during 1951-61) as the dividing line we get the following two categories of states:

A. Growth rate over 21.5 per cent

Assam, Orissa, Bihar, Madhya Pradesh, Kerala, West Bengal, Punjab, and Madras.

B. Growth rate below 21.5 per cent

Maharashtra, Gujarat, Mysore, Andhra Pradesh, Rajasthan, and Uttar Pradesh.

2. In view of definitional changes, one is on firmer ground when one considers towns and cities with a population of 20,000 and over, referred to by us as "effective urban population." The rate of growth of the effective urban population is a better index of urbanization than the rate of growth of the total urban population. For India as a whole, the growth rate for the effective urban population was 42.2 per cent during 1951-61, which is quite high. This should correct the impression of slow urbanization given by the overall rate of urban growth of 26.4 per cent. Here again, the inter-state variations are considerable. The rate varies from 33.0 per cent in Uttar Pradesh to 116.3 per cent in Assam. The following states can be put in the "slow urbanization" category inasmuch as the growth rates of their effective urban population were lower than the all-India average: Mysore, Andhra Pradesh, Rajasthan, and Uttar Pradesh.

TABLE 10

INDICES OF URBAN GROWTH: 1951-61

State	Per cent increase in: Total urban population	Effective urban population (20,000+ towns)	I 100,000 +towns	II 50,000-99,999	III 20,000 49,999	IV-VI less than 19,999	Per cent variation in urban proportion 1951-61	Population of new towns as per cent of total urban population in 1961	Population of declining towns as per cent of total urban population in 1961	Population of declassified towns as per cent of total urban population in 1951
1	2	3	4	5	6	7	8	9	10	11
Assam	122.5	116.3	Nil	143.5	54.8	131.5	65.4	31.1	0.4	1.2
Orissa	86.8	97.8	42.7	265.8	62.9	75.3	55.7	27.2	1.6	—
Bihar	49.0	51.4	51.5	16.5	77.7	43.4	24.5	14.2	2.7	1.3
Madhya Pradesh	47.7	58.7	47.8	43.8	84.5	29.6	18.8	12.8	0.7	4.1
Kerala	39.9	68.4	49.0	10.8	148.7	—9.7	12.1	18.8	2.2	12.9
West Bengal	36.0	35.7	31.3	40.5	47.8	37.5	2.4	8.4	0.7	—
Punjab	33.3	53.2	65.6	43.7	49.4	—1.8	5.9	5.4	5.9	1.9
Tamil Nadu	22.6	27.7	30.4	58.2	9.4	10.7	9.6	6.8	4.3	2.8
Maharashtra	21.3	42.6	61.4	6.1	21.0	—29.1	—1.8	1.5	1.0	9.4
Gujarat	20.1	43.3	41.2	127.3	26.4	—22.5	—5·4	2.7	3.2	9.7
Mysore	18.3	41.8	35.5	25.1	74.7	—12.3	—2.7	6.1	4.4	9.6
Andhra Pradesh	15.8	41.0	53.7	—19.1	67.6	—24.0	0.1	2.2	2.9	9.2
Rajasthan	11.0	33.2	58.0	—8.5	18.2	—15.6	—12.0	0.4	4.3	12.3
Uttar Pradesh	9.9	33.0	41.9	20.7	20.6	—37.7	5.8	0.5	1.3	13.3
INDIA	26.4	42.2	48.0	25.0	41.7	—7.2	3.9	6.1	2.4	7.0

NOTE: The states are ranked in order of the urban growth rates during 1951-61.

3. We next consider the growth rates by urban classes. The all-India growth rates for cities (population 100,000 and over) was 48.0 per cent, while the growth rates for class II towns (50,000—100,000) and class III towns (20,000—50,000) were 25.0 per cent and 41.7 per cent respectively. Thus, the class III towns recorded a higher rate of growth compared to class II towns.

4. The small towns in India (population below 20,000) recorded a decrease in population of the order of 7.2 per cent. But this, as we have already discussed, was on account of the stricter definition of "town" adopted in the 1961 census.

5. In column 8 (of Table 10) we have given the rate of urbanization as measured by the per cent variation in the urban proportion between 1951 and 1961 (without making adjustments for definitional changes). The rate of urbanization for India as a whole was 3.9 per cent. The rate varied from —12.0 per cent in Rajasthan to +65.4 per cent in Assam. The following states recorded negative rates of urbanization: Maharashtra, Gujarat, Mysore, Rajasthan, and Uttar Pradesh.

6. We next consider three important variables affecting urban growth, namely, (*i*) population of new towns as per cent of the total urban population; (*ii*) population of declining towns as per cent of the total urban population; and (*iii*) population of declassified towns as per cent of the total urban population.

In India as a whole, the new towns accounted for 6.1 per cent of the total urban population in 1961. This percentage varied from 0.4 per cent in Rajasthan to 31.1 per cent in Assam. This explains, to a considerable extent, the abnormally low rate of urban growth in Rajasthan and Uttar Pradesh where the shares of new towns were 0.4 per cent and 0.5 per cent respectively.

7. Turning to declining towns, we find that the contribution of these towns was 2.4 per cent of the total urban population in 1961. This percentage varied from 0.4 per cent in Assam to 5.9 per cent in Punjab.

8. In India as a whole, 7.0 per cent of the total urban population in 1951 was in the category of declassified towns of 1961. Here again, there were wide inter-state variations. In Orissa and West Bengal, there were absolutely no declassified towns, while in Rajasthan and Uttar Pradesh, the figures were 12.3 per cent and 13.3 per cent respectively. This explains to a great extent the slow urbanization in Rajasthan and Uttar Pradesh.

To sum up, when we consider all the three variables together, namely, the relative share of new towns, declining towns, and declassified towns, we get a better insight into the process of urbanization in India and in the different states than is revealed by the overall figure for urban growth rates during the 1951-61 decade.

A Decade of Rapid Urbanization, 1961-71

We shall now turn to the 1961-71 decade. Since the 1971 census is the latest census of India, it may be worthwhile considering the long-term trend of urbanization in India in the twentieth century and bring the figures right up to 1971. This is done in Table 11.

TABLE 11
TREND OF URBANIZATION IN INDIA: 1901-1971

Census Year	*Percentage of urban population to total population*	*Percentage of population in each size-class of towns to total urban population*					
		Class I 100,000 and over	*Class II 50,000-99,999*	*Class III 20,000-49,999*	*Class IV 10,000-19,999*	*Class V 5,000-9,999*	*Class VI below 5,000*
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*
1901	10.85	22.93	11.84	16.50	22.06	20.38	6.29
1911	10.29	24.19	10.90	17.69	20.46	19.81	6.95
1921	11.18	25.31	12.43	16.89	18.91	19.03	7.43
1931	12.00	27.37	11.95	18.76	18.97	17.32	5.63
1941	13.86	35.40	11.77	17.71	16.29	15.38	3.45
1951	17.30	41.77	11.06	16.73	14.02	13.20	3.22
1961	17.98	48.37	11.89	18.53	13.03	7.23	0.95
1971	19.87	52.41	12.15	17.36	12.04	5.24	0 80

NOTE: [1]From 1901 to 1961 a town group has been classified according to total population.

[2]In 1971 in respect of the following states and union territories, an urban agglomeration has been classified according to its total population.

Andhra Pradesh, Bihar, Himachal Pradesh, Madhya Pradesh, Mysore, Orissa, Uttar Pradesh, West Bengal, Chandigarh, Delhi and Goa, Daman and Diu.

It will be observed from Table 11 that in 1961 the urban population was roughly 18 per cent of the total population, while in 1971, it was roughly 20 per cent of the total population. But in

terms of the per cent increase of the urban population, the rate of urbanization during 1961-71 cannot be regarded as very high. However, this is primarily a statistical phenomenon. In terms of absolute population size, there has been an increase of about 30 million in the urban population of India during the last 10 years and the rate of growth of the urban population has been of the order of 37.8 per cent. Thus, from the point of view of the urban growth rate, urbanization has indeed been rapid during the last decade. A growth rate of 2.5 per cent is enough to convince most people about the population explosion. Therefore, a growth rate of over 3.5 per cent must certainly be a cause for concern, whether one calls it an urban explosion or not.

Table 11 also gives the percentage distribution of the urban population by six classes of towns according to the size of population. The most interesting feature which emerges from this table is the increasing role of class I cities (population: 100,000 and over). In 1901 these cities accounted for 23 per cent of the total urban population, while, in 1971, more than 52 per cent of the urban population was residing in these cities. Even in one single decade (1961-71), the proportion of urban population in class I cities has increased from 48.4 per cent to 52.4 per cent, whereas in the case of towns belonging to urban classes III, IV, V and VI, there has been a decrease in the proportion and in the case of class II towns, there has been only a marginal increase in the proportion, from 11.9 per cent to 12.2 per cent. In fact, even if the entire period (1901-71) is considered, there is stagnation in the case of class II and III towns, whereas there has been a substantial decline in the percentage or urban population in class IV, V, and VI towns. For example, class II towns accounted for 11.8 per cent of the urban population in 1901 and the comparable figure in 1971 was 12.2 per cent. But in the case of class V towns, the percentage lowered from 20.4 in 1901 to 5.2 in 1971. Part of the explanation lies in definitional changes as we have noted earlier. The 1961 census adopted a rigorous definition of the term "urban." This practice was also followed in 1971. Thus, the 1961 and 1971 figures are not vitiated by definitional changes. Therefore, the decline in the importance of class III, IV, V, and VI towns is genuine. The conclusion is that the number of class I cities has increased as also their population. The process of urbanization has thus been essentially a process of cityward migration.

Table 12 gives the urban population distribution in the six classes of towns for 1961 and 1971. It will be seen that the number of class I cities has increased from 113 to 142 during 1961-71, and the population residing in these cities has increased from 38 million to 57 million during this period.

TABLE 12
DIFFERENT SIZE-CLASS OF TOWNS AND POPULATION IN 1961 AND 1971

Population size	*1961*		*1971*	
	No. of town groups	*Population (in millions)*	*No. of town groups*	*Population (in millions)*
Class I (100,000 and over)	113	38.18	142	57.02
Class II (50,000-99,999)	138	9.37	198	13.22
Class III (20,000-49,999)	484	14.63	617	18.89
Class IV (10,000-19,999)	748	10.29	931	13.10
Class V (5,000-9,999)	760	5.71	756	5.70
Class VI (below 5,000)	218	0.76	277	0.87
Total	2,461	78.94	2,921	108.80

NOTE: The discrepancy between the figures for the number of towns in 1961 in this Table and Table 6 is explained as follows:
Table 6 refers to towns while Table 12 refers to town groups.

Table 13 gives the urban proportion in all the states of India. Here we observe interesting inter-state variations. In West Bengal the proportion of urban population has remained almost static. It was 24.5 per cent in 1961 and 24.6 per cent in 1971. This was also the case in Punjab, where the figures were 23.1 in 1961 and 23.8 in 1971, and in Haryana, where comparable figures are 17.2 and 17.8. On the other hand, in Tamil Nadu the urban proportion has shot up from 26.7 per cent in 1961 to 30.3 per cent in 1971. In Gujarat, the comparable figures are 25.8 and 28.1, while in Maharashtra they are 28.2 and 31.2. Judging from the proportions of urban population, in 1971, Maharashtra was the most urban state in India followed by Tamil Nadu and Gujarat, while the least urban states were Himachal Pradesh, Orissa, and Assam.

TABLE 13
PERCENTAGE OF URBAN POPULATION IN STATES, 1961 AND 1971

State	*1961*	*1971*
INDIA	17.98	19.87
Andhra Pradesh	17.44	19.35
Assam*	7.37	8.39
Bihar	8.43	10.04
Gujarat	25.77	28.13
Haryana	17.23	17.78
Himachal Pradesh	6.34	7.06
Jammu and Kashmir	16.66	18.26
Kerala	15.11	16.28
Madhya Pradesh	14.29	16.26
Maharashtra	28.22	31.20
Mysore	22.33	24.31
Nagaland	5.19	9.91
Orissa	6.32	8.27
Punjab	23.06	23.80
Rajasthan	16.28	17.61
Tamil Nadu	26.69	30.28
Uttar Pradesh	12.85	14.00
West Bengal	24.45	24.59

*Combined figures for Assam and Meghalaya.

In Table 14 we have given the growth rate of urban population for the different states of India. In India as a whole, the urban population increased by 37.8 per cent. During 1961-71, barring the small state of Nagaland, the urban growth rate was highest in the case of Orissa and lowest in Punjab. The impact of industrialization on urban growth in Orissa and the impact of agricultural prosperity in Punjab and Haryana on the urban growth of these two states need fuller investigation. The industrial stagnation in West Bengal is reflected in the low growth rate of the urban population during 1961-71.

Every decade has a theme: famine, plague, influenza, epidemic, depression, war, and partition. The 1951-61 decade was, in a way, the first "normal" decade of urbanization and yet the growth of urban population was much less than anticipated in view of the increased tempo of industrialization. The 1961-71 decade has witnessed an acceleration of the tempo of urbanization in terms of the

rate of growth of the urban population. In fact, if adjustments are made for the partition effect, this decade has recorded the highest ever rate of growth of urban population in India. It is difficult to say if 1961-71 was a normal decade n the context of economic development. During this decade, there were three wars: the Chinese aggression in 1962, the Pakistan aggression in 1965, and the Pakistan aggression again in 1971. During this decade, India passed

TABLE 14
URBAN POPULATION IN STATES OF INDIA, 1961 AND 1971
(*figures in millions*)

State	*Population*		*Total addition*	*Per cent*
	1961	*1971*	*1961-71*	*growth rate*
INDIA	78.94	108.79	29.86	37.8
Andhra Pradesh	6.27	8.40	2.12	33.8
Assam*	0.78	1.25	0.47	51.5
Bihar	3.91	5.65	1.74	44.5
Gujarat	5.32	7.51	2.19	41.2
Haryana	1.30	1.77	0.47	35.6
Himachal Pradesh	0.18	0.24	0.06	35.5
Jammu and Kashmir	0.59	0.84	0.25	42.0
Kerala	2.55	3.47	0.91	35.7
Madhya Pradesh	4.63	6.77	2.14	46.3
Maharashtra	11.16	15.70	4.54	40.7
Mysore	5.27	7.11	1.85	35.1
Nagaland	0.02	0.05	0.03	166.6
Orissa	1.11	1.81	0.70	63.5
Punjab	2.57	3.21	0.64	24.9
Rajasthan	3.28	4.53	1.25	38.0
Tamil Nadu	8.99	12.45	3.46	38.4
Uttar Pradesh	9.48	12.37	2.89	30.5
West Bengal	8.54	10.93	2.39	28.0

*Combined figures for Assam and Meghalaya.

through some of the worst years of drought, and massive influx of refugees from Bangladesh, apart from the usual share of floods and other natural calamities. After the completion of the Third Five Year Plan, there was a Plan holiday. This was a setback to the process of planning and the Fourth Five Year Plan was launched only in 1969-70. Our examination of the trend of urbanization

during the last decade, thus reveals a hopeful sign that many of our industrial centres, steel cities, port towns, etc., have recorded a high rate of growth. The investments made on industrialization, especially during the Second Five Year Plan, have made some impact on individual urban centres.

The dominant role of cities with a population of 100,000 and over in the urbanization process will be evident from the fact that about 56 per cent of the total urban population resides in the cities. The growth rate of the cities was 59 per cent compared to the overall growth rate of the urban population of 38 per cent during the 1961-71 decade. Out of the net increase of 30 million persons in urban areas during this decade, the cities claimed 22.5 million people or 75 per cent of the total urban increase. In brief, the process of urbanization during the last decade has been essentially a *process of cityward migration.* This conclusion is true even if a long-term trend is considered. In 1901, the cities accounted for about 23 per cent of the urban population compared to 56 per cent in 1971.

Today there are 147 cities with an aggregate population of about 61 million. Of these, there are 9 cities with population exceeding one million in each city. Except for the Calcutta urban agglomeration, the growth rate of all these cities has been very high. During 1961-71, the growth rate of the total population of India was 24.8

TABLE 15
URBAN POPULATION BY CLASS OF TOWN: 1961 AND 1971

Class of towns	*No. of towns*		*Population in millions*		*Per cent of total urban population*		*Growth rate of population 1961-71*
	1961	*1971*	*1961*	*1971*	*1961*	*1971*	
I 100,000 and over	113	147	38.2	60.7	48.4	55.7	59.1
II 50,000-99,999	138	185	9.4	12.5	11.9	11.5	32.9
III 20,000-49,999	484	583	14.6	17.8	18.5	16.3	21.7
IV 10,000-19,999	748	874	10.3	12.3	13.1	11.3	20.1
V 5,000-9,999	760	680	5.7	5.2	7.2	4.7	—9.6
VI Below 5,000	218	172	0.7	0.6	0.9	0.5	—25.4
All classes	2,461	2,641	78.9	109.1	100.0	100.0	38.2

SOURCE: Table 4, pp. 26-27. *In* census centenary 1972. *Pocket book of population statistics.* New Delhi: Registrar General and Census Commisioner.

per cent. As already observed, the growth rate of cities with population of 100,000 and over was 59 per cent. As Table 15 indicates the growth rate of towns with population between 50,000 and 100,000 was 33 per cent. In the other categories of towns, the growth rate was below the national average and in the case of the smallest towns, there was an actual decrease in population. The overall growth rate of urban population of 38 per cent conceals the fact that there is stagnation and decay of small towns. In other words, many big cities have grown at the cost of the small towns.

A healthy feature of urbanization during the last decade is the growth of steel cities, other industrial centers, ports, and new capital cities. The impact of the Five Year Plans and in particular, the programmes of industrial development, is evident from the pattern of urban growth. Table 16 indicates the high growth rates of a number of such *dynamic* cities. The glaring exception is Calcutta which reached its saturation point a long time ago. There are, however, a number of cities which recorded low growth rates. For example, Mirzapur-cum-Vindhyachal (6%), Kharagpur (10%), Machilipatnam (11%), Mathura (12%), Alleppey (15%), Eluru (17%), Muzaffarpur (17%), Farukhabad-cum-Fatehgarh (18%), Gaya (19%), Kanchipuram (19%), and Rampur (19%).

TABLE 16
GROWTH OF POPULATION IN SELECTED CLASS I CITIES

	Population in 1971 (thousands)	*Decade (1961-71) growth rate (per cent)*
Million-plus cities		
Calcutta Urban Agglomeration	7,005	22
Greater Bombay	5,969	44
Delhi (including New Delhi)	3,630	54
Tamil Nadu	2,470	43
Hyderabad	1,799	44
Bangalore	1,648	43
Ahmedabad	1,588	38
Kanpur	1,273	31
Steel cities		
Jamshedpur	465	42
Durg-Bhilainagar	245	84
Durgapur	207	397
Rourkela	173	91
Bokaro Steel City	108	New
Bhadravati	101	54

Other industrial cities		
Surat	472	64
Baroda	467	57
Ludhiana	401	64
Ranchi	256	83
Kota	213	77
Ghaziabad	128	82
Port cities		
Cochin	438	56
Calicut	334	73
Vishakhapatnam	362	72
Capital cities		
Bhopal	392	76
Chandigarh	233	135
Bhubaneswar	106	176

Industrialization, Tertiarization and Urbanization

The literature on urbanization is replete with discussions on the correlation between industrialization and urbanization and the push and pull factors in rural to urban migration. It is unrealistic to argue that industrialization in India is not rapid enough to keep pace with urban growth. It is doubtful whether, even after twenty years, industrialization will be able to keep pace with urban growth. We shall not go into the mechanics of industrialization here but will point out that during 1951-61, the number of employees in large-scale factories increased by only one million. We must face the fact that industrialization cannot be the solution to the problem of surplus labour in India. Our contention is that urbanization in the context of rapid population growth and surplus labour—which is the case in present-day India—calls for fresh thinking on the industrialization urbanization process. It is our contention that the theoretical generalization regarding the relationship between industrialization and urbanization are rather flimsy and that the empirical studies concerning the process of industrialization and urbanization lack rigorous analysis, mostly because adequate data are not available. As a result, much of the discussion on the subject revolves round pedestrian controversies regarding capital-intensive and labour-intensive techniques, push and pull factors in migration, and so on. A comprehensive study of the industrialization-urbanization process merits the joint efforts of historians, economists,

sociologists, and demographers. The Indian case is in many ways unique and such efforts are bound to be rewarding.

In a recent study of different models of urbanization in India, Mookherjee and Morrill (1973) come to the conclusion:

> With a few exceptions, the dynamic models were not too successful in accounting for change in the level of urbanization and urban growth over the decade (1951-61). In general, the notion that investment in the secondary sector would lead to a greater degree of urban growth was not borne out, but rather urban growth was more associated with expansion of employment in services, transport and trade. There was, however, a relation between income and prevalence of manufacturing; status, if not urban growth, seemed to be dependent on success in industrialization.
>
> Results of the analysis of individual Class I centers indicated an association between urban growth and change in the total labor force and in the tertiary sector, as well as change in the city area, as expected. However, as in the preceding models, the hypothesis of a close relationship between city growth and occupational change in the secondary sector, particularly in manufacturing, was not supported.

Mookherjee and Morrill further observe:

> Percentage growth of urban population seems to be more a function of change in the tertiary sector than in the secondary, but neither provides a very complete explanation. The same pattern emerges in the analysis of urban growth in individual cities of over 100,000 population, where growth appears to be associated with change in total and non-agricultural labor force and employment in the tertiary, rather than the secondary, sector.

Their conclusion is as follows:

> The association of tertiary sector employment (indicating a broad expansion of commercial activities and services that, for want of a better word, we term as "tertiarization") with both the degree of urbanization and urban growth is not uncommon in the developing countries as well as in more developed ones.

> But, as many scholars have pointed out, while in the latter case this trend may signify a well-developed and mechanized primary and secondary sector along with a high standard of living, in the former situation it usually simply points towards a vast under-employed labor force . . . "tertiarization" in India—a pattern quite different from that in the Western models . . . should be explored to its fullest socio-economic implications on the study of urbanization and planning in the nation (Mookherjee and Morrill 1973: 58-61).

It has become almost a ritual to analyze the causes of migration in terms of "push and pull factors." A corollary of the push and pull thesis is the "over-urbanization" thesis propounded by some western scholars. This has been questioned by some Indian scholars.

Sovani has effectively demolished the "over-urbanization" thesis in one of his recent papers (Sovani 1966: 1-13). We have also argued against migration analysis in terms of push and pull factors (Bose 1963).

Sovani says, "A common and widely accepted view about rural-urban migrants in Asian countries is that they are 'pushed' rather than 'pulled' into the urban areas. . . . This is such a widely accepted view of rural-urban migration that it takes quite an effort even to notice the evidence that does not fit into this picture" (Sovani 1966: 1-13).

Sovani argues mainly on the basis of data collected in Orissa state. He also takes into account the findings of several socio economic surveys of cities in India. He compares the income distribution of households in rural areas which send out migrants and those which do not send out migrants. In one of the three districts he studies, the migration from the highest income brackets is considerable. He concludes, "On the whole there is an indication that household income is an important factor which influences outmigration but it is doubtful whether it is the most decisive one."

Turning to the occupation of migrants before migration, Sovani finds that the proportion of households sending out migrants from among the agricultural labourers (who are more or less landless) was small compared to households with other occupations. He says, "As landless labour belongs to the poorest section of the rural areas, it seems strange that the 'push' to the urban areas does not operate more strongly on it."

Sovani then proceeds to compare the unemployment rates among migrants to the cities and the non-migrant population of cities. Several city surveys have revealed that the incidence of unemployment was higher among residents. One explanation of this has been offered by the author of the Calcutta survey who says:

> Unemployment has always been lowest among the migrants. The most probable explanation is the fact that a large number of such migrants who are unable to secure any job in the city after staying here for a certain period go back to their native places or some other places. Otherwise it is difficult to explain the persistently low unemployment rates among this group of employment seekers.

Commenting on this, Sovani says:

> If this is true generally, it throws a new light on rural-urban migration in India because it would show that it is not such a blind phenomenon as results in over-migration to urban areas because of the rural "push." The movement seems to be much more cautious and discerning and reversible. It seems a carefully calculated move and retreat is an integral part of it.

Elsewhere (Bose 1973), we have drawn attention to the phenomenon of "turnover migration" in India. We have argued that push and pull factors must be interpreted in the overall demographic context. Under conditions of a high rate of natural increase in population not only in the rural areas but in the urban areas as well (as a result of high urban birth rates and rapidly declining urban death rates), the push factor also operates in the urban areas. In India the urban labour force is quite large and the urban unemployment rates are high. Pools of under-employed and unemployed population already exist in the labour force, pools which act as deterrents to fresh flows of migration from rural areas to urban areas. We have called this the "push-back" factor. If new employment opportunities are created in the urban areas, the first persons to offer themselves for employment are the marginally employed persons already residing there unless, of course, special skills are required.

In support of our argument we may point that in urban India,

the unemployment rate was 8.2 per cent among the resident (non-migrant) population while it was 6.4 per cent among the migrant population (National Sample Survey, 1972). In urban Delhi, it was found that while 4.2 per cent of the working force in resident households was unemployed, only 2.7 per cent of the working force in migrant (excluding refugee) households was unemployed (Rao and Desai 1965: 380). In Bombay city, it was found that 7.1 per cent of the resident males were unemployed while only 4.5 per cent of the immigrant males (non-refugees) were unemployed (Lakdawala *etal.* 1963: 482). At the same time, it is true that more people come to cities in search of employment than for better employment. On the basis of NSS data we estimated that for every 100 persons who migrate to urban areas in India because they have found better employment, 254 persons come in search of employment. These two factors taken together, namely, the larger number of persons coming to cities in search of work compared to those who come having procured better employment, and yet the lower unemployment rate among the migrants, indicate the operation of the push factor both at the rural and urban ends. In other words, there are not always clear streams of migration from rural to urban areas but there is probably a high rate of turnover migration indicating push to and fro.

There is also another type of urban "push." In the absence of social security measures, except in a limited sense and for a small section of the population, there is a constant "push" factor in urban areas which operates whenever a migrant in a city falls sick, is unemployed, or retires from service. This is especially true of the migrant who comes to the city in expectation of a job but fails to get it. He is inevitably pushed back to his village or to some other city in search of a job.

With regard to the push factor in rural areas, we may also interpret "push" in a literal sense to indicate the dash and dynamism on the part of some sections of the population. In a study of migration in Punjab (India), Gosal lists among the causes of migration, "the adventurous spirit of the Punjabis whom distance does not deter in the pursuit of economic opportunities" (Gosal 1967), but he also points out that the areas from where the out-migration has been the highest are areas where density of population is the highest, where per capita cultivated land is the smallest, and where large

parts have been affected by water-logging. This indicates the combination of positive and negative aspects of the push factor.

It does seem to us that it would be more fruitful to look for decisive factors in rural-urban migration which really trigger off the process of migration. Under conditions of mass illiteracy and unorganized spread of employment market information, mobility of labour is severely restricted. There may be rural unemployment or underemployment and at the same time there may be cities with unfulfilled demand for labour. It does not necessarily follow from this that there will be rural-urban migration. It is our contention that except in the case of contract labour and similar forms of labour recruitment, individual migration of labour from rural to urban areas (especially long distance migration) depends largely on the presence of friends, relations, or fellow-villagers in the city of migration. Unfortunately, the socio-economic surveys of cities in India did not collect data to substantiate or nullify this viewpoint. However, one recent study based on the survey of rural labour in Bombay city by Kunj Patel (1963: 29) supports our contention (Table 17).

TABLE 17
DISTRIBUTION OF WORKERS OF RURAL ORIGIN IN BOMBAY (SAMPLE SURVEY) ACCORDING TO RELATIONS WORKING IN MILLS

Particulars	*No. of workers*	*Percentage*
Close relations	333	66.6
Relations	75	15.0
Villagers	86	17.2
No relations/no villagers	6	1.2
Total	500	100.0

Patel comments that "just when a lead is given, the villager does not leave his home on his own. Only when there is a close relation or friend to take him to Bombay, does he leave the village with him, and it is through his influence that the newcomer gets a job, in whichever industry the former happens to be employed." It is also interesting to note that when workers were asked if they had any of their fellow-villagers working in Bombay, 99 per cent replied that they had and many of them were employed in mills.

Thus in order to get a better insight into the causes of migration it is necessary to know more about the method of recruitment of labour. Here again there is need for careful case studies with a historical perspective. Unfortunately such studies are rare in developing countries.

Commenting on the various hypotheses about the commitment of rural labour and related questions, Morris says:

> Much of the literature tends to base interpretation on hypothetical psychological and sociological propositions which themselves are highly suspect. Moreover, the methodology is questionable. The historical argument typically rests on scattered fragments of evidence taken indiscriminately from all areas of the country and from all sorts of industry, seasonal and perennial, large-scale and small-scale; it relates to all kinds of labour, casual and permanent, unskilled and skilled. . . . I have suggested that satisfactory studies of the creation of an industrial labour force cannot be made on an all-India basis (Morris 1965: 4).

The so-called "pull" factor to cities in terms of the glamour of city lights also cannot stand close scrutiny. In a study of factory workers of Poona city, Richard D. Lambert (1963: 85) presents interesting data on commitment of labour (Table 18).

TABLE 18
PER CENT OF WORKERS COMMITTED TO FACTORY, OCCUPATION AND CITY (POONA)

Type of attachment	*Percentage*
Factory	76.2
Occupation	46.0
City (Poona)	4.3

As Lambert points out, "The comparatively low proportion of workers who would insist on working in Poona shows how much stronger the employment commitment is than the residential commitment."

The glamour of the city lights is basically the "glamour" for better employment in terms of higher wages in cities.

To conclude, a macro-analysis of the causes of migration has doubtful value in arriving at meaningful generalizations on the process of rural-urban migration.

The implication of our analysis in terms of economic development is that urbanization in the face of rapid population growth has built-in obstacles in the form of a surplus labour force in the urban areas which has to be liquidated before there is any scope for a significant shift of population from the rural to the urban areas. This not only slows down the tempo of urbanization, but also worsens the situation in rural areas. While the pressure of population on land goes on increasing, the channels of rural-urban migration are closed or narrowed down on account of the "push-back" from urban areas.

Projections of Urban Population

On the basis of the projections made by Raghavachari from the Office of the Registrar General, we shall give the dimensions of urban growth till the end of this century. Assuming a progressive decline of the decennial rate of growth of total population from 22.5 per cent during 1966-70 to 16 per cent at the end of the century, Raghavachari (Bose *et al.* 1974: 277-8) has estimated an increase in population from 547 million in 1971 to 945.4 million by 2001, an increase of around 398 million between 1971 and 2001. We summarize the position in Tables 19, 20, and 21.

TABLE 19
PROJECTIONS OF TOTAL, RURAL, AND URBAN POPULATIONS FOR THE PERIOD 1981-2001 (WITH THE ACTUALS OF 1971)

Year	*Urban*	*Rural*	*Total*	*Per cent of urban to total population*	*Per cent of rural to total population*
	(in million)				
1971	109.1	439.0	548.1	19.9	80.1
1981	150.1	518.1	668.2	22.5	77.5
1991	205.1	596.1	801.2	25.6	74.4
2001	278.3	667.1	945.4	29.4	70.6

TABLE 20
ANNUAL COMPOUND GROWTH RATES OF THE PROJECTED POPULATION DURING 1971-2001

Decade	*Urban*	*Rural*	*Total*
1971-81	3.3	1.7	2.0
1981-91	3.2	1.4	1.9
1991-2001	3.1	1.1	1.7

TABLE 21
INCREASE IN RURAL AND URBAN POPULATION, 1961-2001

	(*million*)			
Increase in	*1961-71*	*1971-81*	*1981-91*	*1991-2001*
Total population	108	121	133	144
Rural population	78	80	78	71
Urban population	30	41	55	73

His projection of urban population based on the ratio method using the logistic curve with the constraint that 90 per cent of the population would become urban by the year 2001, implies that the urban proportion would move up from 19.9 per cent in 1971 to 41.7 per cent in 2001. Thus the urban population by 2001 would be approximately 169 million more than what it was in 1971, indicating a 3.2 per cent geometric rate of growth on the average during the next 39 years.

The Draft Fifth Five Year Plan indicates that the urban labour force (excluding the workers in the age-group 0-14 years) will be 20.5 million more in 1986 than in 1971, which is more than the present level of employment in the entire organized sector, including both public and private sectors. This implies that the present stagnation in occupational structure will probably not change in the near future.

Atreyi Chatterjee sums up the implications of the future trends of urbanization as follows:

> In the face of rapidly increasing rates of unemployment in urban areas, high rates of natural increase of urban labour force and an acceleration in the tempo of urban to urban migration, it

seems unlikely that the relative importance of rural to urban migration will greatly increase in the current decade. To that extent the relative increase in urban population may be less at the end of the century than what we have indicated earlier. But the absolute increase in urban population will still be tremendous. Besides, the stagnation in the relative share of rural-urban migration in total migration does not imply that the flow of rural poverty to urban areas will be arrested, because even if the relative share of rural-urban migration which was around 15 per cent in 1961-71 remains the same, it will mean in absolute terms an increase in the number of life time rural-urban migrants from around 24 million in 1971 to 33 million by 1981 signifying an increase of 9 million during the decade 1971-81 (Chatterjee 1974: 279).

To sum up this discussion, it is very unlikely that the present pattern of big city-dominated urbanization, the development of the population growth-sponsored service sector, which is really a poverty-based sector, and the extension of rural poverty to urban areas through disorderly rural-urban migration, will undergo any drastic modification unless there is a change in value system, life styles, and a departure from the past in our social and economic development plans.

The growing concern for environment has introduced a new dimension to demographic studies. The crisis of human settlement is no less acute than the crisis of population explosion and the need for controlling human settlement is as great as that for controlling population growth rates.

One of the pioneering studies on environment—*Only One Earth* by Barbara Ward and Rene Dubos—begins the chapter on "Problems of human settlements" as follows, "The first need is to take the strain off existing cities," (Ward and Dubos 1972: 181) and proceeds to give some figures indicating the deplorable housing condition in Indian cities. But one could argue with equal force that "the first need is to take the strain off rural areas—the strain of poverty, unemployment and economic and social stagnation." One could also give figures for the deplorable state of the productive base of the rural economy in countries like India.

An overemphasis on the problems of big cities created by "the human avalanche" of migration, to use the picturesque phrase of

Ward and Dubos, underestimates the positive role of migration in relieving rural poverty. There is inadequate realization of the role of cities as reception centres for the rural poor in countries like India. The tendency to look upon rural-urban migration as a nuisance and urbanization as an evil and to dream of pure air and the picturesque landscape in the countryside is to shut one's eyes to economic reality. This is not to deny the urgency of positive measures to regulate rural-urban migration. But the popular view that a rural to urban migration is creating serious problems and that such migration should be curbed is an over-simplification. One should ask: serious problems for whom? Certainly not for the rural migrant in spite of all the hostilities of the urban environment. In fact, poverty and unemployment in rural areas drive the migrant to the city. One cannot look upon the cities as the exclusive preserve of only those who are already there and ask for an internal passport system in the name of orderly urban development.

Strategy of Urban Development

A review of the five-year plans of India indicates the helplessness of the Planning Commission which recognized the ineffective role of municipalities in urban development and the utter lack of any innovation in this regard. We shall quote from these plans to illustrate our point.

The First Five Year Plan makes a frank criticism of state governments and local authorities:

> We have already seen how haphazard growth and ribbon development have been caused by inadequate legal powers to control use of land and construction of buildings, though it must be admitted that neither the State Governments nor local authorities have shown a full appreciation of the situation or utilised such powers as they already have to arrest the unhealthy growth.

The Second Five Year Plan also admits the failure of the present system of municipal administrations to cope with the problems of urban planning. It observes:

> It is sufficient to remark here that for urban development to

proceed on desirable lines, competent municipal administration with adequate powers, resources, and administrative and technical staff are essential. Urban development and redevelopment throws increasing responsibility on municipal administration which few of them are at present able to discharge.

The Third Five Year Plan reiterates the weakness of the present municipal system. It says:

> At the local level, municipal administration alone can undertake satisfactorily the task of providing the services needed for development in urban areas, expansion of housing and improvement of living conditions. Most municipal administrations are not strong enough to carry out these functions.

The Fourth Five Year Plan refers to the recommendations of the Rural Urban Relationship Committee and two other committees appointed by the Local Self-Government Ministers' Council on augmentation of financial resources of local urban bodies and urban land policy and makes this philosophical observation:

> The implementation of schemes for the benefit of these cities (metropolitan cities and other large centres) carries with it a corresponding obligation on the part of the beneficiaries to share the burden. It is hoped that State Governments will take all the measures necessary to augment resources at the local level.

The Draft Fifth Five Year Plan also observes somewhat helplessly:

> Whilst, during the Fourth Plan, there has generally been a growing awareness in the States of the problems of urban development, it cannot be stated that the States have made much headway in taking comprehensive action for the adoption and implementation of Master Plans. This has been due primarily to lack of adequate resources both financial and organizational at the local level.

There are at least six factors in the existing situation which inhibit the success of urban development plans:

1. The Finance Commission, which is appointed every five years under the Constitution of India, is not required to look into the problem of local finance.

2. The Planning Commission does not take note of individual cities in their planning process in spite of the cliches on regional planning which occur in all the five-year plans.

3. The Department of Urban Development in the Central Ministry does some coordination work and the Town and Country Planning Organization reviews master plans. Periodical conferences of state ministers of local self-government and mayors from different parts of India are called and presided over by the Central Minister but the Government of India does not have any machinery to tackle urban problems on a national plane. This is the outcome of regarding local self-government as a state subject.

4. The states, however, do not generally consider urban problems as of any particular consequence and usually the Ministry of Local Self-Government is considered one of the unimportant ministries. To make matters worse, there are instances when state governments superseded municipalities and corporations on political grounds though overtly some other reasons were given.

5. The corporations and municipalities are, by and large, centres of inefficiency, corruption, and political nepotism. Most of them are bankrupt and cannot in any way tackle the big problems in the field of housing, transport, environmental pollution, etc. Besides, they do not have adequate legal powers of the administrative machinery to implement a modern master plan. In short, the municipalities are not geared to urban planning as understood today but merely perform municipal functions as understood in the nineteenth century. They have neither the financial viability nor the legal backing to confront urban problems except in limited spheres such as zoning and land-use planning.

6. Some bold efforts have been made to tackle the problems of a few cities. Examples: the Delhi Development Authority (DDA) and the Calcutta Metropolitan Development Authority (CMDA). But in spite of some bright patches, the overall picture is dismal. The DDA has limited expertise in the field of housing, transport, and other issues of urban development and its composition is again a hangover from the nineteenth century ideas on municipal administration. In Calcutta, for the last ten years the Calcutta Metropolitan Planning Organization has been conducting studies which

have generated some employment for economists, without making any significant impact on the life of the city. The twin-city project of Bombay continues to be controversial.

There are hardly any studies on the constitutional aspects of urban administration. The basic problem can be posed as follows: in view of the growing complexity of urban problems and the financial and administrative weakness of the present obsolete form of municipal administration, is it possible to think in terms of a national system of cities based on a clear recognition of the role of big cities and the need for an adequate administrative machinery at the national level to deal with the problems of urban development? This calls for a reappraisal of the role of the Centre, the states, and the local governments, within the framework of the present federal structure of India and also for constitutional changes essential for the implementation of a progressive policy for urban development—a policy which treats urbanization as a national issue and not merely as a state or local issue.

The linking of urban problems to housing, slums, and renewal has restricted our vision of urban development and failed to take note of the complexity of urban problems in terms of growing pollution of soil, water, and air, in terms of human environment, in terms of urbanization as a process essential for economic growth and social change. If urban problems are viewed in this wider perspective, it should be clear that there is need for rethinking on the role of cities in the national and not municipal context. In fact, one must also consider the international aspects of the problems.

In India, as in many other countries, there is growing conflict and violence in cities. Here again there is a great danger of interpreting this conflict and violence in a textbook manner and talking about the high positive correlation between urbanization and social disharmony in terms of crime, murder, and divorce. In Indian cities, it will be unrealistic to interpret conflict and violence as essentially a law and order problem which can be solved by the police and the army. There are deep-rooted political, economic, and social aspects which have to be studied, analyzed, and understood before any solutions can be offered.

It must be clearly understood that the big cities have a national function apart from their regional and local functions. Therefore, their economy must be linked with the national economy. This can be done if the Planning Commission treats a number of cities at

par with states with respect to allocation to funds. Detailed consideration will have to be given to the requirements of all such cities not only in terms of funds for housing, transport, etc., but also for the wider task of strengthening the economic base of these cities, which will in turn generate economic growth throughout the country. In other words, instead of the Planning Commission identifying a few small towns in each state as growth centres to counteract metropolitan development, the strategy should be to identify the metropolitan cities and back them up heavily. The guiltcomplex concerning helping big cities to grow bigger, has its origin in the nineteenth century glorification of the countryside. Any plea for a rigid system to keep out migrants from big cities implies ignoring the basic tenets of democracy. Instead of condemning urbanization, we should look upon it as the best generator of economic growth and social change in India. Of course, it is not necessary for us to follow the beaten track of the nineteenth century urbanization process. The need for innovation is great.

Parliament should pass what might be called the Chartered Cities of India Act, and designate chartered cities which will form the core of a national system of cities, planned and developed by a central agency with assistance from the central and state governments, the U.N. agencies, the World Bank, and so forth. It is not intended that the chartered cities should become Union territories. They will continue to be integral parts of the states in which they are located and elected representatives of the people will have a say in their running. But there will be a new administrative-legal-financial apparatus to run these cities with the overriding objective of generating rapid economic growth with social justice in a national framework and not merely in a narrow regional or local framework. By way of analogy, we may mention that Schedule VIII of the Constitution of India lists fourteen languages without giving any territorial jurisdiction. These languages are ignored. Similarly, the development of chartered cities should not mean the neglect of other cities. In selecting these chartered cities, we should keep in mind a number of criteria. As an illustration we may mention the following: (*i*) population size, (*ii*) economic base, (*iii*) administrative function, and (*iv*) strategic importance.

We give a list of chartered cities by way of illustration:

1. All cities with a population of over one million: Greater

Bombay, Calcutta, Delhi, Madras, Hyderabad, Bangalore, Ahmedabad, Kanpur, and Poona.

2. The new steel towns : (Durgapur, Bhilai, Rourkela, and Bokaro), the new port towns (Pardip, Haldia, Kandla, and Okha), other industrial and transport centres (Asansol, Baroda, Gorakhpur, Howrah, Jamshedpur, Kota, Ludhiana, Ranchi, and Vishakhapatnam), the newly planned cities (Chandigarh and Bhubaneshwar), and also the proposed new capitals of Haryana and Assam.

3. Other state capitals such as Agartala, Bhopal, Goa, Imphal, Jaipur, Kohima, Lucknow, Mysore, Patna, Pondicherry, Shillong, Simla, Srinagar, and Trivandrum.

4. Strategic cities (other than cantonments): Ambala, Amritsar, Cochin, Darjeeling, Gauhati, Jammu, Jullundur, Silchar, and Siliguri.

It will be seen that most of these cities are class I cities (population over 100,000) and that the small cities listed above have a large growth potential. Each city will, of course, have its metropolitan region for planning purposes. Our strategy is essentially metropolitan-based but it seems a powerful administrative-legal-financial machinery to make these cities a part of the national system of cities which will help generate rapid economic growth and social change in India.

We conclude by referring to the following exhortations:

SAVE OUR CITIES
SAVE OUR SOIL
SAVE OUR AIR
SAVE OUR WATER

This is not a Vedic prayer but a set of captions on a series of four postal stamps released in the USA. And yet there is nothing peculiarly American about this appeal. Cities all over the world have been overtaken by a deep crisis and it is now abundantly clear that this urban crisis has rendered the present form of urban government obsolete, ineffective, and totally inadequate to meet the challenge of urbanization.

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MINORITIES

Vinayshil Gautam

The transformation of a plural society into a modern nation-state creates problems of identity and allegiance within the structure of that society. After the August declaration of 1917 there was little doubt that at some future date British authority would be withdrawn from India and that the responsibility of governing the country would fall upon Indians themselves. As India was at a rather low stage of industrial and technological development it was difficult to conceive of a party system based on ideological considerations, such as that prevailing in Britain, succeeding to the seat of power. There would be a party system, but the parties would tend to emerge more out of group and community loyalties than out of well-thought-out differences on matters of policy such as means of development and modes of administration. It is in this special context of decolonization that the problem of cultural minorities acquired an importance in the pre-independence period.

Minority is a term which is difficult to define with any degree of precision. For the purpose of this essay it would be taken to mean a relatively small group of people either dominated or capable of being dominated by a preponderant majority. Such groups are often cohesive and are united by certain common features. Such a group may be held together by shared descent, physical characteristics, traditions, customs, language, and religious faith, or by a combination of these. There is consequently a sense of affinity, a sense of community or unity prevalent in the group that distinguishes it from others. It is this "we feeling" within the group

that serves as the basis for various claims and counter-claims on their loyalty.

Situation before Independence

As it became increasingly evident that the British were likely to withdraw from India, a variety of claims were advanced by the minorities, who were not quite sure as to how the power equation would crystallize in free India. The process had every indication of being long, bitter, and even bloody. It proved to be all this and more.

Ramsay MacDonald tried to offer in the Communal Award (1932) what the British considered the best functional solution of the problem, but this only succeeded in imparting respectability to existing communal cleavages. He suggested separate electorates for special interests and minorities, and for Muslims in Bengal and the Punjab; weightage to Muslims in provinces in which they were in a minority, and also to Sikhs and Hindus in the Punjab; the recognition of depressed classes as a minority community; and separate electorates for Indian Christians and Anglo-Indians. The award was rejected by the Congress as "thoroughly obnoxious." The various cultural minorities were none too pleased either. The award provoked Gandhi into a prolonged fast and the British government eventually accepted a compromise embodied in the Poona Pact (1931). The pact retained joint electorates for the scheduled castes and the Hindus with reservation of seats for the former, but the problems of the other cultural minorities were not really solved. The Round Table Conference of 1932, the next attempt at evolving a solution, was not more successful as it only reaffirmed the decision already arrived at.

A period of intense negotiations followed. There came the White Paper and then the Joint Select Committee to discuss it. These formed the background to the famous Government of India Act of 1935, which was promptly assailed by, among others, the Congress, the Muslim League, the Hindu Mahasabha, and the Sikhs. The provincial autonomy, federal structure, and protection of minority interests that it promised were in effect throttled by the so-called "safeguards." The system was nevertheless partially put to a test in the election of 1937. For the first time in the colonial period Indians were able to wield a measure of power at certain levels of

administration. The struggle for control over the decision-making process at the provincial level was intense and bitter. The pre-industrial state of social consciousness of a majority of the areas where this electoral system was tried, made sure that parties which contended for power depended largely on group, community, and territorial loyalties. Even so the Indian National Congress, which contested 1161 of the total number of 1585 seats, won 716. The victory was impressive since less than half the total number of seats, 657 to be exact, were "general," i.e., not specifically allotted to the minorities. The Muslim League won only 109 of the 482 seats allotted to Muslims, securing 4.8 per cent of the total votes polled. Worried by these dismal results Jinnah called for a coalition in all the provinces with the Congress. Jawaharlal Nehru failed to understand what Mohammad Ali Jinnah meant by such a request when the Muslim League had clearly lost. Jinnah vowed to make himself clear. The parting of the ways, at least for Jinnah's and Nehru's parties, had come. In March 1940 the League expounded the two-nation theory and demanded the creation of Pakistan in its famous Lahore Resolution.

Most of the minorities had contributed their share to the struggle for independence and looked upon themselves as deserving a share in power in independent India. The Muslims, the Christians, the Sikhs, and the Parsees, in some measure, had contributed to the freedom struggle.

Of course, there were certain groups which for reasons implicit in their history, were more or less apolitical. There were the Buddhists, who were experiencing a resurgence because of contemporary conversions of members of untouchable communities, especially in Maharashtra, to Buddhism. Some believe that the aggressive nature of neo-Buddhism, so evident in independent India, had its origins in their politicization which started at this point of time. The Jains have always been a business community and flexibility was naturally their greatest asset. We find them, throughout this period, tied by strong religious bonds to the Indian soil and yet prepared to adjust to any situation that might present itself.

The Christians consist of two major groups—Indian Christians and Anglo-Indians. The former were largely apolitical, but the Anglo-Indians were faced with a dilemma. Their links with the British were strong in terms of ethnic, religious, and cultural

affinities. Freedom of India to them implied withdrawal of British protection and rule by groups they had hitherto considered inferior. They also had a religious argument. Their religious faith preached that the development of the individual in conditions of freedom and justice was a matter of supreme concern. Would they get an environment of freedom and justice in the new India? The prospects of state interference in their life raised the spectre of communism which, to them, was the very negation of Christian beliefs. This is the dilemma one finds expressed in the writings of the Anglo-Indians in the pre-independence period. At the root of it was concern and anxiety about the way the country would eventually go. Clearly it was a case where imagined perception was more important than reality.

As the prospects of independence came nearer, communal tensions grew more intense. Social realities were obliterated in the emotionally-charged atmosphere created by their leadership. Few were willing to recognize that within the Muslims there were numerous class differences and that the Hindus were also not a monolithic community. It was in such an atmosphere that the proposals of the Cripps Mission and the Cabinet Mission were rejected by all the concerned parties. Labour came to power in Britain in 1946 and promised independence to India by June 1948. But centrifugal forces continued to mount. The partition of India became a certainty and a matter of time.

During this period the role of the largest cultural minority, the Muslims, has been variously viewed by different interpreters and writers. Of these, two polar views may be considered here.

The first thesis was that the Muslims found it difficult to integrate with the rest of Indian society because of their pride in having been the conquerors and rulers of India. It was further argued that by refusing to join the mainstream of national life and thereby forgoing the chance to embrace modernity simultaneously with the Hindus, the Muslims were damaging their own case. This view has been criticized at two levels—the general and the specific. In the most general terms it can be regarded as too simplistic. It is argued that the allegation that the Muslim intelligentsia did not accept the modern concept of nationalism and attempted to preserve Muslim separatist trends does not hold any water, for the Hindus had more or less the same attitude. The entire ethos of the national movement, the argument goes on, was undeniably Hindu, for it

incorporated the concepts of Swaraj and Satyagraha, Gandhi's Hindu prayers, and so forth. Can one, then, blame the Muslim intelligentsia for feeling isolated? In specific terms, such a picture of the Muslim community, on the eve of independence, neglects the minute local, regional, and even class differences within it as it ignores the varied responses of each one of these sections in terms of specific interests. To argue that the Muslims were one monolithic community, as we noted earlier, amounts to taking up a position which has no relation to social reality.

The other view on the Muslims swings to another extreme. The blame for the partition is put squarely, by the protagonists of this view, on the Congress and the majority. It sees little difference even between Congressmen and Hindu Mahasabhaites. As proof, it is said that it took seven to eight years for the idea of Pakistan to find favour with the Muslim League and its President (Jinnah), but not half as long with Congress leaders.

The obvious flaw in the reasoning of these approaches is a lack of insight into the structure and dynamics of Indian society. The Muslim communalist and his Hindu counterpart had successfully camouflaged from the more gullible of the followers of their respective religions the hard fact that the Muslims were already an intimate and integral part of the socio-economic mainstream of the country.

Events moved fast. They were aided by an impatient leadership which wanted to see it all happen within its lifetime. Issues got confused and many did not understand the full import of their demands. On the eve of the country's independence, the other cultural minorities did not face a crisis of identity to the same extent as the Muslims did. But during this period no community was surveying the national scene from the position of objective isolation. All were equally involved in the march of events, and the involvement of each was determined by its own particular hopes, fears, and aspirations.

Situation after Independence

Independence and the partition, two simultaneous epoch-making events, left the new India in a dazed state. For the minorities the most important question was: what now? The adoption of the concept of a secular state came to these groups as a breath of

reassurance. They could now hope that their aspirations would be fulfilled within a new framework.

Speaking specifically of the two largest minority groups, the Muslims and the Sikhs, partition and its aftermath had certain similar repercussions. Both communities were to a large extent socially, economically, politically, and geographically uprooted. After the creation of Pakistan, the Muslims who remained in India had to forgo many of their earlier gains such as reservation of posts in the services and separate electorates. Some of the other socio-economic changes in the country affected the Muslims no more than they affected the other communities, but they were erroneously viewed as parts of a larger plan for the persecution of the Muslims. For example, the Muslim nobility which had stayed back in India reacted sharply to the abolition of zamindari. It was also alleged that there was a deliberate misuse of the evacuee property law by anti-Muslim elements. The Muslim leadership itself was split into two broad groups—the secular position of Maulana Abul Kalam Azad and the isolationist approach of those separatists who for various reasons could not migrate to Pakistan.

The crisis facing the Sikhs was also severe. Their life in both rural and urban sectors was disrupted. The large estates of the Sikh farmers of western Punjab were no more, and many of them tried to rehabilitate themselves in eastern Punjab. The entrepreneurs and the commercial sections had to begin life almost from scratch. The Sikhs were now "displaced persons," constantly on the move. They did not know where they were heading next and had no means of establishing contacts between their different groups. Such conditions were not conducive to the emergence of a unified leadership.

Despite the broad similarities on certain points there were qualitative differences in the crises which the two communities faced. For the Muslims the birth of Pakistan posed a choice, the effects of which on their life styles and fortunes no one could foresee. The Sikhs had no choice as India was the country where they could settle down. They accepted the inevitable and there were many among them who had buoyant optimism and incredible enterprise. They mixed reasonably well with local population wherever they went. With the reduction in the size of land holdings in the Punjab area, Sikh landlords began cultivating their land themselves instead of subletting it. Absentee landlordism nearly vanished and when this

was coupled with a will to accept new techniques and instruments of production, prosperity was not far away. Sikh farmers settled in the Terai area and in parts of Rajasthan and Madhya Pradesh, in many cases bringing barren land under cultivation. By and large, whereas Muslims very often tended to be fearful of the surrounding population, Sikhs tended to rely on the local community. They were products of the same historical processes but found themselves in different contexts because of the assumed emotional alignments with other resident communities.

Somewhat different was the situation of a smaller minority—the Anglo-Indians. They had not really suffered social, economic, or political uprooting. Their problem appeared more to be one of psychological readjustment to the fact of the withdrawal of the British, their protectors and patrons, from the Indian scene. An Anglo-Indian, according to the 1935 Act was "a person whose father or any of whose male progenitors in the male line is or was of Europen descent but who is a native of India." This definition was also accepted in the Indian Constitution. The socio-cultural and political identification of this group was very often with the ruling whites. Indian Christians did not face the same problems. They too experienced some difficulties of integration, but this was largely because of the hostility of the orthodox elements among the Hindus who were averse to accepting the followers of a religion which had originated outside India and was associated with the colonial rulers.

Those who wanted to build up a viable sense of loyalty to the new nation in the minorities had certain advantages. The administrative structure was geared to deal with the problems of the minorities more effectively than was possible before 15 August 1947. Earlier, many local grievances had been used by the organizers of the nationalist movement to mobilize support. With the system of administration firmly and uniformly established throughout the nation, local problems could be contained within state boundaries and tackled there. This was a great help in keeping the local grievances of the minorities from being blown out of proportion. Many of the difficulties confronted by these groups in matters of everyday routine could be tackled almost immediately.

The new Constitution, promulgated on 26 January 1950, has to be understood in this context. The ideal of a secular democratic state could become reality only through the processes that the

Constitution envisaged and through the safeguards and privileges that it provided for the minorities. Some of these were to be modified from time to time and others were for specified periods. Anglo-Indians were among those who benefited. A special clause authorized the government to make special provisions for the advancement of socially and educationally backward classes and for the scheduled castes and the scheduled tribes.

Part III of the Constitution deals with fundamental rights. Some articles grant the general right to freedom of religion, and others specifically protect the rights of the minorities.

Another move by the government towards safeguarding the interests of the minorites came in the late sixties by the establishment of the National Integration Council. Constitutional provisions regarding minorities have been periodically strengthened. Among the more notable of recent efforts is the Criminal Law (Amendment) Act of 1972, which makes punishable activities likely to cause communal, racial, linguistic, regional, or caste rivalries.

In 1964 the Supreme Court upheld the right of the minorities to choose the medium of instruction in their schools. The Constitution (Seventh Amendment Act) urges the states to make provision for the education of children belonging to the minorities, through their own language at the primary stage. In fact it went a step further in protecting the interests of the minorities by providing for a special officer, designated as Commissioner for Linguistic Minorities, who would investigate all matters relating to their safeguards and would submit periodic reports. A survey of some of the representations made to this officer by various minority groups, however, reveals that in most cases state governments could justify their actions with an impressive array of legal arguments. It seems, therefore, that there are several loopholes which will have to be plugged before the Commissioner for Linguistic Minorities can serve any useful purpose in defending minority rights.

At this point we could study in some detail how the various minorities have aligned themselves in the life of the nation. It has been noted earlier that all cultural minorities, being involved in the vital life processes of the country, are a part of the national mainstream. But at another level there is the problem of socio-political adjustment involved in inter-community relations within a society experiencing increasing politicization. The 1952 and 1957 elections were a depressing experience for communal leaders, thanks largely

to the secular vision and dynamic leadership of Jawaharlal Nehru. As subsequent experience showed, peace on the communal front proved a tenuous one.

Home Ministry studies describe 1950 to 1960 as years of communal peace. Others feel that while this may have been true from the perspective of the higher echelons of administration, at the lower levels communal elements were active and social tensions, at times violent, were never absent. Only the violence was not of an order which the all-India ministerial committees would pay any great attention to.

The Muslims, it appears, still felt shaky. The Congress party tried, during this period, to woo the Muslim voters by holding out the spectre of the communal Hindus coming to power in the event of a Congress defeat. Among the Muslims this produced several types of reaction. Some of them wanted to remain linked with the Congress. A section of the community wished to come to an understanding with the Hindu communal elements in the hope that this would be an effective shield against attack. Another section withdrew into seclusion and sought refuge in religion. Yet another group formed a fertile breeding ground for the isolationist and obscurantist politics of the Jamaāt-i-Islami. The Jamaāt preached that sovereignty is the attribute of God alone, hence the supremacy of legislative bodies is un-Islamic. In consequence, Muslim participation in the political processes of the country would also be un-Islamic.

It needs to be pointed out that the claim of the Jamaāt to be a non-communal party on the grounds that it is not a para-military body like the RSS and that it extends help to victims of riots and floods, does not make an entirely logical case for it. The fact of the matter is that it not only discourages the emergence of a secular national identity by attempting to keep the Muslims away from participating in the political life of the country, but looks upon Muslims and Hindus as two inherently different societies. The ideology of the Jamaāt, when viewed in terms of political strategy, means that it favours a united front of all Muslim organizations which accept its leadership. During the mid-sixties the Jamaāt acquired a certain prominence. This was aided partly by the existence of a set of genuine or at least imagined grievances. Urdu provides a case in point. There is a feeling among the Muslims that Urdu is being discriminated against. The Education Ministers'

Conference of 1949 had passed a resolution on the question of primary education and mother tongue, and had defined the legitimate rights of the linguistic minorities. Evidently the Uttar Pradesh government did not accept it. A study of the statistics compiled for the period 1959-1960 clearly brings out the plight of the Urdu language. Not a single primary school or a section teaching Urdu existed during 1959-1960 and 1960-1961 in a district where the Urdu-speaking population was more than sixty-three thousand.

Many Muslims also found themselves subjected to unfounded suspicions and social disabilities. These ranged from the reference to Aligarh Muslim University as "mini Pakistan," to a definite prejudice in letting out houses to Muslims. There were also complaints at other levels. In 1966 a committee consisting of K.G. Saiyidain, J.P. Naik, and Gopinath Aman found that most textbooks glorified Hindu mythology in such a way as to raise prejudices against certain other religious groups. The dangers of such a situation creating a sense of alienation amongst the minorities and encouraging communal disharmony are evident.

For the Sikhs the fifties were also a period of ferment and adjustment, though of a different nature. The frustrations generated by post-partition hardships and a strong urge towards subnationalism had provoked certain sections of the community to support the demand for a "homeland." In the minds of some Sikhs there lurked the fear of a renascent Hinduism engulfing all the minorities. The increase in the number of Hindu religious organizations, the revival of Sanskrit, and the controversies on the linguistic front by organizations such as the Arya Samaj and the Jana Sangh strengthened Sikh fears. In 1948 Punjab's princely states were merged into one unit, PEPSU. If only the Sikh majority districts of eastern Punjab could be added to PEPSU the Sikh state would have become a reality. But the declaration of Punjab as a bilingual state with both Punjabi and Hindi as its languages did not soothe their frayed emotions. The Sikhs argued that Punjabi was spoken universally in the state. The literature of this area, barring Haryana, was essentially in Punjabi, much of it in the Gurmukhi script. Resentment was caused by the unconcealed campaigns of the Arya Samaj and certain sections of the Jana Sangh to persuade Punjabi-speaking Hindus to disown their mother tongue and adopt Hindi. Some Akalis also felt unhappy

that while the rest of the country had been reorganized on a linguistic basis, Punjab continued to be a bilingual state. Their leaders felt that they had been fooled into believing that the merger of PEPSU and Punjab would be a step towards the establishment of a Punjabi Suba. There is little wonder then that the problem of adjustment for the Sikhs proved to be a rather extended one. Naturally enough, the demand to make Punjab unilingual and to make Haryana a separate Hindi-speaking state became popular. Of course, it was widely realized that the demand for a linguistic state also disguised the desire of the Sikh community to have a "homeland."

The commission appointed in 1953 to readjust state boundaries had rejected the Sikh demand. The government decided to merge PEPSU into the Punjab. In the new state of Punjab, the Hindus formed a majority. A major split took place in the Akali leadership and Master Tara Singh found himself virtually alone in leading the campaign for a Punjabi Suba. In the general election of 1957 the Congress won, though within three years Master Tara Singh also demonstrated his strength by capturing 136 out of 140 seats in the Sri Gurdwara Prabandhak Committee elections.

In April 1960 Master Tara Singh conceived the famous "now or never" resolution. However, before any decisive action could be taken Pratap Singh Kairon, then Chief Minister of Punjab, had almost the entire opposition Sikh leadership in jail. Tara Singh then began a fast unto death but eventually gave it up. The price of his submission was a virtual eclipse of his political career for a long time. The general election of 1962 again returned the Congress with a majority. It is interesting to note that during the Chinese aggression of 1962 the demand for a Punjabi Suba was suspended and no agitation took place. This only serves to re-emphasize the basic loyalty of the minorities to the nation.

The leadership of the Sikhs was not progressive or forward-looking. The activities of persons like Master Tara Singh gave a conservative character to the Akali Dal. It was fortunate that individuals like Sant Fateh Singh were there to provide some sort of a corrective balance.

For the Anglo-Indians and the Christians the process of adjustment was not as difficult. Gradually, both began to develop an Indian idiom. Two Anglo-Indian organizations—the All-India Anglo-Indian Association and the Domiciled European Association

TABLE 1
POPULATION FIGURES BEFORE AND AFTER PARTITION*

Communities	*Before partition India and Pakistan (in millions)*	*After partition India (in millions)*	*Before partition states (in millions)*	*After partition states (in millions)*
Hindus	190.8	188.84	64.1	51.18
(*i*) Scheduled Castes	39.9	37.62	8.9	6.94
(*ii*) Others	150.9	151.22	55.2	44.24
Muslims	79.4	32.53	15.0	10.17
Sikhs	4.2	2.69	1.5	1.41
Christians	3.5	2 87	2.8	2.73

*From *The India and Pakistan year book 1949.* Volume XXXV, p. 13.

of South India—played a significant role in the process. This adjustment, however, had some obstacles quite different from those of any other minority. A sizeable number of foreign missionaries were still amongst them. Some of them were suspected to be tools of foreign powers. By the mid-fifties the coming of foreign missionaries was being strictly regulated by the government. The adjustment of these two groups was relatively easy and was helped by the high incidence of literacy in their ranks and by the fact that most of their public activities were confined to the areas of education, health, and so forth. In 1953 the Archbishop of Bombay was elevated to the Cardinalate, the first Indian to be so honoured. High government functionaries not only expressed pleasure but paid tribute to Cardinal Gracias at the recognition given to him. By 1950 a section of the Roman Catholic Church began actively participating in the political processes of the country. In that year the Archbishop of Varapuzlia issued a circular concerning the coming state elections which were being contested by the Communist Party of India, the Praja Socialist Party, and the Congress. The Archbishop warned against the grave sin of voting against the Congress. But by and large the activities of the Christians tended to be confined, as has been noted earlier, to the field of social service.

Special mention should be made of the Syrian Christians of Kerala. They are among the oldest Christian communities and seem to have achieved a remarkable degree of integration with the other communities of their area. The use of the *tali* (locket) by their married women and the rituals associated with the death anniversaries of elders are very similar to Hindu practices. The use of an Indian language in religious activities is not uncommon. In Kerala, largely since independence and certainly in the first decade and a half following the promulgation of the Constitution, there has been no major inter-community tension. Even in competition for jobs, there is seldom any violence. The Christians and the Hindus, while not enmeshed politically, did find it possible to continue to live amicably in the social sphere.

Among the other minorities who have managed to live peaceably without hitting the headlines every other day are the Jains. They pursued their traditional entrepreneurial and commercial activities in an unobtrusive fashion and independence tended to widen their avenues to prosperity. By and large the Buddhists continued to be a

TABLE 2
POPULATION FIGURES AND PERCENTAGE RISE

Year	*Hindu*	*Muslim*	*Sikh*	*Buddhist*	*Jain*	*Christian*	*Zoroastrian*
1947 (on the basis of 1941 Census)	185,240,000	32,308,000	2,636,000		735,000	3,058,000	
1951 (Census)	303,186,986	35,400,117	6,219,134	180,767	1,618,406	8,157,763	111,791
% rise for 1951-61 period	20.29%	25.61%	25.13%	16.71%	27.17%	27.38%	
1961 (Census)	366,492,878	46,938,357	7,843,170	3,250,227	2,027,267	10,726,190	
% rise for 1961-71 period	23.69%	30.85%	32.28%	17.20%	28.48%	32.60%	
1971 (Census)	453,292,086	61,417,934	10,378,797	3,812,325	2,604,646	14,223,382	

docile and politically unaggressive group. However, on occasions the neo-Buddhists of Maharashtra displayed some militancy.

The relatively quiet inter-community relations during the first fifteen years or so of independence were the result of a number of factors. The Muslim communalist was too fearful of reprisal after the experience of post-independence riots, to take any risks. The Hindu communalist, likewise, was bound to take time to recover from the shock of Gandhi's assassination. The Sikhs coming in as displaced persons from Pakistan, neither faced hostility nor were they instrumental in fomenting communal trouble after the fury of violence was abated.

Developmental plans were beginning to hold out promises of a great industrial future, new temples of modern India were coming up. The first fifteen years or so of independence gave hopes of a speedy achievement of self-sufficiency, for the grit and determination of the people were showing results. Of course, there were innumerable difficulties: flood, drought, famine, and pestilence had not disappeared; but the morale of the people was high. Even internationally there was considerable respect for India. For a while the goal of achieving national greatness appeared well within reach. There was the great effort towards national reconstruction to be shared, not just unmitigated poverty and gloom. In the light of subsequent events, however, it was evident that the country had not been restored to perfect health and minorities were facing genuine difficulties in their adjustment.

The 1962 frontier adventure of China did much to foster Indian unity. But in retrospect 1962 appears to mark a turning point in the history of free India. Around this time an impression gained ground that the Centre was no longer as effective as it had been, and many hibernating fissiparous tendencies began coming out into the open.

However, there were some new positive forces in the field. By then a new generation (those born after 1942) had come of age. Many in this generation were relatively free of the bitterness of the pre-partition and post-independence years. Their outlook was not disfigured with preconceived notions so far as communal relations were concerned. In these elements there was considerable potential for reshaping the national pattern and stabilizing pluralism.

As economic difficulties grew the leadership of the country appeared unsure of its options. The promised economic take-off was nowhere in sight, and though the people voted the Congress

back to power there is evidence to suggest that primordial loyalties, in some sections, were becoming stronger. The priestly group of most of the religious minorities could thus play a more important role. Unfortunately for communal harmony, much of the religious leadership continued to be in obscurantist hands. Serious communal riots broke out. There were developments at other levels too, one of the more notable being the zeal with which the demand for a Punjabi Suba was raised again. The Akalis were the vanguard of this movement. Sant Fateh Singh reformulated the demand as a linguistic issue, but Master Tara Singh did not give up the communal plan. Sardar Pratap Singh Kairon was not to be out-manoeuvred. He swore to a rally of Sikhs that as long as he wore his beard, the question of partitioning Punjab would not arise. The Iron Man of Punjab proved as good as his word.

Nehru's health showed disconcerting signs after the Bhubaneshwar session of the Congress and he passed away in May 1964. The cultural minorities had lost a great father figure. The selection of Lal Bahadur Shastri as the Prime Minister assured the continuity of the Nehru line.

The Kashmir issue, never really solved in 1948 or through the debates at the United Nations, was intimately linked with the emotional susceptibilities of various cultural groups. Pakistan once again sought to solve it (1965) through force. Indian gains in the war are not as relevant to the theme of this essay as the fact that during this time many latent emotions surfaced. Hindu chauvinism and Muslim communalism were both visible. This was an hour of trial and intense emotional stress for Muslims, whose families, in many cases, lay divided across national frontiers. It is significant that throughout this period communal harmony was maintained. The roll call of honour, after the war, included many Muslims who had distinguished themselves in valour and had even laid down their lives.

The post Indo-Pakistan war period (after 1965) saw the hardening and consolidation of communal forces in general. Among the Muslims perhaps the suffering induced by the war had much to do with this. Bigoted and narrow-minded elements could easily exploit such a situation. Organizations like the Jamaāt-i-Islami, the Muslim League in Kerala, the Tamir-e-Millet, and the Ittehadul-Muslimeen became much more vocal and assertive. The Majlis-e-Mashwarat emerged as the united front of all Muslim communal

organizations. Maulana Asad Madni, the secretary of the Jamiat-e-Ulema-i-Hind branded as "traitors" all Indian leaders who were against the policy of supporting the Arabs. As late as 17 May 1970, *Radiance*, the weekly organ of the Jamaāt-i-Islami, asked: "Why not an effort be made to take five or six states on a cultural basis, so that Muslims from all states may live there in an atmosphere of peace, free from periodic chastisement?" Such statements were strongly reminiscent of the early stages of the demand for Pakistan and could not possibly help the secular ideal. The Hindu communalists contributed significantly to the creation of this mood. This demand was indirectly provoked by writings in journals like the *Organiser*. Indeed the situation after 1965 was such that the communalists appeared to be in for a field day. Girish Mathur in a special report to the *Patriot* of Delhi (28 September 1969) wrote ". . . after the death of Gandhiji the RSS had lost whatever influence it had in Gujarat, but since the Kutch Conflict and more particularly since the Indo-Pak War, it has acquired some respectability in the state, mainly because of the attitude of the then leadership at the Centre towards Golwalkar and the Jan Sangh leaders . . . ." It is not surprising, therefore, that there were sporadic outbursts of communal violence in different parts of the country.

According to the official report on communal disturbances, prepared for the Standing Committee of the National Integration Council, in the first three months of 1969 there were no less than one hundred and one incidents. In the second quarter there were sixty-four incidents including three major riots. From 1 July to 15 September, forty-four communal clashes were reported. Then occurred the massive tragedies—Ahmedabad, Baroda, Jagatdal, and Nanded. Several reports prepared on the massacre of Ahmedabad accused the political leadership of the state either of having fostered communal feelings or of having maintained a passive role during the violence.

In the face of such evidence the naive hypothesis put forward by some analysts that the "cultural backwardness" of Muslim communities or the failure of the Muslim intelligentsia is responsible for the riots, does not provide either a full or a satisfactory explanation. The leadership of all cultural groups, most notably so of the majority community, bears a special responsibility in this matter. Particular reference must also be made to a feeling among

some members of the Muslim community that they are economically discriminated against and are unable to get an equitable share of available jobs. Many of the problems of the Muslims are undoubtedly of an economic nature.

The agitation for a Punjabi Suba on linguistic grounds now became really intense. The Sikh landed-interests combined with the cream of the priestly section of the community to ram the point home. They got good support from the artisan class of Sikhs which had rapidly filled the gap created by the migration of Muslim artisans to Pakistan.

The Centre, along with the state government, first showed a will to resist, but it was eventually swept under the tide of unilinguism driven to its logical conclusion. The Hindi-speaking people of the area also wanted an independent state. Even after the announcement of yet another partition of Punjab in 1966 the problem was not solved conclusively. Contention over Chandigarh was passionate and prolonged. For the Punjabi-speaking people it became an emotional issue and ultimately the Prime Minister's award gave Chandigarh to Punjab, but compensated Haryana by giving it Fazilka and Abohar. The Punjabi Suba, after many fasts and agitations as well as threats and even self-immolation, was finally a reality. The Sikhs felt happy. They had achieved a solution to what they thought was their problem.

The Christians too closed their ranks, but in an altogether different way. There was an attempt on their part to weave together their various denominational and splinter groups. First the Protestant churches pioneered ecumenical activity in the second half of the sixties by exploring possibilities of collaboration in the area of social service. There then emerged the United Church of North India and the Church of South India. Later, as their experiments proved successful, they collaborated with the Catholics. Action research involving the participation of the churches in the development of Chota Nagpur district and action for food production are two concrete cases of the fruitful pooling of resources and efforts by the two sections of the Christian community. In 1967 there emerged the National Board for Christian Higher Education in India to help raise standards in Christian colleges. The indications are that there would be continued activity along these lines. The Anglo-Indians have been politically active. In fact, their leaders in the Lok Sabha have always managed to get more attention to

the community than would be warranted by their numerical strength.

By and large the Jains and the Buddhists continued to evolve along the same lines as they had done before 1965. The younger generation, depending upon the extent of education and urbanization, could not be differentiated from the majority community. They developed common food habits and were subject almost equally to the vagaries of administrative corruption, financial bickerings, rigged appointments, and a general sense of helplessness in the face of the lack of a foolproof system ensuring social justice and economic equality.

A reference to aggressive neo-Buddhism noticed in the last few years would not be out of place here. Some regional dissentions have articulated themselves, first through conversion to Buddhism and then by emphasis on their separate identity. This is most evident in Maharashtra where the Mahar embraced Buddhism in large numbers. They are politically conscious and articulate. Today they can argue their case with force and conviction.

The Parsees merit attention not so much for their numerical strength but for their overall contribution to the economic life of the nation. To their credit they have the initiative they displayed in laying the foundations of the textile and steel industries in this country. They were also pioneers in the production of electric energy. In non-economic fields, they were associated with the founding of the first all-India political association and of the modern trade union movement.

Independence was welcomed by the Parsees. Despite the fact that some of them rose to positions of prominence in the political field, the Parsees kept their distance from the national movement. In the context of Indian independence they realized that their community had to reinterpret its position in Indian society and adapt itself to the changing environment. The adaptation was smooth because the new government made no demands on the Parsees to justify themselves as Indians. On the other hand, to make themselves more acceptable the Parsees tried to take credit as a community for men like Naoroji, Pherozeshah Mehta, and K. F. Nariman. Even so, some Parsees remained suspicious and thought of the Indian government as Hindu rule. Gradually even they realized that their worst fears were unjustified. Whatever threats existed in the last two decades and a half to the Parsees

were largely internal—declining birth rate, high age at marriage, more mixed marriages, disallowal of conversions, impoverishment, and lack of entrepreneurial activity. Religion was ceasing to be a powerful integrating factor in the Parsee community partly on account of the clergy's inability to reform and partly as a result of secularization. Moreover, westernization began early among the Parsees and continued into independent India. Their relative affluence permitted a higher degree of westernization.

In spite of their efforts to reorient their historical role, not many Parsees have sympathized with the radical policies of the Congress. Only a few of them, like Feroze Gandhi and Homi Talyarkhan, have actively participated in Congress politics in the post-independence period. The majority of the Parsee community, it appears, tended towards what was the Swatantra party (since merged into the Bhartiya Lok Dal). Minoo Masani and Piloo Mody emerged as leaders of some significance in the Indian parliamentary system. The Tatas have created a modern industrial empire. Individual Parsees have played a leading role in the fields of law, science, and journalism.

In 1969 things began to happen in the subcontinent which had a considerable impact on the minorities in India. The increasing discontent in East Pakistan; the tussle for power between Mujib, Yahya, and Bhutto; the Pakistani military crackdown; the steady trickle of East Bengal refugees into India; the escalation of the entire sequence of events into the Indo-Pakistan war; and the emergence of the free nation of Bangladesh are recent events and too well-known to need recounting. The results proved, by the beginning of 1972, that a nation based on religion alone was a dead idea in the subcontinent. Attempting to find answers to individual and community problems in one's location, in the context of one's time and in the idiom of one's background, appeared finally to have emerged as an alternative. Prejudice dies hard on either side in a situation where groups are in conflict. The initiative for understanding and accommodation lies with the majority. But then the minorities must also learn to view problems in a wider national perspective rather than in terms of their narrow interests. The majority community must provide an environment where the minorities can stand on their own with self respect.

Inter-community tensions are a fact of life and they need to be faced and tackled in a mature fashion. Packing up and leaving is

not a solution. Intolerance on the part of the dominant group does not pay either. The pity is that most of the cultural groups in India seemed to learn the lesson the hard way. One wonders if the writing on the wall is clear even now.

The Future

Few exercises are as simple as armchair diagnosis. Finding adequate solutions to complex problems is a different matter altogethe.. We have talked of a "message" and of "writing on the wall." But on whom has this message to register and who has to read the writing? Evidently the message of understanding and amity must be addressed to 550 million Indians. The magnitude of the problem—communicating something to such a large population—makes it a gigantic exercise. It is complicated by the fact that most of them are illiterate and are dispersed in a country of continental dimensions. If the nation has to emerge with a set of solidarity symbols, under which all other loyalties are subsumed, the problem of effective communication will have to be given careful attention. An attempt will also have to be made to reinforce traditional modes of communication rather than replace them by the new mass media. The two will have to be integrated since only then can composite loyalties emerge at the desired pace. People will be able to realize that loyalties at the level of the individual, the family, and the community require a behaviour pattern which is not necessarily in opposition to loyalties to the nation as a whole. At the moment one wonders if many are aware of the demands which a modern nation-state makes on its citizenry. This is the price that has to be paid for aspiring to run a state on secular democratic principles without the necessary infrastructure of industrial growth and without hurting the plural character of the society.

Industrial and technological growth in India needs to influence not just the majority community but equally, in fact more so, the Muslims, who constitute 11.21%, Christians constituting 2.60%, Sikhs constituting 1.89%, Buddhists constituting 0.70%, and Jains constituting 0.47% of the country's population. An adequate share in new economic opportunities will enhance their self-confidence and generate in them a new outlook. Until this happens they are not likely to fully accept the idiom of secular and progressive political ideologies.

As things stand in the country today no minority inhabits as a majority, an area large enough to be made into a viable administrative unit. The Muslim majority areas were flaked off in 1947 as an independent state. Within India, Kashmir enjoys a special status. The acceptance of the Punjabi Suba demand on a linguistic basis has satisfied most of the Sikhs. Administrative reorganization has made Meghalaya, Mizoram, and Nagaland predominantly Christian areas, though separate tribal loyalties continue to prevail there. For the rest, all non-linguistic communities lie scattered throughout the country. It can thus be safely assumed that another movement for autonomy from the religious minorities is not very likely.

It appears that most minorities are beginning to realize, along with many members of the majority community, that economic realities also modulate everyday experience, not just religion. The requirement of the day is attacking hunger, poverty, and disease on a non-denominational basis.

The young Muslims, along with the young of other minority groups, are no longer silent spectators of the emerging national scene merely because they feel that coming from minority communities they should not speak up. They are willing to take a stand and fight against what they consider wrong, for example, inequitable job opportunities resulting from discrimination. This will to resist is a great asset and has every indication of growing in strength. In the next twenty-five years the thrust should be on the creation of a "participant society."

To speak of such development is to go back to what Karl Mannheim has called "fundamental democratisation." This concept implies two stages of the process of social mobilization, namely the stage of uprooting individuals (or their breaking away) from old settings, habits, and commitment; and the induction of the mobilized persons into some relatively stable new pattern of group membership, organization, and commitment. It is thus that social isolation and an introverted behaviour pattern would end and a culturally and socially composite society would emerge.

This does not require demolishing the cultural traits of minority groups. Safeguards have been provided in the Constitution, some of which have been further strengthened by legislative action. The experience of Kerala indicates that minorities need have little fear of their cultural autonomy being taken away. More specifically, the constitutional provisions have been enforced there by the

courts in such a way that the minorities are assured of a large measure of control in administering their educational institutions. There is little reason to suspect that the lines of growth in the next twenty-five years will be different. Such rumblings as one hears on these matters in different parts of the country from time to time are likely to be solved gradually.

Behind all the talk about persecution, exclusiveness, treachery, and maladjustment—some of which may be quite true—and occasional violence, it cannot be denied that life by and large continues to flow in a relatively sedate fashion in India, at least so far as inter-community relations are concerned. There is a growing realization that there is little overlap between cultural and socio-economic categories. Attention has been drawn earlier to the fact that all communities are divided into socio-economic classes. All regions have their own factions and cliques cutting across barriers of caste, sect, and denomination. This is a far greater social reality for the average Muslim, Christian, Sikh, Buddhist, and Jain than an abstract dogma can be. It is through awarenesses of this that secular identities can be realistically welded.

Industrial and technological growth and educational development are the two most effective instruments to bring about national integration. Legislation can at best aid the process. In the next twenty-five years the economic factor is likely to overshadow the religious factor. The effectiveness with which the economic problems of the country are handled, in their productive and distributive aspects, will in the final analysis determine the course and pace of the integration of the minorities into the national mainstream. The policy of "stabilized pluralism," pursued so far, appears to be the only viable cultural approach to building national cohesiveness.

SCHEDULED CASTES AND SCHEDULED TRIBES

T. K. Oommen

Free India's commitment to a socialist, secular, and democratic order required the state to inspire and institutionalize change in tune with her national objectives. An important instance of this is to be found in the induction of provisions in India's Constitution and in the introduction of institutional mechanisms, not only to protect the interests but also to promote the welfare of the scheduled castes and the scheduled tribes. This may be designated as the policy of protective discrimination. While several social scientists have argued that such a policy promotes proto- and sub-nationalism, localism, casteism, and so forth, viewed against the antecedent hierarchical and pluralistic social structure of India and in the absence of any large scale structural changes, this approach seems to be the most viable within the framework of a democratic policy. However, several efforts preceded the state attempt to initiate measures of welfare and change among the scheduled castes and tribes, but not necessarily in the same sectors, and other changes were the consequences of state sponsored measures. Thus several social reform movements of national spread or of local concentration were initiated either by social reformers drawn from the upper castes and the foreign missionaries, or occasionally by leaders from these categories during the pre-independence era. Such attempts continue even today. Partly as a response to this, legislative measures were introduced: the reform movements led to organized interest articulation, and state action in turn, gave birth to new aspirations and provided a continual basis to organize and mobilize the scheduled tribes first to get the legislative provisions implemented and then

to demand new legal provisions. In writing about these categories, therefore, it is necessary to take into account the multiplicity of the sources of change and the dialectic relationship between these sources.

Notwithstanding the fact that both the scheduled castes and the scheduled tribes are beneficiaries of the policy of protective discrimination they differ substantially in their disabilities, backgrounds, and existential conditions.

The Scheduled Castes

According to the traditional social organization of India, Hindu society was divided into five categories and most of the scheduled castes were designated as *Panchamas*, those of the Fifth Order. They were ranked below the four *varnas* of the Brahman, the Kshatriya, the Vaishya, and the Shudra. In British officialese, sometime in the late nineteenth century, the term "depressed classes" was used for the untouchable castes as well as for the tribes. In 1919 separate representation on a number of bodies was given to the depressed classes, which included untouchables along with a number of aboriginal tribes. It was not until 1932 that the term was officially defined to mean only the untouchables and it was around this time that the term "scheduled castes" came into vogue to denote this category of Indian population. Even after independence, the Government of India has continued to accord a separate status to this category for constitutional protection and developmental allocations.

While temporary untouchability obtained in the life cycle crises of all castes, the scheduled castes were born in pollution and they lived and died in pollution. They were denied access to temples, wells, and schools. Although, outside the pale of the *varna* scheme, the scheduled castes constituted a vital segment of the population in that they performed most of the manual and unskilled, particularly the ritually unclean, occupations without which the very existence and continuance of the traditional system would have been impossible. Involved in the Hindu *jajmani* (patron-client) system, which provided the economic foundation for the caste system, the scheduled castes served the upper castes as leather workers, sweepers, scavengers, village messengers, and the like. The services of priests, barbers, washermen, and other service castes were denied

to them. There were no commensal relations between them and the clean castes. Although they were the tillers of the soil, a majority of them did not own any land and were in fact traditionally prohibited from doing so. Consequently, they earned meagre incomes, were perennially indebted, and were coerced to work as bonded or attached labourers to their upper caste masters on low wages. They were also under obligation to perform forced free labour (*begar*). Their economic subservience was reflected in their political impotence. They had little voice in the decision-making process of the community. Even the disputes among them were arbitrated by the upper castes. The scheduled castes were prohibited from learning the Vedas; they were in fact not allowed to undergo any formal education. They did not speak the sophisticated language of the upper castes; they used dialects. The speech differences reflected the disparity in status between them and the upper castes. Generally speaking, the scheduled castes were segregated from the rest of the community; they lived on the outskirts of villages and towns, mostly in *kutcha* houses made of mud and thatched roof, situated on land not owned by them. Their dietary practices differed from those of the clean castes: they were non-vegetarians (and this often meant consumption of carrion), they rarely had a balanced and nutritive diet, and they consumed country liquor. Their dress and ornaments were also different from those of clean castes; the males used only a loin cloth and the females, in some parts of the country, were not allowed to cover their breasts. Gold ornaments were prohibited to them, but they could not afford them either.

The religious practices of the scheduled castes were also distinct in some ways. They did not follow or even understand sophisticated Hinduism. Priests drawn from among themselves officiated at their rituals.

It will be evident from this general profile that the scheduled castes were in a very real sense *marginal men* or outsiders to the system; they lived *in* communities but were not *of* it. It is against this background that we should try to understand the ongoing process of integration of the scheduled castes into the mainstream of Indian life.

The Scheduled Tribes

While the scheduled castes were territorially dispersed all over

India and were "untouchables" among the Hindus, the scheduled tribes lived more or less in exclusive territorial communities and as a rule they were not treated as a part of Hindu society—and therefore as untouchables, unless of course in the process of detribalization and assimilation they came to occupy the lowest position in the social ladder. It may be suggested that the basic disability of the scheduled castes stems from their low ritual status whereas that of scheduled tribes is rooted in their physical isolation and associated psychological insulation. The present policy with regard to the tribal population has two edges: (*i*) to draw them into the concourse of national life through a process of successive approximations to the wider society, and (*ii*) at the same time to maintain at least some of their distinctive characteristics. The latter aspect has its origin in the British policy which found its beginning in the Scheduled District Act of 1874, according to which tribal areas were treated as separate entities for purposes of administration. The need for such a policy is evident if we examine the conditions of tribal existence.

Based on their ethnic, historical, and socio-cultural background the tribal communities of India can be grouped into five major territorial groups: (*i*) north-east India; (*ii*) sub-Himalayan region; (*iii*) central and east India; (*iv*) south India, and (*v*) western India. While there are as many as 427 communities in the list of scheduled tribes, some of them such as the Gonds, the Bhils, and the Santals have each a population of 3 million or more. On the other end of the continuum come the Andamanese with a numerical strength of only 1.9 million in 1961. The tribal communities are distinguished from others by the language or dialect they use. Tribal languages belong to the Austric, Tibeto-Chinese (the prominent groups), Dravidian, and Indo-Aryan families. A small but not insignificant part of them is bilingual; 15.75 per cent of the tribal population is enumerated in the census as speaking one or more subsidiary languages in addition to the mother tongue. While the tribals do not subscribe to, and are unaware of the sophisticated beliefs of Hinduism, according to the 1961 census, 89.39 per cent claimed to be Hindus; only 5.3 per cent of them are Christians, 4.19 per cent are Buddhists, and 0.21 per cent are Muslims. In terms of their economy and technology the tribes of India cover a wide spectrum of techno-economic organization: hunters and gatherers, shifting cultivators, settled agriculturists,

fisher folk, pastoralists, and so forth. Similarly, in terms of their physical isolation and social interaction with the wider world, the tribes vary substantially; the naked groups who dwell in the interior of forests are in marked contrast to the industrial labour force which has taken to a modern style of life. Again, through a process of long drawn culture-contact some of the tribal communities are either fully or partially assimilated into the Hindu fold with higher or lower ritual status, while many others remain outside it either because they converted to other religions or because they do not regularly interact with the Hindus due to physical isolation. The attempt to integrate the tribes into the wider community should then be viewed against this background of differential patterns of existential conditions.

Sources of Change

Social reform movements

The need to recognize the multiplicity of the sources of change among the scheduled castes and the scheduled tribes of India has been stressed in the beginning of this chapter. We shall discuss three of them specifically: social reform movements, state action, and political action. It is our contention that, broadly speaking, these sources interacted with and reinforced one another and there is a rough time sequence in the order indicated above. Social reform movements may be of national scope such as the one initiated by Mahatma Gandhi, or of a regional nature as those initiated among the scheduled castes of Maharashtra by Mahatma Phule and those led by A.V. Thakkar among the tribes of Gujarat, or only of local character covering just a few villages. Most of these movements were initiated by outsiders, generally upper caste men or missionaries. In the case of the scheduled castes the possibility of an all-India movement and pan-Indian leader (such as Dr B.R. Ambedkar) was always present given their territorial dispersal. Assuming that meaningful operation of caste has always been within a limited locality and each caste group had a degree of insulation, the spread of these movements has also been limited to one or another locality and within the same locality to one caste or another. On the other hand, tribal movements have always been localized, as they are concentrated in a specific locality and confined to one or another tribe. It may not be an exaggeration to

suggest that most of the scheduled caste and tribal movements have been of a limited scale and have had a measure of autonomy. Some groups, therefore, were more frequently involved in these movements and registered considerable advancement while others lagged behind partly because of their lack of involvement in such movements.

Some of the social reform movements among the scheduled castes and tribes involved the adoption of the norms and values of the upper castes. The underlying rationale of these imitative movements was that if they accepted the norms and values of the upper castes their status would improve; the motivation for change was status mobility. Such movements often appealed to the scheduled castes and tribes to abstain from consumption of meat and liquor, to abolish idol worship, to respect the sacred cow, to take to upper caste names, to follow the occupation of clean castes, to stop the practice of widow remarriage, to practise monogamy, to struggle for temple entry and so forth. Some of these movements attempted to create new myths and symbols to establish their superior origin. This channel of social mobility had two constraints: (*i*) the upper castes had to permit or at least tolerate these categories to imitate their norms and values, and (*ii*) the scheduled castes and tribes had to be psychologically prepared to attempt the contemplated transformation as well as to suffer penalties for their behaviour change. To the extent the imitative process was confined to the life styles of the upper castes, it could have effected changes only in the socio-cultural dimensions, leaving the politico-economic dimensions relatively untouched. Whenever these groups attempt the sanskritization of their style of life it is likely to result in stresses and strains between them and the clean castes, thereby leading to confrontations between the two categories. Thus, given the hierarchial nature of the system, the clean castes invariably resisted the attempts by the scheduled castes at sanskritization. This implied that the reform movements carried with them an element of protest and in the very nature of sanskritization led to group mobility. Thus fissions and fusions, based on new identities leading to formation of new castes and sects, occurred simultaneously. Admittedly, the change that took place was *positional* in character and not *structural*. The caste system continued intact but the status of individual castes and tribes vis-a-vis others went up, or remained static, or went down depending on the response pattern to the social reform movements.

An important variant of such social reform movements was conversion to other religious faiths. This was designed to create a counter-culture to dominant Hinduism and to improve the social and economic condition of the converts. As in the case of sanskritization, conversion was also often a group phenomenon and the converts came to assume the attributes of a *jati* in course of time. Generally speaking, conversion took place to Christianity, Islam, Buddhism, and Sikhism. The widespread talk about conversion notwithstanding, the proportion of the scheduled caste and tribal population converted to other faiths seems to be negligible except in some parts of the country. About the scheduled castes we are not in a position to ascertain the number involved, as they lose their statutory status as scheduled castes if they convert to any religion other than Sikhism. In 1961, 98.56 per cent of the scheduled castes were Hindus and only 1.44 per cent were Sikhs. Given the policy of protective discrimination, the statutory status of the scheduled castes is a significant factor in their socio-economic development and political representation. This situation dissuades this category from embracing non-Hindu faiths. However, this is not to deny that there have been occasional spurts of conversion, particularly to Buddhism, in recent times. Perhaps the magnitude of scheduled caste conversion can be discerned in the decline in their population from 15.32 per cent in 1951 to 14.69 per cent in 1961. To the extent that conversion was in large numbers, the scheduled caste converts continued to be social isolates within the framework of their new faith. Thus, wherever conversion of scheduled castes and upper castes to Christianity took place in large numbers, the social differentiation continued to persist, each category maintaining the characteristics of a caste. It is important to recall that the antecedent status of converts was critical in their status identity. Thus in north India, recent converts to Christianity have been invariably from the lower castes, and they came to be identified as *Bhangi* (sweepers)—the caste with the lowest status in the hierarchy. Their antecedent low ritual status and poor economic resources, coupled with occupational identification, prevented them from establishing equal relationships with higher caste members. But it cannot be denied that many scheduled castes improved their material conditions and emancipated themselves from traditional ritual degradation, although only to a limited extent, through conversion.

In the case of the tribes the consequences of conversion have

been different. They retain their statutory status as scheduled tribes irrespective of conversion. However, even among them conversion took place only to a limited extent. Thus in 1961, 89.39 per cent of the scheduled tribes were reported to be Hindu; only 6.42 per cent belonged to other faiths, and 4.49 per cent were enumerated as having retained tribal religions. Religion is a matter of self-reporting; there are no stringent criteria to distinguish between a Hindu tribal and one who professes tribal religion. Of the tribal population belonging to other faiths the overwhelming majority are Christians and they have progressed substantially in economic and educational spheres as compared with the non-Christian tribals. Some of them are highly westernized in their life style and occupy important positions in different spheres. As for the majority of the scheduled tribes, who are listed as Hindus, some have entered the fold of Hinduism through a gradual process of acculturation. They get inducted into Hindu society at three levels; those who succeed in establishing their claims as tribal *rajas* (kings) secure near-Kshatriya status, some of them become peasants by taking to settled agriculture, and the rest come to occupy the ritual status of lower Shudras or of the scheduled castes, since they usually take to occupations similar to those followed by the two latter categories.

Both in sanskritization and conversion, the scheduled castes and the scheduled tribes, particularly the former, face certain dilemmas. Through sanskritization, the concerned group hopes to climb up in the ritual status hierarchy, but such upward movement is antithetical to their material interests in so far as the possibility of getting de-scheduled looms large if they achieve status mobility. Therefore, the dilemma is essentially one of choosing between ritual and legal (statutory) status and in so far as the former is accepted as the basis for conferment of legal status, the problem is genuine to the concerned group. For the scheduled tribes, assimilation into the Hindu-fold has always been a risky proposition, as the specific status niche into which they will be induced is uncertain. Notwithstanding these contradictory forces in operation it may not be wrong to suggest that the imitative process, especially social reforms and conversions, have sensitized the scheduled castes and tribes to their own problems as they come to view themselves in relation to others. Therefore, the hitherto frozen aspirations of India's dispossessed – the scheduled

castes and the scheduled tribes—started melting as they participated in social reform movements of various kinds. As their aspirations rose high, they came to experience an acute sense of deprivation, which in turn led to demand aggregation and interest articulation. In the context of democratic politics, these are essential prerequisites for a group to make organized attempts to improve their conditions. Although the policy of protective discrimination had its beginnings in pre-independence India, its acceptance by the scheduled castes and the scheduled tribes as a weapon for improvement was partly a governmental response to the organized demands these categories made, the skills for which they initially acquired through participation in social reform movements.

State action

The second major source of change that we have identified in the case of the scheduled castes and tribes was state action. Since our major concern in this essay is to examine the progress made by these categories within the framework of constitutional objectives, we propose to discuss at some length the measures taken by the state. State action, in this context, refers to legislative and administrative measures undertaken for the betterment of these categories. The Constitution of India provides for a number of protective measures for the welfare of the scheduled castes and tribes, who between them form nearly 22 per cent of the total population of India. Chief among the state measures are: representation in the Parliament and state legislatures; representation in the central and state services; special provisions for social, educational, and economic advancement; banning of traffic in human beings and forced labour; abolition of the practice of untouchability; the development of the scheduled and tribal areas; appointment of a special officer to investigate all matters relating to safeguards provided for the scheduled castes and tribes, and so forth.

(1) *Reservation in legislative bodies.* One of the prerequisites for the successful functioning of a parliamentary democracy is the representation of the various sections of the population in legislative bodies. Given the uneven development of the different categories of the population and given the competitive nature of

politics, it is necessary to make special provisions for the representation of the weaker sections. In the Indian context, the attempt to give political representation to the weaker sections of the population is manifested in the effort to reserve seats for the scheduled castes and the scheduled tribes, both in the Central Parliament and in the state legislatures, roughly in proportion to their population. Thus, nearly 15 per cent and 7 per cent of the seats are reserved for the scheduled castes and the scheduled tribes respectively, in the Lok Sabha as well as the state Vidhan Sabhas. This worked out to be 75 and 33 seats respectively for the scheduled castes and the scheduled tribes in 1961 in the Lok Sabha with a strength of 496 members. These numbers rose to 77 and 37 by 1971, when the strength of the Lok Sabha was increased to 519. In addition to this, one scheduled caste and four scheduled tribe candidates elected from general constituencies were also in the Lok Sabha in 1971. In the case of the Rajya Sabha (Upper House), due to the absence of any constitutional provision for reservation of seats in this House, no record is kept of members belonging to these categories.

There were 510 seats reserved for the scheduled castes and 262 for the scheduled tribes out of the 3,625 seats in the Vidhan Sabhas of various states and union territories in 1971. Additionally, five persons from these categories were elected from general seats. As in the case of the Rajya Sabha no provision for reservation of seats for the scheduled castes and tribes exists in the state Vidhan Parishads (Upper Houses) also. However, sixteen candidates from these categories were elected or nominated to Vidhan Parishads. It is important to note that the number of candidates belonging to these categories, elected from general constituencies to the Lok Sabha and Vidhan Sabhas, was steadily decreasing. For instance, in 1952-56 there were four to five scheduled caste members elected from general constituencies in the Lok Sabha, but by 1967 there was none. Similarly for the same period, the number dwindled from five to seven to four in the Vidhan Sabhas. Thus it is clear that only through reservations are the scheduled castes and tribes likely to get due representation in legislative bodies.

Originally, the provision for reservation of seats for the scheduled castes and the scheduled tribes was provided only up to 1960, but as it stands now the provision is extended up to 1980. The

realities of the political situation being what they are the reservations are likely to be extended further. The assumption behind the fixation of a time limit has been that by that time the scheduled castes and tribes will have made sufficient progress in social, economic, and educational fields, and they will be able to successfully compete with other categories to get elected. But the trend does not seem to indicate this. There are two sides to this problem. It is extremely unlikely that soon after the termination of reservation of seats, the scheduled castes and tribes will get elected in as many numbers as at present. Because of this they have developed a vested interest in the continuation of reservations. On the other hand, given the reservation of seats for these categories, it is unlikely that others will support the candidates drawn from these categories if they contest from general constituencies. Both these factors may lead to the persistence of political reservation which in turn may lead to the persistence of underdevelopment. In this sense, it may be postulated that protection begets underdevelopment.

With the introduction of *panchayati raj* (local self-government) institutions, systematic efforts have been made to give representation to the scheduled castes and tribes in all statutory bodies at the local level: *vikas panchayats*, *panchayat samitis*, and *zila parishads*. At the village level, the effort is usually to induct at least one person from these categories into the formal decision-making bodies even if they constitute only 10 per cent or less of the population When their population exceeds this level the representation is usually increased. Thus in formal legal terms the scheduled castes and tribes are represented at all the levels of legislation roughly in proportion to their population. It is difficult to say, however, how effective these inductions are in the sense of whether they really enable these groups to participate in the decision-making process, particularly at the local level. In a system characterized by considerable disparity in wealth and status, dispersal of power through constitutional provisions is not likely to make the expected dent. Frequently one notes in studies made of the functioning of legislative bodies and press reports that the scheduled castes and tribes are not included in high-power committees, that they do not actively participate in the decision-making process when represented, and even when they are verbally articulate and argue for just causes they do not get sufficient support from others.

Although there exists no statutory requirement, except in the case of Bihar, Madhya Pradesh, Orissa and Assam to appoint ministers (who need not be from scheduled tribes, but who usually are) to look after tribal welfare, this is generally done. It has also become a convention to include some members of the scheduled castes and tribes in all the state ministries, depending upon the local situation, as well as in the Central Ministry. Ministers in charge of Harijan and tribal welfare are invariably drawn from scheduled castes and tribes. In the Union Cabinet, some of the important ministers are drawn from these categories. The recent demand (1974) by the scheduled castes that the next President of India should be a Harijan, in a way symbolizes the new height of confidence and aspirations that this erstwhile disenfranchized social category has attained. Similarly one of the two contestants for vice-presidency was a person from a scheduled tribe.

(2) *Reservation in government services.* Apart from the reservation of seats in legislative bodies, 15 per cent and 7.5 per cent of the seats in central and state government services are reserved for scheduled castes and scheduled tribes respectively. Reservation of seats for these categories, however, does not automatically ensure their entry. For instance, of the hundred positions filled annually in the prestigious Indian Administrative Service, sixteen are reserved for scheduled castes. Only five of these were actually filled in 1957, although from 1962 all the positions reserved for them have been filled. In general terms, the representation of these categories in government services remains poor. Thus only 0.71, 2.01, and 7.03 per cent of Class I, II, and III officers were drawn from the scheduled castes in 1957. Their representation increased to 2.70, 4.41, and 10.00 per cent respectively in Class I, II, and III services by 1971. As against this, the percentage of scheduled castes in Class IV posts was 22.10 in 1957, which included the position of sweepers, an overwhelming majority of them being drawn from the scheduled castes. By 1971 the percentage of the scheduled castes in Class IV decreased to 17.72; the drop being the result of exclusion of sweepers in calculating these figures. In the case of the scheduled tribes the percentage shares in Class I, II, III, and IV posts in 1957 was 0.10, 0.32, 0.62 and 2.44, which increased to 0.45, 0.48, 1.85, and 3.96 respectively by 1971. Thus, it is clear that the representation of these categories

in central government services falls far short of the prescribed 15 and 7.5 per cent.

In order to highlight the magnitude of the deficiency in representation, the figures relating to Class I, II, and III posts (since the deficiency is acute in these cases) are shown in Table 1.

TABLE 1
DEFICIT IN REPRESENTATION IN DIFFERENT CATEGORIES OF POSTS FROM 1.1.1957 TO 1.1.1970 IN THE CASE OF SCHEDULED CASTES AND TRIBES

	General increase in posts	*Scheduled castes*			*Scheduled tribes*		
		Actual increase	*Expected increase*	*Deficit*	*Actual increase*	*Expected increase*	*Deficit*
Class I	18,244	549	2361	1812	94	944	850
Class II	23,595	1223	3114	1891	100	1245	1145
Class III	6,57,052	94,622	96,062	1440	16,821	38,425	21,604
	6,98,891	96,394	1,01,537	5,143	17,015	40,614	23,599

Two conclusions emerge from this Table: (*i*) the proportionate deficit in representation is more at the higher levels, and (*ii*) the gap in achieving the target in the case of the scheduled tribes is greater.

What are the reasons for this situation? For entry into a particular level certain minimum qualifications are prescribed. Usually the practice is that if persons with the minimum qualifications are not found in the category to fill up the positions, these are de-reserved and recruitment is done from the general population. Given this practice it is understandable that the top positions are rarely filled by these categories and the less developed among them have lesser chances of getting recruited. Thus a process of cumulative underdevelopment is set in motion; underdevelopment begets underdevelopment. Second, the majority of positions in Class I and II are filled by promotion by selection or through departmental tests and reservations do not apply in these cases. Admittedly, the aspirants from the scheduled castes and tribes are handicapped in this process. Third, according to the existing provisions, not more than 45 per cent of the vacancies occurring in a year, in a cadre or in a category of posts, can be reserved for the scheduled castes and tribes. This means that in order to get the benefit, two or

more positions should be vacant in a given cadre, which may not always happen. Further, the uneven distribution of skill creates problems as the candidates from the scheduled castes and tribes may not have acquired the relevant skill in certain areas. Unless they are compensated by reserving posts in other areas, the gap will continue to exist. Fourth, the maintenance of a roster indicating the recruitment from these categories is not centralized and this leads to inadequate dissemination of vital information. Since the reservation is proportionate to annual vacancies, by the time the non-fulfilment of target is discovered, the time lapses. Fifth, the prejudice of recruiting authorities to candidates from the scheduled castes and tribes and the built-in inferiority complex of the latter are additional obstacles in the process of their recruitment.

(3) *Educational development*. Before independence the education of the scheduled castes and tribes was mainly undertaken by voluntary organizations, particularly Christian missions. Thus in the case of the scheduled castes, the Arcot Mission, the Depressed Classes Mission, the Poor School Society, the Social Service League, etc., and in the case of the scheduled tribes the Roman Catholic Society and the Society for the Propagation of the Gospel Mission, etc., were mainly active. In the case of the scheduled castes their entry into educational institutions was particularly problematic because of the practice of untouchability. In 1931 the rate of literacy among "exterior castes" was 1.9 per cent and in that year, when the government decided to admit exterior caste pupils in all the aided schools, many schools were closed down and caste-Hindus withdrew their children from schools. Broadly speaking, the scheduled castes have gone through three stages before securing complete and full entry into educational institutions. These are: (*i*) admission to the school, without being allowed to enter the classroom, (*ii*) permission to enter the classroom but being kept physically separate, and (*iii*) the present stage in which visible discriminations are almost absent. In the case of the scheduled tribes this problem was absent, but another set of problems did exist. It was very difficult to spread education among them because they lived in small hamlets in isolated areas.

Since independence, primary education is free to all children in the country and is made compulsory through legislation in some of the states. Besides, additional facilities such as midday meals

in the schools, monetary aid to buy books and clothes, award of scholarships, exclusive hostels, and technical and vocational schools, are made available to pupils from these categories. The programme of awarding scholarships, which was confined to the scheduled castes till 1948, was extended to the scheduled tribes in 1948-49. The number of scholarships awarded to the latter increased from 84 in 1948-49 to 20,504 in 1967-68. Apart from these, two to four overseas scholarships were awarded since 1962, this rose to an average of five by 1967-68. Among the scheduled castes the number of post-matric scholarship holders rose from 655 in 1947-48 to 1,04,098 by 1967-68. The overseas scholarships awarded to the scheduled caste students have also been steadily increasing: five in 1961-62 to ten in 1967-68. Additionally, reservation of seats in institutions like the Sainik schools and industrial training institutes have been made for the scheduled caste and tribe students. The result of these measures have been that the literacy rate among the scheduled castes and the scheduled tribes rose from 1.9 per cent and 0.7 per cent in 1931 to 10.27 per cent and 8.45 per cent respectively by 1961. However, their literacy rate falls very short of the country's general literacy level which stood at 24 per cent in 1961. There is considerable imbalance in the rate of literacy between the various sections and categories of the scheduled castes and tribes. In 1961 the literacy standard among the scheduled caste women was only 3.6 per cent as against 10.27 per cent for the category as a whole. Similarly, among the tribes there are communities with barely 4 per cent literacy, while there are others with more than 40 per cent literacy. The extent of literacy among the scheduled tribe females was only 3.16 per cent in 1961.

Among the educational programmes specially designed for the scheduled castes and tribes, that of the scholarship awards has made considerable progress. Even this programme is not without its share of problems. We shall illustrate this with the example of the scholarships for the scheduled castes. These scholarships are designed as merit-cum-means awards. Only those students whose parents or guardians earn less than Rs 500 per month are eligible for the post-matric scholarships. The scholarships include tuition as well as maintenance allowance, Rs 40 per month for boarders and Rs 27 per month for day scholars in the under-graduate as well as degree courses and Rs 75 per month for boarders and Rs 60 per month for day scholars in the case of

professional degree courses in engineering, medicine, etc. Generally speaking, these stipends are inadequate to meet the expenses of education at different levels. Further, the rate of scholarship is uniform throughout India; this adversely affected those who were studying in big and expensive cities. The rates of scholarship were fixed in 1954-55. They were inadequate in terms of the high cost of living in the late sixties and early seventies. As the cost of living index has gone up considerably, the fixation of the income limit at Rs 500 per month has deprived many deserving students of these benefits. In an economy characterized by continuous inflationary tendencies, unless the decision-makers—political and bureaucratic—take quick, imaginative, and bold steps, the state measures will not produce the intended impact. Another problem is the delay in the payment of scholarships. This often nullifies the very utility of the measure as most of the beneficiaries come from very poor economic backgrounds. Finally, the actual beneficiaries are not found to be the poorest or the most deserving among the scheduled castes or the scheduled tribes, particularly in the case of post-matric scholarships. In fact, for the overwhelming majority of persons belonging to these categories the post-matric scholarship is redundant as they have not reached the stage of development at which they can avail themselves of these facilities.

(4) *Special economic measures for the scheduled castes.* As was mentioned at the beginning of this essay, there is considerable variation among the scheduled castes and the scheduled tribes in terms of their socio-economic conditions. Understandably, the state measures meant for their socio-economic uplift reflect this variation.

According to the 1961 census, 30.34 million or 47.07 per cent of the scheduled castes were workers. This figure was higher than the percentage of workers in the general population, which was 42.48 per cent. It is estimated that out of the total number of workers among the scheduled castes, 72.20 per cent were engaged in agriculture as against 69.46 per cent of the workers in the general population and 34.46 per cent of the scheduled castes worked as landless agricultural labourers as against 16.65 per cent in the general population in 1961. Among the scheduled caste landholders, 51.5 per cent had holdings of less than 2.5 acres.

Allotment of land, therefore, has been considered to be one of the major programmes for improving the economic condition of

the scheduled castes. There are three main sources of land for distribution: (*i*) land through reclamation of cultivable waste-land; (*ii*) surplus land released through imposition of ceilings on agricultural holdings; and (*iii*) lands made available through *bhoodan* and *gramdan*.

The Government of India spent Rs 1000 million during the last eighteen years on allotment of land and for improving the land held by the scheduled castes. In the First, Second, and Third Plan periods 11.8 million acres of land was distributed to landless agricultural workers, including the scheduled castes.

Agricultural work is seasonal in nature and this gives rise to the problem of seasonal unemployment and underemployment. The second problem is the very low rate of wages for agricultural labour. Thirdly, the practice of forced and bonded labour is still prevalent in some of the states. The practice of bonded labour originates from indebtedness. The moneylenders, traders, and contractors advance cash or sell commodities on credit and charge exhorbitant rates of interest. When landlords advance loans, either in cash or kind, to landless labourers, they usually demand the latter's free services as they are not in a position to pay back the loan and the interest goes on increasing. Those in debt thus become bonded to landlords. The percentage of indebted households among the scheduled castes was 61.94 per cent in the rural and 46.79 per cent in the urban areas, according to a sample survey conducted in 1960-61.

The importance of cooperatives has been recognized by the government as a way of protecting the scheduled castes from exploitation. Several types of cooperatives, viz., industrial cooperatives, cooperative housing societies, poultry cooperative societies, cooperative farming societies, sweepers' cooperatives, basket makers' cooperatives, and rickshaw pullers' cooperatives have been started. During the Second Five Year Plan, an allocation of Rs 25 million was made for the development of different types of cooperative societies among the scheduled castes and the scheduled tribes. After 1961, the quantum of allocation has decreased and even the available amount has not been fully utilized.

With a view to providing training in crafts to Harijans, several training-cum-production centres were set up. Provision was also made for the development of cottage industries during the Third Five Year Plan. Subsidies were given to trained and hereditary

artisans for improving their trade. In the Third Five Year Plan an allocation of Rs 42.2 million was made for the programme of which an expenditure of only Rs 23.2 million was incurred.

Housing and sanitation are a major problem for the scheduled castes. Their existing houses, in most cases, are constructed on sites which do not belong to them. They are, therefore, in constant fear of being evicted at short notice. In the first three five-year plans, 6.2 per cent of the 3.4 million landless labourers belonging to the scheduled castes were provided with houses or house sites. To provide house sites to them, the government had to acquire large tracts of private land. However, 80 per cent of the house sites allotted to them remained unutilized. In the absence of any scheme of financial assistance from the government, they were unable to construct even mud houses. The situation has been remedied; 75 per cent of the cost of construction is now borne by the government.

(5) *The fight against untouchability.* As was pointed out earlier, untouchability is one of the most serious disabilities faced by the scheduled castes in India. The scheduled tribes also encounter it, but on a limited scale: in some areas in their interaction with caste Hindus but mostly when some of them try to get Hinduized. Social reformers have been fighting against untouchability for the last one hundred years. The first governmental effort to legislate against the practice of untouchability was made in 1858 when an untouchable boy was refused admission in a government school in Dharwar. The government announced, "All schools maintained at the sole cost of government shall be open to all classes of its subjects without distinction." To strengthen its position, the Bombay Government (Dharwar belonged to Bombay State in those days) issued a circular in 1923 to the effect that no grants would be paid to an educational institution which refused admission to children belonging to the depressed classes. Soon after, several states passed legislation on this issue. In 1925 a bill was introduced in the Madras Legislative Council to throw open all public roads, streets, wells, etc., to all persons irrespective of their caste or creed. More radical was the Temple Entry Proclamation issued by the Maharaja of Travancore in 1936, permitting Hindus of all castes to enter temples controlled by the Government of Travancore. By 1948 all the states in India, except Rajasthan and Assam, had passed laws for the removal of the social disabilities of the scheduled castes

and/or permitting temple entry for them. Under article 17 of the Indian Constitution, untouchability is forbidden and its practice in any form is made punishable. However, it was only in 1955 that a country-wide legislation, the Untouchability (Offences) Act, 1955, was passed. According to this Act, an untouchable should have access to all public places, including places of worship, and public utilities.

Despite the legislation, untouchability is practised in various forms all over the country. The practice of untouchability frequently manifests itself in the following forms: scheduled caste students are not allowed to mix with caste Hindu children in schools or not allowed to eat from common hostel messes; in some places scheduled caste customers are not served in the same plates or glasses used by others in hotels and restaurants and if served they are compelled to clean them; they are denied use of public wells or tanks and transport; they are not allowed to pass through a road where temples are located or denied entry into temples or prohibited from participating in religious festivals; barbers and washermen refuse to serve them; they are not allowed to wear shoes while passing through the caste Hindu areas in villages or their marriage and other processions are prohibited in caste Hindu areas; they are not usually elected to political offices (except in the case of reserved seats); excessive punishment is given to them for petty offences, and so forth. Admittedly the intensity of discrimination varies from region to region and within the same region; the practice is more frequent in rural than urban areas.

Apart from legislation the government has undertaken several measures to eradicate the practice of untouchability. The Ministry of Social Welfare is responsible for policy formulation, implementation, and coordination of all programmes relating to untouchability. In 1950 the office of the Commissioner for Scheduled Castes and Scheduled Tribes, which is attached to the Ministry of Social Welfare, was created with the overall responsibility of investigating and evaluating the progress made in the implementation of constitutional provisions relating to these categories. The Ministry of Information and Broadcasting, which controls All India Radio and Television, is at present working for the removal of untouchability through propaganda and mobilization of public opinion. In addition to this, a few states have separate units to undertake effective propaganda against the practice of untouchability.

Soon after the passing of the Untouchability (Offences) Act, 1955, by the Centre, state governments were advised to set up committees to look after the successful implementation of the Act. However, except two states (Bihar and Madhya Pradesh) none conformed to this prescription and even in these states all the recommendations made by the committee were not implemented. One of the acute problems in the successful implementation of the Act is inadequate communication. In several states the Act has not been translated into the local languages and even if it is translated, its copies are not always distributed to the public. To crown it all, even the law and order agencies—the police and the judges—are not always familiar with the provisions of the Act.

From 1955 to 1970 a total of 6654 cases, under the Untouchability (Offences) Act, 1955, were registered with the police. Of these, 5764 cases were taken to court. However, in only 1659 cases offenders were convicted; 1032 were acquitted, 1315 cases were compounded, and 2057 cases were dragging on in the courts. While we are not in a position to calculate the average time taken for the disposal of cases, it is evident that more than 20 per cent of the cases registered during the period were subject to long delays. This indicates the slow pace in the disposal of cases which creates several hardships for the scheduled caste persons involved in the cases. While the registered cases do not indicate the incidence or the magnitude of the offences committed, the prevailing tendency to slow disposal dissuades the victims from approaching the law and order agencies. It is often alleged that the law and order agencies in collusion with the offenders, both groups being drawn from the same socio-economic background, deliberately delay the disposal of cases to harass the victims and this mechanism is being used as a deterrent in the case of potential complainants. Even when the offender is punished, the punishment is generally mild: in the majority of cases it is a fine, usually Rs 25 or less. Similarly, when the culprit is sentenced to imprisonment it does not usually exceed seven days' simple or rigorous imprisonment. Often the complainants are coerced to agree to a compromise and the case is compounded. All these go to indicate that the punishment prescribed is not a sufficient deterrent and, due to their social backwardness and economic dependence, the complainants are greatly handicapped in pursuing the course of justice.

To date, the most radical measure to eradicate untouchability

was taken by the Government of Kerala a few years ago, by appointing scheduled caste priests, after training them through an institution run by the state, to temples which are also attended by caste Hindus. A few years later Tamil Nadu followed.

(6) *Economic measures for the uplift of scheduled tribes.* Efforts have been made since independence to improve the condition of tribals in agriculture by: (*i*) recognizing traditional tribal rights to land; (*ii*) legal protection against alienation of tribal land and the protection of tribals from moneylenders; (*iii*) distribution of land to the tribals and development of land already in their possession; and (*iv*) distribution of improved agricultural implements, seeds, manure, and extension of agricultural facilities.

An important problem affecting man-land relations in tribal areas is whether land traditionally under the control of a tribe for generations for the purposes of shifting cultivation, grazing, hunting, and collection of forest produce, should be considered as being owned by it. On this matter a uniform policy has not been followed throughout India. In NEFA, the members of a village or community have absolute right over their Jhum land provided they are in a permanent location. In Manipur, the different households are free to cultivate any amount of land on payment of an amount of Rs 3 per annum as house tax which is collected through the hereditary village headmen or chiefs, who are entitled to keep one anna in the rupee. In Madhya Pradesh, the government denies any title to land not under permanent cultivation. The Commissioner for Scheduled Castes and Scheduled Tribes in his report in 1960-61 expressed the view that in the matter of recognition of traditional rights of tribal communities over land, especially those under impermanent cultivation, there should be a policy decision at the all-India level. A state policy in this regard, however, is yet to be evolved.

In different states, laws have been enacted to give protection to the tribals against the alienation of land. The measures to control the alienation of land differ in different states and union territories. The Assam Land and Revenue Regulations (amendment) Act, 1964, provides protection to the scheduled tribes of Assam against alienation of their lands in areas falling in tribal belts and blocks. In Gujarat, according to a resolution of 1970, the land of the tribal cultivators in the scheduled areas cannot be transferred to non-tribals without prior permission of the district collector. According

to the Kerala Land Assignment Rules, 1964, members of the scheduled castes can transfer their land to both scheduled caste and scheduled tribe persons, whereas those belonging to the scheduled tribes can transfer land only to other scheduled tribes. Even these transfers are subject to prior permission of the authorities concerned. No legislative or executive measures against alienation of land have been adopted by the Government of Nagaland. However, no land can be sold to a person other than a Naga, which is serving as a protection against alienation of land.

The scheduled tribes are faced with another form of exploitation—indebtedness and bonded labour. Tribals borrow money from moneylenders who charge them exhorbitant rates of interest. Coupled with extreme poverty, heavy ritual expenses and drinking habits prompt them to borrow money from easily available and accessible sources. Indebtedness thus becomes a normal and unavoidable aspect of their existence. Various state measures have been instituted to put a stop to the exploitation of the tribals by moneylenders. For instance, a number of cooperatives have been opened in various states to advance loans to the tribals at nominal interests. A case in point is the allocation of Rs 2.5 million to the Andhra Pradesh Cooperative Corporation Limited, Visakhapatnam, as a revolving fund for the sanction of short-term loans to the tribals.

In Maharashtra, the state government formulated a scheme for the grant of assistance to all the tribals in the Thana district in 1965. Under the scheme, a loan amounting to Rs 250 is given to a family, of which not less than 50 per cent is in kind, consisting largely of food grains. The loan is disbursed through the Block Development Officer and carries interest at the rate of $7\frac{1}{2}$ per cent. The step taken by the Government of Maharashtra was very helpful to the poor tribals who otherwise had to depend upon moneylenders.

Available evidence suggests that the tribals prefer to take loan from private moneylenders instead of cooperative societies, notwithstanding the lower interests charged by the latter. The main reasons for the failure of the cooperatives have been: (*i*) the cooperatives generally take too long to sanction the loans and have cumbersome procedures; and (*ii*) the cooperatives do not give loans to landless people.

Continuous efforts are being made by the state to put a stop to the exploitation of the tribals by moneylenders, for indebtedness

leads to the problem of bonded labour. The loans are advanced either in the form of cash or kind to the landless labourers. As the latter are not in a position to pay back the loan, the interest goes on increasing and the landlords demand free and compulsory service from them. A bonded person gives lifelong service and his heir inherits the obligation to serve his father's master. In relation to this, the Orissa Debt Bondage Abolition Regulation was promulgated as early as 1948, but it was not implemented and no rules were framed under the regulation. In Rajasthan, the Sagri System Abolition Act was passed in 1961. The study team on tribal development programmes observed in their report (in 1969) that despite the recommendations made by the Commissioner for Scheduled Castes and Scheduled Tribes, and the Scheduled Areas and Scheduled Tribes Commission, several states had not taken any action with regard to the continuing practice of bonded labour.

The Ministry of Food and Agriculture set up a Wasteland Survey and Reclamation Committee (Uppal Committee) that surveyed wasteland in blocks of more than 250 acres in twelve states and recommended reclamation of 1.08 million acres at an estimated cost of Rs 168 million, the average cost of reclamation being Rs 158 per acre. The Committee on the Settlement of Landless Agricultural Workers, set up by the Panel on Land Reforms, surveyed wasteland in smaller sized plots and recommended that a rapid survey and categorization of small blocks of wasteland in villages should be made with the help of village officials trained for the purpose and the landless families settled on suitable land. Thus, a centrally sponsored scheme was approved in 1961 for the survey of wasteland in the villages. The scheme has been taken up in thirteen states covering about one hundred districts. Surplus land released through imposition of ceiling on landholdings are also to be distributed to the tribal population. According to available information, the land allotted to the scheduled tribes till 1970-71 is only 118,478 hectares under various schemes and the families who benefited from it number 39,305.

In order to help the scheduled tribe agriculturists to settle in agricultural occupations and to increase the productivity of the land, several schemes like provision of irrigation facilities, ploughs, bullocks, agricultural implements, and distribution of improved seeds are in operation. In the Fourth Five Year Plan, an allocation of Rs 44.7 million was made to promote agriculture and also

to improve the agricultural practices of the scheduled tribes.

Small farmers' development agencies have been set up in certain tribal areas with the object of bringing about economic and social development. In Orissa, in the hope of rehabilitating the tribals and of changing their way of life by bringing them down from the hills where they lived by shifting cultivation, 101 colonies were started and 3,490 families were settled. They were given land, agricultural equipment, and bullocks, in addition to several other amenities. For various reasons, of which the most important was the lack of adequate finance to set up costly irrigation projects, some of the colonies did not succeed.

Most of the tribals live in forests and therefore forests have great significance for them. While a small number of tribals depend upon forests for their main source of livelihood, to several tribal groups they are an important subsidiary source of livelihood. In several states, provision has been made in the Panchayat Acts to associate the tribal *gram panchayats* with the management of forests. But in areas where the *gram panchayats* are controlled by non-tribal communities, the traditional rights and privileges of the tribals with respect to forests are not respected. In some areas the forest labourers' cooperative societies have proved useful in ameliorating the conditions of the tribals living in and near the forest. They have been set up with the aim of developing forest products.

As it has not been possible to give land to all the tribals, efforts are being made in the direction of the development of cottage industries. There are various training and production centres where tribals are trained in different crafts. Financial and technical aid is given to those who are trained and also those who are in industry. During the Second Five Year Plan an expenditure of Rs 16.83 million was incurred on the development of cottage industries for the scheduled tribes. The scheme for the development of cottage industries also include giving financial aid to the scheduled tribes to set up or improve their own trade or business. In Orissa a special programme for the economic betterment of the most backward tribals of the state has been implemented since 1963-64. Under this programme an area is taken up as a unit for a purchase, sale, and fair price shop scheme. Commodities sold by the tribals are purchased from them at various centres and the articles they need are sold to them at fair price shops.

Special multipurpose tribal development blocks have been established in consonance with articles 46 and 275 of the Constitution. In the beginning there were only 43 special multipurpose tribal development blocks. A tribal development block covers 40 villages over an area of 150-200 square miles, with a population of 25,000 and the ability to function as a normal administrative unit. The object of these blocks is to bring about significant changes in the economic and social life of the tribals, particularly to modernize tribal agriculture and to encourage the tribals to take to settled agriculture instead of shifting cultivation. The blocks are based on the general pattern of the community development blocks and geared to the special needs of the tribals. Being the first effort of its kind in the tribal areas, the scheme faced certain organizational difficulties. Problems like a subsistence level of living, under-developed infrastructure, and the high percentage of illiteracy in the tribal population have been responsible for the limited impact of the development programme on the life of the tribals. In the Third Plan 330 blocks were started to which 120 blocks were added later. Various shortcomings have been noticed in the working of the tribal development blocks. Generally speaking, they have covered a limited population, while in several cases the schemes have been launched without any benchmark data In the development block there has been a lack of coordination among the development agencies. In many instances the response of the tribals was not enthusiastic.

Political action

The third important source of change among the scheduled castes and scheduled tribes is political action, initiated by political parties through the process of mobilization. Given the fact that India has a multi-party political system, it is legitimate to expect some amount of dispersal of politicians belonging to the scheduled castes and tribes into the different parties. However, as the Congress party is in power at the Centre and in most of the states, those who aspire to occupy political offices are likely to identify themselves with it. On the other hand, we should expect that some politicians who perceive other parties as political alternatives to the Congress are likely to align themselves with opposition parties. A third possibility is that separate political parties are formed by the scheduled castes and tribes to pursue their specific interests. While

the first two groups of politicians are likely to champion the cause of these categories within the framework of the parties to which they belong, the last category operates as an autonomous group of spokesmen only for their specific groups.

Here we shall be concerned mainly with parties which have their base exclusively among the scheduled castes or scheduled tribes, such as the Republican Party of India (RPI) and the Jharkhand party. They are the only parties of the scheduled castes and the tribes which have ever secured representation in Parliament and both have a long history. The case of the Dalit Panthers will also be briefly discussed. This is a militant political group of scheduled castes which emanated from the RPI and indicated a new trend in political action.

Of the seventy-seven scheduled caste members in the Lok Sabha in 1957, sixty belonged to the Congress party, three each belonged to the Communist Party of India and Jana Sangh, and five belonged to the All-India Scheduled Caste Federation. By 1971, while the number of the scheduled caste members remained constant, only fifty were in the Congress party. However, the Jana Sangh had four and the two Communist parties together had six members. There were only two MPs belonging to the RPI—an exclusive party of scheduled castes—and the rest were mainly independents. In the case of the scheduled tribes only three of the thirty-one scheduled tribe MPs belonged to an exclusively tribal party (the Jharkhand party), while nineteen belonged to the Congress and two to the Communist party in 1957. By 1971, their number in the Lok Sabha increased to thirty-seven. As many as twenty-six of the scheduled tribe MPs were in the Congress party and only two of them belonged to exclusive tribal parties. There was only one scheduled tribe MP who belonged to a communist party (CPM).

(1) *The Republican Party of India.* The ancestry of the Republican Party of India (RPI) can be traced to the late 1920s when the British government initiated a series of Round Table Conferences to provide political representation to the scheduled castes. In the second conference in 1931, Dr Ambedkar was nominated as the representative of the depressed classes. He insisted on separate elections for the depressed classes instead of joint elections with reserved seats in legislatures, for he believed that unless the caste system was destroyed the social evil of untouchability could not be

removed. With the objectives of securing political rights and representation for the scheduled castes he established, in 1942, the All-India Scheduled Caste Federation at an All-India Depressed Classes Conference in Nagpur. This was a direct appeal for the scheduled castes to win power through unity. In 1957 the All-India Scheduled Caste Federation was disbanded and the Republican Party of India was formed.

The RPI accepts the fundamental tenets of the Indian Constitution such as justice, freedom, equality, and brotherhood for the citizens of India and it aims to pursue these objectives through the medium of parliamentary democracy. One of the important reasons for the RPI's close attachment to the Indian Constitution and loyalty to democracy is rooted in the fact that Ambedkar drafted the Constitution and attested democratic polity. Among the RPI's specific aims are fighting for equality of opportunity for every Indian with a provision to give the "have nots" of the past some special consideration to bring about a requisite balance in society, and for the removal of exploitation of man by man and class by class. Some of the objectives of the party, listed below, reflect its interests in the dispossessed of India:

1. To organize the oppressed and others, especially the Buddhists, the scheduled castes, the scheduled tribes and other backward classes;
2. To organize the farmers, landless labourers, industrial workers, and other workers depending on wages;
3. To work for ensuring justice for the minorities; and
4. To fight against the atrocities committed on the oppressed and to get their disabilities removed.

After the death of Ambedkar, the founder of the party, N. Sivaraj was its leader up to 1964, till his death. The next president of the party, B. S. Gaikwad, was sympathetic to the Congress party, and a large number of RPI workers joined the Congress during this period. The party gradually weakened and its strength was considerably eroded by 1970, when a formal split of the party took place, giving birth to two factions. Several of the erstwhile leaders of the RPI are at present in the Congress party occupying positions in the party hierarchy, one of them is a minister in the Union Cabinet and another in the State Cabinet of Maharashtra. By and large, the RPI functions only in a few states, Maharashtra being in the forefront with three members in the legislative assembly

followed by Uttar Pradesh, with the same number of MLAs, although one of them is not a scheduled caste. Although an all-India party, the RPI's support comes mainly from the Mahars of Maharashtra and the Jatavas of Uttar Pradesh—the two most populous scheduled castes of these states. At present the activities of the party are confined to routine political action such as participation in elections, submitting occasional memoranda to the state authorities, issuing press releases for public circulation, organizing protest activities in pursuance of its goals, and so forth.

The RPI presented its first charter of demands in 1964 to the then Prime Minister of India. Since the charter did not evoke any response, the party organized an agitation in which 0.3 million RPI volunteers courted arrest. Responding to the agitation the Prime Minister invited the leaders of the party to discuss the demands, and in the light of the assurances given the agitation was called off. However, no action was taken and a delegation of RPI presented its second charter to the Prime Minister in 1969, with a threat that direct action would be resorted to if the demands were not accepted. A third charter was presented in 1970. It was decided to start an all-India civil disobedience movement in October 1970 to press these demands. The leading demands of the party convey its overall orientation. These demands were:

1. Baba Saheb Dr B.R. Ambedkar to be given the honour of a national leader;
2. Nationalization of land and introduction of collective farming;
3 Introduction of a national minimum wage and the minimum wage be fixed at Rs 5 for an eight-hour working day;
4. Implementation of the recommendations of the Committee on the Welfare of Scheduled Castes and Tribes and reservation for these categories, 45 per cent of the seats in public services till such time as they secure representation proportionate to their population;
5. Extension of educational, economic, and other facilities to neo-Buddhists (who are mainly converts from scheduled castes);
6. Stringent measures to be taken against those who perpetrate atrocities on scheduled castes;
7. The amount of scholarship payable to scheduled caste

students, fixed in 1946, should be revised; and

8. A finance corporation should be started for the welfare of the scheduled castes and tribes.

It is clear from the demands put forward by the RPI that the party keeps the welfare of the scheduled castes as its central focus. It should be noted with regard to the second and third demands that an overwhelming majority of the landless agricultural labourers in India are drawn from the scheduled castes. Similarly, among the wage earners—both agricultural and industrial—a substantial number belongs to this category.

Most of the demands of the party remain unfulfilled. In October 1972, the executive committee of the party decided to launch a country-wide agitation in pursuance of its demands. The agitation consisted of demonstration and the courting of arrest by party volunteers. The action programme of the agitation included: (*i*) occupation of government land for cultivation by the landless peasants and erection of residential structures; (*ii*) demonstration by volunteers before collectorates to press for providing relief work in the drought affected areas and for the starting of a separate finance corporation for scheduled castes and tribes; and (*iii*) demonstration before regional employment exchange offices to press for the implementation of statutory reservations in government services and also in public undertakings.

In 1972, the RPI in one of its resolutions called upon the government to make the Untouchability (Offences) Act, comprehensive. The Act should cover, the party demanded, the atrocities committed on the scheduled castes as well as those arising out of caste prejudices and the sense of untouchability nursed by the clean castes. The Act should also provide protection to those who came forward to lodge complaints and pursue cases, it was demanded. Further, the severity of punishment should be increased so that it was not less than two years' imprisonment. In the event of social boycott of the scheduled castes by the upper castes the provisions of the Preventive Detention Act should be invoked and the offence should be non-compoundable and non-bailable.

While it is clear that the RPI champions the cause of the dispossessed in India, it often fails to make an impact at the national level for the following reasons:

1. The party is too weak and localized and wherever it functions its ranks are not always united;
2. An overwhelming majority of the scheduled caste politicians function through the Congress party, which is in power. Therefore, the RPI leaders are not accepted as the exclusive or even important champions of the scheduled caste cause;
3. The party does not have an ideology or programme radically different from several other parties, including the Congress. Thus the RPI fails to provide a viable alternative for pursuing the interests of the scheduled castes; and
4. Often the leaders of the RPI are silenced through the process of cooption by the Congress party or through the process of distribution of appropriate rewards. All these render the party ineffective as the instrumentality of the dispossessed.

(2) *Dalit Panthers.* As was noted earlier, the RPI as a party of the scheduled castes weakened by the mid-sixties. The militant among the scheduled caste youth found that the older leaders from their castes either joined the Congress, or those who continued with the RPI were not radical enough. A literary movement led by radical scheduled caste young writers, depicting the life and conditions of these groups, gradually developed in Maharashtra. Diffuse in its goal orientations in the beginning, the movement gradually shaped an action programme. The implementation of this programme called for an organizational framework. By 1972 the Dalit Panthers came into being as a distinct political group.

The Dalit Panthers, most of whom are neo-Buddhists, recognize that conversion to another religion and voluntary disengagement from Hinduism will not ensure them a higher status in a caste-ridden society. Participation in parliamentary politics either through established political parties of the right or left, or even through exclusive political parties of the scheduled castes such as the RPI, which supports conventional democratic politics, is not likely to improve their lot. The Panthers, therefore, consciously opt for confrontation, total revolution. While they continue to draw inspiration from Baba Saheb Ambedkar, at least part of their ideology is drawn from Marxism, which gives them a broader orientation. They count not only the scheduled castes and tribes and neo-Buddhists as Dalits, but also the toiling masses—factory workers, farm labourers, landless tenants, poor peasants, etc.—all of whom

are not drawn from scheduled castes. While they consider all true leftists—those who are dedicated to the task of destroying the class and caste system—and the victims of economic and political oppression as their "friends," landlords, capitalists, moneylenders, and communalists are their avowed "enemies."

According to the Dalit Panthers it is futile to expect the Congress government to lead a social revolution as its ranks are filled with former Hindu autocrats—landlords, capitalists, and religious heads—who for ages deprived them of wealth, power, and prestige. The Dalits diagnose the problem as essentially one of concentration of economic and political power, ". . .bureaucracy, judiciary, military, and police are under its control. . . .The problem of untouchability. . .has long ceased to be that of mental enslavement alone. Untouchability today is the ghastliest form of parasitical exploitation which supports and sustains the everchanging hierarchy of power politics." The solution to this problem lies in revolutionary action and not in conversion to other religions or in leading reform movements.

According to the Dalits, while the Congress party indulged in verbal radicalism and made promises to the poor, in effect it deliberately and ruthlessly crushed the farm labourers, factory workers, and the landless labourers, and through the process of distributing spoils to a few gullible leaders of the scheduled castes castrated their revolutionary elan. As for other political parties, none is a genuine champion of the Dalits, including the communists, as they enter into convenient electoral alliances with communal parties—the Jana Sangh and the Muslim League—and non-socialists such as the Swatantra party. While the communists talk incessantly of class struggle, they are silent about untouchability which is nothing but a barbaric means of exploitation. The RPI, which presumes to be the spokesman of the scheduled castes, is essentially communal in its orientation and it never attempted to bring the economically exploited workers and untouchables together. Further, the leadership of the RPI passed into the hands of middle class intellectuals who cannot and do not empathize with the Dalits. These circumstances necessitated the formation of a true revolutionary political group and the Dalit Panthers is that group.

The problems facing the Dalits are: bare economic needs, social discrimination, political oppression, and physical torture. The historicity of these problems is located in the social structure of

India. Mechanisms of appeasement or tokenism in the form of economic concessions or political reservations will not deliver the goods. Attacking individuals and groups is of no consequence. The Dalits declare: "We want to rule over the entire country. Our target now is not individuals, but a whole system rotten to the core."

The specific programmes of the Dalit Panthers are:

1. To destroy the feudal, parasitical landlords and money-lenders;
2. To compel the government to distribute land to the landless on a priority basis;
3. To fight for the increase of wages of farm labourers;
4. To press for the right of the Dalits to use public wells;
5. To fight against the residential segregation prevalent particularly in villages;
6. To end exploitation through private ownership and to press for the confiscation of all foreign capital without compensation;
7. To fight for employment of all Dalits and to ensure unemployment allowance for the unemployed;
8. To struggle for free educational and medical facilities and press for the selling of food grains at fair prices;
9. To fight against the practice of declaring caste and religion while applying for jobs and to press for the stoppage of government grants to religious institutions;
10. To work against the publication of literature inciting violence;
11. To fight for the abolition of caste-based regiments in Indian army; and
12. To fight for the fixation of prices of essential commodities.

It is clear from the above list that the Dalit Panthers stand for socialism and secularism, the two avowed goals of independent India. Therefore, while there is no basic divergence in the goals pursued by the government and the Dalit Panthers, the disenchantment of the latter is essentially rooted in the inadequate implementation of the legislative provisions. However, the Dalit Panthers have scarcely initiated any action programme, their impressive list notwithstanding. Perhaps the only known political confrontation

that the Panthers led so far was the electoral boycott of the Central Bombay parliamentary election in January 1974 against the Congress candidate. According to the call given by the Panthers the scheduled castes of the constituency abstained from voting, leading to the defeat of the Congress candidate. After the election, an anti-scheduled caste riot broke out which lasted for about six weeks. The Dalits allege that the police openly sided with caste Hindus in the riot and this was a clear expression of the anger of the establishment against the Dalits as they were instrumental in defeating the Congress candidate.

The main thrust of the Dalit Panthers' movement as it stands today is the intellectual awakening and creation of a revolutionary consciousness among the oppressed through the publication of literature. A band of young radical writers with their base in Bombay are spearheading the movement through their writings in Marathi. They do not as yet have a sustained action programme and it is too early to evaluate their impact on the political scene.

(3) *Jharkhand party*. It is evident from our discussion of the RPI and the Dalit Panthers that the scheduled castes are organized mainly to fight against the traditional social, political, and economic disabilities to which they have been subjected for centuries. Although the tendency to operate mainly in certain specific localities is prominent, the trans-local orientation of these political groups is evident. In constrast, the tribal movements and parties invariably have a local orientation. The differences in the political organizations of the scheduled castes and the scheduled tribes reflect their aspirations, which in turn mirror their existential conditions. While the scheduled castes are territorially mixed and dispersed with the rest of the population, the scheduled tribes are concentrated in specific pockets. Therefore, it is natural that most of the tribal movements and parties have been striving towards regional autonomy. The Jharkhand party, formed in 1950, is a typical example of this political expression.

Jharkhand is a folk region presently distributed into the states of Bihar, Orissa, West Bengal, and Madhya Pradesh. It consists of fifteen districts and a population of twenty million. The main objective of the Jharkhand party is to promote the social, economic, and political advancement of the people of Jharkhand and to constitute the region into a state within the constitutional framework of the Republic of India. By and large the activities of the

party are confined to Santal Parganas and Chota Nagpur division.

Political awakening among the people of Jharkhand can be traced to the Churai movement (1795-1800), the Kol insurrection (1831-32), and the Sardari Larai (agitation), all of which were directed against non-tribal landlords and contractors who were mainly migrants from other parts of Bihar. The Birsa uprisings of 1895-1900, under the leadership of a charismatic cultural hero of the Munda tribe, were mainly aimed at the establishment of a Munda Raj (state). By the turn of this century the influence of Christian missionaries became evident and a voluntary organization known as the Unnati Samaj was established by Christian tribal young men for the educational development and political awakening of the tribals of the region. Later the Samaj was broad-based to include non-Christians also and a new organization called the Adibasi Mahasabha was formed in 1938. The two chief objectives of this organization were: (*i*) statehood for Jharkhand, and (*ii*) protection of adivasis from exploiters, locally referred to as *dikkus*. Ever since the formation of the Adibasi Mahasabha, the people of Jharkhand expressed their desire for a separate state. The district board elections of 1939, the assembly elections of 1946, and the general elections of 1952 have used separate statehood for Jharkhand as a political plank by the people of this plateau.

In 1957, of the thirty-one scheduled tribe members of the Lok Sabha only three belonged to the Jharkhand party, the only exclusively tribal party in Parliament at that time, although two scheduled tribe MPs belonged to the Gantantra Parishad—a party with its base mainly in Orissa, on which the tribal population of the region exerted considerable influence. By 1971, of the thirty-seven scheduled tribe MPs, only two belonged to political parties exclusively belonging to the tribes; the All Party Hill Leaders' Conference with its base in Assam and the Jharkhand party with its anchorage in Bihar, with one member each. Viewed this way, diminution of the localistic orientation of the tribal population of India can be seen. It is instructive to look into the circumstances which led to this situation, using the Jharkhand party as an illustrative case.

In 1952 the Jharkhand party won thirty-two out of the seventy-seven seats in the legislative assembly of Bihar from Chota Nagpur and Santal Parganas. In 1957 the seats bagged by the party went down, thirty out of seventy-seven. Since then, the party has gradually deteriorated in terms of the number of seats it has won in the

state assembly. Thus while the total number of seats from the region to the state assembly remained constant (seventy-nine), the Jharkhand party won only twenty seats in 1962 and thirteen in 1969. It is clear that the electoral appeal of the party has been steadily declining. For a decade from 1952, the party was strong in championing the cause of a separate state. It appealed to the state reorganization commission in 1954, invoking the historical background, economic viability, political peculiarity, and cultural autonomy of the Jharkhand region, for the formation of a separate Jharkhand state. However, the commission was not persuaded as the region does not have a common language (the main basis for the reorganization), and when the electorate at large found that the possibility of the party realizing its goal was diminished, the appeal of the party also declined. This was clearly manifested in the 1962 election when the party lost ten of its former seats. In 1963 the Jharkhand party merged with the Congress party, although all of its supporters did not approve of the merger. In the 1967 election, ten independent candidates were voted into power by the erstwhile sympathizers of the party. Having experienced frustration in pursuing their aims without an organized political forum, some of the dissident Jharkhand leaders made a new attempt to form separate tribal political parties once again. Thus in 1969, four factions of the Jharkhand party emerged, of which only two managed to secure any seats in the state assembly.

It is important to recall that several of the erstwhile Jharkhand leaders, who joined the Congress party, became ministers at the state level. The founder leader of the party—Jaipal Singh—first became a minister in Bihar. Later both he and his wife were made deputy ministers in the Union government. Thus, as in the case of the RPI, the political party of the scheduled castes, it is through the process of picking up the leaders of the Jharkhand party into the establishment, that the vitality of the party as a political force was sapped. We may note that in any political system characterized by one-party dominance, this is the logical course of events with respect to those parties which do not radically differ in their ideological orientation, tactics, and strategies from the dominant party. In so far as political rewards can be gained only through one's association with the party in power, those who champion the cause of one or another section are likely to be lured by the dominant party. This is precisely what happened both in the case of the

RPI and the Jharkhand party, the parties with their social base among the scheduled castes and tribes respectively.

Conclusion

The process of change was initiated among the scheduled castes and the scheduled tribes much before independence, by social reformers mainly drawn from upper castes and missionaries. Given the institutionalized inequality of the social system, however, it was necessary for the state to take specific measures for their uplift. In the context of these measures, social reforms and state action, they were at the receiving end, and this had three consequences. First, any group permanently relegated to the receiving end gets socially and psychologically degraded, despite slight economic betterment. Second, once the possibilities of improving its sub-human conditions are opened up the group concerned will become increasingly restive and recalcitrant. Third, the groups which occupy superior positions in the society, when challenged by their erstwhile slaves, will start counter-offensives to suppress them. Therefore, increased confrontation between the scheduled castes and the scheduled tribes on the one hand and the dominant groups on the other is a natural corrollary of the change process.

Frequently we come across suggestions both from the beneficiaries and the benefactors, i.e., social reformers, bureaucrats, and politicians to the effect that additional administrative measures, or strengthening of the existing ones, are the answer to the problem. They believe that implementation of these measures on a time-bound basis will solve the problems. But what are the realities?

It is well-known that certain of the scheduled castes, particularly the more populous ones and a few scheduled tribes, have monopolized practically all the developmental benefits, be it the distribution of land, entry into educational institutions, or representation in legislative bodies and government services. This is perhaps built into the very nature of the situation. Given the importance of numerical superiority in a democratic setup, the political representatives of these groups will be invariably drawn from the more populous and dominant categories among them. This in turn helps such groups to utilize their connections and networks as resources to secure a disproportionate share in the benefits extended by the state. Thus a cumulative process starts operating, favouring the

categories with certain initial advantages. This leads to substantial disparities between the various groups among the scheduled castes and the scheduled tribes.

Although the developmental benefits are extended to the scheduled castes and tribes as social categories, the beneficiaries are specific persons and families. This means the unit of mobility is an individual and not a group in the context of developmental benefits. This has certain inevitable consequences, the foremost among them being a social differentiation between the elite and masses among them. In consequence, a new prosperous class emerges among them. This is turn leads to the disappearance of the unity and relative homogeneity among particular castes and tribes and gives birth to intra-caste and intra-tribe divisions based on income and wealth. A group of dominant individuals emerge out of this situation. They are usually urban based professionals or white-collar employees with education. Among them some maintain their scheduled caste or tribal identity and continue their connections with the less fortunate members of their groups, often taking initiative for their development and change. Another group consists of those who quickly snap all their connections with their fellow men and try to merge with the social elite. If successful they are assimilated; if unsuccessful they are alienated.

If state action for the uplift of the scheduled castes and tribes leaves the really poor among them way behind, we have to resort to other means for their betterment. Perhaps political action might deliver the goods. The accent of political action is power, the axis around which groups get organized is ideology. It is certainly anomalous to suggest that particular castes or tribes belong to specific political parties and attest differing ideologies. It is a matter of common observation, however, that for a variety of reasons a large proportion of the population of a particular social group come to be identified with one political party or another. This, I suggest, is the logic involved in the process of mobilization of a populace with intense primordial attachments. Familial, kinship, and caste ties are important resources in the context of political action. Thus, if a group of leaders from a caste come to support a political party, a substantial number of caste members fall in line. This accrues several benefits for the caste as a whole. To start with, the leaders of the caste will be inducted into leadership positions of that party at the local level and will

gradually move up in the political hierarchy as and when they acquire sufficient political skills and have demonstrated their commitment to the party and its ideology. At the same time, the contacts of these leaders with the higher echelons of the party functions as a feedback resource. Acting as political brokers and bridges at the local level they enhance their resources in many ways.

The involvement of caste in political action has two important consequences. The caste gets politicized and mobilized, and subsequently it becomes ready for confrontation. A process of political education starts with political participation in the form of electoral participation, strikes, lockouts, satyagraha, organization of labour unions, etc. The group certainly suffers some casualities as its members are likely to be engaged, at least occasionally, in violent conflicts. However, the radicalization of the group will result in political payoffs: party tickets, funds, and positions. Admittedly, only a few individuals move up in the social hierarchy through the acquisition of power—formal or informal. They may establish new caste associations or Sabhas or the existing ones may be invigorated. In the final analysis, emergence of a political elite among them becomes evident. Of the two types of this elite, one operates at the village and district level: usually rural based, semi-literate, and with a traditional lifestyle. The other operates at the macro-level: usually urban based, represented at the state and national level: political and governmental bodies. Placed in an advantageous position the political elites among the scheduled castes and tribes amass wealth, usually to their individual benefits. Their sons and daughters get educated in top schools, get recruited into top professions, acquire social skills to mix with the mainstream elite and thus come to be identified with them, culminating in the process of social assimilation.

At this juncture I would like to draw the attention of the reader to a few general trends of change among the scheduled castes and tribes. The social reform movements which encompass the process of sanskritization and conversion to other religious faiths gave the initial impetus for change. The units for moving up through these processes were social categories and the motivation for change was status mobility leading to the advancement of the ritual status of the groups concerned. The kind of measures introduced through state action resulted in the emergence of a new prosperous class

effecting social differentiation among the scheduled castes and tribes leading to class mobility. In general, state action led to individually mobility. Political action is invariably group based and it leads to the acquisition of power by the scheduled castes and tribes, resulting in power mobility.

It is interesting and important to note that the self perception of the scheduled castes and tribes has undergone substantial changes as they started using one or other channel of mobility. Thus in the first stage, when social reform movements were the main channel of mobility, they did not reject the caste system although they rejected their specific status within its fold. The attempt was simply to move up within the hierarchy through sanskritization. Their identity and self perception retained an essentially Hindu caste identity. But as they gradually realized the limitations of this mechanism of mobility the attempt to disengage themselves from Hinduism and the caste system started as manifested in their conversion to Islam, Christianity, and Buddhism. The attempt here was to create a counter-culture to the caste system, to reject it totally and to search for a new identity outside its fold. While reform movements frequently had an indirect political dimension in that the involved group was to be mobilized into collective protest-behaviour, in the case of conversion to other faiths the political aspect was visible and clear-cut. Conversion to Islam during the Muslim rule and conversion to Christianity during the British period meant an identity with the rulers' religion. With regard to conversion to Buddhism, the political import was forceful and clear-cut. To begin with, Buddhism was an indigenous religion and therefore did not evoke anti-national sentiments in the minds of others, as in the case of conversion to Islam and Christianity. Secondly, being strongly anti-caste it was easier for the untouchables to empathize with it. However, conversion to new faiths did not bring about the desired result, viz., bestowing a higher status; the scheduled caste converts became neo-Buddhists or neo-Christians and the scheduled tribe converts remained tribal Christians or with rare exceptions became untouchables, if they were assimilated into Hinduism. With the introduction of state measures and the invoking of the statutory status—scheduled caste—as the basis of distributing state patronage, the scheduled castes started viewing themselves as one among the castes considered as

untouchables by others, the clean castes. This meant a transformation in the self perception of status identity by the scheduled castes. Although this was a legal status in so far as it was anchored in low ritual status, it meant the tacit acceptance of a lower status. However, as the scheduled castes and tribes started resorting to political action, once again an identity transformation is in evidence, as citizenship based on the notion of equality is the basis of such actions. Although one notes the fusion of caste and political identity here, in so far as the radicals among them reject reservations of all kinds for their welfare, the rejection of scheduled caste status identity and the anxiety to establish an identity independent of caste status becomes crystallized. The radicals in the RPI and the Dalit Panthers opt for this. The scheduled tribes, generally speaking, have not reached this stage. Further, the radicals among these groups perceive reservations of all kinds as a weapon of the establishment to divide and rule the oppressed, to rob these groups of able leadership as the educated and the enlightened among them are coopted into the establishment for jobs and political offices. The three sources of change that we have analyzed, sequentially led to the following status identities by the scheduled castes and tribes: attempt to move up and secure a higher ritual status within the traditional system, accepting a lower ritual status to achieve a higher secular status, and rejecting caste as a basis of status identity. Admittedly, the erstwhile status does not become completely irrelevant or insignificant as the search for new status identities continues. In this sense what happens is not mere status displacement but status accretion: a person is at once an untouchable, member of a scheduled caste, and a citizen. This status accretion then leads to a gradual process of change avoiding high social costs and sudden breakdowns characteristic of rapid social changes.

The burden of the argument stated so far has been to indicate that neither social reforms, nor state action, nor political mobilization of the scheduled castes and tribes, as it takes place today, will benefit the really poor and the oppressed. The need of the hour is a mass movement of a wider scale with a systematic effort to restructure the prevalent power structure, particularly at the grass-root level so that development benefits really reach the poor. Are their political mentors altruistic enough to facilitate this process? Experience to-date is to the contrary. Secondly, in this effort the bureaucracy and the law and order agencies will consciously have

to side with the dispossessed. But can we expect that Indian bureaucrats, predominantly drawn from the upper castes and middle class classes, to do justice to the cause of the underdog? In the final analysis, then, any attempt to emancipate India's scheduled castes and scheduled tribes from their present predicament should have two ingredients. First, a systematic attempt at their large-scale political mobilization initiated by political workers with intense collectivity-orientation drawn from among them. Second, a concerted effort by a bureaucracy committed to the cause of the underdog to channellize the benefits earmarked to the scheduled castes and tribes down to them.

It should be noted here that it is extremely difficult to mobilize the scheduled castes and tribes on an all-India basis because of their geographical spread or localization, differential cultural backgrounds, and varying pace of development. It is crucial for their progress, however, that a process of political mobilization should be initiated forthwith in order to consolidate the gains made so far and to avoid a possible relapse. The only way out seems to be a more vigorous and widespread process of politicization although this may generate a certain amount of political anomie manifested in conflicts and confrontations of various types. But change is always a painful process.

YOUTH

Y.B. Damle

The study of Indian youth involves a discussion of several dimensions. It is not difficult to make quantitative estimates of the proportion of youth in a population: generally the age-group fifteen to twenty-five is regarded as constituting youth, but in some cases, the age-group fifteen to twenty-nine has been included in this category. Youth cannot be defined, however, only in biological and demographic terms; it is also a matter of recognition by society and there are variations from one society to another in the definition of youth. The socio-cultural dimension of youth is significant for every society. Youth can be understood, thus, in terms of different groupings and criteria of stratification in a society exemplified by class and caste. Then again, the different socio-cultural variables like education, occupation, income, standard of living, and rural-urban differences have to be taken into account when one talks about youth. While youth may be a statistical category in terms of a particular age group, in reality it cannot be treated as a homogeneous group because of the interplay of the socio-cultural factors noted above. All the same, it is important to enquire into the demographic dimension of youth because the proportion which the youth bear to a given population at a given point of time has important socio-cultural and political implications, particularly when the youth have been sensitized to their rights and to the share they should have in the processes of decision-making. Authors like Moller (1958) and Apter (1965) have emphasized the increased significance of youth in terms of the higher percentage of youth in a population both in developed and in

developing societies. Moller says, "In any community, the presence of a large number of adolescents and young adults influences the temper of life: and the greater the proportion of young people, the greater the likelihood of cultural and political change" (Moller 1968:454).

To the extent that the youth are kept away from the mainstream of life, they constitute a threat to the political stability of the society concerned. Apter (1965) also observes that youth want equality as a right so that they can succeed to adulthood and enjoy positions of authority. That is why the young are willing to accept political religions.

Another aspect of youth that needs attention is the expectation the society has from it with respect to the tasks of national development and social transformation. In the Third World it is believed that the youth can bear this responsibility because of their physical energy, freshness of outlook, and the desire and capacity to innovate. To be able to undertake this role effectively, it is essential that they should have a share in authority and the decision-making processes. One has to enquire, therefore, into the nature of the society and particularly into the genesis and distribution of authority in the society before one could sit in judgement about the inculcation of responsibility or otherwise by the youth. In this context it is also necessary to understand the "youth culture" in society. There is no denying the fact that the very concept of youth culture is foreign to the Third World and particularly to India. The absence of an identifiable youth culture, when linked with certain other features of the social system, renders the problem even more difficult. In our discussion on Indian youth, we shall therefore begin with some of the special features of Indian society which have implications for the behaviour and functioning of youth.

Features of Indian Society

In the first place, one should mention the phases of life and the allocation of responsibility and authority in Indian society based on biological age and appropriate rituals demarcating divisions in terms of age. In the traditional Hindu system, life is viewed in terms of four well-marked stages with relevant responsibility and authority, or the denial of it. The youth enjoyed no authority, but

were enjoined to prepare to shoulder it in the second stage. In this system age was respected and as such young age was a matter of disadvantage. While the notion of the stages of life was confined to Hindus, respect and reverence for age and the authority enjoyed by the elders was a common characteristic of the entire Indian society.

Education was denied to youth belonging to certain strata and as such they had little opportunity for self-improvement. In consequence, socio-economic and occupational mobility was severely constricted. To the extent that education, particularly higher education, even today is a commodity which has to be bought, it is available largely to those who are able to pay for it and as such it is beyond the reach of the lower income groups (Desai). The percentage of non-student youth to student youth at all levels makes poignant reading. The prevailing system of stratification denies the possibility of education acting as a lever of mobility.

The pre-independence period, or the period of British rule to be specific, was characterized by a stagnant economy which provided very little opportunity to youth in terms of new occupations and professions. Even in the post-independence period, the slowness of economic growth has meant restricted opportunities for youth. Viewed against the revolution of rising expectations the slow growth of the economy appears even more depressing. There is a considerable demand for higher education on the part of the erstwhile deprived and disprivileged sections who have not had access to it for centuries. They look upon education as a gateway to economic well-being and social prestige. This has to be taken into account in examining the problems of Indian youth. Education is a sub-system of society. The various components of this sub-system—students, teachers, courses and syllabi, methods of teaching and examination, relationship between the teachers and the students, linkage between education and employment—have to be considered when we view education as a source of career and prospects for its recipients. To the extent that the education system falls short of what the society expects from it, it will promote frustration among youth. One of the major criticisms against the Indian educational system is its irrelevance and meaninglessness to its recipients. When education is looked upon as a channel for attaining status and white-collar jobs, it ends up by swelling the ranks of disgruntled young men and women, for the number of

such jobs is pitifully small. In the absence of proper linkage between the educational and the occupational systems a high proportion of youth does not know what it can do with its educational attainments. This disjunction is heightened by the slow growth of the economy. The discrepancy between education and employment creates unrest amongst the youth.

Youth Before Independence

As no significant studies were done on youth in the pre-independence period, the discussion in this section will be largely in the nature of general observations.

Before independence, life expectation was estimated to be roughly thirty. This had significant consequences for the relationship between the younger and the older generations in the sense that a clear-cut demarcation between the two was not possible.

Education, especially higher education, was largely the privilege of the upper crust of society. Those from the lower strata were also drawn to it, but their numbers were not large and quality-wise the education that they received was inferior.

The 1930s were a period of acute economic depression and unemployment. This tended to increase youth's dependence either on their parents or on traditional and hereditary occupations.

During the pre-independence period, there was considerable participation by youth in the national movement. The revolutionary movements for the overthrow of British rule in India were manned by youth. Impoverishment of the people and the rising nationalist consciousness, created and reinforced by modern education, generated resentment and resistence against the British. Some of the youth were drawn to trade unionism and other radical movements. A section of them felt that apart from dislodging the British, it was also necessary to demolish the system of stratification based on property. Marxian ideology found favour with the younger intellectuals and they were very keen to lead the struggle for the abolition of the inequitous class system. Such movements met with stiff resistence on the part of the British and many young men and women languished in jails for years. There was a ferment among the youth in favour of new ideas, new institutional structures, and new patterns of thought. This is reflected in the literature produced during the 1920s, 1930s, and the early 1940s.

Besides the national and radical movements, there were few outlets for the energy and creativity of youth. A non-expanding economy and a restrictive social structure did not give freedom to the imagination, initiative, and creativity of the youth. As the nationalist movement was led by intellectuals and professionals, it attracted young men and women from the more affiuent and educated sections of society. Those from the lower strata were drawn into it only when it acquired a mass character.

Youth After Independence

At the outset the importance of the biological and socio-cultural dimensions of youth was emphasized. As a result of the increase in life expectation from thirty in the pre-independence period to fifty-five and above after 1960 and later, the youth were recognized as a force to contend with.

The distribution of youth population in rural and urban areas for 1951, 1961, and 1971 makes interesting reading. In 1951 the percentage of youth, i.e., those in the age group fifteen to twenty-four, was 16.86 (males 16.46 per cent and females 17.26 per cent) in the rural areas. For the same year, in the urban areas, the percentage of youth was 19.93 (males 20.07 per cent and females 19.76 per cent). In 1961, the percentage of youth in rural areas was 16.20 (males 15.62 per cent and females 16.81 per cent) and 18.84 (males 19.05 per cent and females 18.58 per cent) in urban areas. A decade later, in 1971, the percentage of youth in rural areas was 15.75 (males 15.57 per cent and females 15.93 per cent) and 19.61 (males 19.90 per cent and females 19.27 per cent) in urban areas. Thus, we find little evidence of change in the percentage of youth in urban and rural areas for the different census years quoted above. Of course, if we consider the age-group fifteen to twenty-nine the youth constitute a very sizeable proportion of the Indian population.

With respect to the urban areas, in 1961, 34.96 per cent of youth was uneducated, while educated youth constituted 14.14 per cent. Among these, 23.70 per cent were males and 48.62 per cent were females. Amongst the educated, males were 19.15 per cent while females were only 8.05 per cent. The term educated, in this context, includes matriculates and technical and non-technical diploma holders, as also those with higher education. In rural areas, for

the same year, 71.44 per cent were uneducated (males 56.30 per cent and females 86.05 per cent). There were only 2.09 per cent educated youth (males 3.77 per cent and females 0.48 per cent). For the year 1971, in the urban areas, uneducated youth constituted 26.43 per cent (males 18.12 per cent and females 36.38 per cent), while educated youth constituted 22.96 per cent (males 26.59 per cent and females 17.42 per cent). As for the rural areas, the uneducated were 60.62 per cent (males 45.24 per cent and females 76.38 per cent) and the educated were 5.45 per cent (males 8.8 per cent and females 2.2 per cent). Thus, we find that there has been a reduction in the percentage of the uneducated over the ten years. Naturally, all those who have received some education—matriculation and above—are bound to swell the number of persons who need employment, adding in its turn to the number of the educated unemployed in the country.

Non-student Youth

Taking into account the rural-urban dimension as well as caste and class variations and, of course, exposure to education, one understands why the youth do not really constitute a homogeneous group in India. There are significant differences in education, aspiration, styles of living, and so on that divide the youth into several segments.

In the first place, uneducated youth have to be distinguished from the educated youth whose situation and problems are in many ways different. So far, considerable attention has been given to the analysis of the problems of educated youth, but little, if any, to uneducated youth. This contemporary discussion on youth, focused only on educated youth, does not adequately represent the total reality of the situation of youth in India. It is only with respect to the demographic dimension that material is available regarding educated as well as uneducated youth of the country.

We shall first enumerate the problems of uneducated youth. Because of their special nature they deserve careful understanding.

A vast majority of youth have been denied opportunities of education at all levels. According to the Fourth Plan estimates, non-students in age group eleven to fourteen formed about 66 per cent, 80 per cent in the age group of fourteen to seventeen, and 97 per cent in the age group seventeen to twenty-three. These three age groups

represent the middle school, secondary school, and higher educational levels. It is thus obvious that very few young people are able to pursue education even if they are keen to do so. While there is a significant rise in the level of aspiration on the part of youth and their parents with respect to acquiring education, there is denial of opportunity to a large proportion of youth.

As we shall see later, there are structural constraints under which even the educated youth have to labour. One can easily imagine the handicaps which the uneducated youth have to suffer. In the case of non-student youth it is obvious that they have no relationship whatsoever with the main intellectual stream and as such are likely to be alienated from society. The conditions under which they live are characterized by economic and cultural deprivation. These factors have definite implications for dropout rates and even for the patterns of recreation and leisure time activities of youth. The kind of work which non-student youth are able to get is mostly of an unskilled nature, offering practically no avenues of promotion or mobility. There is continued dependence on kin-groups, friends, and neighbours with respect to getting employment. A sense of belonging to society is lacking among non-student youth. This youth pose a problem to society for two reasons: first, they cannot be put to any effective use, and second, as a group they constitute a threat to stability because of their discontent and dissatisfaction.

Non-student youth, who constitute an important segment of the population and who need serious attention, have been neglected. It is true that political parties and pressure groups often use student youth for various kinds of agitations and protest movements, but the uneducated youth have not been mobilized so far even towards these ends. These youth cannot visualize a wider social role for themselves. Desire for education coupled with non-availability of education and the general rise in the level of aspirations can make the situation explosive.

Student Youth in India

A great deal of attention has been given to the problems of youth by social scientists, both Indian and foreign. The importance attached to the study of youth in societies having a well-developed youth culture, and in those in which it is incipient, is understand-

able. It should be noted that certain authors, like Musgrave (1964), dispute the entire formulation about a clear-cut differentiation between the youth and the old generation and assert that the youth are not a distinctive group. However, the presence of a large number of adolescents and young adults has significant implications for the general stability of the social system in societies in which the majority of the population consists of adolescents and youth and in which the capacity to generate income is limited. This appears to be true of many Asian countries. The importance of educated youth is enhanced by the fact that they have been exposed to education and sensitized to new ideas and values. This gives them new visions and utopias. But they are not given necessary opportunities for the realization of their aspirations. This fact has implications for the politicization of youth. This is why student youth are attracted to political religions. It should be emphasized that even educated youth do not constitute a homogeneous group, for among them there are differences which stem from rural and urban backgrounds, family backgrounds, caste and class backgrounds, and so on. Many students undergoing higher education today come from families which have had hardly any background of higher education. This has implications for the choice of careers and courses and also for performance in colleges and universities. Several studies have brought home the relationship between socio-economic and cultural backgrounds and the performance of the students. With respect to wastage and stagnation in education this relationship is pronounced (Kamat and Deshmukh 1963:13). In a study of students from Poona university, it was found that about forty-six per cent of arts students completed their B. A. course, but fifteen per cent left without passing the first year examination, sixteen per cent passed the first year examination but left without passing the intermediate examination, seven per cent joined the degree classes but left without passing, seven per cent passed the intermediate but left without joining the degree classes, and four per cent joined the degree classes but left without passing the final examination. Apart from the hard fact of wastage and stagnation reported above, the relationship between social stratification and wastage and stagnation is even more revealing. From the Poona study, it is clear that among advanced castes of Brahmans and Prabhus (CKP) the wastage is about forty-two per cent and for other castes and communities it is fifty-two per cent or above. Even

if we exclude the backward classes, among whom wastage is the highest, it is as high as fifty-six per cent among the Marathas. It is further noted that among the higher grades (S.S.C.), wastage among local students is lower than among non-local students. Among the Brahmans and the CKP, wastage is less than thirty-five per cent, while among all other castes and communities it is as high as fifty per cent. Wastage and stagnation in professional courses has also been reported.

Quest for Higher Education

The considerable demand for higher education is evinced by the growth of colleges and universities in India since independence. There are today one hundred universities and university level institutions and three thousand and five hundred colleges which admit students for higher education. A large part of the benefits of the expanded educational opportunity has gone to youth from the more affluent sections of society. A study of the social and economic background of the students of the Indian Institute of Technology, New Delhi, points out that the proportion of students from low income groups has declined over the years and that there is a concentration in it of students belonging to higher income groups (King 1970: 1463, 67). Students belonging to lower socio-economic strata have to face all kinds of difficulties in pursuing their studies successfully. Recruitment to the I.A.S. and other central services also shows that candidates belonging to the backward classes find it difficult to make the grade. On the whole, it can be said that higher education does not act as a sufficient lever of mobility, particularly for the lower socio-economic strata.

Educational System

It is indeed a matter of common knowledge and criticism that the educational system in India neither maintains high and rigorous standards nor does it impart any skills to its recipients to enable them to enter the employment market. Several committees and commissions have enquired into the malaise of higher education in India and have criticized its lack of rigour, its social irrelevance, and its inability to prepare students for careers. But the rush for admission to institutions of higher learning continues. It is well-

known that the courses, methods of teaching, the relationship between the teachers and the taught, and the examination system stand in urgent need of reform. The increase in the numbers of students in institutions of higher learning has been regarded generally as one of the major factors responsible for the decline in standards. There are other factors, however, which are equally responsible for the paralysis of the university system. The most important among them are (*i*) the resistance from within to update the courses, (*ii*) the system emphasizes rote learning, (*iii*) the examinations fail to judge the true worth of a student, and (*iv*) the apathy and lack of social commitment in the teaching community.

The rush for higher education can be explained in terms of the desire for social and occupational mobility, especially the desire for attaining higher status in society. Higher education is regarded as an instrument of social status as white-collared jobs continue to enjoy a high status. Education imparts wrong ideas regarding *status* and *dignity* and creates in the students a disdain for manual labour. On the positive side, there is no denying the fact that new ideas and values are inculcated through education; these make students receptive to and desirous of social change. Several studies (Cormack 1961) have shown that students are keen on social change in the areas of family, caste, notions of status, rationality, secularism, equality, social justice, women's position, and so on. Students favour a democratic family structure as against the prevailing authoritarian structure. They do not believe in many restrictions rooted in caste, class, and sex. Similarly, they would like the affairs of the nation to be conducted on a rational and scientific plane. But these studies also point out that the students, while they give such responses at the overt and verbal level, are also aware of the difficulties lying in the way of translating these ideas and values into actual patterns of interaction and behaviour.

Family and socio-economic background have a great deal to do with the students' choice of courses and careers, which has significance for what Erickson describes as the process of identity formation (1959). Their financial dependence on parents means that their choice of courses and occupations in most cases rests with parents and guardians. Gaudino observes "young people are manipulated into adult life by the elders with a surprising practical success and the great psychological uneasiness" (Damle 1970).

Thus, even those who receive higher education and have been exposed to new values and ideas find themselves constrained by some of the structural features like family, caste, and stratification.

Education and Employment

Higher education in India, it is well-known, does not guarantee suitable employment. The reasons for this are many; lack of proper guidance, training, and preparation for careers and non-availability of jobs may be cited as important factors. The spectre of unemployment haunts the students in the final stages of their education and makes them restive and insecure about their future. Several estimates have been made about unemployment among the educated (Saxena 1972: 128-38). According to the most conservative of these, based on live register data, the number of educated unemployed was in the vicinity of 0.8 million in 1970 and if the part-time or unsuitably employed persons are included the number may well swell to 1.5 million. These studies point to the preponderance of unemployment among those in the age group 18-21. The highest incidence of unemployment is among the matriculates who account for about two-thirds of the total educated unemployment. The live register data reveal a steeper rise in unemployment among the graduates and postgraduates than among the matriculates in recent years. There is a higher incidence of unemployment among the freshers. The situation has been further aggravated because of the general disinclination among the educated to look for manual jobs and their preference for white-collar jobs. The incidence of unemployment is higher among the educated with arts degrees than among those who studied science or commerce. It should also be mentioned that there is substantial unemployment among engineers, particularly after 1967, because of the recession. The crisis of educated unemployment in India is deepened both by the figures of unemployment and also by the proliferation of educated young men and women every year who have not really received a proper kind of education. The increase in the number of such educated youth and the indifferent quality of education makes matters worse. This definitely has implications for student unrest and unrest in the population at large (Panthackal 1973). According to the employment register of 1 June 1971, there were 0.26 million unemployed youth in the country. "Social structure which generates poverty

generates its own shabby education system to serve it. Therefore there is a firm linkage between kind of education and social structure" (Panthackal 1973).

It is very clear from these figures that there is a disjunction between educational unemployment and preparation for an occupational career. Erickson regards an occupational career as an important requisite of identity formation (Erickson 1959). If for any structural reason, an occupational career cannot be guaranteed then the process of identity formation is not successfully completed and creates a series of problems both for the recipients of education and for society as a whole. It was also mentioned earlier that a mass of educated adolescents, without either proper education or employment prospects, provide a threat to social stability. The swelling of the educated unemployed cannot but have a disturbing impact on those who are undergoing higher education. The persistent criticism about the present education being worthless also adds to the insecurity of the recipients of education. Broadly, the inadequacies of the educational system are well-known, but when it comes to action, all sorts of financial and institutional alibis are offered as reasons for inaction.

Radical Ideologies

It was pointed out earlier that students receiving higher education acquire new ideas and values and are keen to bring about social change. A section of them is fired by radical ideologies which they inculcate as a result of their exposure to the wider world through books and periodicals. There is a regrettable tendency to dismiss student movements as being concerned only with trifling and ephemeral issues, devoid of a firm ideological basis. However, some studies of student activism in India question this assumption (Aikara 1973: 236-37). On the basis of a study of student activism in Kerala, Jacob comes to the conclusion that "students inculcate revolutionary ideology when supported by political parties. Student activism in the case of ideologies is a concerted occasion to realise ideal society as envisaged in the revolutionary ideology. Thus political parties, the leftist ones, play an important role in ideologically oriented student activism in Kerala in so far as they equip student activists with revolutionary ideology. Apart from providing leadership and organizational structure, students' unions help

political socialization of students and the making of future political leaders. Thus leftist student unions acquire both ideology and organizational techniques from the political parties." This is not to suggest that all the student activists are ideologically oriented, but it has to be borne in mind that commitment on the part of the few provides the necessary ideological and organizational base for student activism. Of course, one has also to enquire into the social base of those who have inculcated radical ideologies and particularly investigate their styles of living, for it is likely that in some cases there may be no correspondence between their formal acceptance of radical ideology and actual practice in daily life. In case there is a wide gap between the two, radical ideology loses much of its significance and becomes a mere excuse to cover the guilt complex generated by higher standards of living. Nevertheless, it cannot be denied that youth exposed to radical ideologies are discontent with the social system and they spearhead movements to bring about changes in it. They contribute content, organization, and strategies to youth activism.

Student Unrest and Violence

An issue of the journal *Seminar* (June 1973) was devoted to a discussion on our paralyzed universities. In his article, Malcolm S. Adiseshiah says, "during Christmas term in nineteen seventy-two between two to three hundred of our University Institutions representing ten per cent of our total were involved in strikes and the destruction of public property which are predominently followed by Gheraos and killings stemming from political involvement and the desire to avoid examinations followed by academic, employment, transport and linguistic problem occasions" (Adiseshiah 1963). The same article says that according to the Union government's announcement in the Lok Sabha, "between June and November nineteen seventy-two there had occurred four thousand three hundred sixteen cases of unrest in our educational institutions. This means that all our University Institutions have been disrupted during this six-month period at least once, with about a third of them suffering disruption twice or about half of our institutions have suffered unrest thrice in the six-month period." The government statement further states, "more than a third of the

disturbances were due to relation to unacademic or campus parochial factors which had no relation to academic or campus matters" (Adiseshiah 1963).

A study of student unrest, the main conclusions of which were reported in the *Sunday World*, the magazine section of the *Hindustan Times* (Vinayak 1972), lists and analyzes the issues involved in the widespread student unrest. These fit into three broad categories—academic, off campus, and others (unemployment, fees, residential and other facilities). The causes of campus disturbance, category-wise, were as follows: (*i*) academic-196, (*ii*) off campus-484, and (*iii*) others-84.

The reasons for student unrest in different universities and colleges are of a varied character. The study referred to above, revealed that of the total number of cases reported during 1968 to 1971, more than 65 per cent were due to off campus issues, about 24 per cent due to academic issues, and about 11 per cent due to other factors such as unemployment and fees. The off campus issues invariably relate to public transport arrangements, sympathetic strikes, and confrontation between students themselves and group clashes. The state-wise analysis showed that there were 66 agitations in Andhra Pradesh, 25 in Assam, 44 in Bihar, 128 in Delhi, 7 in Gujarat, 6 in Haryana, 7 in Himachal Pradesh, 15 in Jammu and Kashmir, 51 in Tamil Nadu, 14 in Maharashtra, 22 in Orissa, 50 in Punjab, 18 in Rajasthan, 109 in U.P., and 101 in West Bengal. It will be seen that four states, viz., Andhra Pradesh, Delhi, U.P., and West Bengal accounted for more than 57 per cent of the total number of agitations arising from off campus issues during 1968 to 1971 and the states of Bihar, Delhi, U.P., and West Bengal accounted for 58 per cent of the total number of disturbances arising from academic issues during the period under report. The study revealed that almost all the states were affected by student violence during 1968 to 1971.

The analysis of student unrest in different universities and colleges in India during the period 1968 to 1971 showed that of the total of 744 instances of student unrest, more than 80 per cent were violent and about 20 per cent were peaceful. Student agitations each year and in each state, during the period under report, were predominantly violent. The all-India average ratio of violent to peaceful agitations was 4.5 to 1.0 and it ranged between 2.3 to 1.0 in Bihar and Madras, to 31.0 to 0.0 in Madhya Pradesh. This

study dispels the general feeling that universities in the southern states are more peaceful or at least less violent. The analysis revealed that student disturbances in these states each year during 1968-1971 were predominantly violent. The maximum number of cases of student violence reported were in Delhi, followed by U.P. and West Bengal. The least disturbed states were Gujarat, Himachal Pradesh, Jammu and Kashmir, Haryana, Tamil Nadu, and Rajasthan. The least number of cases were reported from Haryana. The study futher revealed that the states of Delhi, U.P., Punjab, and West Bengal together accounted for 60 per cent of the total number of cases of student unrest. The maximum number of cases were reported in 1969 (288) and the minimum (105) in 1968.

What are the causes of student violence? The extent and fury of it deserve serious examination. According to one analyst, "One of the underlying causes of student discontent in India is rooted in a general feeling of unrest and frustration amongst the masses. Students are bewildered by the kaleidoscopic changes in their social, political, and intellectual environments and the incapacity of the present systems and values to respond to the new changes. The vanishing of decency from public life have enfeebled the students' faith in accepted moral and intellectual values. They have come to believe that in the present set-up the defiance of authority will yield immediate and rich dividends whereas merit and ability are at a discount" (Vinayak 1972). Further, violence seems to act as an important medium of communication while everything else appears to fail to obtain the desired result.

The outbreak of student violence generally takes place in the month of September, which can be explained partly by a feeling of home-sickness on the part of the students who are away from their homes, partly by their desire for some kind of thrill, and also partly by the fact that the elections of the student unions are generally held in August or September.

The asociation of various political parties through their student wings—the Youth Congress, the Students Federation of India, the Akhil Bharatiya Vidyarthi Parishad, and so forth—with student affairs is also in many ways responsible for the outbreak of student violence. Several studies of student unions in different parts of the country appear to support this view. Political parties tend to use student unions as sounding boards and as testing grounds for their

strength for general elections. This has been revealed time and again in studies of student unions.

Student unions are generally dominated by leaders who come from relatively well-to-do families. A majority of them wish to become political leaders and towards this end they use leadership of student unions as a training ground. Student unions are meant to promote welfare of students, but provide necessary learning opportunities for student leaders to prepare for leadership roles in adult life. Elections to students' unions involve considerable expenditure, often reducing student leadership to a monopoly of the well-to-do classes. Some of the estimates made of the expenses incurred during student union elections clearly point out that very large amounts are involved. This implies heavy spending by political parties and by the richer parents of students who aspire to be union leaders. Student unions give little attention to the welfare of students, which is ostensibly their major aim.

Association of students' unions with political parties naturally provides a semblance of power to students Of course, the power enjoyed by the unions is only some kind of reflected glory and as such the students have to depend continuously on their links with political bosses. Much depends on the way student power is handled by educational institutions, including colleges and universities.

Our discussion of the situation and problems of youth (students as well as non-students) in the post-independence period highlights certain important points:

1. There is increasing awareness on the part of youth that it forms a distinctive group and it is conscious that it will be in its own interest to work for bringing about rapid social change and progress;
2. There is a general distrust of the prevailing institutional arrangements and a keen desire for changing the social order;
3. Non-student youth are handicapped with several difficulties such as lack of education, lack of any prospects of mobility, and dependence on kith and kin, caste and linguistic group;
4. Such youth are either not adequately exposed to new ideas and values, or in the event of their exposure to them through the mass media, it is not possible for them to act upon any of them;
5. Student youth, who have been exposed to new ideas and values, are keen to implement them although they are also beset

with certain difficulties—financial dependence on parents, nature of the educational system, and lack of opportunities for occupations and career.

6. A section of the student youth is fired by radical ideology and is keen on restructuring the social order;

7. Due to a variety of factors, there is considerable student unrest and violence, but this unrest is only an extension of their frustration and helplessness which is capitalized on by political leaders;

8. Student violence can also be understood as an important medium of communication between students and the authorities; and

9. Restlessness among the youth is an indicator of the feeling on its part that the present order and institutional arrangements have failed to keep the promise which was given on the eve of independence.

The Future

As a result of health measures, life expectancy has increased considerably over the last twenty-five years. It is expected to increase much more by A.D. 2000. It would be safe to assume that expectancy of life would go up to at least sixty years, if not more. This would necessitate a clear-cut division between youth and adults and would involve a definite demarcation of their roles and responsibilities. It would also involve some transfer of authority from the older generation to the younger. Demographically speaking, even if the percentage of youth in the population were to decline relative to the older generation, it would not mean relaxation of pressure on the older generation by the younger with respect to some opportunities of life such as occupying important positions in different walks of life. Thus one does not foresee any possibility of a reduction in the clash of interest between the younger and the older generation. On the other hand, such a clash is likely to be sharpened in years to come.

There are several ways of avoiding such a clash. Appropriate changes in the structure of the family appear to be necessary. The younger generation will expect a more permissive and democratic family atmosphere. Perhaps more nuclear families will emerge.

There will have to be a radical change in the husband-wife relationship, which will have to be essentially egalitarian in every respect, including the responsibility for the upbringing of children, and household chores. This would also mean availability of a large number of educated and trained women for the task of national development.

It was noted earlier that because of the financial dependence of youth, particularly for higher education, the parents can manipulate the career and life of their sons and daughters with remarkable ease. Once this responsibility is taken away from the parents the youth will have greater autonomy, and hopefully a greater sense of responsibility. The process of identity formation can be more satisfactorily completed in the absence of constraints and inhibitions stemming from the family system. Similar observations can be made with respect to kinship. Its strength would be reduced and it would remain a sentimental tie rather than an obligatory relationship involving complex responsibilities. The caste system, which defines role, responsibilities, privileges, duties, and obligations, will be neutralized or rendered innocuous. The hold which it has today on personality formation and choice of career, personal friendships, and other relationships will be considerably reduced and may remain only a matter of cultural difference which need not be a permanent obstacle in anybody's path. As a result of significant reduction in the potency of caste, the youth will be considerably emancipated from shackles and constraints and this would mean enhanced emphasis on achieved status. Along with caste, which has given rise to all kinds of discriminatory practices, other factors like linguistic, sub-regional, and regional loyalties would also cease to be effective, or at any rate they will be weakened. Once they are curbed, a really all-India pattern would emerge. The youth is even now in no mood to accept any kind of disparity but these disparities can really be done away with only when some of the structural features are rendered powerless. Freedom, which youth will attain, will have to be matched by a sense of responsibility. It is only then that a radical transformation of the old order will be possible.

In the light of the foregoing discussion certain trends emerge. In the first place, Indian society did not have and still does not have a youth culture, largely because of its social structure and the system of values. There always was emphasis on the physical valour

of youth and it was called upon to make supreme sacrifices for the national cause. The demographic situation and the life expectancy of the population did not necessitate the emergence of a youth culture. Due to traditional occupations, which did not need any formal training, youth could be absorbed into adult society without any difficulty. Marriage and the family also enable youth to fit into the adult world with ease. However, because of changes in the system of education and the occupational structure, this smooth transition from youth to adulthood has been disturbed. As mentioned earlier, the prolongation of the process of identity formation on account of higher education gives rise to certain problems. These problems have now been considerably accentuated. In the pre-independence period there were certain attenuating circumstances, for example early marriage and the joint family system with common sharing of property. The prolongation of identity formation did not then really pose much of a problem. In the post-independence period, however, with the expansion of education, urbanization, industrialization, and of course acceptance of new ideas and values, there tended to develop a hiatus between youth and the older generation. On the one hand there has been a considerable rise in the level of aspirations and expectations and on the other, due to the inadequate growth rate, the youth have been compelled to depend on traditional structures and as such tend to be dominated by the forces of tradition. At the ideational level the youth are radical and progressive, while at the behavioural level they cannot implement their views and envisioned patterns of social interactions and relationships. All the same, one has also to keep in mind that due to the entrenchment of student organizations, which were largely encouraged during the nationalist struggle, student youth have become a force to be reckoned with. In any case, students can exercise pressure by resorting to negative strategies like strikes, *gheraos*, *bandhs*, destruction of property, and so forth. There is no denying the fact that students are often exploited by interested parties. As we have seen, the percentage of educated youth is very small, particularly as far as higher education is concerned. One must note that at the same time a beginning has been made with respect to making higher education available to the erstwhile unprivileged and deprived sections of the population. We have also noted that there is a significantly large population of non-student youth who are constrained in every way

because of lack of education. Such youth are not even organized, for most of them work in domestic service and at menial jobs along with their studies. A large majority of the youth is not in the mainstream of national life and as such is denied opportunities for self-advancement and making its contribution to society. As for future trends, one envisages increasing life expectation and therefore there will be a cleavage between the young and the old. Radical transformation in certain key institutions like family, kinship, caste and regional loyalties will free youth from the constraints which have inhibited them. It is obvious that in times to come, say in the next twenty-five years, the youth will wage a continuous battle against discrimination on all counts—sex, age, caste, region, language, religion, and economic class. In fact youth will play a significant role in rooting out discrimination. Then alone can a social order based on performance, merit, and social justice, as well as the welfare of all, be established.

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WOMEN

Promilla Kalhan

The twentieth century has witnessed remarkable changes in the status of women in India, although the dramatic happening of the passage of the Hindu Code Bill which gave women, at least by law, an identity of their own was not a windfall. The process began in the nineteenth century when social and religious reformers, moved by the inhuman treatment meted out to women, especially the widows, stood up for them. But it was in the twentieth century that their greatest champion Mahatma Gandhi voiced his conviction that one half of the country's population could not be left in a state of neglect if it was to throw away the yoke of foreign rule and make any progress.

That women were accorded a high status in ancient India, at least in theory, is amply brought out in the Rigveda and the Upanishadas. The institution of monogamy was well established. Women participated in the educational discipline of *brahmacharya*, the stage of celibate life. As young students they engaged in scholarly pursuits; on completing their studies they married men of their choice equal to them in learning. On marriage a woman became the mistress of her home, looking after her husband's parents, brothers, and sisters. The presence of a wife beside her husband was necessary at all major religious ceremonies.

Evidently literary pursuits were not the only preoccupation of women in ancient India. Chandragupta Maurya, according to Megasthenes, the Greek ambassador to his court, employed a bodyguard of armed women in his palace. Patanjali, author of the *Mahabhashya*, uses a formation to indicate the female bearer of

a spear. A second century B.C. sculpture depicts a woman standard-bearer on horseback.

In Buddhist times the tradition of women participating in scholarly pursuits was continued and some Buddhist nuns achieved distinction both in matters of learning and social service. Unsettled social conditions for some centuries, until the second half of the eighteenth century, led to a deterioration in women's position. Their seclusion on account of lack of security as well as the break-up of the political, economic, and cultural structures hit women. Conditions for women in south India, however, were better as there was less pressure on account of continuous invasions.

But a visible effort to improve the conditions of women came after the middle of the eighteenth century from a group of religious and social reformers and humanitarians who were moved by the plight of women on account of the evil practices of *sati* and child marriage leading to early widowhood. This resulted in some much-needed legislation concerning the abolition of *sati* and legalizing the remarriage of widows. The plight of widows, who had no economic means of their own, led to the passing of the Hindu Women's Right to Property Act in 1929, followed by another legislation in 1937. These laws made widowed women less dependent financially during their lifetime, but their right to property was limited only to their lifetime. While the climate for the enactment of social legislation to remove some of the inhuman practices suffered by widows was created by reformers like Raja Ram Mohan Roy, Justice Ranade, Swami Dayananda Sarasvati, and Ishwarachandra Vidyasagar among others, the foundation for major reform later in the twentieth century, was laid by Gandhi. He was anxious that women should be freed from social and legal disabilities and raised from their inferior position in matters concerning guardianship, inheritance, and marriage. It was because of his encouragement that opinion in favour of a unified civil code covering subjects such as marriage and divorce, succession, guardianship, and adoption emerged. Earlier efforts at relieving women's distressing conditions were either piecemeal or confined to particular regions. This often enabled offenders to escape to areas where these laws were not operative. The early reform movements did not aim at purposive restructuring of the social organization necessary to lift women from their subordinate and subjugated position in society. They were not prepared to identify themselves with very radical

ideas but aimed generally at changing the position of women only within the family and the domestic framework.

What came to be known as the Hindu Code Bill had a chequered history. In 1941, after long years of effort on the part of Indian leaders to improve the legal status of women, the government appointed a committee to examine the lacunae in the Hindu Women's Rights to Property Act of 1937, with B.N. Rau as its Chairman. This committee recommended that the entire law relating to marriage and succession should be codified as Hindu women suffered grave disabilities. Child marriage and dowry persisted. There was polygyny but no divorce. Women could not inherit property; widows could own property left to them by their husbands or sons but they had no right to sell or alienate it. A woman could not adopt children. The government accepted the Rau committee's recommendations, and the Hindu Code Bill was drafted in 1947. A select committee of the provisional Parliament considered the Code but could not get it passed during its life.

A book on population published over sixty years ago, *Census of India — An Analysis and Criticism* by M. Subaraya Kamath, had a preface by Annie Besant. In it she drew attention to illiteracy among women, the existence of child widows, and the large death toll among women between the age of fifteen and thirty. These problems continue to this day. The traditional pattern of life governing Indian women, particularly in the rural areas, is characterized by early marriage, an average of five children by the age of forty-five, and a completed family of 6:4 children. Early marriage leading to excessive childbearing at a tender age, resulting in ill health and death between the age of fifteen and thirty-five is among the reasons for the high wastage of female life in that age group.

The attitude of women to their own role in society, by and large, has been one of unquestioning acceptance of tradition. This is not surprising since the lowly status of women, it was made out, had religious sanction. In the image of a mother, particularly a mother of sons, Hinduism gave her an elevated position. A new bride entering her husband's home was also welcomed as a contributor to fertility and prosperity, a future mother of sons.

The ideal picture of a woman was one of an uncomplaining wife, serving her husband and his family and sacrificing herself for them. She was otherwise no separate entity. Being weaker physically she

was clearly inferior to men. Traditionally she could not perform certain functions like those of a priest at congregational religious gatherings or fill the role assigned to male children during certain ceremonies.

Women in India's population

It is a matter of concern that in every census the sex ratio turns out to be a little more unfavourable to women. In 1901 the number of females per one thousand males was 972. The figures for the decades that followed are: 964 in 1911, 955 in 1921, 950 in 1931, 945 in 1941, and 930 in 1971. In India, as in the rest of the world, more boys are born than girls but whereas in developed countries the survival rate for females is higher than among males, the opposite holds true in India. The expectation of life among Indian males is 47.1 years, and 45.6 years for females according to the 1971 census. It is a universal phenomenon that women are more hardwearing than men. That this is also true in India is brought out by the fact that the number of women in the age group above sixty is greater than men and that the incidence of widowhood increases sharply after that age. In the age group sixty to sixty-four the proportion of widows is 62.5 per cent. It is 64.5 per cent among women in the age group sixty-five to sixty-nine and almost 80 per cent among the female population aged seventy and over. Of course, the reason for this may be that on an average wives are about five years younger than husbands. Once a woman has crossed her fortieth year the chances are that she will survive to a ripe old age as all the damage is done in earlier years. The infant mortality rate for girls is 148 per thousand live births, compared to 132 for boys. The extent of female child mortality varies from state to state and between rural and urban areas. In the rural areas of Uttar Pradesh female infant mortality is as high as 206. It is lowest in Kerala, i.e., 48. In the urban areas of Uttar Pradesh, for some reason, the male infant mortality is higher than female, but in the Punjab female mortality is higher than male both in the rural as well as urban areas. The survival rate for girls between the age of ten and fourteen is somewhat higher than the male survival rate and again after thirty-five, women outlive men.

Literacy and education

Educationally, Indian women were lagging behind, having been

provided with few opportunities for learning. In 1901 literacy among women was only 0.8 per cent. The number of girls enrolled for every hundred boys was only twelve at the primary and fourteen at the secondary stages. The total enrolment of women in higher education all over the country added up to the modest figure of 264. This included seventy-six women studying in medical colleges and eleven in colleges of education. Nineteenth century reform movements like the Brahmo Samaj stressed the importance of women's education. Unlike in western countries, therefore, the admission of women to the universities presented fewer difficulties. Calcutta University permitted women candidates to appear for the B.A. examination as early as 1878. Bombay University followed in 1883. But the spread of higher education among women remained tardy In 1947, on the eve of independence, their total enrolment in higher education was only 23,000. In professional education the only courses open to women prior to independence were medicine, education, nursing, and law. Few women went in for law.

In 1947, 83 per cent of all girls enrolled in the education system were in primary schools, almost half of them in Class I. Only 7 per cent were in secondary schools.

Only a few years after independence, in 1950-51, the position with regard to girls' school education had dramatically changed. There were thirty-nine girls for every hundred boys in Class I to IV. This went up to fifty-five for every hundred boys in 1966.

At the school level, currently, in Class I to IV, two out of every three girls in the age group six to eleven attend school. But the dropout rates are high. Of every hundred girls enrolled in Class I only about thirty reach Class V. In Class VI to VIII, in the age group eleven to fourteen, one out of every five girls is in school. To attain the national objective of education for all up to the age of fourteen, much headway remains to be made with the current rate of rise in population.

Women's entry into the field of research and in engineering and technology courses is a post-independence development. The mistaken belief that girls have less aptitude than boys for subjects like science and mathematics has now been disproved. Indian women who have gone on for higher studies, on the whole, have done very well, and significantly the proportion of women to men is higher at the post-graduate stage and is showing a rapid increase. The number

of girls in the age group seventeen to twenty-three at the universities is thirty-one for every hundred boys. In professional courses girls have substantial enrolments in colleges of education and medicine—two of the old favourites—and also in fine arts. Their enrolment in traditional men's subjects like commerce, law, agriculture, and engineering is catching up. Higher education, it is said, is still confined mainly to the urban upper and middle classes. But in recent years farmers in areas like Punjab and Haryana and small industrial entrepreneurs spread over different parts of the country have started sending their children to school and institutions of higher education in increasing numbers.

According to the 1971 census the literacy rate of the total population is 29.5—39.5 per cent for males and 18.7 per cent for females. The rural female literacy rate in India is, however, only 13.2, while the urban female literacy rate is 42.3. Kerala has the highest literacy rate both in rural and urban areas and Rajasthan the lowest. Of the 352 districts in India, in eighty-three the female literacy rate in rural areas is less than 5 per cent. As many as sixty-four of these districts belong to the states of Uttar Pradesh, Rajasthan, Bihar, and Madhya Pradesh. In another seventy-three districts in these states and also in Andhra Pradesh, the level of literacy is between 5 and 10 per cent.

The highest literacy rate among females is in the age group ten to fourteen. This is a hopeful sign for the future. The gap between the enrolment ratios for boys and girls in schools is getting narrower, though it is still wide enough to be a matter for concern. Among the total female literates, 40 per cent have no educational level and could best be described as semi-literates, 7.8 per cent are matriculates, and only 1.4 per cent are graduates and above. Even so the development in the education of women in the present century was considered phenomenal by the Education Commission (1964-66).

Table 1 presents the literacy rates in different age groups for males and females in 1970.

Female literacy rates for urban and rural areas for different states in 1971 are presented in Table 2.

Women and the law

The election of India's first Parliament was a landmark in the progress of women, for it was only after the election of the first

TABLE 1

Age group	*Males*	*Females*	*Total*
5-9	26.7	18 5	22.8
10-14	60.3	37.4	49.7
15-19	63.0	36.9	50.8
20-24	59.8	27.9	43.8
25-34	49.3	18.8	33.9
35	37.0	10.4	24.5
Total	39.5	18 7	29.5

SOURCE: O.P. Sharma, Regional variation in rural female literacy, 1971. Paper submitted to the seminar on *First Results of the 1971 Census* organized by the Indian Association for the Study of Population and the Institute of Economic Growth, Delhi, November 1971.

TABLE 2
FEMALE LITERACY RATES IN RURAL AND URBAN AREAS IN 1971

States	*Rural*	*Urban*	*Total*
All India	13.2	42.3	18.7
Andhra Pradesh	10.9	36.3	15.8
Assam	16.5	50.9	19.3
Bihar	6.4	31.9	8.7
Gujarat	17.2	44.8	24.8
Haryana	9.2	41.5	14.9
Himachal Pradesh	18.2	52.2	20.2
Jammu and Kashmir	5.0	28.4	9.3
Kerala	53.1	60.6	54.3
Madhya Pradesh	6.1	37.0	10.9
Maharashtra	17.8	47.3	26.4
Manipur	16.4	40.4	19.5
Meghalaya	18.9	59.7	24.6
Mysore	14.5	41.6	21.0
Nagaland	16.4	49.5	18.7
Orissa	12.1	36.1	13.9
Punjab	19.9	45.4	25.9
Rajasthan	4.0	29.7	8.5
Tamil Nadu	19.0	45.4	26.9
Tripura	17.3	55.0	21.2
Uttar Pradesh	7.0	34.4	10.7
West Bengal	15.0	47.8	22.4

Parliament that the Hindu Code Bill was passed into law. The Special Marriage Act (1954), the Hindu Marriage Act (1955), and the Hindu Succession and Adoption and Maintenance Acts (1956) fulfilled, by law, the great need of doing away with the injustices suffered by women.

With the enactment of the Hindu Marriage Act (1955), which laid down the principle of monogamy for all Hindus, 88 per cent of the Indian population are now legally governed by it.

It was perhaps because of the legacy of divide and rule practised by the British that a uniform law for the different communities could not be evolved and women in some communities statutorily continue to have an inferior position. The government's reason for not covering communities other than the Hindus in the words of the former Minister for Law—H.R. Gokhale—was, "We believe that while we should do everything possible to build up and cultivate the consciousness for reform, the urge and the demand for the reform must come from the community itself," (Presidential address in the seminar on Islamic Personal Law in Modern India, 14 to 16 January 1972.)

Though polygamy came to be practised in India after the ancient period, it is on the wane even among those not governed by the anti-polygamy laws in modern India. In any case, the only personal law which has not registered change from polygamy to monogamy is Muslim law: the government has stood aside so as not to offend the beliefs and sentiments of the Muslim community. Many Muslim countries like Turkey, Iraq, Iran, Syria, Tunisia, Indonesia, and Pakistan have, however, introduced reforms of varying degrees to correct the abuse of polygamy. This they have done on the basis of a re-interpretation of Islamic principles. As to other communities, the Indian Christian Marriage Act (1872) lays down the condition that neither of the persons intending to be married shall have a wife or husband still living. The union for life of one man with one woman is in fact a Christian concept. The Parsees and Brahmos, among other advanced communities, opted for monogamous marriages.

But legislation alone cannot change society and much remains to be done to enable women to benefit from it. In some areas the law is still lagging behind the principles laid down in the Constitution which gives equal rights to men and women. The interpretation of article 17 of the Hindu Marriage Act has sometimes been

invoked to defend bigamous marriages not celebrated with "proper ceremonies and due form." The right to initiate legal proceedings against bigamy needs to be extended to persons other than the wife's family who are sometimes reluctant to do so.

Despite the law forbidding it, polygamy still exists. An economically dependent and ill-educated wife can hardly take recourse to law even if she has valid grounds for divorce and if her husband has illegally taken another wife. Legal proceedings against the husband may mean her social ostracism, for public opinion still places men in a superior position. Unless some welfare agency can come to the aid of a woman, who is often without adequate means and is ill-equipped in other ways, she is helpless. It is not surprising, therefore, that one often comes across the familiarly worded small news items tucked away in a corner of newspapers, stating that a housewife committed suicide by sprinkling kerosene on her person and burning herself. The cause of such suicides is invariably "domestic unhappiness." A women often has to undergo a great deal of hardship to obtain maintenance from her husband even after she has been able to obtain an order from the law courts.

The Hindu Marriage Act lays down the eligibility age of marriage as eighteen and fifteen years for the bridegroom and the bride respectively. But violation of this condition does not affect the validity of the marriage. The Special Marriage Act lays down the minimum age of the bride at eighteen and that of bridegroom at twenty-one years.

It is generally felt that there should be stricter enforcement of the law against child marriages and that offences under the Child Marriage Restraint Act should be made cognizable and special officers appointed to enforce the law. Another suggestion is that the right to repudiate a marriage contracted when a girl is below the legal age of marriage should be made available to her. It should be obligatory to register all marriages. This will be useful both in dealing with bigamy and child marriage.

According to available statistics child marriage is still being practised. In 1971 in the rural areas 13.6 per cent of girls in the age group ten to fourteen were married. Of them 0.1 per cent were widows. Child marriage in urban areas was about 3.9 per cent. This custom fortunately is accompanied by another, of performing the *gauna* (when the bride is actually sent away to the bridegroom's home and when consummation is expected to take place, in many

cases several years after the marriage ceremony). The bride may by then be fifteen, the legal age of marriage for girls.

Indications are that in certain respects conditions are improving for India's female population. The incidence of widowhood fell between 1961 and 1971 from 15.5 per cent to 12.5 per cent. This may be attributed to a declining death rate, or to increase in widow remarriage, or to a combination of the two. Census figures also show a fall in the incidence of divorce and separation. Presumably, after the passage of the Act allowing divorce there was a spurt of cases, many of them hard ones. Later the position stabilized. Contrary to fears expressed by some the law did not do any serious damage to the institution of marriage.

The mean age of marriage in the case of girls has gone up from 13.2 in 1901 to 17.2 in 1971. The mean age at marriage for girls in urban areas is 19.2 but in rural areas it is only 16.7. There has been, thus, a positive gain with respect to the age at marriage. The 1961 census recorded 17.2 per cent women above the age of ten as unmarried. The figure went up to 22 per cent in 1971. This resulted in a decrease in the percentage of married women from 66.5 to 64.9 during the ten years.

The Hindu Succession Act (1956) for the first time gave the right of inheritance to the daughter. She can now hold property absolutely with full rights to sell, mortgage, give away, and dispose off as she desires. Under the Act, the daughter, the widow, and the mother can inherit the property of the deceased simultaneously. Each of them takes an equal share except that where there are more widows than one they together get one share. This is with respect to the self-acquired property of the deceased. With respect to coparcenary property, the son takes his own share in such property and in addition takes a share in the father's share. No female member of the family can belong to the coparcenary under the *mitakshara* law of succession. The position will change if the *dayabhaga* system becomes the rule for all Hindus as it has been suggested for future reform. Amendments to other Acts affecting women are also under way.There is need to treat husbands and wives equally regarding the grounds for divorce, and to a wife the right to divorce when her husband compels her to practise prostitution. The right to adopt children, it is felt, should also be equal between husband and wife. Legislative sanction to article 39 E of the Constitution assuring equal pay for equal work needs to be given

A Bill providing for equal pay for equal work is likely to come up soon.

The position of tribal women is also inferior to that of men, but they enjoy greater mobility and freedom with respect to marriage and divorce. The government recognizes customary law, but there is need to codify customary laws obtaining in the country to avoid confusion.

Dowry

Because women live under the protective shadow of their menfolk—their fathers while unmarried, husbands during their lifetime, and sons when widowed or at a later age—they tend to cling to the sons and in a sense look upon their daughters-in-law as their rivals for the sons' affection and attention. Their entire attitude is unhealthy because they want their daughters-in-law to go through what they themselves had to undergo when they were young housewives. The change in the law of inheritance certainly adds to women's status. Quite often, however, particularly when it is the case of landed property and there are sons as well as daughters, the daughters forego their claim. Partly because of this the dowry system still continues. The anti-dowry law, like some others, is evaded with impunity. The incidence of dowry in the country is on the increase despite the Dowry Prohibition Act of 1961.

According to the findings of the Committee on the Status of Women, set up in 1971, the Act has signally failed to achieve its purpose. By all accounts dowry is on the increase, but the committee came across hardly any cases reported to the police under the Act. On the other hand, the committee came across a number of instances of ill-treatment meted out to young wives because the dowry they had brought at the time of marriage and later was considered "inadequate" by their in-laws. In one of the many cases, a bride was physically tortured through scalding her legs and back on this account. The case was not reported to the police nor was the family boycotted.

Educated youth, it is amazing, is so grossly insensitive to the evil and unashamedly contributes to its perpetuation.

A major cause of the failure of the Dowry Prohibition Act is that an infringement of the provisions of the Act is not made a cognizable offence. This should now be done. A small but significant step that could be taken by the government is that it should declare the

taking or giving of dowry to be against the Government Servants Conduct Rules. Similar steps were taken earlier to prevent bigamous marriages and the giving and taking of dowry could be similarly dealt with. Waiting for conditions for women to improve by way of increase in the economic freedom and job opportunities and for the practice of dowry to become obsolete will take a long time. This is borne out by the fact of the failure that anti-dowry campaigns have met.

To ensure that there is no harrassment by the police and encroachment on the right to privacy, the Committee on the Status of Women suggests that enforcement of social laws like the Dowry Prohibition Act, be entrusted to a separate administrative machinery. Social workers, experts, and socially conscious citizens could be associated with these special tribunals.

Towards equality

There are several factors which determine the status of a wife in her husband's traditional joint family. The most important among them are: the extent of dowry she brought with her at the time of marriage, and the number of sons she has produced. It is no wonder, therefore, that an infant female child is no cause for joy to her parents but a male child is. Laws alone cannot change this situation. There is need for a vigorous reform movement as well as for a stricter implementation of progressive social legislation enacted since 1947. Centuries old customs seem hard to break, yet the Indian people, both in rural and urban areas, are receptive to ideas of change. In the villages, in fact, people are far less cynical than in cities. The need of the day is to give the much needed attention to villages. This can perhaps best be done through a motivated and enlightened local leadership. In many rural areas the local leadership has passed from the feudal elders to younger, progressive farmers who are more amenable to accepting ideas of change. This is seldom recognized and the old leadership often continues to be taken cognizance of by officialdom. Educated Indian women and social workers connected with some well-established women's associations, which were once active during the freedom movement, have much to do to improve the lot of women in India buried under the morass of ignorance. The first need is to make women aware of their own worth as individuals other than the biological role assigned to them. Wide areas of work have come to

be demarcated as women's sphere or men's sphere. This needs to be narrowed down considerably.

Equality between men and women requires of women not to look for privileges. But there are certain minimum functional needs which, if unfulfilled, render women less than equal. Among them is the need for adequate hostel accommodation both in cities and rural areas for working women, for women in danger of exploitation, and for those who have been victims of cruelty. If work could also be provided to such women according to their talent, there would be fewer cases of suicide than at present.

In ancient India, it is said, women had a say in the matter of the choice of their life partners. The custom of arranged marriages today appears to be entrenched. Arranged marriages, provided they are not marriages of convenience and are not forced on unwilling young men and women, can turn out to be quite happy. In fact the present day trend even among educated young people in metropolitan cities, where there is greater mixing among the sexes and permissiveness, is to go in for arranged marriages. What the girls and their parents are looking for is security signified by the possession of a good job on the part of the bridegrooms besides an educational level. The girls' qualities matter but in some cases dowry may be tacitly asked for and be given. That education and dowry should go together is perhaps part of the lack of present day idealism and the fashion for "living well." Possessing the trappings of modern living and keeping ahead of the Joneses is becoming increasingly difficult at the current price level. The cinema is sometimes blamed for the increase of materialistic tendencies among a section of present day youth. True, the film hero is always goodlooking and is usually either born rich (running about in large cars of foreign make, albeit of quite ten year vintage, and living in Victorian style bungalows with an army of retainers) or comes into money which turns out to be his rightful due. In real life some of these frills are acquired through dowry when the base is already there. Often it is a case of money (on the bride's side) marrying boys in the Indian Foreign Service, the Indian Administrative Service, and other central services; the the combination of money and power being irresistible. These couples constitute only a small minority in the vast sea that is India, but they occupy pivotal positions making their influence felt all the way down to the common people. Indian women who

have been fortunate enough to have received the benefits of university education or professional training, once married into the upper class powerful official orbit or the world of the coveted managerial elite, waste their diplomas and degrees, earned only to rate them higher in the marriage market, over bridge and coffee tables in the districts or in high society in the metropolitan centres. The fault is in their upbringing; they are "educated" in order to be desirable as brides of the well-placed rather than trained-to-be individuals. A few of these wives make occassional effort at "social work." On such occasions, donning handloom cotton saris reserved for visits to some wretched orphanage, slum, or hospital, they perform a ritual as the wife of an area executive or administrator. And yet, they could if they had the correct values, provide real leadership in work of uplift among the underprivileged or in breaking down customs inimical to women. A woman is still not considered an individual and if she is a discard—separated or divorced—she is looked upon with suspicion. It is taken for granted that it is she who is responsible for the breakup of a marriage. If she has received education and training she might survive by taking on a job. Otherwise she is fair game for men on the lookout, and should she belong to the more conventional middle class strata, she may be driven into being a recluse in some household where she must live on sufferance. The fate of widows in the lower income groups with no economic means of their own can be unenviable.

Destitute women are considered fit subjects to be turned over to brothels by the unscruplous. Once there they are veritably doomed since society has no other use for them. Their children too are brought up to take to prostitution. Singing and dancing of a type are taught to them as part of the equipment for entertaining customers. Children in brothels, obviously in moral danger, are occasionally rescued in police raids under the Suppression of Immoral Traffic Act, but the campaigns to save them are by no means systematic. Implementation of the law governing women and children being morally exploited has to be much more strict. And more effective means must be found for their rehabilitation. A variation of the brothel theme is the more recent call girl phenomenon. Some of these girls have been found to have received university education. Permissiveness and a taste for high living

are among the reasons why, they admit, they have taken to becoming call girls.

The "hep" set

At some of the metropolitan universities it is considered "with it" for a girl to have a boy friend. She does not necessarily end up marrying him. By and large the relationship is quite healthy. It is just the done thing to have an escort. Drugs are taken by some among the "jet" or "hep" set. With relation to the total population of university students in the country their number is small, but it is a matter of concern that drugs are not taken by students in the very large cities alone. In Punjab, for instance, the habit appears to have caught on at an alarming rate even in smaller towns. Women, so far, have largely escaped this habit except perhaps for small numbers in the universities. Unhealthy attributes of contemporary youth culture in the west are being blindly imitated in India.

Women and politics

It is sometimes said that women in India did not have to fight for their political rights and that these were handed down to them after the country's independence. This would appear to suggest that Indian women's role in the whole matter was passive. Nothing could be farther from the truth since women played a significant role in the freedom struggle. It is true that independence created a more favourable climate for enlightened reform connected with women to be pushed through, because the British themselves were conceding few rights to their own women in England and were conservative in this respect. It would be unfair, however, not to acknowledge some beneficial influences emanating from the west. Closely working with Indian leaders like Sarojini Naidu were a group of women, Irish in origin and suffragette in their sympathies, who have earned a name for themselves in the history of Indian women's emanicipation. Prominent among them are the names of Margaret Cousins and Annie Besant. In 1917 Margaret Cousins started, in Madras, the Indian Women's Association which later gave birth to the All-India Women's Conference.

The Indian Women's Association took the initiative to lead a deputation of women to the Secretary of State for India to introduce political reforms. They demanded voting rights for women. The

deputation was led by Sarojini Naidu. Later when she, among other leaders, made similar demands before the Parliamentary Committee on Reforms (in London), the British Parliament agreed to leave the issue of women's franchise to the new Indian legislatures in the provinces which were to be set under the constitutional reforms. A small fraction of the Indian population, including women, was enfranchised through the Reforms Act of 1921. The right to vote, however, was subject to certain reservations. Women could vote only if they possessed the qualifications of wifehood, property, and education. By 1926, however, women came to enjoy franchise on the same terms as men in all provinces, with respect to elections to the provincial legislative councils. The same year women were also granted the right to sit in legislative councils. By the Government of India Act of 1935, which increased the number of enfranchised Indians, all women over twenty-one could vote provided they fulfilled the conditions of property and education. This Act increased the number of women voters to more than six million from 315,000. With independence came adult franchise. Twenty-three women were elected to the Lok Sabha in 1952. In 1957, twenty-seven women were returned to the Lok Sabha. Their number went up to thirty-three in 1962, the highest so far. It was twenty-eight in 1967, but it went down to twenty-one in 1971, the lowest so far. Three more women have, however, been elected since. The number of women contestants, though going up, has not kept pace with the proportional increase in the female population. A major deterrent to women fighting elections is the great expense. Other factors include the threat of violence and character assassination. The turn out of women voters, however, has been increasing.

Because of insufficient representation in political life, women's share in decision-making is also meagre and programmes for the welfare of women and children in the districts suffer on this account. Though equality demands that women should not seek privileges, because of the fact that they are in reality far less than equal, it is felt that they should be enabled to participate in the political process at the village level through statutory women's *panchayats* which should be in addition to *gram panchayats* and meant exclusively to look after programmes for women and children. Their participation in local bodies could also be ensured through reservation of seats in municipal bodies.

Women and work

The twentieth century has opened up new professional avenues for women. They are now entering the Indian Foreign Service, the Indian Administrative Service, and other central services in increasing numbers. The services were thrown open to women through competition in 1948. The ratio of women in the IAS/IFS/IPS has improved from 1:81:6 in 1960 to 1:7:5 in 1972. The Indian Police Service, which had declined to accept women in its ranks, has now withdrawn the ban. The railways accept women Class I officers in its medical and accounts sections but not so far in operational work.

An important issue concerning women in the central services was whether they could continue in service on getting married. According to Rule 5 (3) of the IAS Recruitment Rules (1954) when a woman officer married, the Central Government could, if the maintenance of the service required, call upon her to resign. In actual fact women in the IFS/IAS were expected automatically to resign upon getting married. Rule 5 (3) was deleted from the IAS Recruitment Rules in 1972 after an assurance that efficiency would not suffer—given by the Prime Minister in Parliament.

According to a recent survey the largest number of women Class I officers are in the Department of Atomic Energy, besides Ministries of Education and Social Welfare, External Affairs, and Tourism.

A trend, set off after the partition, which made it necessary for a large number of young women in urban areas to seek work has continued and gathered momentum. The registers of employment exchanges indicate that more and more women are being absorbed in the public and private sectors as typists, stenographers, clerks, key punch operators, and telephone operators. In some of the professions the percentage of women compared to men is as follows:

Physicians and Surgeons	:	7.1 per cent
Lawyers	:	1.2 per cent
Teachers	:	30.3 per cent
Nursing and health	:	72.2 per cent
Scientists	:	10.9 per cent

In increasing numbers women are taking to new careers like social work. Their number in journalism and in the world of

commerce is small, but here too they are making a mark. In science and technology, auditing and accountancy, and architecture, they have a fair representation.

The metropolitan cities are offering scope for feminine talent to be diverted to other channels—advertizing and commercial art, interior decoration, and dress designing. Some are working as beauticians. Television, the cinema, and the radio are drawing feminine creative talent both on a part-time as well as a full-time basis.

All over the country women have traditionally participated in agriculture, which is generally a family effort. They also form a part of landless agricultural labour. Many women engage in turning out handicrafts. Menial jobs are largely assigned to them. But where there is mechanization of agriculture women are left out or given unskilled work. They are seldom picked for training to work at machines. And being unskilled, they are paid less than men. This tendency exists in industry as well. It is not always easy to assess the extent of work put in by women as in the case of family businesses where women execute their share of work at home rather than at the workshop. But it is assumed that on account of the rapid increase of the organized sector, household industries, which were mainly female-oriented, have declined and this has brought hardship to women. Household industries like weaving, oil pressing, rice-pounding, and leather and tobacco processing have had to face competition from factories. The marketing of products of household industry once done by women has also declined with the development of organized markets. The ratio of female to male workers has registered an overall decline both in the rural and urban areas and more particularly so in the urban areas in industry and the service sector.

The problems of women who are gainfully employed, often arise partly on account of the fact that a majority of them are engaged in the unorganized sector. They seldom benefit from laws that seek to protect the security and working conditions of labour. Women find it harder to get work than men and the high incidence of unemployment as well as underemployment among women who are illiterate or semi-illiterate points to the extent of their hardship. The Department of Social Welfare has estimated that about *one lakh* widows become destitute every year in the age group twenty to forty-four, while in the age group above sixty-five their number is *48.3 lakhs*.

During 1961-71, the participation rate for illiterate women declined from 81.1 per cent to 65.8 per cent in urban areas but showed marginal variations in rural areas. The employment of women has therefore declined both in the unorganized non-agricultural occupations and in organized industry.

At the time of the 1971 census, India's working population consisted of 52.5 per cent of the total number of males and 11.8 per cent of the total number of females. Among the "non-working" women, 51 per cent reported household duties as their main activity. Among the gainfully employed, the majority of women were engaged in agriculture. In urban areas the service sectors claimed 38 per cent of women workers followed by agriculture (17.5 per cent) and manufacturing industries (13 per cent). The concept of domestic tasks being counted as work has still to be accepted.

Of the 31 million women workers in India enumerated in the 1971 census, 28 million were in rural areas and 3 million in urban areas. Because of their participation in agriculture 13 per cent of the rural work force consisted of women, while the comparable figure for urban areas was less than 7 per cent. This is so because even in the largest cities their work participation rate in industry does not exceed 9 per cent. Women's participation in the industrial sectors could be much larger. One reason why this is not so could be that with the conservative middle class, teaching and medicine are considered the most desirable professions for women where the scope is limited. Much of the resistance to women working in offices emanates from orthodox attitudes.

Apart from provisions that aim to protect the health of women workers like restriction on their carrying heavy loads, specific welfare measures for women in organized industry are maternity benefits and provision of creches in establishments employing fifty or more women, except in mines where the provisions are obligatory, irrespective of the number of women workers. The general view that these measures have made women workers more costly for the employers is disputed. In plantations women continue to be employed in larger numbers despite these measures.

Not long ago non-participation of women in day work, particularly manual work outdoors, was upheld as a social value. But things are fast changing not in cities alone but also in small towns and the adjoining rural areas. In some of the smaller towns of Gujarat such as Nadiad and Surat one can find scores of young

women doing skilled jobs in small factories where they were preferred to men workers. In the readymade garments factory in Nadiad, where shirts are manufactured mainly for export, the labour force consists mainly of women, some of whom come to the factory from nearby villages. Young women in clock-manufacturing units in Surat are handling intricate machinery. The employers appreciate the fact that they are more nimble with their fingers than men. There are more professions opening up to women. In Maharashtra, for instance, there are over a dozen banks in rural areas and towns "manned" wholly by women. Their shareholders are also only women. The women's banks have been loaning money to women to set up, in the main, small businesses like milk vending and keeping shops selling general merchandise. A large chemist shop in Bombay and a motor repair shop have been set up by women with loans from one of the women's cooperative banks. In a different area—Punjab—it is a common sight in the rural are as to see women whose husbands may be doing jobs in nearby towns, managing both their small farms as well as keeping poultry and a certain number of cattle to sell eggs and milk, while taking the household chores in their stride, helped by their children. Then again, in the hill areas women do most of the work on their land besides tending cattle. In hill resorts like Mussoorie dozens of women are keeping shops and running small restaurants.

Obstacles to progress

Custom still governs the destinies of Indian women. Society is usually slow to shake off its established customs even if they are irrational. And in matters relating to women they appear to be almost sacrosanct and unshakable.

Any sweeping generalization about Indian women can be misleading partly because of the wide gap between life in the urban and rural areas and partly because of the differences in the opportunities for education and training available to women. Modern Indian women have proved their worth, reaching the top of the ladder in various fields of activity. That they are highly sensitive and intelligent is true, but the number of Indian women to whom the portals of education, training, and opportunity to exercise their professional skills are open and whom the social milieu allows a full flowering of personality unfortunately continues to be small.

Those who deviate from the norm attract adverse attention even

if the law is on their side. Social legislation alone cannot therefore be expected to remove women's disabilities. As Gandhi pointed out over forty years ago, "I am uncompromising in the matter of woman's rights. In my opinion she should labour under no legal disability not suffered by man. I should treat the daughters and sons on a footing of perfect equality. . .women must have votes and an equal legal status. But the problem does not end there. It only commences at the point where women began to affect the political deliberations of the nation."

The passing of the Hindu Code Bill has certainly laid the foundation for women's equal status in society, but there are obstacles in the way which continue to burden women with the age-old weight of suffering and hardship. She is no longer a bonded slave in her lifetime and the compliant wife ending up on her dead husband's funeral pyre, but the path of her progress is blocked by unhelpful customs, placing her in a lowly position.

Excessive childbearing continues despite the promotion of family planning programmes by the government. Only about 15 per cent of couples are believed to be practising family planning. Even in large cities, where family planning is practised on a wider scale than in rural areas, there is need for a large number of couples being protected. The number of couples protected in India's capital, for instance, is estimated at no more than 30.4 per cent. The tally for different states repeats the same story. Some states, among them Maharashtra, Punjab, Haryana, Gujarat, and Kerala have succeeded in checking the birth rate. At the lower end are Bihar, Uttar Pradesh, and Rajasthan. High infant mortality leads couples to have large families in the hope that some of them at least may survive. Male children are considered a security in old age. Each mouth brings with it two hands which are often put to work early enough. Traditionally India has been pro-natalist and women are expected, particularly by elders among their in-laws, to bear fruit and multiply. The larger the number of sons a women bears, the higher is her status in the family.

A woman's workload in villages is heavier than a man's. She not only bears the children but almost single-handed looks after the daily needs of the entire family—cooking, cleaning, fetching water, and caring for cattle, besides lending a hand in agricultural activities.

Worn out by the yearly burden of childbirth in addition to her

heavy domestic chores, a woman's weak and anaemic body wears her down to premature old age and death. The women who survive up to forty years may be expected to live, however, to a ripe old age—in many cases surviving their husbands, according to the demographic pattern.

The future

Though the hold of custom on Indian society cannot be dismissed lightly, Indians are amenable to change. Reform movements in the second half of the eighteenth and in the nineteenth centuries resulted in eliminating certain practices to an extent and in the spread of the idea of women's education and protective legislation. What seems to be required now is an intensive effort on the part of educated women themselves to undertake social action against practices like dowry, child marriage, and customs inimical to women. In these matters women as much as men have to be educated. The time is ripe for a vigorous movement to change the attitudes of men and of women themselves concerning their role. A reappraisal of the contribution of women to society is called for. The image of women as *shakti*—the female principle of life synonymous with energy and power—is an original pre-Aryan Indian concept. According to it woman is by no means the weaker sex, she both creates and sustains life. This image was clouded in the conditions of insecurity generated by long years of conquest, vast migrations of people, and the economic depression which followed. There was naturally a deterioration in women's position due to their strict seclusion and the enforcement of purdah.

The future of Indian women is by no means bleak. But large masses of them are still not aware of their legal rights and those who are, often find it difficult to benefit from them on account of cumbersome and expensive procedures. Apathy on the part of educated women to take up cudgels for their less fortunate sisters and an easygoing attitude on their part has allowed outmoded customs, a hangover of the dark medieval period, to continue despite enlightened legislation.

As voters women have so far not utilized their power to bargain for increased representation in the legislatures and other policy and decision-making bodies. Though organizations like the All India Women's Conference, which was founded in 1926, did much to mobilize support for the passage of the Hindu Code Bill, its

objectives are social rather than political. Similar is the case with the National Council of Women which was founded in 1925. The NCWI has most of its membership in urban areas. The Bharatiya Grameen Mahila Sangh, established later in 1955, aims to improve the conditions of rural women. The Sangh has been organizing various training programmes for farm women and *mahila mandals* in villages. Women active in the *mahila mandals* are becoming members in *panchayats* and it is no longer unusual to come across an occasional woman *sarpanch*.

The National Federation of Indian Women founded in 1954, is largely composed of women from the less affluent sections of society. It has raised its voice against the ill-treatment of Harjan women and against rising prices. Other women's bodies are also trying to take up cudgels for consumers.

During 1975, the International Women's Year, various women's organizations have come together to highlight women's problems. Among them are groups like University Women's Association and the All India Medical Women's Conference which have been taking up specific subjects for discussion.

Most political parties have women's wings which are now becoming active with the realization of the importance of women's votes. Though their main aim is to woo women voters to support the parties to which they belong, the method used has of necessity to include constructive work.

Poverty and health are among major problems facing women today. The government of India has taken the right step in including pregnant and lactating mothers in the nutrition programme administered by the Department of Social Welfare through various agencies like the Central Social Welfare Board both in rural and slum areas. *Balwadis*, some 20,000 of them located mainly in rural areas, are providing welfare services for the pre-school child and also performing other useful service. Among other benefits the *balwadis* reduce the burden of the mother. Both the programmes could usually be expanded, given the resources.

The integration of maternity and child welfare, including family planning, with health services has been a step in the right direction since the child survival rate has much to do with the birth rate. A woman would want to limit her family if the chances of her existing childern's survival were greater.

Demands of working women for living accommodation by way

of hostels and quarters both in urban and rural areas are now likely to be met to a reasonable extent. The absence of suitable accommodation in villages is responsible for jobs in the health, family planning, education, and social welfare fields not always being filled. The majority of women doctors are concentrated in cities and towns.

In the year A.D. 2,000 one visualizes that free legal aid will have enabled women to exercize their rights freely and benefit from legislation initiated by Gandhi. A uniform civil code will have been accepted by various communites.

It has now been established that the majority of women work for the same reason as men do—to earn a living. Their right to work can in many cases best be exercized through the provision of part-time jobs and self-employment schemes. The scope of the types of work will have been widened. This is already happening.

Work-oriented education can open up new avenues for work. Women are beginning to be trained to do work which offers employment opportunities. If they can undertake sophisticted scientific research in laboratories there is no reason why they cannot learn to repair tractors and handle machinery. The machine age is reducing the importance of muscle power and women should be acceptable for employment as operators. They are already handling computers.

Indian women are poised on the threshold of further progress. The main problem is to more widely arouse their own consciousness about their worth. Once that hurdle is crossed the shackles of time will fall off their wrists and men and women who complement each other will move together smoothly like two wheels taking the country forward at a faster pace than hitherto.

Prejudices against women and their unequal status as human beings are breaking down with the spread of modern scientific thought.

Male domination as a matter of right, custom, and in some parts of the world like India with the additional sanction of the religion, is in varying degrees a global phenomenon. It is, quite understandably, not being allowed by men to crumble down automatically or even easily. Enlightened social legislation, as in India, opens up an opportunity for women to exercize their rights but being helpless and both educationally and economically resourceless, large numbers of them have not been able to do so.

Subtle forms of discrimination against working women at different levels, especially with a view to preventing their occupying the top executive posts, is again a world-wide phenomenon which has been identified and must be dealt with. India has so far been lacking in special administrative machinery to deal with working women's problems and cases of discrimination against them. This is now being set up both at the Centre and in the states.

Questions like "Should men share the burden of housework?" are related largely to the urban middle class. But there is the larger question of the society's total attitude towards women and this concerns their status both in relation to men and in relation to the society itself. From childhood itself boys are valued more than girls and are accorded better treatment. The double standard, one for men and the other for women, also continues later. Woman is regarded as somebody's daughter, wife, or mother, rather than an individual. She must be protected by a man against men. Because nature has ordained matters so that she stands in need of protection this is considered both woman's weakness and even her fault. She is considered to be sinning even if it is that she has really been sinned against. It is surprising that women, almost half the country's population, have done little to change the situation. On the other hand women are sometimes the worst enemies of women. According to various surveys the high suicide rate among women, mainly younger housewives, can often be traced to mother-in-law daughter-in-law feuds.

The climate in India is ripe for a change in these attitudes. With the growth of education and communication, opening up of new employment opportunities, and the emergence of an egalitarian ethos, Indian woman will move steadily towards more equal status with man.

EDUCATION

J. P. Naik

The last twenty-five years (1947-72) form, even on the basis of a conservative and critical evaluation, the most crowded era in the history of Indian education: education was never subjected to so much critical thought and so many bold initiatives and innovations in any equivalent period in the earlier history of the nation. Its achievements, both in absolute and relative terms, are by no means inconsiderable. And yet the failures of commission and omission of this era are so great that Indian education continues to be afflicted by many of its old ills and with every passing year, it appears to be acquiring new maladies. It is still largely unrelated to national needs and aspirations, in spite of all the expansion achieved. India's illiteracy rate is among the highest in the world; universal elementary education for all children in the age groups of six to fourteen years is still a distant dream; educational standards are, by and large, unsatisfactory, each stage of education being bedevilled with wastage, stagnation, and general ineffectiveness; and the system has become dysfunctional at all stages, especially at the secondary and university levels, and is generating immense social stresses and strains by creating rapidly increasing groups of educated unemployed. What is worse, every year that passes increases the complexity and enormity of the problems of the educational system on the one hand and decreases the capacity of the country to reform it on the other. These contradictory results, not uniquely confined to the education sector, need careful analysis.

The Educational Situation in 1947

India began its independence with a comparatively low level

of educational development, a moderate administrative experience of the practical problems involved, a reasonably trained and committed personnel of a fair size, very high hopes of radical achievements and a set of pious resolutions.

The modern educational system which had begun by about 1800, had not made much progress even at the end of the British rule in India. In 1947, the overall percentage of literacy in India was only about fourteen. In primary education (Classes I-V or age group six to eleven), the total enrolment was 14.11 million, i.e., only one child out of every three was at school. In middle schools (Classes VI-VIII or age group eleven to fourteen) the total enrolment was 2.04 million, i.e., only one child out of eleven was enrolled. The rates of stagnation and wastage were very high; the curriculum, largely unrelated to the immediate environment, merely prepared the child for admission to a secondary school. The number of secondary schools was 5,297 and the enrolment at the secondary stage was 870,000 or only 3.0 per cent of the age group fourteen to seventeen. What was worse, the curriculum of secondary education did not prepare the majority of students, through vocational courses, for a career in life. Instead, it merely fitted them for entrance into a college and unfitted them for almost everything else. There were nineteen universities and 636 colleges of all types and the total enrolment at the university stage was only 256,000. Here also, the picture was mixed. On the one hand, there was little development of postgraduate education and research and still less of professional education in agriculture, engineering, and medicine so that there was an acute shortage of the trained scientific and technical manpower needed for developmental purposes. On the other hand, there was a large output of substandard generalists, most of whom could not be profitably employed. The standards, by and large, were poor and in terms of stagnation, wastage, or general ineffectiveness, the overall situation in higher (as well as in secondary) education was quite unsatisfactory. There were also considerable inequalities of educational opportunity. Thousands of villages were very largely urban and higher education almost exclusively so. The principal beneficiaries of the system were the urban upper and middle classes while the rural areas and the poorer people got only marginal benefits. The education of girls and women was comparatively backward—the number of girls enrolled for every hundred boys being only thirty-six at the primary stage, twenty-

two at the middle school stage, fourteen at the secondary stage, twelve in general higher education and seven in professional higher education. The education of scheduled castes and scheduled tribes lagged woefully behind that of the other social groups. The regional imbalances were also no less conspicuous. Among the princely states, some like Travancore, Cochin, or Baroda were far advanced (even ahead of the British Indian provinces) while the vast majority of them (including some big states like Hyderabad or Gwalior) were extremely backward. There is no doubt that the national government inherited a legacy of long neglect and backwardness in education which presented a Herculean challenge.

This is the debit side. On the positive side, it may be pointed out, we had some valuable assets. The first was a long established tradition of educational administration. In the British Indian provinces, primary education had been transferred to local control as early as in 1882; and most of education was transferred to Indian control at the state level under the Government of India Acts of 1919 and 1935. The Indian Education Service was one of the first to be Indianized. Private enterprise in education had a tradition of nearly a hundred years. Through private schools and colleges, especially the national education institutions established after 1921, we had developed a fairly large cadre of good teachers and able educational thinkers. These were indeed valuable resources.

We also began with very high hopes. That primary education should be universal and compulsory was one of the earliest demands of the national leadership. This had been placed before the Indian Education Commission (1882) by Dadabhai Naoroji and it was reiterated by Gokhale in the central legislature in 1911-12. The first compulsory education laws were passed between 1918 and 1931. The scheme of basic education had been enunciated in 1937. Since little was done to give effect to all these dreams, the framers of the Constitution emphasized their hopes and determination in Article 45 which spoke of providing free and compulsory education, by 1960, to all children till they reach the age of fourteen years. But hopes of this type were not restricted to primary and middle school education alone. There was a general view that the entire educational structure needed a major transformation. During the days of struggle for freedom, this desire to transform the entire educational system was inevitably limited to

the establishment of a few institutions of "national education" which functioned outside the main educational system. It was hoped that all educational institutions could be transformed into those of national education soon after freedom was achieved. There is also enough evidence to show that this was not merely a popular desire but a conscious commitment of the national leadership as well. For instance, in his address to the National Educational Conference convened by the Ministry of Education in 1948, Jawaharlal Nehru said: "Whenever conferences were called to form a plan for education in India, the tendency, as a rule, was to maintain the existing system with slight modifications. This must not happen now. Great changes have taken place in the country and the educational system must also be in keeping with them. The entire basis of education must be revolutionised."[1] The achievements of the last twenty-five years will have to be judged, therefore, not only on the basis of the low level of educational development that had been reached in 1947, but also on the basis of our long tradition of interest in education, our comparatively better experience of its administration, our not inconsiderable resources in trained and committed manpower, popular hopes and aspirations, and the unequivocal commitments of the national leaderships.

Main Developments: 1947-72

What are the principal achievements and failures of the educational system over the last twenty-five years? It may be desirable to give a broad running account of these major developments before we turn to their evaluation.

To begin with, let us consider two basic programmes of mass education: liquidation of illiteracy and provision of universal elementary education for all children in the age group six to fourteen. It may be pointed out in this context that we, as a nation, have never attempted to educate the adults directly and to make them literate on a mass scale. Our programmes of adult literacy have been on a small scale, aimed at making about 500,000 to a million persons literate every year, and our investments in them have been

[1]See proceedings of National Education Conference, Ministry of Education, Government of India Press, New Delhi, 1948.

very small, less than one per cent of our total educational expenditure. In fact we have relied, for the liquidation of illiteracy, mainly on the provision of universal elementary education to all children in the age group six to fourteen by 1960. Even if this programme had succeeded in its entirety, illiteracy would not have disappeared till about A.D. 2,000, i.e., until nearly all illiterate adults had died out. But this programme has not yet succeeded; and the prevalence of wastage and stagnation is so high that our existing system of elementary education makes only a limited contribution to the spread of literacy in the population as a whole.[2] The census of 1971 gave a literacy percentage of only 29 against 14 in 1947—an increase of 15 per cent in twenty-four years. Meanwhile population has been increasing by about 2 per cent per year so that today there are more illiterate persons in the country than there were in 1947. In fact, about half the world's total illiterate population is in India. This is by no means an enviable position. There is no doubt that this area has been one of our major failures and one which will need considerable emphasis in the years ahead.

Our record in the other programmes of mass education, viz., universal elementary education for all children in the age group six to fourteen, is considerably better but still far from satisfactory. Perhaps the best achievement here is with regard to universal provision of facilities. In the successive five year plans, thousands of new primary and middle schools have been established and there were about 400,000 primary schools and 94,000 middle schools in 1972. The present position, therefore, is that there is a primary school within easy walking distance from the home of every child. The provision of middle schools is still not so universal in all parts of country. Some states like Kerala or Tamil Nadu have been able to provide even middle schools within easy walking distance from the home of almost every child, while states like Andhra Pradesh or Rajasthan have still a long way to go. All things considered, however, it may be said that the country has been able to provide universal provision of facilities at the primary stage and that, within the next five years or so, it may also be possible

[2]It may also be pointed out that this policy of exclusive reliance on universal elementary education as a means of liquidating mass illiteracy is fallacious because the illiteracy of the general population is, in itself, one of the major obstacles to the progress of universal elementary education which we propose to use as the only tool to liquidate mass illiteracy.

to provide universal facilities for middle school education as well.

The establishment of a school in a given area is only the first and simplest step in a programme of universal elementary education. It begins with the enrolment of a few children, generally from the better-off or more educationally conscious social groups. It has to be followed up with a sustained effort from year to year to bring in more and more children; and the difficulty increases as one reaches the lower and poorer social groups. The problem of universal enrolment is, therefore, obviously more important and more difficult; but even here immense progress has been made. The total enrolment at the primary stage (Classes I-V) was 61.4 million or 81.9 per cent of the total population in the age group six to eleven. At the middle school stage, the total enrolment was 14.1 million or 35.3 per cent of the age group eleven to fourteen. Good as these achievements are, they nevertheless fall far short of the expectations or promises.

The third important aspect of elementary education, viz., universal retention, is even more significant. It is necessary not only to enroll every child in school at about the age of six but also to ensure that he continues to remain at school (and progresses every year from class to class) till he reaches the age of fourteen. It is here that our failure has been the greatest. Even now the rates of stagnation and wastage are very high: of every hundred children enrolled in schools, only about forty reach Class V, only about twenty-five reach Class VIII, and the rest "drop out" at some stage or the other. This dropping out starts at about the age of nine when the child begins to be useful at home and increases rapidly after the age of eleven when the child's immediate economic utility also increases. Both wastage and stagnation have declined only marginally in the last twenty-five years.

It is because of all these failures—the failure to provide a middle school within easy walking distance of the home of every child, the failure to enroll every child in school, and the failure to retain the vast majority of enrolled children in schools till they reach the age of fourteen—that we have not yet been able to fulfil the directive of Article 45 of the Constitution (which ought to have been fulfilled by 1960) and no one knows even now as to when it will be fulfilled.

There has also not been much progress in improving standards in elementary education. There are, no doubt, several positive

achievements. The training of teachers has improved, both qualitatively and quantitatively, though the overall situation is still far from satisfactory; a certain proportion of students (about 10-12) get midday meals; and there has been some upgrading of curriculum and improvement of textbooks. Work-experience has not yet been generally introduced and teaching has remained largely unrelated to local environment. The scheme of basic education was never implemented (with or without changes) and was ultimately given up. There has also been some deterioration with regard to buildings and equipment. On the whole, the general standards of elementary education have deteriorated, partly because the positive efforts made in this field have been unequal to offset the negative results of rapid expansion and the large scale entry of the less motivated children of the poor sections of society into schools.

We see an interesting pattern of development here. A radical difference to the society and nation could have been made by a determined effort to liquidate mass illiteracy, the introduction of compulsory education for all children in the age group six to fourteen, and a radical reorientation of the curriculum by the introduction of work-experience and relating it to the immediate environment. But in spite of all the professed desire to change the system radically, these reforms were never carried out. Instead, what was attempted (and secured) was only a large expansion of the traditional system with a few minor changes.

Secondly, education has somehow fallen between two stools. On the one hand, it has never had the prestige which is inherently attached to higher education. On the other, it has also not attracted the attention which elementary education received, especially because of Article 45 of the Constitution. This is so in spite of the fact that a Secondary Education Commission was appointed in 1952 and effect was given to some of its recommendations.

The most outstanding event in secondary education has been its rapid expansion. It must be pointed out that this expansion occurred not so much because it was deliberately planned for, but because it arose, despite all planning to the contrary, as a result of certain strong social forces, viz., the demand of the well-to-do classes in rural areas and the upper and middle classes in urban areas seeking secondary education (either for itself or as a prelude to higher education) for getting meaningful jobs in the

organized public or private sector. In 1972, there were about 38,500 secondary schools and the enrolment in secondary education was 7.1 million or 20.8 per cent of the age group fourteen to seventeen. This rapid and unprecedented expansion had both positive and negative aspects. On the one hand, it spread secondary education in hitherto neglected areas, especially in the medium-sized villages and among the weaker sections, thereby increasing equality of educational opportunity. On the other hand, it led to a dilution of standards and the creation of hundreds of small and inefficient institutions.

As the resources allocated to secondary education were comparatively limited, and as most of these were eaten up by unplanned and rapid expansion, the programmes of transformation of secondary education or its qualitative improvement came to be generally neglected. For instance, a major reform of secondary education was to diversify and vocationalize the higher secondary stage so that many students who complete secondary school would rather enter different worlds of work than seek the traditional road to the university. It is true that, in absolute numbers, there has been a tremendous increase in the facilities for vocational education at the secondary stage through the expansion of the programmes for training of elementary school teachers, establishment of polytechnics and industrial training institutions to train skilled and semi-skilled workers for industry, secretarial and commercial courses, provision for training of para-medical personnel, training of middle level workers in agriculture, development of a training programme for village and cottage industries and so forth. But side by side, the facilities of general secondary education and also the population of the age group increased so much that even today the enrolment in vocational courses is about 9 per cent of the total enrolment at the secondary stage (as it was in 1947) and the proportion of the age group being trained for vocations (about 2 per cent) is still the lowest in the world.

Another major failure has been to adopt throughout the country a uniform pattern of school and college classes which would have made diversification and vocationalization of the higher secondary stage feasible. In 1947, there was a common pattern of school and college classes. It included:

1. A school stage of ten years (or of eleven years in some

states) leading to the matriculation examination which had an all-India equivalence;
2. An intermediate stage of two years; and
3. An undergraduate stage of two years leading to the first degree.

The Calcutta University Commission (1917-19) had viewed the intermediate stage as really a part of school education and had recommended that it should be treated as such and that the undergraduate course of two years should be lengthened to three years. This was also the recommendation of the University Education Commission (1948-49) which suggested the adoption of the uniform pattern of 10+2+3, i.e., a school stage of ten years leading to the matriculation examination, a higher secondary stage of two years, and a three-year stage leading to the first degree. All that was necessary to implement this recommendation was to reduce the stage leading to matriculation uniformally to ten years in all states (which would not have involved any additional expenditure); to transfer the intermediate course from the universities, where it was a misfit, to the school stage where it properly belonged and to introduce a large vocational element therein to divert a sizeable proportion of students into the world of work; and to increase the duration of the undergraduate course to three years in all universities (or to allow the two-year course to continue for the pass degree and to have a three-year course for the honours degree). Had this pattern been adopted, there would have been a radical change in the structure of the system and vocationalization and diversification of secondary education would have been made easier. Besides this would have raised standards in higher education. But unfortunately this was not done. On the recommendation of the Secondary Education Commission, it was decided to split the intermediate stage into two parts, one year going to the school and the other to the university, and thus to introduce a uniform school stage of eleven years and an undergraduate course of three years. This was a retrograde step for several reasons. The eleven-year higher secondary course was wrong because it introduced specialization too early (at the end of Class VIII), made vocationalization difficult, and increased expansion (because it was too early to introduce a selective element at the end of Class VIII so that all those who entered the secondary course in Class IX

were perforce required to climb up to Class XI). The intermediate stage had served a very useful purpose. On the one hand, it gave sound preparatory education to those who wanted to enter the university; on the other, it also made it possible to give good vocational education to those who wanted to begin working for a livelihood. It was therefore a grievous error to break up this stage. We have thus lost valuable time; and what is even worse, we have to pay dearly for this mistake by reintroducing the intermediate stage.

There were also some positive achievements in the secondary stage. Following the report of the Mudaliar Commission, some reforms were introduced. Perhaps the most significant achievement has been the improvement in the remuneration of secondary teachers. The facilities for their training have been expanded, although there has not been adequate improvement in its quality. On the whole, the average secondary teacher is now much better qualified than he was in 1947. The problem of security of tenure is still not satisfactorily solved because a majority of secondary schools are in the private sector where practices of exploiting teachers have increased. There have been attempts to improve curricula (especially to diversify the programmes as in the multi-purpose scheme) and textbooks, to introduce new methods of teaching, to reform examinations, to introduce programmes of vocational guidance, to make better provision for education in science and physical education, and so on. These have done some good, although the total improvement made is almost eclipsed by the enormous growth in substandard institutions. Moreover, these are hardly a compensation for the major errors of commission and omission indicated above.

Once again we see the same pattern of development emerging here; programmes that could have made a radical difference such as substantial qualitative improvement or vocationalization were not or could not be implemented. Instead, we had a tremendous expansion of the old system with a few minor changes and reforms that could not hold in check the strains and deterioration that necessarily followed in the wake of unplanned expansion.

Higher education and research received early attention and continuing emphasis. A University Education Commission was appointed in 1948, and on its recommendations, the University Grants Commission was created in 1956. In spite of all the efforts,

however, the overall achievements are a mixture of light and shade and of success and failure.

The success stories relate mainly to five fields.

The first is the development of science education and the training of scientific manpower and promotion of scientific research. A great lead in this was given by Jawaharlal Nehru who believed that the progress of the country depended upon our ability to promote science and technology. It is realized that the country has still a long way to go in improving research and that there are many weaknesses to be overcome. However, the achievement in the field of research in science and technology during the last twenty-five years is something of which the country has every right to be proud.

The second success area is that of agriculture. At present there are ninety-three agricultural colleges. The admissions to these institutions reached their peak in 1965-66 (11,562); but there has been some fall recently due to increasing unemployment among agricultural graduates. In the earlier phase of expansion of agricultural education, the pre-independence structure of teaching institutions unsupported by extension and research activities continued. However, the weakness of such a system was soon recognized and, in order to place agricultural education on a sound footing, it was decided to establish agricultural universities modelled on the lines of the land grant colleges of the United States of America where agricultural education, research, and extension were integrated. There are now nineteen such universities and it is planned to establish one agricultural university in every state. A massive programme of agricultural research was also developed under the Indian Council of Agricultural Research and this, combined with adoption of an equally massive programme of extension, has been a major contributory factor to the green revolution.

Till 1946, there were fifteen medical colleges in the country with an annual intake of twelve hundred. Little or no emphasis was laid on the training of specialists and on postgraduate education even in the oldest colleges of India. This important programme therefore received great emphasis in the post-independence period; and different aspects of the problem were examined, among others, by the Health Survey and Planning Committee (1959-60) and the Mudaliar Committee. Today, there are a hundred medical colleges with an annual admission capacity of

twelve and a half thousand. There has also been considerable expansion in postgraduate teaching and research in medicine. Regional Postgraduate Centres are being established and an All-India Institute of Medical Sciences has been created by an Act of Parliament. A National Institute of Health Administration and Education has also been established and medical research is being promoted under the Indian Council of Medical Research. The number of doctors has considerably increased and there has also been a similar expansion in the facilities for training para-medical personnel. Consequently, it has been possible to increase and improve medical facilities and services. This, combined with an improvement of health services and the development of preventive programmes (such as malaria eradication, vaccination, innoculation against cholera), the death rates have fallen greatly and expectancy of life at birth has risen sharply.

The fourth success area is that of technical education. Free India was faced with the great challenge of developing her predominantly agricultural economy into a major industrial one in a short time. It had to begin this task on a very narrow base: in 1947, the country produced only 930 graduates in engineering and 320 graduates in technology. Facilities for advanced training at the postgraduate level were very meagre in technology and almost non-existent in engineering. As compared to this situation, the advance in technical education during the last twenty-five years has been phenomenal. There are now five institutes of technology and fifteen regional engineering colleges. There are also several other first-rate institutions providing high quality engineering education. In addition, the existing engineering colleges and polytechnics have been expanded and strengthened and a large number of new colleges and polytechnics were also established. Consequently, the annual admissions in engineering colleges increased from three thousand in 1947 to twenty-five thousand in 1965-66 and those in polytechnics from three thousand and seven hundred in 1947 to fifty thousand in 1965-66. This expansion contributed, in some measure, to the spectacular development of industries that has taken place in the post-independence period. Unfortunately, an industrial recession then set in and reduced the demand for trained engineering manpower. Consequently, unemployment amongst engineers and persons trained in polytechnics began to grow.

Government, therefore, had to cut down fresh admissions to engineering colleges and polytechnics as a temporary measure.

The fifth area of success covers programmes of selective development and qualitative improvement introduced in general higher education. There were a number of good institutions in the field of general higher education in 1947. During the last twenty-five years their numbers have increased considerably and in many of these institutions the standards have risen even higher. Some of these like the centres of advanced study have been supported by the University Grants Commission. The teaching universities, or the teaching departments of teaching-cum-affiliating universities, are themselves a quality system within higher education. The number of good colleges has also increased. The University Grants Commission has taken up a programme of selective development of affiliated colleges and as recommended by the Education Commission, it is also proposed to establish some autonomous colleges which will have the authority to frame their own courses and hold their own examinations. In the general picture of falling standards all around, the good work that is being done by this select group of institutions tends to be ignored. This is not fair to them or to their teachers who are engaged in a difficult and uphill fight. In fact the achievements of these institutions should really be a source of inspiration and guidance that can help us to face the task ahead with greater confidence.

Some other qualitative reforms also deserve notice. For instance, a three-year course for the first degree has been introduced throughout the country, except in the universities of Uttar Pradesh and in Bombay University. Standards of teaching at the post-graduate stage have also been improved in several institutions and the number of students engaged in research for the doctorate degree has substantially increased. The scales of pay of university and college teachers have been substantially improved. A limited programme for exchange of university teachers has been introduced and a fairly large programme of summer institutes has also been initiated for upgrading the knowledge of the teachers. Curriculum reform has also been undertaken. The University Grants Commission appointed review committees in different disciplines and, on ths basis of their reports, the universities are now modernizing their courses. A programme of national service has been introduced. It would not be fair to ignore what has already been

achieved, although there is yet an immense amount of work to be done.

What has largely offset all these achievements, and made general higher education a sore spot in the educational system is its unplanned and practically uncontrolled expansion. Today there are a hundred universities and about four thousand colleges with an enrolment of 3.4 million. The reasons for this expansion are manifold. The first is the inability of the government to introduce a system of selective admissions to higher education so that it is always possible for any student who has completed secondary school and who desires to study further to find admission to *some* college and in *some* course. Second, there has been a mushroom growth of new colleges, most of which do not have adequate facilities or teachers. This is because the conditions of affiliation are not stringent enough or cannot be enforced for political or social reasons. This dilution of quality at the institutional level and the unplanned growth of colleges and other institutions of higher education necessarily lead to indiscriminate expansion of enrolments. A third reason is the weakness of the secondary education system which, for lack of diversification, increases the pressure on university admission. An inordinate rush for higher education is, thus, built into the system itself. Fourth, the social demand for higher education has considerably increased because it is still the only gateway to any worthwhile job in the public sector and it is increasingly becoming the minimum qualification even for those jobs which, in theory at any rate, are open to secondary school leavers. Fifth, higher education is becoming, especially in urban areas and for the middle classes, a substitute for a job rather than a preparation for it. A boy or girl completes the secondary school at the age of sixteen or seventeen. The boy does not get a job and the girl is too young to be married. The parents, therefore, send them to the college because there is nothing else to be done. This trend is further accentuated by the large subsidy involved in all programmes of higher education due to the low fees charged in most educational institutions. Finally, this indiscriminate expansion is also facilitated because higher education is still largely in the private sector; and private managements often open new colleges for non-educational considerations such as gaining political weight or providing patronage.

This large and spiralling expansion of higher education along

with an almost equal expansion in secondary education, which has taken place in the post-independence period, has had some good effects. It has given access to secondary and higher education to several social groups which did not have it in the past. This has increased equalization of educational opportunity and, to some extent, even equalization of economic opportunity. The weaker sections of society have found through it new opportunities for vertical mobility and have thrown up new leadership and bands of workers. This has also been socially beneficial and has helped in creating a more evenly balanced society. On the other hand, it has had several serious consequences. Its deleterious effects on standards are obvious; and it has created an increasing and extremely difficult problem of educated unemployment which has sapped the motivation of students and created large stresses and strains within the system. It has also made the system far too large to be manageable and prevented the investment of adequate resources into more vital sectors like universal primary education or liquidation of adult illiteracy.

The deterioration in standards, which was sparked off by this unplanned and uncontrolled expansion, is further aggravated by the fall in teaching standards which have also deteriorated because of a fairly large recruitment of substandard teachers, overcrowding, and inability to provide the necessary facilities and satisfactory working conditions. The student community now includes a large proportion of persons whose motivation is minimal and whose competence to profit from higher education is also questionable. This factor, coupled with unsatisfactory working conditions in universities and colleges, and the lengthening distance between degrees and jobs, has created a ferment in the system of higher education. The politicians exploit and foment this discontent for their own purposes. Student unrest has thus become a major factor which makes it extremely difficult to run university administration.

In higher education also we see the same pattern of development emerging. Some programmes that could have made a radical difference to the system of general higher education such as selective admissions; insistence on maintenance of standards; intensive programme of faculty development; radical reforms in curricula, teaching methods, and examination systems; a symbiosis between teaching and research; adoption of Indian languages

as media of instruction; introduction of compulsory national service creation of fairly large and academically viable institutions which are both economic and efficient; and deep involvement of students, were either not taken up at all or were only taken up in a lukewarm fashion. An intensive effort on these lines would have made a qualitative difference, but for the lack of political will to take the hard decisions involved and the failure to mobilize the needed intellectual and organizational inputs, this attempt was not made. What we have witnessed therefore is a large scale expansion of the old system of general higher education with a few reforms and modifications which have been overshadowed by the stresses and strains created by unplanned expansion.

Another area of considerable achievements is equalization of educational opportunity. Some element of equalization is necessarily inherent in all expansion programmes and the tremendous expansion of educational facilities at all levels achieved in the last twenty-five years has necessarily increased the equality of educational opportunity in several areas. The first is the education of girls and women. In the last twenty-five years, the enrolment of girls has increased from about 3.7 million to 23.2 million (about six times) at the primary school stage, from about 0.3 million to 4.3 million (about fourteen times) at the middle school stage, from about 80,000 to 1.9 million (about twenty-nine times) at the secondary school stage, and from a mere 23,000 to about 750,000 (about thirty-three times) in colleges and universities. Many new careers have opened up for girls and women. Girls (who are generally more conscientious and diligent) are increasingly securing top positions in examinations. It is true, of course, that the enrolment of girls is still much less than what one would like to have and that the gap between it and the enrolment of boys is still wide at all stages and increases from stage to stage. All the same, the actual achievements are in every way something to be proud of.

The education of scheduled castes and scheduled tribes is another area in which equality of educational opportunity has considerably increased. Special efforts have been made in this field during the last twenty-five years. At the school stage the students from the scheduled castes and scheduled tribes get free education. In addition, there are scholarships, free hostels, and *ashram* schools for tribal students. At the university stage, all scheduled tribe

students and every scheduled caste student (subject to a means test) get scholarships. In 1967-68, the last year for which data is available, the total enrolment of scheduled castes at all stages of education was 8.41 million of whom 2.4 million were girls or 10.8 per cent of the total enrolment as against 14 per cent which is their proportion in the total population. In the same year, the total enrolment of the scheduled tribes was 3.1 million of whom 89,000 were girls or 4.1 per cent of the total enrolment as against 6.8 per cent which is their proportion in the total population. It is obvious that the scheduled castes and scheduled tribes have still a long way to go to be at par with other communities. The rates of wastage and stagnation in their case are even higher than for the country as a whole. All the same, the recent massive expansion of education in their midst is one of the notable achievements of the post-independence period.

The regional imbalances in educational development which were so conspicuous in 1947 have been reduced to some extent in the last twenty-five years. Even then considerable disparities still persist in the development of education in different areas. In primary education, Kerala and Tamil Nadu continue to lead, but the most backward states are Bihar and Orissa. In the provision of vocational secondary education, Maharashtra and West Bengal lead while Jammu and Kashmir and Nagaland remain the most backward. At the university stage, the highest enrolment in general education is in Kerala and Uttar Pradesh and the least in Orissa and Rajasthan. In professional higher education, Maharashtra and West Bengal lead while Orissa and Assam are the last in the line. Quite obviously a good deal more has to be done, especially at the elementary stage, if the regional imbalances are to be reduced to tolerable proportions.

There are several other areas in which a good deal of useful work has been done in the last twenty-five years. For instance, the programme of scholarships was considerably expanded by the state governments. The Government of India also instituted a large programme of scholarships which includes merit and loan scholarships in higher education, scholarships for talented students from rural areas at the secondary stage, scholarships for students in residential schools, scholarships for study overseas, and scholarships for children of primary and secondary teachers. A programme for the development and promotion of Hindi and other national

languages is being developed which also includes the preparation of a scientific and technical terminology. Special efforts have been made to provide pre-schools in rural areas and for the urban poor. It is estimated that there were about one million children in preschools (or about two children out of every hundred in the age group) in 1972. A National College of Physical Education has been established at Gwalior and a National Institute of Sports at Patiala, and several schemes have been introduced for promotion of games and sports. A programme for the education and welfare of handicapped children has been initiated. Cultural agreements have been entered into with a large number of countries and these provide, among other things, training facilities for Indians abroad. A National Council of Educational Research and Training has been established at the Centre and institutes of education have been established in the states for qualitative improvement of school education. For lack of space, these have not been examined in detail. But the overall picture they present is the same as in the major sectors. What has been achieved is good in itself and even excellent in comparison with past performance. But it falls far short of the needs of the situation and the hopes and aspirations of the people.

It is necessary to refer to two more areas: investment in educational development and total expenditure on education. Between 1950-51 and 1973-74, a total investment of about Rs 21,000 million has been made in educational development—Rs 1,530 million in the First Plan, Rs 2,730 million in the Second Plan, Rs 5,890 million in the Third Plan, Rs 3,220 million in the three annual plan years and Rs 7,860 million in the Fourth Plan.[3] Of this, Rs 6,220 million was on elementary education, Rs 3,670 million on secondary education, and Rs 4,210 million on higher education. As a result of these investments, the total educational expenditure has considerably increased. It was only Rs 570 million (or less than half a per cent of national income) in 1946-47. It rose to 1,140 million in 1950-51, 1,897 million in 1955-56, 3,444 million in 1960-61, 6,220 million in 1965-66, 9,030 million in 1968-69, and about 11,000 million in 1971-72. The total educational

[3]These figures do not include expenditure on medical and agricultural education and on industrial training institutes which are not administered by the Ministry of Education and Social Welfare.

expenditure has been increasing by more than ten per cent every year or twice the rate of growth of economy. In 1971-72, India was spending more than three per cent of its total national income on education.

Looking Ahead

How does one evaluate this crowded hour of post-independence developments in education? What lessons can one draw from this experience? We shall briefly attempt to answer these questions in this concluding section.

What the Education Commission said of the Indian educational system in 1966 was true in 1947: it needed radical changes—almost a revolution—which in turn could have set in motion the much desired social, economic, and cultural revolution.[4] In a democratic society functioning on a federal pattern, such radical change can be carried out only through the enthusiastic support and cooperation of the states, students, teachers, educational administrators, and, above all, the general public. The ideal background to have set this process in motion in a big way was provided by the attainment of independence: anything would have been possible in that ecstatic atmosphere, notwithstanding the agonies of Partition. The opportunity was allowed to pass by. A comprehensive Education Commission ought to have been set up in 1947, but it did not come till 1964. Even on the reports of the commission and committees that were actually set up, action was never taken either adequately or in time. Education was never given due priority in the Five Year Plans: in fact its priority, as indicated by the proportion of total resources allocated to education, decreased from plan to plan.[5] Hardly any effective steps were taken to implement even those schemes that were formulated and included in the plans. The vast efforts in human and organizational terms which such a revolution necessarily needs were never mobilized. It is therefore small wonder that the

[4]See report of the Education Commission, National Council of Educational Research and Training, New Delhi, 1970 para 1. 17.

[5]The allocations to education formed 8.7 per cent of the total outlay in the First Plan, 6.7 per cent in the Second Plan, 6.9 per cent in the Third Plan, and 5.2 per cent in the Fourth Plan.

much needed and most talked of radical reconstruction of the educational system never materialized. It would be more correct to say that it was never attempted.

The British administrators never wanted to educate the masses; their main objective was to create and educate a class which would remain loyal and grateful to them and act as mediators between them and the masses they ruled and exploited. Instead, a nationalist leadership emerged which organized the masses and drove the British out. However, it was a class that came to power in 1947 and it has remained in power ever since. Its base has also been considerably broadened in the last twenty-five years. All educational systems generally tend to strengthen and perpetuate the *status quo*; and the Indian educational system in the post-Independence period has also tried basically to serve the needs of this class. That is why one sees the emphasis on secondary and higher education and the comparative neglect of elementary education or mass literacy. Even the development of science and technology or agricultural, engineering, and medical education has served the same purpose because it is this class that has been its principal beneficiary. That is why one finds a dual system of education at all levels in Indian education: a small group of quality schools and colleges (generally private) that caters to the needs of this ruling class, while the large majority of state-run institutions, which generally maintain very poor standards, are meant for the masses. On the obvious ground that it admirably meets the needs of this ruling class, the traditional model of the formal system of education with its single-point entry, sequential promotions, exclusive emphasis on full-time institutional instruction by professional full-time teachers still continues to hold the field, in spite of its unsuitability for the education of the masses and its heavy costs. In other words, the inevitable conclusion seems to be that the old formal system of education has not been transformed and has merely been expanded with some changes and this is for the simple reason that this policy was in the interests of the dominant groups.

It is to be noted that we have succeeded better where schemes of expansion are concerned and that our achievements are meagre in programmes of qualitative improvement. This is because of the over-emphasis on monetary inputs and of the relative neglect of the human inputs of ideas and efforts. Expansion is easy to achieve

in secondary and higher education because of the pressing social demand. All that it needs is the provision of buildings and teachers, the things that money can easily buy if one does not insist on quality. Hence, in these fields, we could not only achieve the targets but even overshoot them. In elementary education, expansion is not so easy and that is why our results have been comparatively less spectacular. In adult education, expansion is even more difficult and we did not even choose to try our hand at it. Quality in education, on the other hand, is an entirely different matter. It does need money, but what it needs most is a tremendous input of thought and human effort. Programmes like revision of curricula, improvement of textbooks, adoption of dynamic methods of teaching, examination reform, or student involvement need hard work by students and even harder and dedicated work by teachers. By and large, we have not been willing to put in the human effort which needs idealism, commitment, and sustained hard work. Instead, we have chosen to depend almost exclusively on money and monetary incentives to achieve our ends. But this can at best achieve only superficial results. It is certainly not a policy which a poor country like India can afford.

In this context, attention can be appropriately invited to the weaknesses in educational planning and administration which have made their own contribution to our failures. In a federal polity like ours where education is a state responsibility, educational planning must develop as a decentralized and broad-based process with appropriate types of planning being done at the central, state, district, and institutional levels. Our planning began at the Centre and is still concentrated there. It ought to have been strongest at the state level but continues to be very weak there. At the district level, it has not yet been initiated; and at the institutional level—where alone one can best harness the energies of parents, teachers, and students—it has received little or no attention. The education departments in the states continue to be weak; the teachers and students are not adequately involved in educational planning and development; and the central ministry is not properly organized to perform its role of providing a stimulating but non-coercive leadership. These organizational aspects need serious attention.

The dominant view advocated in the last twenty-five years has been that a radical reform of the educational system should be

attempted first in order to bring about a social, economic, and cultural revolution. This is true to only a limited extent. As mentioned earlier, we never tried to radically transform the educational system but contented ourselves by merely expanding it with a few minor changes. Even if the attempt had been made, it would not have been very successful in the absence of a simultaneous political effort to restructure society. It is obvious that an attempt to reform education, by itself, cannot hope to succeed fully. Similarly, the efforts to introduce a major structural change in society will not also succeed without the help of education. What is really needed is a major political and economic effort to change the existing social structure based on hierarchy, inequality, and rigidity, in favour of a new society based on justice, equality, freedom, and dignity of the individual. Alongside, there should be an effort to radically alter the existing system of education and to create a new system which is in keeping with national needs and aspirations.

A time has come when we should question the models we have blindly adopted and think seriously of some alternative strategies to solve our problems. For instance, the problem of universal elementary education can never be solved in the foreseeable future unless we abandon our exclusive dependence on the existing model of the formal educational system and unless we are prepared to organize classes of large size, a multiple-entry system, part-time education, and special classes for grown-up children in the age group nine to fourteen who may have not gone to school or dropped out. There is also the need to abandon our exclusive dependence on professional teachers and to utilize all community resources for education, including the systematic use of students as teachers. It would pay rich dividends if we were to develop a programme of part-time education of youth in the age group fifteen to twenty-five. A programme of techniracy or the teaching of basic scientific concepts and technical skills will have to be spread to the masses on a priority basis, with or without literacy. Programmes of on-the-job education and upgrading the skills of all workers—urban and rural—will have to be developed in a massive way. The point to be emphasized is that a formal system of education of the type we have adopted, even at its best, serves only a limited purpose. It has a large class bias and is unhelpful to the education of the masses. It is also very costly and wasteful. To continue our

exclusive dependence thereon will be fatal, especially because time is running out and because the financial resources available for educational development are becoming scantier as time passes. We must, therefore, address ourselves to the development of alternative strategies of educational advance—strategies which suit our conditions better and which can be implemented with the limited financial resources we can provide. While searching for these strategies we should take the experience of the whole world as our guide, but what we must ultimately evolve should be a unique solution of our own, a national system of education suited to our needs and aspirations. It is on the vision, determination, and perseverance that we bring to bear on this task that the future of our education depends.

COMMUNICATION

Yogesh Atal

The vastness and variety that characterize India have put communication in a key position in the strategy of nation building. Geographical and linguistic barriers in the past allowed the growth of what have been called *regional regimes*. Political boundaries drawn at the regional frontiers made it possible for the administration to run the regime through traditional channels of communication. A high degree of illiteracy and attachment to the soil, contributing to social immobility, kept most of the people in a state of blissful ignorance under the tutelage of the landed and exploitative aristocracy.

The growth of newer modes of communication in India is related to steps aimed at empire building. When regimes expanded and assumed a sort of all-India or at least multi-regional character, the need for speedy communication was felt by the administration for rapid transmission of orders and instructions from above and for prompt reception of reports of happenings from below. Communication thus developed as an adjunct to administration.

Construction of roads, building of government rest houses, and creation of a courier service were the first steps in the direction of developing communication. These helped in creating the rudiments of a postal service.

It was during the British period that the postal system assumed a somewhat all-India character. A regular postal service first came into being in Bengal in 1766 through the initiative of Robert Clive; in 1774, Warren Hastings made the facility of the official postal system available to the general public. Mail could be sent

not only within the district but also outside it. The concept of Imperial Post was introduced alongside of District Post (which functioned under the collector who served as postmaster). In addition, some private entrepreneurs also provided such services.

In 1837 the East India Company abolished all other postal services and established its monopoly in the territories governed by it. The postal service went on improving with the introduction of postage stamps, parcel service, money orders, and postal savings banks. The British postal system, as well as other postal systems operating in the various princely states, considerably improved the flow of messages.

Associated with the development of the postal system was the introduction of telegraph and telephone services. As early as 1839, a medical man, Professor O' Shaughnessy, helped erect a telegraph line in Calcutta. It started functioning in 1851. Described as "engine of power" by Dalhousie, the telegraph network was extended for imperial purposes. By 1883, there were 267 telegraph offices working alongside the post offices. The telegraph network provided strong support to the British administration at the time of the first war of Indian independence in 1857, and in one of his despatches to the Secretary of State, the Governor-General is believed to have stated that the electric telegraph had saved India during the emergency.

The telephone arrived in the country in 1875 when private enterprise introduced it on a limited scale. Apart from the company systems by 1883 there were tweleve exchanges with a total of ninety-two connections. The first automatic telephone exchange was set up in Simla in 1913-14. The first railway line was laid in 1852.

As was said earlier, to begin with, the postal services were utilized for purposes of official communications and for personal correspondence. Ideas and messages meant for larger audiences depend, however, upon the growth of the mass media. An avenue was opened for mass communication when the first printing press was installed in India in 1550. It published a catechism in 1557. In the years to come, printing technology developed rapidly and covered all major Indian languages Printed matter in all these languages in the form of pamphlets, books, newspapers, and periodicals emerged as a new form of mass communication. The first newspaper was brought out by William Bolts in 1776 from Calcutta, but it did not last long. The other efforts were made in 1780; one

by James Augustus Hickey who started *Bengal Gazette*, and another by Messink and Reed who published *India Gazette*. Other attempts made by some of the more adventurous members of the European community experienced several obstacles. The editors were required tosubmit the newspaper for inspection to the Chief Secretary of the government before publication. Heavy censorship by the government led to underground printing activity. In August 1818, however, the requirement of submission of proof-sheets for approval was dispensed with.

About the growth of the newspapers in the nineteenth century, Chalapathi Rau writes:

> In a minute in September 1828, G. Stockwell reported the following: English language newspapers: two dailies (*Bengal Harkaru* and *John Bull*) with a circulation, respectively, of 155 and 204 copies daily; three bi-weeklies (*India Gazette*, *Government Gazette*, *Calcutta Chronicle*) with a circulation per issue of 280, 290, and 189 respectively; Persian papers: one weekly (presumably *Jam-i-Jahan-Numa*) with 26 copies per issue. A report by A. Sterling said that between 1824 and 1826 six Indian language newspapers were published in Calcutta (three Bengali, two Persian, and one Hindi) in addition to two newspapers, one in Persian and the other in Bengali, published by the Serampore missionaries (Rau 1974: 41).

In 1830 sixteen newspapers and periodicals were published in Indian languages (*Ibid*:42). They included three dailies, one triweekly, two bi-weeklies, seven weeklies, three bi-monthlies, and one monthly. At this time, "the number of English dailies and periodicals published in Bengal was 33 and the total number of subscribers 2,205" (*Ibid*). The first daily newspaper in Hindi came out as late as 1854; published from Calcutta, it was named *Samachar Sudhavarshan*.

Indian newspapers have covered more than a century of their existence. "There are 16 centenarians of which 8 are in English language, 4 in Gujarati, one each in Marathi, Tamil, and Portuguese, and one bi-lingual (English and Tamil). The oldest, the *Bombay Samachar*, a Gujarati daily, was 149 years in 1971" (Chatterjee 1973:47).

Table 1 lists the oldest newspapers in different Indian languages along with the year in which they commenced publication.

TABLE 1
OLDEST NEWSPAPERS IN DIFFERENT LANGUAGES

Language	*Name of the paper*	*Year of inauguration*
Gujarati	*Bombay Samachar*, Bombay	1822
English	*Times of India*, Bombay	1838
Tamil	*Tinnevelly Diocesan Magazine*, Madras	1849
Marathi	*Belgaum Samachar*, Belgaum	1863
Urdu	*Arya Gazette*, Jullundur	1885
Malayalam	*Deepika*, Kottayam	1887
Telugu	*Satya Dootha*, Madras	1888
Punjabi	*Khalsa Samachar*, Amritsar	1891
Bengali	(*i*) *Murshidabad Hitaisi*, Murshidabad	1893
	(*ii*) *Chinsura Bartabaha*, Hooghly	1893
Hindi	*Jain Gazette*, Ajmer	1895
Kannada	*Satbodha Chandrika*, Dharwar	1907
Sanskrit	*Sanskrit Sahitya Parishat*, Calcutta	1918
Oriya	*Samaj*, Cuttack	1919
Sindhi	*Shyam*, Poona	1938
Assamese	*Janmabhoomi*, Jorhat	1947

Broadcasting in India was introduced in 1927 by the Indian Broadcasting Company which set up a 1.5 kw medium wave transmitter in Bombay. "In August of the same year the Calcutta Station (1.5 kw medium wave) was opened. Subsequent developments proceeded haltingly, and in 1930 the Indian Broadcasting Company went into liquidation. However, the same year, the Government of India took over broadcasting and established the Indian State Broadcasting Service. In June 1936, the name of the organization was changed to All India Radio" (Chatterjee 1973:65). The government aimed at using this medium to reach the masses. From the very beginning broadcasting for the rural areas was introduced, but in 1939 only a hundred villages had community sets.

For managing the vast territory of India the British government had to create channels of communication between the centres of

administration at different levels. While traditional channels operated within the region, and mostly in social spheres, the new channels started operating across regional boundaries. They were designed to foster a supra-regional unity and to ensure efficiency of administration. The introduction of railways and of postal service facilitated movement of men, messages, and materials.

The newly created infrastructure of communication was used not only by the administration but also by the people. The growing nationalist sentiment was diffused far and wide as a result of improvements in the system of communication. Roads and railways made people mobile; printing technology served as a multiplier of messages and ideas which reached the people through the postal system; telegraph and telephone services linked people located at long distances.

Communications helped in efficient running of the Raj on the one hand, and the growth of nationalist sentiment on the other.

Communication Profile on the Eve of Independence

Considerable progress had been made during the British regime in the field of communications. In March 1947, there were 391,985 kilometres of extra-municipal roads in the area that formed the Indian Union after Partition. Of this 146,278 kilometres were metalled. On these roads plied 269,000 motor vehicles; public service vehicles numbered 37,382, the number of private cars was 133,359, and there were 22,810 motor cycles. Figures for 1944-45 indicate that railway lines were spread over 64,814 kilometres. They carried 927 million passengers during the year; nearly a million persons were on the staff of the various railways.

About civil aviation the *Statesman Year Book* for 1948 says:

> India is well-served by air transport. In addition to the direct B.O.A.C. services between the UK and Delhi, Calcutta, and Bombay, she is on the flying boat route to Sydney and Singapore. As regards internal air services, there were on 30 June, 1947, 22 services (including one external service from Calcutta to Rangoon) operating over 21 air routes totalling 15,020 miles as against 14 routes covering 10,517 miles on 1st January, an increase of 42% in the route mileage in six months. Most of the

large cities and towns of India are linked by air routes. Some 161 aircrafts are employed on internal service (Steingberg 1948: 130).

In 1947, the Indian Airlines had flown a total of 150.7 lakh kilometres, carrying 260,000 passengers, and 25.6 lakh kg of freight and 0.04 million kg of mail.

After Partition, India had a total of 20,240 permanent post offices staffed by 153,062 men who handled, in 1947-48, a total of 2,133 million letters, postcards, newspapers, parcels, and other packets (Government of India 1954:705). During this year, there were 15,592 km of telegraph lines. Telephone connections were provided to 111,149 subscribers through departmental exchanges (321), private exchanges (2,021), and other than departmental exchanges (145); the state earned a total annual rental, including trunk calls and toll fees, of 55.21 million rupees.

India had 6,118 printing presses at the time of Partition. She published 4,114 newspapers and periodicals, and 6,435 books (1,704 in foreign languages and 4,731 in Indian languages).

Compared to 1936, when broadcasting was taken over by the government, in 1947 the situation had improved but not much: "there were only half a dozen radio stations in the country and about a dozen transmitters with about 275,000 radio sets for the

TABLE 2
NEWS BROADCAST ON AIR IN 1947

Language	*Relayed by*	*No. of bulletins*	*Total duration of news (in hrs)*
English	All Stations of AIR	1,460	304
Hindustani	Delhi, Bombay, Lucknow Jullundur, Amritsar, Patna	1,460	242
Tamil	Madras and Trichinopoly	1,095	183
Telugu	Madras	1,095	183
Bengali	Calcutta	1,095	183
Marathi	Bombay	1,095	183
Gujarati	Bombay	1,095	183
Kannada	Bombay	92	23
Special East Punjab	Jullundur and Amritsar	242	20

SOURCE: *India and Pakistan year book* and *Who's who 1948*, Vol. 34, p. 661.

then population of 320 million people. At that time, less than 10 per cent of the country was covered by radio facilities and less than 25 per cent of the population as far as medium-wave broadcasting was concerned" (Chatterjee 1974:65-6). The number of news bulletins and total time taken by them in different languages, in the year 1947, is given in Table 2.

In the film industry, India's performance in 1947 was quite impressive. A total of 281 films were produced that year; of these 186 were in Hindi, 38 in Bengali, 29 in Tamil, 11 in Gujarati, and the rest in other languages (Marathi 6, Telugu 6, and Kannada 5).

Communication Policy of the Government

The government of independent India has regarded communication as important for both administration and development. This is evidenced by the fact that even in the First Five Year Plan (1951-56) a series of measures were taken to improve the communication map of India. During the First Five Year Plan period, the communication services registered an impressive advance. The number of post offices increased from 36,000 to 53,000; telephone connections from 168,000 to 260,000; and public call offices from 338 to 1,200. Progress was also made in the field of overseas communication by setting up radio telegraph and radio telephone circuits, and also radio photo services.

At the end of the First Five Year Plan, 26 radio stations were functioning in the country, covering all major languages and different regions of the subcontinent.

The Second Five Year Plan had provision for the expansion of these services. It envisaged providing public call offices in all towns with a population of twenty thousand or more and in all important *tehsils* and police stations. A similar decision was taken to increase the number of telegraph offices so as to serve, among others, all places with a population of five thousand or more. In the field of broadcasting, the aim of the Second Plan was to extend the services to as wide an area as possible. For regions in which terrain conditions were difficult short wave transmitters were to be set up. To meet the growing demand for national programmes and for ensuring countrywide listening of national broadcasting, a 100 kw short wave transmitter was to be set up at Delhi and 50 kw short wave transmitters at Calcutta, Bombay, and Madras. With a view to

promoting listening among the people, it was proposed to install community receivers in all villages with a population of a thousand and above. The target was seventy-two thousand sets for the Second Five Year Plan.

In the Third Five Year Plan it was proposed to provide as additional twenty thousand post offices, two thousand telegraph offices, and about two lakh telephone connections. Steps were also taken to modernize and improve telephone services between important towns in the country. In the field of broadcasting, decisions were taken to expand the services, both domestic and external. During the ten-year period, beginning 1950, the number of radio licences issued increased from 0.55 million to 1.88 million.

About communications, the draft outline of the Fourth Five Year Plan says, "The programme for telecommunications provides for installation of 6.5 lakh additional telephone connections bringing the total number of telephones in the country from 8.7 lakh at the end of 1965-66 to over 15 lakh at the end of 1970-71. The broadcasting programmes provide for the strengthening of external services, extension of rural broadcasting, and for increase in coverage of internal services to about 82% of the country's area and 85% of the population by 1970-71 as against 52% and 72% respectively reached at the end of the third plan" (Government of India 1960).

It is clear from the available documents that the demand for various communication facilities has been rising continuously as a result of increase in literacy, growth of urbanization, expansion of industry and commerce, and the overall process of modernization. This was the reason that the planners decided to install trunk automatic exchanges and several public call offices. The facility of subscriber to subscriber inter-city dialling received priority in the Fourth Plan. Provision was also made for laying coaxial cables and establishing micro-wave links on different routes as also for alternate routing for interlinking major metropolitan centres in the country.

Teleprinters were also introduced on a wide scale and efforts were made to install general teleprinter exchanges in major centres for introducing circuit switching in telegraph network. The plan proposes "to introduce 4,000 teleprinters in the telegraph offices. . . the existing teleprinter exchanges will be expanded and the telex

services will be extended to 50 additional stations" (Government of India 1960).

Provision is also made for eight thousand voice frequency telegraph channels for strengthening of different routes for telegraph services.

The Fourth Five Year Plan provided Rs 450 million for the expansion of radio network in India. The objectives laid down by All India Radio were:

1. Strengthening of external services;
2. Effective coverage of the border areas;
3. Extension of coverage of regional service; and
4. Expansion of facilities for community listening.

In addition to the two high-power short wave transmitters and one super high-power transmitter set up during the Third Five Year Plan, the Fourth Plan envisaged installation of two high-power short wave transmitters and one super power transmitter. With these facilities it was hoped that 82 per cent of the area and 85 per cent of the population would be covered by the radio. The Plan also recognized the need for indigenous manufacture of transmitters, television sets, community listening sets, low cost receivers, and other broadcasting equipment.

That communications have an important role to play in the process of medernization has been acknowledged by the planners. In the draft Fifth Five Year Plan it is stated that

> . . .development of commerce and industry and also administration depends to a very large extent on the availability of a proper communication system. The increase in economic and other activities since the advancement of the Five Year Plan has been placing heavy demand on the communication system of the country. . . .In the past it has not been possible to meet the demand for communication facilities in full. . . .A programme for the development of communication is related to a very large extent to the timely supplies of indigenous equipment, the production of which is in the public sector (Government of India 1974 : 184).

There has been a growing demand for telephone connections.

While the number of telephone connections increased from 8.1 lakh at the end of 1968-69, to nearly 13 lakh at the end of 1973-74, there continues to be a long waiting list. The average waiting period is two to three years, but in large cities this period extends to as many as eight to ten years. Even under the Own Your Telephone (OYT) Scheme the subscribers have to wait for about eighteen to twenty months. Commenting on the performance of the Fourth Plan in the field of communication, the draft Fifth Five Year Plan has this to say:

> The programme provided for 5.4 lakh new telephones (Direct Exchange Line) against which the achievement is likely to be 9.94 lakh. The programme also provided for 7,500 route kilometers of cable system for long distance transmission against which the achievement is likely to be 4,746 route kilometers. As regards the micro-wave system the achievement was only 5,535 route kilometers against the target of 12,050 route kilometers. In other programmes too, there were generally short falls. . . .In the Fifth Plan, the main objectives are to meet the growing requirements of telecommunications and to reduce the waiting list for telephones, improve the facilities for long distance transmission and to set up the production capacity of the indigenous factories to meet the requirements of Posts and Telegraphs to a very substantial extent and to reduce the direct import to the minimum (Government of India 1974: 184).

The postal services have improved considerably since independence. In 1968 India had one lakh post offices. It is estimated that there are about twenty-nine thousand *gram panchayat* villages in the country which are located at a distance of more than 3.2 kilometers from the nearest office. The Fifth Plan proposes to cover all these villages and in addition two thousand other villages which are located in backward areas. With the setting up of these post offices it will be possible to ensure daily delivery in all villages. Already the quantum of mail has grown to such proportions that handling it manually is becoming difficult. The Plan also envisages improvement in the telephone facilities by introducing a hierarchical discipline in switching and routing of long distance traffic. The national subscriber dialling service is also proposed to be introduced to about three hundred stations. During the Fifth Plan seven

thousand telegraph offices are proposed to be set up. There will also be a provision for thirty-two new telex exchanges with ten thousand lines capacity and four circuit switching transmitting telegraph exchanges at Bombay, Calcutta, New Delhi, and Madras. In the field of mass communication the government laid emphasis in the early years only on the expansion of the radio; during the Fourth Plan some steps were taken to introduce television.

With the invention of a stationary satellite in 1965 by the American NASA a new era in telecommunications began. The immense potential of the new technology attracted not only the advanced countries, but also developing countries like India which is a late acceptor of the television medium. The enthusiastic support given by the Chanda Committee to the growth of a television system in India led the Department of Atomic Energy (DAE) to think in terms of utilizing the satellite for bringing television to the villages for educational purposes. In September 1969 the DAE signed an agreement with NASA under which the satellite to be launched in June 1974 was to be made available to India free of cost for a one-year experiment called SITE (Satellite Instructional Television Experiment). The UNESCO also sent an expert in 1969 to prepare a detailed report on television development in India. John Willings, the UNESCO expert, supported a television service mainly for the great potential of television in the spread of education and its possible contribution to development through the spread of information about improved agricultural practices, health, nutrition, and family planning. An ambitious television expansion programme has been launched by the Government of India following these recommendations. This programme will cost Rs 112 crore; the first phase will cost Rs 25 crore and when completed television will be available through seven mother stations (Delhi, Bombay, Srinagar, Madras, Lucknow, Calcutta, and Jullundur) and eight relay stations (Mussoorie, Poona, Kanpur, Asansol, a place in West Bengal, Amritsar, Bhatinda, and Chandigarh) to 17 per cent of the population. It will cover 10 per cent of India's territory.

In the second phase of the proposed expansion programme, television stations will be constructed in eleven state capitals with associated relay stations; the existing stations will also be augmented further. The towns which will have television stations, if the programme is carried out, are: Hyderabad, Gauhati/Shillong, Patna, Ahmedabad, Simla, Trivandrum, Bhopal, Imphal, Bangalore,

Cuttack, and Jaipur. These stations and their relay stations will add to the already existing network of television stations, together they will cover 36 per cent of the population in 32 per cent of the country's 3.3 million square kilometres of territory. By the end of the second phase there will be one hundred television outlets. "The ultimate goal (beyond the Fifth Plan) is to provide twenty-five mother stations and 133 relay stations. This would give a population coverage of 80 per cent and an area coverage of 73 per cent."

Communication Map—1972

Twenty-five years of independent India convey a story of development on all fronts. Both roads and railroads have been constructed and new air-routes have been opened to link the various regions of the country and to promote movement. The literacy rate has gone up and the number of both educational institutions and students is continually rising. Generation of electricity, growth of urban and industrial centres, and the increase in the number of the educated have promoted mass media—radio, television, newspapers, and films.

Railways

The railway system has a route kilometerage of 60,067, on which a fleet of 11,154 locomotives (9,227 steam, 1,288 diesel, and 639 electric) carry 35,472 coaching vehicles and 3.82 lakh wagons. Employing more than 1.3 million people, the railways run 10,800 trains, operating over 7,060 stations, carrying 64 lakh of passengers, and over 5.7 lakh tonnes of freight every day.

Roads and vehicles

The road kilometerage in India was 1.28 million, in 1970-71 as against 0.39 million in 1947. In terms of motor vehicles of different types the position in 1971 was:

Motorcycles	551,613
Auto rickshaws	36,340
Jeeps	81,071
Private motorcars	529,590
Taxis	60,434

Buses	94,027
Goods vehicles	339,168
Miscellaneous	128,931

Civil aviation

Over the years rapid progress has been made in the field of civil aviation. Indian aircrafts flew about 21 million kilometres on scheduled and non-scheduled flights in 1947; in 1972 this figure was as high as 70 million. In terms of passenger traffic and cargo and mail, the achievements are indeed remarkable. In 1947, Indian aircrafts carried 3.1 lakh passengers and 45.6 lakh kg of cargo and mail; in 1972, they carried 3.36 million passengers and 666 lakh kg of cargo and mail.

Improvement in transportation facilities has had two happy consequences: It has provided for speedy delivery of messages and for easy access to remote areas. With the rise in the levels of literacy and percentage of literates the use of postal facilities has also increased.[1]

Post, telegraph and telephones

Responding to the growing demand for postal services, the government has increased the number of post offices from nearly 20 thousand in 1947, to 36,094 in 1951, to 76,839 in 1961, and to 111,682 in 1971. The number of telephone exchanges has risen from 271 in 1947 to 4,205 in 1972—a rise of 1555 per cent; telephone connections have also increased from 0.115 million to 1.4 million during the period.

Radio listening

While there has been significant expansion of the mass media, they are still inadequate for a country of 548 million people inhabiting a territory of 3.2 million square kilometres. As on December

[1]It may be noted that the literacy percentage for the country in 1951 was 16.6. The figure in 1971 stands at 29.46. It is indeed striking that rural literacy in 1971 is as high as the overall literacy in the country at the time of the 1961 census (23.74%). Even female literacy is higher than the overall literacy rate in 1951. If we take the literacy percentage for people above the age of five, the figures for 1971 are 33.8 as against 18.3 for 1951; 45.3% males and 21.5% females are literate now as against 27.1% males and 8.9% females in 1951. The rural literacy rate has gone up from 14% to 27.3%.

1972, the total number of broadcast receiver licences in force was 12.89 million, which included domestic, concessional, commercial, and other types. Table 3 shows the rising trend in radio listening.

TABLE 3
RADIO LICENCES ISSUED

Year	*No. of licences*	*Percentage of population with radios*	
		Persons	*Families (average 5 persons)*
1938	64,480		
1941	147,121	.04	0.2
1947	275,000	.08	0.4
1951	635,026	.18	0.9
1961	2,011,244	.46	2.3
1972	12,894,535	2.36	11.8

The figures indicate that the number of radio licences increased thirteen times between 1938-1961, a period of twenty-four years. But between 1947-1972 this increase was forty-seven times. Even with this increase only 11.8 per cent of the families possess a radio set. Thus, while the radio network covers the entire area and therefore is accessible to all the people, the effective listening population is anywhere between ten and twenty per cent.

The radio network operates through 67 broadcasting centres and 130 transmitters. In 1961 the country had nearly half this number—31 stations and 74 transmitters. Compared to 1961, when 128,009 hours and 25 minutes were devoted by AIR for domestic transmission, in 1972 the total broadcasting time was 261,714 hours and 23 minutes for general programmes and 133,291 hours and six minutes for *Vividh Bharati*. Distribution of these hours on different programmes at these two points of time is shown in Table 4.

TABLE 4
PERCENTAGE TIME DEVOTED ON VARIOUS PROGRAMMES BY AIR

Programme	*Percentage time*	
	1961	*1972*
Indian music (all types)	45.0	40.5
Western music	1.9	2.5
Talks, discussions, etc.	5.3	6.9
Dramas and features	4.8	4.0
News	21.4	22.7
Special broadcasts	21.6	23.4
(*i*) Women's programme	8.0	1.4
(*ii*) Rural programme	2.0	6.2
(*iii*) Educational programme	3.0	2.4
(*iv*) Others	8.6	13.4

Television

A landmark in the history of mass communication in India came on 15 September 1959, when the first television centre, with a 40 kilometre range, was established in Delhi. Now it covers a sixty kilometre range. Delhi television's programmes are viewed by seventy-seven farm teleclubs and 163 urban teleclubs. In 560 Delhi schools, television sets are installed so that children can view the special instructional programmes telecast for them during school hours.

Bombay TV started functioning from 2 October 1972. It has a 10 kw transmitter with a reception range of 95 kilometres. The relay transmitter at Poona has extended its range by 88 kilometres.

In January 1973 a television centre was inaugurated at Srinagar. In the same year, in September, the fourth television station at Amritsar was put into action.

There has been a steady increase in the production of television sets in the country; the production climbed from 16,000 in 1970 to 70,000 in 1972 (40,000 in the organized sector by three manufacturers and 30,000 in the small-scale sector by six manufacturers).

At the end of 1972, licences were issued for 84,114 television sets. "A demand projection study made by AIR in 1969 indicated that 3.7 lakh television sets would be required by the end of the

Fourth Plan. The government has sanctioned a capacity of 110,000 TV sets in the organized sector (both public and private) and of over 170,000 sets in the small-scale sector" (Government of India 1974:113).

Newspapers

In 1972 the number of newspapers published in India was 11,926; they had a total circulation of 32 million. Of these 793 are dailies, 64 are tri- or bi-weeklies, 3,388 are weeklies, and 7,486 have different periodicity. The largest number of newspapers is published in Hindi (3,083), followed by English (2,368). Among dailies, however, Tamil ranks second (102 dailies) to Hindi (225); Urdu comes third (91) followed by English (73) and Marathi (72). The

TABLE 5
LANGUAGE-WISE PUBLICATION OF NEWSPAPERS
(AS ON 31 DECEMBER 1972)

Language	*Dailies*	*Tri-bi-weeklies*	*Weeklies*	*Other periodicals*	*Total*
Hindi	225	23	1,453	1,382	3,083
English	73	6	291	1,998	2,368
Urdu	91	6	457	375	929
Bengali	17	6	162	546	731
Marathi	72	6	246	389	713
Tamil	102	3	93	409	607
Gujarati	36	3	142	384	565
Malayalam	56	7	71	323	451
Telugu	14	1	108	271	394
Kannada	44	2	99	153	298
Punjabi	16	—	101	124	241
Oriya	7	—	10	102	128
Sindhi	5	—	28	40	73
Assamese	2	1	9	24	36
Sanskrit	1	—	2	19	22
Bilingual	21	5	235	695	956
Multilingual	3	1	42	158	204
Others*	8	—	25	94	127
Total	793	64	3,583	7,486	11,926

*Includes Kashmiri, mentioned in Schedule VIII of the Constitution, for which separate figures are not available.

SOURCE: India 1974 : 116.

largest number of newspapers is brought out by the states of Maharashtra (1742) and Uttar Pradesh (1711); Delhi (1345) and West Bengal (1213) come next in that order. Tamil Nadu ranks third in the number of dailies published (108); Uttar Pradesh publishes 124 and Maharashtra 110. Printed media are very poorly developed in Mizoram, Andaman and Nicobar Islands, Nagaland, and Dadra and Nagar Haveli. In Arunachal Pradesh and in Lakshadweep there was no newspaper in 1972. Language-wise and state-wise publication of newspapers is given in Tables 5 and 6.

TABLE 6
STATE-WISE PUBLICATION OF NEWSPAPERS (1972)

State/Union territories	*Dailies*	*Tri-bi-weeklies*	*Weeklies*	*Other periodicals*	*Total*
Maharashtra	110	8	460	1,164	1,742
Uttar Pradesh	124	10	834	743	1,711
Delhi	32	1	222	1,090	1,345
West Bengal	31	7	223	952	1,213
Tamil Nadu	108	4	123	720	955
Andhra Pradesh	25	4	223	403	655
Rajasthan	33	4	306	284	627
Kerala	50	1	87	466	613
Gujarat	35	3	141	349	528
Karnataka	66	2	146	292	506
Madhya Pradesh	65	11	245	151	472
Punjab	35	1	156	241	433
Bihar	9	1	104	128	242
Haryana	7	2	78	114	201
Orissa	7	—	24	122	153
Jammu and Kashmir	18	—	94	24	136
Chandigarh	2	—	27	60	89
Assam	5	2	26	47	80
Himachal Pradesh	—	—	26	40	66
Pondicherry	1	—	4	38	43
Manipur	6	—	—	24	30
Meghalaya	1	2	13	13	29
Goa, Daman and Diu	6	—	5	15	26
Tripura	5	1	10	1	17
Mizoram	2	—	2	2	6
Andaman and Nicobar Islands	1	—	1	2	4
Nagaland	—	—	2	1	3
Dadar and Nagar Haveli	—	—	1	—	1
Total	793	64	3,583	7,486	11,926

In terms of circulation, English newspapers have a better record with 7.77 million readers. Hindi readership is 6.85 million. The details are shown in Table 7.

TABLE 7
LANGUAGE-WISE AND PERIODICITY-WISE CIRCULATION
(IN THOUSANDS, AS ON 31 DECEMBER 1972)

Language	*Dailies*	*Tri-bi-weeklies*	*Weeklies*	*Other periodicals*	*Total*
English	2,151	32	1,510	4,079	7,772
Hindi	1,536	21	2,279	3,023	6,859
Tamil	842	9	1,506	1,223	3,580
Malayalam	1,032	—	725	740	2,497
Marathi	876	8	438	744	2,066
Gujarati	671	25	437	735	1,868
Bengali	598	6	382	698	1,684
Urdu	386	13	545	590	1,534
Telugu	223	4	364	469	1,060
Kannada	315	1	280	303	890
Punjabi	79	—	199	215	493
Oriya	80	—	17	94	191
Sindhi	21	—	57	38	116
Assamese	21	—	66	33	110
Sanskrit	2	—	1	10	13
Bilingual	32	11	268	630	941
Multilingual	—	—	40	198	238
Others*	8	—	29	79	116
Total	8,867	130	9,143	13,891	32,031

*Includes Kashmiri, mentioned in Schedule VIII of the Constitution, for which separate figures are not available.

SOURCE: India 1974: 118.

The circulation figures, however, are misleading. They do not, for example, indicate the actual number of readers per newspaper copy; similarly the fact of an individual subscribing to more than one newspaper is also ignored. Nevertheless, what is important is the fact that while the country's literacy percentage is around 30, the total newspaper circulation comes to only 5.85 per cent. Even if five persons constitute the average reading group per newspaper copy, the total readership will be less than the literacy percentage.

It can safely be hypothesized that effective exposure to newspaper media is limited to 3 to 6 per cent of the country's population. There are several villages in the country which do not subscribe to any newspaper.

In 1972 there were as many as twenty newspapers (dailies) which had a circulation of more than 0.1 million. Of these six are in English; five in Malayalam; two each in Bengali, Hindi, Marathi, and Tamil; and one in Gujarati. Circulation of each of these papers is shown in Table 8.

TABLE 8
DAILIES WITH CIRCULATION ABOVE ONE LAKH

Name, language, and place of publication	*1972*
Anand Bazar Patrika (Bengali), Calcutta	310,240
Malayala Manorama (Malayalam), Kottayam	204,078
Jugantar (Bengali), Calcutta	193,646
Nav Bharat Times (Hindi), Delhi	180,287
Hindustan (Hindi), Delhi	161,088
Times of India (English), Bombay	158,630
Statesman (English), Calcutta	146,311
Hindustan Times (English), Delhi	143,940
Mathrubhumi (Malayalam), Ernakulam	143,570
Loksatta (Marathi), Bombay	137,478
Kerala Kaumudi (Malayalam), Trivandrum	134,749
Hindu (English), Madras	131,348
Mathrubhumi (Malayalam), Calicut	122,251
Maharashtra Times (Marathi), Bombay	119,484
Dinamani (Tamil), Madurai	112,112
Tribune (English), Chandigarh	106,893
Amrit Bazar Patrika (English), Calcutta	106,323
Thanthi (Tamil), Madras	106,264
Malayala Manorama (Malayalam), Calicut	101,676
Bombay Samachar (Gujarati), Bombay	100,718

SOURCE: India 1974: 117.

Movies are extremely popular in India as a form of mass entertainment. This is evident by the increase in the output of films as well as by the rise in the number of cinema halls.

In 1956, we are told, there were 3,807 cinemas (2,827 permanent and 980 moving from place to place); in 1960-61 this figure rose

to 4,820 (3,579 permanent and 1,241 of the other kind); in 1970-71 the total was 7,301; and in 1971-72 it rose to 7,538 (with 4,787 permanent and 2,301 touring cinemas). It is estimated that there are about seven to eight seats per thousand people.

The output of feature films is also increasing; from 281 feature films in 1947, to 303 in 1961, to 433 in 1971 is certainly an impressive record. While in 1947, films were produced only in seven languages, now they are available in fourteen different languages, as also in some dialects like Bhojpuri and Rajasthani. The three main South Indian languages—Tamil, Telugu, and Malayalam—have attained an impressive figure in the production of films. Tamil and Telugu have crossed the mark of 70 and Malayalam of 50. The number of films in Bengali was 54 in 1956, but the average has now come down to 30.

In Table 9 we reproduce the figures for the years 1947, 1951, 1961, and 1971 of films produced in different languages.

TABLE 9
OUTPUT OF FEATURE FILMS

Language	*1947*	*1951*	*1961*	*1971*	*1972*
Assamese	—	—	2	5	7
Bengali	38	38	36	30	25
English	—	—	—	1	3
Gujarati	11	6	7	3	4
Hindi	186	100	109	121	134
Kannada	5	2	12	33	20
Konkani	—	—	—	1	—
Malayalam	—	7	11	52	47
Marathi	6	16	15	23	13
Oriya	—	—	2	1	1
Punjabi	—	4	5	2	3
Sindhi	—	—	—	1	1
Tamil	29	26	49	73	77
Telugu	6	30	55	85	73
Others	—	—	—	2	6
Total	281	229	303	433	414

In terms of themes, feature films are classified into fourteen categories. A look at the figures indicates that there is a preponderance

of social films. Crime stories are on the increase, while fantasy, historical, mythological, and legendary tales are on the decline. In Table 10 we give the distribution of films in the various categories; the dates are available for films produced in 1961 and afterwards (Government of India 1974: 123).

TABLE 10
THEMATIC CLASSIFICATION OF FILMS

Theme	*1961*	*1966*	*1971*	*1972*
Social	162	189	283	273
Crime	30	35	83	82
Fantasy	23	15	8	9
Historical	15	6	5	2
Biographical	5	4	2	3
Mythological	32	20	16	16
Legendary	26	22	12	5
Devotional	2	1	8	6
Children	1	5	13	2
Stunt	5	3	1	6
Adventure	2	16	—	3
Political	—	—	1	2
Documentary	—	—	1	4
Horror	—	—	—	1
Total	303	316	433	414

EVALUATION

The preceding account of the growth of mass media is a story of rapid and remarkable advances made by India in the first twenty-five years of her independence. The government recognizes the role that the mass media can play in the country's programme of development and in the strategy of national integration. In all her plans, provision was made for improvement of transport and communication facilities and for the growth of mass media. Through the development of railways, and of roads, the mobility of the people has increased. For nearly five thousand people there now exists a post office, and a telephone is available for every one thousand people. Figures indicate that while in 1948-49 a total

of 4.4 million telephone calls were made, their number rose to 73 million in 1968-69. The number of trunk calls has increased considerably: from 7.1 million in 1950 to 95.2 million in 1971; this is indicative of greater inter-city and inter-state communication.

It must be said, however, that despite the impressive growth of the mass media, their reach is very limited. For example, in spite of an increase by eighty-eight times in the number of radio sets between 1947 and 1972, only twenty-three out of every thousand persons possess this facility. The introduction of electronics media, the cheap availability of transistor sets, and a total coverage by the All India Radio notwithstanding, radio receiving sets have not yet become a universal element of the material culture of the Indian home. Similarly, the number of dailies and their circulation has been rising year after year and yet only a small fraction of the population is exposed to this medium. There were 793 dailies in 1972 compared to 330 in 1952. The circulation of these newspapers during this twenty-year period has increased from 2.5 million to 8.88 million; this means that the percentage of population getting a newspaper has risen from 0.7 to 1.6. The international yardstick, however, is a hundred copies of daily newspapers and fifty radio receivers per thousand. According to both these indicators, India is much below the norm having only sixteen newspapers and twenty-three radio receivers per thousand of population.

The all-India averages presented above can be misleading. It is important to emphasize that the growth of the mass media has been rather uneven. There is a higher concentration of these in the urban and metropolitan centres. There is also in evidence a relative neglect of the border areas. Many of the small states in the border areas do not have their own newspapers. Because of the inadequate means of transportation newspapers originating in metropolitan centres arrive there very late. Programmes relayed through the radio stations located in these areas do not reach beyond a particular limit because of the weak transmitters. The difficulties of the terrain and hardships involved in living there have prevented many a correspondent from going to these areas and reporting about them. There is a general feeling that the news media report about these areas only when serious disturbances take place or when some VIP visits them. Even with regard to the policy of setting up of terrestrial television, or in the selection of experimental villages for

satellite communication, these areas have received the lowest priority. This neglect, associated with topographical inconveniences has, more or less, insulated these people from the rest of the country.

For creating the feeling of nation-ness and *esprit de corps*, it is essential that communications are given a proper place. For the creation of a national community, it is necessary that people have frequent interaction. This is possible through adequate facilities for communication. The rise in fares both by the railways and the airlines has had the effect of restricting the mobility of the people from one region to another. Telephone connections are hard to get. Long distance calls take, on an average, four to seven hours to get through; direct dialling services operate between only a few cities. The non-availability of newsprint has made it obligatory for newspapers to raise their prices and cut their size. This might have an effect on their circulation. All these handicap the creation of a community of interaction, in the development of a sense of empathy, and in the enlargement of one's awareness map.

It appears that while the role of communications is recognized, the government has been rather niggardly in making allocations for their development. In order to utilize the media, which have enormous potential and which are necessary for the enlargement of the cognitive horizons of the masses and generating among them a desire and an expectation for change, an effective communication policy is needed. The costs involved in expanding the networks of communication may appear to be very high in economic terms, but the neglect of these may lead to heavy social costs.

It must also be said that communication enthusiasts at times overemphasize the role that mass media can play. Certainly, communication is not a substitute for development. It only acts as a means to help accelerate the pace of development. Since most of the policies relative to communications are framed by those who possess no expertise in this field, they concoct many fanciful roles for the media. For them, radio and television are magical instruments and they appear to believe that exposure to them will have the desired impact. Such fallacies have been disproved by research done by competent scholars. But research findings do not yet influence the decision-making processes. Media specialists and communication researchers are relegated to a subordinate status; given greater freedom the media specialists should be able to carry out

significant experiments and introduce meaningful innovations.

One such fallacy relates to the educative role of the mass media. Research done, for example, on television's *Krishi Darshan* programme has very clearly brought out that the motivations of the viewers are vastly different from those ascribed to them by the media men and officials. Many viewers come to see the television programme in a community hall not with a view to learning about agriculture, but to satiate their curiosity regarding the magic box. Television gets easily translated into cinema and cinema to the people is entertainment and not education. This important finding, however, has not deterred media planners. *Krishi Darshan* continues and in the SITE programme the educative aim is again given primacy. No purposeful effort is being made to change the people's image of the mass media, particularly radio and television.

Objections have been raised about the satellite communication system proposed to be introduced from 1975 for which preparations have already begun—hardware being prepared by ISRO and software by AIR.

> The rationale of using a geostationery satellite for direct reception of TV by the public in our country with its baffling language diversity and vast variations in regional life and customs, is being questioned on two grounds. The first is that of the international constraints on power and radio bandwidth on telecommunications are such that no more than five TV channels can be available for single satellite. . . .The second ground for questioning the need for a fixed satellite TV service is that the question of a satellite for a hook up in the national system does not arise till all the regional or state TV sub-systems have been first built. And once we build all the state TV sub-systems on the conventional lines, what is the point of hoisting a satellite for direct broadcasting service to rural community TV receivers? (Dhavan 1973: 1248).

A decision has been taken, however, and the satellite ATS-F already in orbit will be repositioned at 35°E longitude for use by India around June 1975 when 2,400 villages located in six states of India will receive, what are called, "interesting and motivational" television programmes. To measure their impact on the people the Space Applications Centre (SAC) of ISRO is preparing a blueprint

for social science research. This is a great opportunity for social science research to make its contribution in the field of mass communication. So far research in communication has mostly been carried out in developed countries. While there is an Institute of Mass Communication in India it has concentrated on training rather than on research. The Audience Research Unit of All India Radio does carry out research of a sort, but it is meant largely for internal consumption; doubts are also raised regarding their methodology.

Available research on communication in India suggests that mass communication has been monopolized by the small modernizing elite, largely located in the urban areas. The traditional channels of communication still predominate. Even the news regarding the Chinese invasion or war with Pakistan reached remote villages quickly but mostly through word-of-mouth. Very little systematic information is available, however, on the communication behaviour of the people.

Mass communication is virgin territory for research. In years to come, there are going to be rapid advances in the field of communications. This affords an excellent opportunity for research into the effects of communication. In the west, the social sciences developed late, mass communications arrived earlier; it was not possible to employ the control-experiment design. In India, it is possible to employ the control-experiment design and to emyloy sophisticated research techniques using controls to assess the impact of mass media of communication.

The coming decade will witness the emergence of a generation of media experts and communication researchers in India.

The Future

What of the future?

As we move closer to A.D. 2001, India will experience increased hunger for information and entertainment. The growing proportion of the educated in society will have new aesthetic needs. They will want opportunities for a creative utilization of their leisure. There will be pressure on the mass media to provide more information, entertainment, and a variety of aesthetically satisfying programmes. A meaningful communications policy will have to address itself to two major problems: (*i*) it will have to ensure that the mass media do not remain symbols of elite privilege and

consumption, and *(ii)* it will also have to take imaginative steps to see that in catering to the needs of the masses it does not stoop so low as to vulgarize culture. Policies can be so framed that the mass media enrich popular culture.

A second related problem is that of meeting the growing demand for outlets of creative expression. It is certain that the numbers of those who would like to be participants in the cultural resurgence at the productive end, rather than at the receiving end, will be considerably enlarged. Communication planning will have to provide for the flowering of their latent creativity.

In the last three decades communication has been put to some good developmental uses. It has enlarged the cognitive map of the people and prepared them to accept the inevitability and desirability of change. It has also played an important role in the promotion of some developmental programmes (Dube 1967; 1975). It can be geared more meaningfully to the promotion of social change and national development. Its potential in the fields of intensive citizenship training and life-long education will have to be fully exploited (Dube 1975). And the mass media have a role to play in sensitizing society to the needs of the future. To quote Dube, "To prepare for the shocks of uncertain tomorrows it is essential that the communications media have a good look at themselves and sharpen their capability to produce the desired results."

Whenever one thinks of the wide utilization of the new electronics media as a powerful source of development, invariably the question of costs is raised. Many of these calculations are based on myopic mathematics. Alongside the cost of using the new media we should also consider the cost of not using them. High, medium, and low cost media can complement one another if their utilization is coordinated with care and imagination.

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LITERATURE

Raghuvir Sahay

The scene is laid in a land where want and misery stand in sharp contrast with waste and wealth and where political expectations are high and close to fulfilment. Literature has already felt the impact of the liberating contact with the west, the revitalizing movement for freedom has given it the courage to look forward, and the growth of socialism in the Soviet Union has inspired it. But leadership in literature, as in the field of politics, is in the hands of a small elite and the expectation of freedom has subdued it somewhat. Literature in a country fighting the battle of freedom on the negotiation table is more inward-looking than aggressive.

Indian languages did not respond to the influence of western literature and thought with uniform ingenuity; in some cases the preoccupation with traditional styles was too strong to admit anything more than a few exercises in translation. But Hindi and Bengali did undergo deeper changes. Of these two, Hindi had the additional advantage of deriving, in some measure, both styles and vocabulary from Urdu—a sister language and a not insignificant vehicle of cultural communication in the central region of the country, which was the repository of a centripetal national culture.

While it is not always correct to link political events with literary trends, it will not be wrong to acknowledge the releasing or restricting influences such events may have on the minds of the writer, who after all is bound to act in a certain relationship with the political leadership. One may note, to begin with, that no writer of any significant literary merit could have been on the side

of the foreign power ruling India. Stalwarts like Premchand in Hindi and their counterparts in other Indian languages were totally against it and had even risked the security of their jobs. However, there were many who, on the eve of independence, found themselves torn between the great upsurge of the masses and their own comfortable position in society. The solution lay in a vague acceptance of the popular demand for independence without necessarily working for the concomitant need for freedom within.

Writers who wrote about the underprivileged and the deprived, suffering under the tyranny of British exploitation, did not always spell out their vision of society in India. Generally speaking, they had little desire to go beyond Gandhi: some of those who did find it necessary to do so took refuge in the glorification of a system which was a remote and somewhat romantic ideal and which, in any case, could not find immediate acceptance by the ignorant masses. A great deal was written in the decades preceding 1947 that treated the villages as the symbol of India. This was done under the influence of Gandhi who brought the village on the political map. But what this writing represented in terms of values was not always Gandhian. Sympathy for the untouchables, tolerance towards other religions, and urge for social equality were some of the themes that inspired writers in more than one language. Non-violence as a value was continuously subjected to enquiry and sometimes even to ridicule. Gandhi's idea of non-violence as a spiritual creed, *satyagraha* as a political method, and *khadi* as an economic programme inspired many writers. They began to see in the so far meaningless existence of the down-trodden peasant a struggle that elevated him in his suffering. But the middle class, which produced nearly all the writers who could carve out for themselves a place in the literary world, found a welcome alternative in the concept of class struggle as developed and preached by the Marxists. It had the qualities of romance and remoteness needed to maintain the illusion of the intellectuals participating in a mass struggle. Incidentally, it also opened up an opportunity for a great deal of polemical debate on the use of violence as a means to independence, while independence seemed to become, in reality, more and more a matter of negotiation. A false sense of satisfaction over his role as a "committed writer" seems to have overtaken the protagonist of violent class struggle as the right way to freedom. The desire to see

beyond his age, which one would be so eager to discern in the writings of a troubled period, was missing. Instead there was a thinly spread mood of expectation and hope. It would be hard to find a great piece of writing in this period which projected the future after independence. If some of the realistic descriptions made before independence can be recognized as true today, it is so because things have not changed much and many of the pre-independence patterns persist.

Poetry, to my mind, is a better index of these pre-independence moods than fiction. The contact with the west as well as the upheavals within the country stirred the imagination of writers all over the country. The central region, where the tradition of nationalism had deep roots, and Bengal, where western education had the most lasting impact, were areas where the poet felt the greatest urge for self-analysis. In Hindi the impact of western literature and thought had already been assimilated and employed towards a rediscovery of one's roots through the personality of pioneers like Bharatendu Harishchandra. Later, Rabindranath Tagore—a giant of his own type—took upon himself the task of liberating Bengali poetry from traditions that were no longer strong enough to outgrow themselves. Tagore also represented, in a limited sense, the urge to identify the Bengali speaking people with the whole complex of the Indian mind. His interest in tales of history from other regions of India is only a superficial evidence of this, but deep within him he accepted a romantic mysticism as the common link. Hindi poets, belonging to what was later termed as the *Chhayavad* school, were essentially concerned with a rediscovery of the self through nature. Some of their contemporaries were more vocal in their urge to identify themselves with the freedom movement, but they retained a deepseated nostalgia for India's cultural past. Still others wanted to destroy the past and to declare their freedom from the shackles of tradition in anticipation of the victory of the freedom-fighters on other fronts.

Poetry in some other languages (such as Oriya, Assamiya, or Tamil) continued to be used for repetitive exercises in alignment with a past that was yet to become the subject of a searching enquiry. The struggle for freedom and the knowledge of the west did not combine in their case to provide the same quality of discontent with the past as in the case of Hindi. In a country of India's

size and complexity this should be considered only a part of the whole picture.

Mention should be made here of the changes that were taking place in the use of language as a creative medium. In Hindi, Nirala's rebellious spirit had already found the archaic idiom of earlier versifiers too burdensome and too restrictive to carry forward into an age of social and political emancipation. For some time he remained the lone example of a major poet making a sustained departure from the tradition of rhymed and calculated verse. This unique position of a poet of the Hindi language was perhaps inevitable. Hindi was the only language that could provide the strength required for such a revolt and needless to say that strength came not so much from the links of Hindi with Sanskrit as from its roots in the Apabhranasha dialects that succeeded Sanskrit in a revolt against it. Its ability to receive and assimilate influences and cross currents of other languages including Urdu—controversially described as a style of Hindi—were indeed unique. The liberation of language from the bonds of prosody could not have taken place without a diffusion of diction and of this again the precursors are to be found mostly in the region of Hindi; other languages taking up the task a little later, in some cases (as in Oriya and Kannada) after independence. The relationship between form and content was a subject of serious debate among the experimentalists of this period.

Another significant trend set in motion in the decades preceding political transfer of power was the anxiety to catch up with world literature, and in the process to look around compatriot-like to other Indian languages for confirmation. A great deal of translation activity took place in the major languages to bring to the educated public the best—according to the awareness of each language—of European literature, including its classics. This was buttressed, in an attempt to rediscover one's roots, with continued emphasis on translations of Sanskrit classics and in some cases in writing extensive commentaries on them. But the most invigorating aspect of this trend was the growing interaction between contemporary writing in various Indian languages. Bengali fiction, for instance, became popular reading in large sections of educated Hindi-speaking people. They gained popularity in several other Indian languages as well. Major works from several other Indian languages were also translated into Hindi. Translations from Hindi

fiction into other languages on any appreciable scale, however, had to wait until the formation of official agencies after independence. This can be understood as part of the historical process of the inter-relationship of Indian languages. Hindi needed links with the other languages for the growth of its own creative life in this period as before, while other languages did not need Hindi for anything more than the political purpose of a united national leadership. But Hindi did draw to its creative fold a galaxy of writers whose mother tongue it was not, as well as many who had close links with the dialects spoken around the so-called Hindi region. This was the result of an awakening to the need for a common struggle for emancipation—in one case becoming manifest on a wider plane, in the other helping a deliberate progression towards the growth of *Khari boli* as a standard national language.[1]

Gandhi has been mentioned earlier as a guiding force, who inculcated in the minds of educated Indians a sense of destiny. But he did not succeed beyond a point in releasing creative literary forces that could pose meaningful questions regarding the future

[1]This was the continuation of a well-known tradition dating from the beginnings of *Khari boli*. The first non-Hindi poets contributing to the then prevailing devotional literature are Chakradhar (1194-1274) who was born in Gujarat and lived in Maharashtra, and his disciple Umamba who is also one of the first known Marathi poetesses. Some of the better known names in this category are Jnaneshwar, Namdeva, Eknath, and Tukaram from Maharashtra; Guru Nanak and Guru Govind Singh besides other Sikh saints from Punjab; Navasi Bhagat and Dadudayal from Gujarat; and a number of Vaishnava saint-poets from Bengal who composed at least some of their songs in *Braj boli*.

Later in the nineteenth century a number of plays were written by dramatists belonging to different regions. Nadell Purushottam Kavi of Masulipattam wrote in Hindi in the Telugu script.

This tradition was carried further by several prose writers. Sardar Pooransinh, Madhav Rao Sapre, Lakshminarayan Garde, Girijakumar Ghosh, Sidhnath Madhav Agarkar, and Rajendranath Bandopadhyaya are a few names that deserve mention.

Non-Hindi writers of the *Chhayavad* period are comparatively better known. Important among them are Nalini Mohan Sanyal, Schachindra Nath Sanyal, Khsitimohan Sen, and Maturi Satyanarayan.

The tradition continues to this day. It brings to mind some well-known names like Gajanan Madhav Muktibodh, Prabhakar Machwe, Balakrishna Rao, and Manmathnath Gupta from the older generation and several younger contemporaries.

or attempt to answer them. The reason lay not in Gandhi's own limitations, but in the nature of the writer's dual relationship with society. The writer was conscious of belonging to the class that was to wield power in the years to come, but he was also aware that power could not come unless he took part in the general awakening of the masses against his own class. The awareness that the basis of power was bound to change with the end of foreign domination inhibited the writer's pursuit of freedom to explore and experiment in the fields of social reforms, re-evaluation of urban-rural relationships, and emancipation of women. But the international scene changed in a big way about this time. Europe became the battleground for the forces of industrialization, militantly staking their claims over the resources of the world. The Soviet Union and Marxist ideology attracted the minds of some middle-class intellectuals and endowed them with revolutionary fervour. This added to the quest for freedom within but only in a limited sense: the writers' concern for the oppressed had already spread wide and deep under the inspiration of Gandhi's mass movements. Ironically enough, Marxism at the same time appears to have helped provide an easy escape to middle-class writers from confronting the complex reality of the Indian situation. Class struggle—an abstract concept in the contemporary Indian context or at best unconnected episodes in the feudal structure of the unindustrialized society—became a dream on which the writer could focus his concern without immediate fear of disturbing the *status quo* in the elite-dominated socio-political scene.

Could the inward-looking postures of the socially concerned and politically conscious writer holding fort on the eve of independence be ascribed, at least partly, to this development? It is not an easy question. But the fact remains that the writer, with the tradition of opposition to British oppression behind him, had been overtaken by politicians who hurried towards the partition of the country as a means to the fulfilment of their idea of independence, without preparing their cadres for redistribution of power and social action to invest meaning into freedom. The writer stood, as it were, looking inward; torn between complacency and concern, half expecting to be rewarded with some fruits of freedom, half fearing the gods he worshipped. Even to those who were vaguely assured of their social status in free India, power appeared to be an unknown and a somewhat uncertain commodity. Partition of India shocked the

writer, but his position was that of a helpless spectator. He wrote on the aftermath of the partition with passion and sincerity, laying bare the cruelty man had perpetuated on other men in the name of religion.

Developments since Independence

I cannot begin my survey of the main trends in Indian literature in the period after 15 August 1947 without questioning the notion that independence represents just an "event" in history. To subscribe to such a view would be to treat independence as something that is no longer with us and to believe that we are dealing with a shadow it cast on the country in the process of its departure into time. For one thing, independence has not gone away, it has come to stay. All our experiences are born out of our successes and failures in making it meaningful to the people living in a nation independent of foreign rule but striving for their own freedom from exploitation and oppression. A stance taken by some critics and immediately accepted by elitist students of Indian literature is that independence (as a line in a recent poem says) fell upon us like a stone. No one truly concerned with the responsibility that "fell" upon us to end the exploitation of the people by the elite and vested interests aligned with it would say such a thing, especially in poetry, where this cannot be dismissed as casual exaggeration. That such an idea has been expressed in poetry and, what is more, taken seriously as a profound observation is a symptom not so much of the disillusionment of the masses with independence as of the disillusionment of a section of the elite with the ruling class. The same can be said of the expression "post-independence" often inadvertently used to denote the passage of time since 1947. Does the expression not really betray a suspicion that the period in question is devoid of the continuing experience that independence is? The story of what happened in the field of literature in the years following the political transfer of power is in fact a reflection of what was done or not done to widen the frontiers of freedom in the last twenty-five years.

Independence was an event, but freedom was and ought to have been a continuous process. Creativity results from freedom or the quest for it: the ups and downs in the field of creativity in literature over the years following 1947 are fundamentally related to the

difficulties and successes in the restructuring of the system of power in free India.

To the active young writer of the late forties the conflict between his generation and the older one had a positive meaning: it was a source of strength and a challenge at the same time, but rarely did it convert itself into a serious clash of interests or purposes. The older writers sang of the glories of the past, translated or retold stories from the epics, and looked upon the experiments of the newcomers with placid amusement. In a way, the early experimentalists had already determined the shape of things to come before they began attracting followers in increasingly large numbers in the early fifties. This is true at least of the Hindi, Bengali, Marathi, Kannada, Telugu, and Malayalam languages which were responsive in varying degrees to the pressures of modern times.

In a period when official patronage was not considered to be a measure of recognition—in most cases the reverse was more true—the adventure of experiment was a reward in itself. But literature was bound to be officially recognized in a free country. A popular government could not afford to neglect the writer or to adopt a policy of leaving him alone. It would appear, thus, that while India became politically free, literature in independent India gradually surrendered its claim to freedom from association with the Establishment as a necessary condition of existence. Immediately after 1947 we witness the older generation walking into positions of power and prestige—Parliament, the Sahitya Akademi, advisory councils and boards, and in the case of Hindi, in many kinds of translation bureaus and textbook units. Hindi had been assigned, at least nationally, the role of the official language as distinct from its historical role as the cultural lingua franca. Its veterans were found competing with each other in composing songs in the praise of Mother India and the national flag. The younger generation looked on helplessly, somewhat hurt, at this crude display of hollow patriotism. The competitors seemed unaware that the only piece of verse to remain forever the song of the national flag—*jhanda uncha rahe hamara*; let our flag fly high—had been written many years ago by an obscure schoolteacher, Shyamlal "Parshad" of Kanpur, in the early thirties.[2]

[2]Partition of India had far-reaching effects on the social and political life of the people on both sides of the new borders, the two languages most affected by this event being Urdu and Punjabi. Urdu, so far a language spread over a

This is a striking example, perhaps peculiar to Hindi, but a more or less similar coexistence of the traditionalists and the tradition-breakers continued in all such major languages as had seen substantial literary activity before independence. In Malayalam, for instance, Vallathol remained in the field till late after 1947, but apart from him the Malayalam language, rich in classical traditions and endowed with a very large number of literate readers, continued the search for its own idiom with renewed vigour. In Kannada, Bendre and Puttappa were not shocked out of the practice of their kind of spiritual and metaphysical poetry, but they did not also come in the way of the emergence of a number of younger writers deeply concerned with changing social values. Marathi, to take the example of another language through which Sanskrit and the Devnagri script had stronger links with the rest of the country, produced

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number of regions but without a region of its own, acquired a region beyond Indian borders where ironically it was not a spoken language but a political emblem. Unfortunately, Urdu as a literary language, both in Pakistan and India, grew more and more pedantic and verbose in diction, and its literature, full of experimentation just before independence, lapsed into conservatism. But of late, Urdu writing in India has rediscovered its roots in the spoken language of the people and its themes have widened in scope to cover larger social areas. This represents a tendency to outgrowt he defence mechanism which seemed to control the thinking of writers writing in what they regarded as a neglected language. A development of some significance is that the myth that Urdu was the only language of Muslims has been broken. Shani and Badiuzzeman in Hindi, Abdul Malik in Assamiya, Hamid Dalwai in Marathi, and Ghulam Mohammed Sheikh in Gujarati are only a few names of writers who write in languages which are their mother-tongues and these writers are Muslim by religion. It is possible that these may be joined by more younger writers.

In the case of Punjabi a curious political development took place. The Hindus who spoke the language before Partition shied away from recognizing it as their mother tongue. To the bulk of them, recognizing Hindi as their mother tongue became expedient for the sake of political power in post-Partition Punjab and the province was subsequently divided. Punjabi got political support from the Sikhs, and at one stage was almost identified with them. But soon it began to develop a distinctly secular and regional outlook. Today, novelists like Gurdial Singh and Mohan Kahlon are making important contributions in this direction.

Another language which suffered a great blow from Partition was Sindhi. Bombay became the cultural centre for Sindhi-speaking people—they had no region of their own in India. The first few years after independence saw copious writing in Sindhi with strong political undertones. The subjects were taken from the closest realities of life. But perspective was lacking in the initial

a number of writers who did not bother much for the Sanskrit tradition, but serious conflict between generations did not erupt until much later. In Bengali, the picture essentially remained the same except for the fact that Rabindranath Tagore was no longer there to see how his modernist rebel successors were facing a challenge from ultramodernists of a sort.

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years of reconstruction of the language and its culture, perhaps due to a preoccupation with the immediate. After the sixties Sindhi writing began to expand its horizons under the impact of world literature and to a limited extent of modern Hindi writing. A period of experimentation seems to lie ahead of this language with a rich tradition of folklore.

Maithili has now an independent status. Trends in contemporary writing in Maithili follow and mingle with the efforts of the Maithili writers' colleagues in Hindi Nagarjun a—one of the most well-known writers of prose and poetry in Hindi—won an Akademi Award for his work in Maithili. Many young writers are experimenting with the language now and one can look forward to interesting results in the years to come.

Rajasthani, a language confined to historical research work before independence, has a larger area to identify itself within the Hindi region. The force operating behind new experiments in contemporary Rajasthani writing is similar to that in the case of Maithili, i.e., the need to keep up with other Indian literature, notably Hindi. But as in the case of Maithili, the very distinct power and beauty of the language is bound to create something which is new and different.

Indians writing in English have acquired a distinct place in our literature in the last twenty-five years. Rabindranath Tagore or Sarojini Naidu were known to the outside world through their writings or translations in English, sharing their fame with spiritual leaders like Shri Aurobindo. Mulk Raj Anand and Narayan represented modern writing in English, but were not considered important enough in India to be translated into other languages.

After 1947, Indian writing in English has grown both in volume and popularity. Most of it sells outside India though sales are increasing rapidly within the country as a result of functioning as English the language of power. In content, it is slightly more oriented towards satisfying the minds of the western elite than before. The best of such writing has chosen themes, situations, and ideas closely related to the Indian scene but has looked at them from a position of aloofness that the writer is driven to take by the nature of the language he uses The best writers in English, to my mind, are not those who do creative writing but those who deal with knowledge.

Experimentation in Indian writing in English could become more and more futile as the language grows more popular but less powerful in the creative sense. Translation from Indian languages may provide succour to it and possibly some literary excellence too, but these will have to be made for the foreign reader if it is the intention to improve the language.

It would be advisable to pause a while to understand the role and interplay of the Sanskrit, English, and Hindi languages, before proceeding further with an appreciation of the conflict of generations. Literary endeavour in India over the last two and a half decades is closely related to the vicissitudes of language, Sanskrit and English playing two different though sometimes complementary roles in this process. State patronage to languages in free India has gradually acquired an extraordinary role. It seems to create the illusion in the minds of the people belonging to a linguistic region that they are enriching their language through state-aided programmes and purchases when they are in fact denying themselves new realms of experience in their own lives in agreeing to a continuous postponement of their language becoming the official language of their state. The meaning of this is that as they wait for the day when their languages would qualify as state languages, the people in question would have become less and less free to take decisions or have control over decisions taken with regard to their lives. English remains the language of the decision-makers. The number of persons capable of obtaining decision-making positions, therefore, remains limited and grotesquely disproportionate to the people about whom decisions are to be made. This is the situation today in all Indian languages. Only replacement of English with the languages of the states can enable the people to seek new opportunities for creative expression in the various disciplines. But the fifteen-year period that was stipulated for the development of Hindi, before it could become the official language of the Central government, seems to have set the pattern for all the other languages. At the same time, disuse has gradually reduced Hindi to the position of a privileged rival of other languages. The language politicians see Hindi more as a political threat than as a possible living and dynamic binding force today.

The effect of this change of relationship on trends in Indian literature cannot be seen in isolation of the frustrations that have grown within the users of the same languages as a result of the domination of English. The domination of English has become synonymous with the domination of the upper castes over the deprived ones and the revolt against English has taken the easier and more natural form of revolt against the literature of the upper caste Brahmins as in Kannada or of the middle caste Marathas as in Marathi.

In both these areas, a militant outburst is in evidence. The works of younger writers like Lankesh and Kambar (Kannada) and Raja Dhale and Namdeo Dhasal (Marathi) represent a political revolt against everything that is related to Brahmins and other higher castes. The emergence of this trend in two major languages gives one the uneasy feeling that the pattern may be repeated in the case of other languages sooner or later. In Tamil Nadu, where anti-Brahminism has had a longer tradition, the revolt is mainly political and has not taken a literary form. In this context M.C. Ramchandran's films of Cho's plays come to mind as more pertinent illustrations; in the case of Kannada and Marathi the revolt is mainly literary and has the potential of taking on a political form. Yet the break these rebel literary trends denote is in reality a break from Sanskrit and not from English.

English continues to be the principle means to reach world literature and the need for world standards continues to be the best safeguard against revivalism. The young modern writer, however, is not much enamoured of modern writing in English. The last of the English poets to exercise some influence over the Indian writer's struggle for freedom from timelessness were Eliot, Auden, Spender, Hopkins, and Cummings, who brought to the post-1947 Indian mind a sense of participation in war and history.

During the quarter century following 1947, genuine efforts have been made by writers in all languages except English, to come closer to the language of the people. This has naturally taken them further away from the usage and idiom directly derived from Sanskrit. The question that remains unanswered is whether the people have been brought closer to the literature being written for them. In the southern languages the educated middle-class writer has been in search of a folk idiom, in the east he has gone much further ahead in this direction. In the Hindi-Punjabi-Urdu region consisting of nearly half the territory of India, the accent has been on the spoken language. This is supported by writers who look upon Sanskrit as the instrument for the revival of traditional values as well as by those who oppose the isolation of Urdu in its Arabic-Persian ivory tower. The most important and the most constructive effort made by new writing over the last twenty-five years can thus be described as the liberation of language from the lure of sanskritization. There is no doubt that the supremacy of Sanskrit has been successfully challenged through a number of

movements over the last two decades and the hope of that language being restored to its former prestige lies buried in the minds of some backward-looking sections of the privileged classes. At the same time, there is fear in the minds of many younger writers that these purists may join hands with the supporters of English, for both share a hostility to the peoples' languages. Another fear is that with the gradual relegation of the living languages to a subsidiary position, the processes of work and pressure that sustain the growth of a people, might slowly dry up to such an extent that their languages in turn may slow down to zero growth level. In the case of Hindi this decay might be accompanied with pressures from its constituent dialects for official recognition as full-fledged languages with a view to sharing power. The irony then would be that the dialects would begin the futile exercise of drawing upon the standard *Khari boli* for literary excellence.

Kaka Kalelkar, the well-known scholar and associate of Gandhi, narrates a story about Gandhi once asking him to correct his own diction in an article meant for Gandhi's Gujarati periodical *Navjivan*. "Do not say *Kalindi ni koole*, but say *Jamna ni kinare*," he told him, "for you are writing for the satyagrahis." Gandhi's insistence on Hindustani is also well-known. What he was doing for apparently political reasons, a variety of writers did for the sake of their own creative fulfilment both in his time and after. They were not merely using simple language, they were trying to enlarge their freedom by making an affort to see larger portions of reality. They had their opposites too and there were counterparts of these sets in different languages. Premchand, in Hindi, had already revolutionized the novel with his direct knowledge of the people he wrote about. Authenticity of characterization was a creative need for him. He was among the first few to recognize the freedom of the individual as a democratic value. About two decades later, Gopinath Mohanti in Oriya, Birendra Bhattacharya in Assamiya, Jaswant Singh Kanwal in Punjabi, Pendse in Marathi, Pannalal Patel in Gujarati, Ravabahadur in Kannada, Varadarajan in Tamil, Takazhi Shivashankara Pillai in Malayalam, and Phanishwar Nath Renu in Hindi found themselves faced with the same creative need. Identification with the aspirations of the people was a must for them. But the political framework had changed. They thought they could still satisfactorily achieve their indentification through writing about the people. The

people were generally waiting outside the said framework of which the writer himself was a privileged part. The writers of the so-called "regional novels" of this period nevertheless established a major trend in the literature of the fifties. It was a revival of the realism of the thirties in a more hopeful atmosphere. Such writers optimistically believed that they were helping to energize the downtrodden sections of society by writing about them. They were conciliatory in approach and somewhat restrained in their criticism of those in authority.

Another important trend in this period was represented by other contemporaries deeply concerned with the freedom of the individual as a value essential to the growth of an independent nation. Agyeya in Hindi, Adiga in Kannada, Mardhekar in Marathi, and Jivanananda Das in Bengali, can be said to be the leading figures of this genre. Their concern with the personality of the individual was only a reflection of their concern for the values of freedom.

About the same time or a little later, we see some of the important romantics like Sumitranandan Pant and Narendra Sharma in Hindi and progressives like Bendre in Marathi and Sundaram in Gujarati, leaving behind thier compassionate concern for the toiling masses and turning to spiritualism in search of higher values.

One can describe this period as the glorious period of experimentalists trying to rearrange realities in literature in order to be at peace with the world. A rather simplistic explanation for the experimental exuberance of this period would be that Nehru's socialism, which inspired many writers, was experimental. While this may be true in a sense, paradoxically, experimentalism in literature cannot be said to have earned Nehru's pleasure in any sense. Nehru was the centre of much cultural and some pseudo-cultural activity. His brand of socialism generated a humane liberalism. His own personality, towering above those around him, encouraged ideas of different hues to mingle in an atmosphere of vague modernity. Writers expected to be recognized by him and he did give recognition to authors. Nearly all of these were writers who had been connected in some way or the other with the freedom movement of the Congress in the past and had continued writing after independence with renewed hopes of survival. A look at the list of the winners of Sahitya Akademi awards would show that, with rare exceptions, recognition went for many years in succession to writers who had risen above the tensions of the present in their

works and had little use for experiment. The Akademi was established in 1954 and its first awards were given in 1955. The generation most actively concerned with the future was left, in a way, to grapple with reality—without recognition. Not that recognition from the highest quarters would necessarily have proved beneficial to the growth of the young writer, but the lack of it did affect him adversely. He grew up in a hostile atmosphere—a nervous and anxious being, not sure of his voice being heard and appreciated by the institutions of the Establishment. In reaction he soon grew fond of his own voice.

Nehru's invisible influence was at its height between 1950-60. These ten years saw a rise on the expectations of the middle classes, great advances in money-making by the capitalist class, and a general growth of complacency in the ruling political party. The vast multitudes of India, however, still remained silent partners in the country's development. New writing, too self-content and preoccupied with the music of its own voice to comprehend the vastness of the gap between illusion and reality, waited till the nation was given a big jolt in the conflict with China in 1962. Nehru is reported to have said, in a mood of admission, that the nation had so far lived in a dream and that it had now been hurled into modernity.

The fighting did not last long. No writers got the chance to join the army as soldiers, but not many offered themselves either. Some of them passed resolutions against China, others against war in general, and a few others engaged themselves in discussions on the role of the writer in a war. A few even offered to donate part of their royalties to the war fund, but they were not the best-selling ones.

In literature the immediate reaction was a plethora of patriotic songs which had even less feeling in them than the lyrics written in hundreds after Gandhi's assassination. It is interesting to recall how a sob song prepared and produced by the Bombay film industry was reported to have won great acclaim at the hands of high political dignitaries at a public meeting in Delhi. The intention behind mentioning this is not to lament the dearth of martial poetry but to underline the fact that writers, like other elite leaders in various fields, were far removed from the people when the clash with the Chinese took place. The soldier who got mauled in the snows invariably came from a poor peasant or farm labourer's

family, possibly in debt or without land. The writer or even the bulk of the readers did not.

At about this time we see signs of a new awakening in the younger writers of different languages. These were most marked in Bengali where the Hungry Generation movement soon captured the imagination of young readers. It came to be known through translation in the Hindi-speaking region where a number of little magazines and mini movements against what was vaguely described as the "system" were soon to spring up. The accent in the poetry of the Hungry Generation was as political as in the various movements in Hindi and the later movement of *Jujharu* (militant) poetry in Punjabi. But there was also in it a hidden undercurrent of disgust bordering on violence and suggesting a direct confrontation between the poet and the politician, the one blaming the other for not running the country properly and decently. This situation produced its own paradox. When the writer couched his anger in involved and complex language he appeared to be doing so out of fear that he might not lose his status as a modern writer by becoming a slogan monger. When he used direct language his anger sounded so impotent that the Establishment could only have smiled at it benignly.

Parallel movements in Kannada and Marathi are worth mentioning for an essential difference in their character. As distinct from Hindi and Bengali they are led by youth belonging to the oppressed groups and for the first time have provided opportunities for recognition to the scheduled castes in Indian writing. Elsewhere, leaders of anger and dissent still come from high castes and sometimes from affluent sections of society. Their literature of protest represents distrust and distress and seeks to destroy the decaying system, without considering if it could still be salvaged. It is sometimes very personal and obscure, despite simplicity of diction, and usually leaves one depressed.

The generation of young men writing today does not hold itself responsible for how the elders have handled democratic values and institutions in the past, and it feels betrayed by them. But the older generation is still in power and may be willing to share power with younger writers provided they do not insist too much on a reconstruction of the values and institutions now considered to be beyond repair. It would appear, thus, that despite its appearance of being nonconformist, the young literature of protest today carries within itself many possibilities of compromise.

The basis of power in India has not changed radically since

1947. A ruler-ruled relationship continues to be the basis of democratically elected governments. What is more, elitist education and the continued domination of the English language over all means of employment for the educated is concentrated in fewer hands than before. Large masses of people have less hold over the means to work today than before. Consequently their creative genius remains dormant. The picture of humanity as seen by the educated writer is full of great numbers of destitutes, of which he is not one. He often tends to view the human condition in abstractions and his attempts at describing it get bogged down in verbiage. This situation must change radically to enable the writer to play his creative role. It can change in two different ways. First, the writer's position may change. If he belongs to the milieu he is writing about, his sincerity is of a different order and his viewpoint is also authentic. Surely the possibility of more writers coming from the classes so far denied the privilege of education and the right to political power will increase in the coming years. Second, the landless, the unemployed, and the underfed people acquire the status of equal partners in society. They are not merely provided work but are also given back their right to their tools, to the means of production, to the enjoyment of their work, and to pursuits of physical and intellectual pleasure. A writer's field of experience in such situations is bound to expand.

The Future

The future, to my mind, lies in the combined operation of both the methods. The Indian writer today is angry and frustrated not only because of the failure of the programmes of equality and justice in enlarging the areas of human happiness, but also because his own creative experiences of life are limited, and often prove sterile.

In Hindi this is true to a deplorable extent, nearly all young writers being only men of letters with little knowledge or experience of other disciplines or skills. In other languages, where a fifteen-year moratorium did not convert two generations of educated young men into translators of scientific literature instead of making scientists out of them, the situation is perhaps much better and so are the prospects of a more challenging encounter with life for the future writer.

The metropolis has been too much with us in contemporary writing. It often succeeds in creating the illusion of modernity. If modernity can be defined as the rediscovery of the relationship between man and work, control over technology becomes a pre-condition for a meaningful experience of modern life. From this it must follow that the choice of technology in a developing society like ours should be directed to liberating more and more people from slavery and ignorance. It would be interesting to quote here from a letter written to Nehru by Gandhi as far back as 1945. Gandhi wrote, "If India is to attain freedom and through India the world also, then sooner or later the fact must be recognised that people will have to live in villages, not in towns, in huts, not in palaces. I must not fear if the world today is going the wrong way—it may be that India too will go that way—but it is my bounden duty upto my last breath to try to protect India and through that the entire world from such a doom . . . . While I admire modern science it should be refashioned aright . . . my ideal village will contain intelligent human beings. They will not live in dirt and darkness as animals. Men and women will be free and able to hold their own against anyone in the world. There will be neither plague nor cholera nor smallpox. No one will be idle, no one will wallow in luxury. Everyone will have to contribute his quota of manual work. India has enough and can have enough—if some of her sons do not corner the good things and deprive the masses of their dues . . .what I object to is the craze for machinery and not machinery as such. If we could have electricity in every village home I shall not mind villagers plying their implements and tools with electricity."

It was in tacit recognition of the fact that a decade of sophisticated technology had not succeeded in putting electricity in every village home, where man could find work and enjoyment through it, that Nehru said in 1958 ". . . in order to give the individual and the nation a sense of purpose, something to live and if necessary to die for, we have to revive some philosophy of life and give, in the wider sense of the word, spiritual background to our thinking."

One can justifiably draw the conclusion that a spiritual background to thinking could not be improvised or transplanted from the past and that it had to grow from the cumulative experience

of socialistic living. The same can be said of literature. The relationship between language and the life which the artist creates through the use of his medium can become positive only if the planners of economic growth provide for technologies which the people can control to their best advantage.

About one thing we must be clear: literature cannot be expected to transform society on its own strength. This is an illusion under which literature in India has laboured for the last twenty-five years, in the process producing many documentary evidences and reports of the social conditions in the country. It has also struggled to save as best as it could, fundamental democratic values from successive attacks by communal and feudal forces. This function of literature goes on as ever, despite the big obstacle of illiteracy, in independent India.

Literacy must spread far and wide if literature is to continue to play its role as an integrating force in the nation. There is no doubt that within its limited readership, Indian writing in the last two decades has immensely helped the process of national integration. It has helped Indians to know each other. Indeed it has been the only means of doing so. Political parties have become less and less interested in this process over the last decade and a half, but Indian languages have at least retained their mutual communicability. Inter-language translations should be encouraged and translations of Indian writing in English for the consumption of Indian readers positively discouraged if languages are to be allowed to play their historical role in the next twenty-five years.

The present state of illiteracy excludes about seventy per cent of the people from participation in the literary scene as readers and would-be writers. The writer escapes criticism and misses appreciation from the bulk of the people and what is worse, tends to unlearn the use of his medium through lack of communication between himself and the people. He sometimes gives the impression of being engaged in serious literary breakthroughs—old names are given up and new movements, attached to certain groups, are started. It becomes fashionable to belong to one group or the other, while in reality there is very little choice. Is this not the sign of a kind of decadence?

It should be possible to change this picture, or at least attempt to do so, merely by enabling the largest number of persons to read what is being published in cold print. Other mass media are bound

to expand their areas of influence, but it is doubtful if they would ever be able to replace the written word.

One subject about which the artists and the writers have been most sensitive is the state-writer relationship. Experience has shown that the state, the most powerful of the organizations offering help to the writer, tends to ask much more in return from him than a writer is or should be willing to give. It is important for the writer to be able to retain entirely for the benefit of his inner self the required measure of autonomy and independence. The nation's political independence may not appear to be compromised if more and more people within the nation lose theirs, but the freedom of the writer in such a country would still remain the infallible index of its freedom. No one can foresee clearly what struggles the writer is likely to face in future in the preservation and growth of his inner freedom. An indication of their extent already available shows that they will involve an area wider than literature and a community larger than that of mere writers.

CULTURE AND THE ARTS

Amita Malik

With the Second World War barely over and independence very new, the overall picture in the field of culture and the arts around 1947 was generally dichotomous.

On the one hand, the state, in the form of the British government, had extended little patronage to the Indian arts. Public entertainment, therefore, tended to be British-slanted in the official sphere and mainly confined to the urban areas. Concerts, drama, opera, and painting and sculpture to some extent derived their roots, as far as the sophisticated elite were concerned, from the western rulers. Dancing was still considered largely disreputable, although some brave pioneers and the independence movement had given an impetus to the revival of Indian traditions.

Indian culture and the arts, however, were not to be so easily suppressed. Music had enjoyed steady patronage in the temples and monasteries of India. The Indian princes, whatever their other virtues, were appreciative and steady patrons of Indian classical music. Independence, therefore, found various *gharanas* (schools) and their musicians in a remarkable state of preservation. The finer points of musicianship, the subtle variations in different styles, were handed down from generation to generation and nurtured with care. Classical music was a somewhat cloistered art, but it had a large, discriminating connoisseur audience all over the country.

The Indian cinema, just before the war, had reached great heights, with well-established studios run by social-minded producers. Pioneers such as Himansu Rai and Devika Rani had already

started recruiting some of the future top directors and stars, musicians and writers, who are now household words. An air of social purpose and artistic skill stamped most productions. It was the age of New Theatres and Prabhat, and aptly termed the golden age of the Indian cinema. The Government of India's News Parade, run as a war propaganda machine, at least provided a nucleus for the documentary film and newsreel to be revived under new auspices.

Indian classical dancing had remained mostly a temple or courtesan art in the early years of the fight for independence. But, ironically enough, it was the independence movement itself which lent an impetus to the revival of classical ballet, since the freedom movement lent a new stature and importance to women, who were the main exponents of dancing and made dancing respectable. Ballet had been on the rise since the thirties, with brave pioneers such as Uday Shankar, Ram Gopal, Menaka Devi, Ragini Devi, Rukmini Arundale, and Sadhona Bose using classical modes as well as experimenting with modern ballet. By the eve of independence, the pioneering work had already been done. Ballet had got out of the courtesan *devadasi* circuit and it is a tribute to India's new respect for this ancient art that Balasaraswathi was looked on with great respect even in the early thirties.

The early encouragement given to classical dancing by Rabindranath Tagore was another great impetus for its revival. He brought teachers of Kathakali to Santiniketan. Manipuri dancing was also introduced to Indian audiences through Tagore's dance dramas. This Vaishnava-inspired art reached large audiences even outside its natural habitat, Manipur, where it has remained a living art held in high esteem and religious reverence. Uday Shankar's ballet centre in Almora had also drawn a large number of highly educated and talented young Indian boys and girls to learn and practise the art in all its aspects.

Even indigenous theatre had miraculously survived. In Bengal, three commercial theatres had run shows continually from 1857 onwards in Calcutta. In Bombay, a westernized but highly popular dramatic form, known as the Parsee Theatre, drew large audiences right from the start and was later to influence the form and content of Bombay films. If one counts Kathakali as dance drama, it had survived in unsullied form in Kerala.

Painting and sculpture on the other hand had survived under

difficult conditions. Patrons had not been lacking—government-sponsored art schools in Bombay, Lahore, Calcutta, Lucknow, and Madras were turning out a steady nucleus of at least academic artists trained in the basic elements of the fine arts. There were aristocratic as well as wealthy families which bought paintings and sometimes gave young artists opportunities to go abroad for training. But art education had yet to be salvaged from a strange situation where government art schools were under the Department of Industries. Painting was still dominated by the Bengal School, later to be frowned upon as palely aesthetic and derivative. Indian art had to get out of its inhibitions, such as the *guru* tradition, because of which the older generation was considered sacrosanct and above criticism. By independence, Jamini Roy, Abanindranath, Amrita Shergil, and Ram Kinkar had already won wide fame. Rabindranath, later to be recognized as a highly original and modern artist, had made his characteristically colourful entry into the world of painting.

Sculpture, always slower-moving than painting, did not seem to have a parallel motivation during the period preceding independence. The monotonous output of British-inspired equestrian statues, of deadpan emperors and empresses, hardly served as creative inspiration. Even Deviprasad Roy Choudhury, known as a pioneer of the time, seemed Rodin-inspired in his famous Dignity of Labour. Ram Kinkar, a highly individual sculptor, had made a breakaway. And later, Indian sculptors were to find some indigenous influences to turn their thoughts towards more distinction in material and style.

However, the most heartening fact was that India's folk arts had survived in all their pristine glory.

India's population, after all, lives largely in its villages. In the midst of all the political upheavals, the poverty, and the backwardness, it is no exaggeration to state that through all the two hundred years of alien rule, the broad stream of Indian culture and civilization had flowed unsullied, serene, and clear, and with an amazing combination of spiritual strength and functional spirit.

Traditional art forms and styles like the *jatra*, the *yakshagana*, the *bhangra*, the *baul*, and the *bhatiali*, and the spontaneous murals on village huts had sustained the spirit of the poorest of Indians and instilled some happiness into their lives. Handicrafts—whether jewellery, textiles, wood carving, *pat* paintings, *puja* images,

bambooware, rice sifters, temple lamps, cooking vessels, or even the coverings for horses and bullocks—had the stamp of good taste, craftsmanship, artistic skill, and sheer *joie de vivre*. Art permeated sacred as well as secular aspects of life.

This art provided the main roots of the cultural and artistic renaissance which was to follow independence. In this sense, on the eve of freedom India found itself not too battered either artistically or culturally. In fact, it started off on a very good wicket.

Trends in the Last Twenty-five Years

Independence propelled Indian culture and the arts back into an exciting old world of tradition as well as projected it forward into an equally exciting new world of international sophistication and experiment.

The compulsory use of English in education as well as the undoubtedly rich world of English literature and the arts had kept Indian intellectuals in touch with world trends in both. The liberal import of international journals and books, including those published in Britain, and the centuries-old interest of Indian scholars and intellectuals not only in European culture and the arts but also those of neighbouring Asian and Middle Eastern countries, had kept up a constant flow of ideas and maintained a continuing cultural exchange between India and the rest of the world. Some of this dated from long before British rule. India, in fact, was in such a happy position that when the country became independent it did not have to make a fresh beginning to establish cultural and artistic contacts with the rest of the world. They were already there.

The slants naturally changed with freedom. Many of the ancient arts had to be completely rehabilitated. Public appreciation had to be stepped up to keep pace with the renaissance which was in the offing. Independence brought wide opportunities for art fellowships, foreign travel, and exchange of cultural delegations and with it endless room for jumping on political and other bandwagons or keeping one's identity intact. All this had to be given direction as well as impetus, dignity as well as enthusiasm.

Mass media, fortunately, acted throughout as a great spurt to culture and artistic activity.

The Indian Press, immediately after independence, instituted

serious critical columns on the arts. A few dedicated writers, avoiding the more tempting glitter of political writing, devoted themselves to building up special columns which could provide encouragement to cultural activity as well as help to guide the tastes of a new, exuberant public, eager for artistic experience but still confused from losing their roots in folk art in their villages and bewildered by the more raucous and, at times, too sophisticated performances in the cities.

All India Radio, being government-owned, has perhaps not been quite as liberal as it should be in allowing artistic and cultural controversy as the Press. But there is no doubt that it has done much to let one part of the country become aware of what the rest of the country offers in the way of traditional art, and what directions contemporary arts are taking in the regions. In encouraging unity in diversity, its role should not be underestimated. Its national programmes broadcast countrywide hookups of Hindustani and Carnatic music on alternate weeks. For the first time the two great schools have been heard throughout the country. Plays from one region are translated into other languages and broadcast simultaneously. Television, which expanded from education to entertainment towards the late sixties, has brought the arts right into the livingrooms and taken it out to the villages. Its role is still modest, but it has tremendous potential for the future.

Music

Indian society underwent certain changes in the first few years of independence, and of all the arts, Indian classical music was the most affected as far as patronage and audiences were concerned. Indian classical music lost one of its main sources of patronage with the abolition of the princely states. However, another traditional source of patronage down the centuries continued, if in depleted form. The temples and monasteries of India still have their musicians. The famous singer M. S. Subbulakshmi, the nagaswaram player Subramania Pillai, are both musicians at the Tirupati temple in south India. Temple musicians are known as *Devasthana Vidwan* and *Adhina Vidwan* and are honoured with shawls and gold ornaments. Performance by these musicians constitutes a part of ceremonial worship. And yet they are full-fledged public concerts having an air of reverence as well.

But with the coming of independence, democracy, and talk of a socialistic pattern of society, the means of communication as well as audiences underwent a change. Classical music audiences and performances had tended to be somewhat isolationist when they were performed mainly in the presence of aristocrats under princely patronage. When the onus of public performances of classical music in a way passed into the hands of All India Radio, the radio suddenly became a far more impartant forum for the dissemination of music. In the heady days of the first phase of freedom, musicians of the calibre of Ravi Shankar served on the staff of All India Radio. The Indian public, which had kept up its interest in classical music, could now get it right in their homes at the turn of a knob. In cities and towns, music societies—sometimes formed by people from the regions who had come there to earn their living—provided a steady succession of special concerts which were well-organized as well as well-attended, and frequently ran into the small hours.

But urbanization also brings attendant problems. With the spread of radio, record players, tape recorders, and other easy means of access to music, corners were occasionally cut and commercial factors sometimes crept in with corresponding debasing of values. On the other hand, with more travel facilities for musicians, north Indian and Carnatic music now tend to borrow from each other. And while concerts have become shorter for inevitable reasons, such as difficulty of transport or paucity of halls, one cannot deny that *alaps*, while becoming shorter, have lost none of their beauty. Excessive demand sometimes brought in mediocrity, but this has not affected standards to an undue extent.

Indeed, musicians of the older generation are the first to acknowledge that the younger generation of Indian musicians not only have formidable talent, they also belong to a genre, as one eminent musicologist put it, "with quicker minds as well as more brains."

In the younger generation, a mark has already been made by classical musicians such as Jasraj, a classical singer; Latif Ahmed, a tabla player; Suryanarayana, a veena player; Ramani, a flute player; Indranil Bhattacharya, a sitar player; Brij Mohan, a sarod player; and Imtiaz Ali Khan, also a sarod player. These are names picked at random to illustrate the heartening fact that a new

generation of classical musicians is coming up in every part of India.

Side by side with classical music, modern experimental music has also developed with varying degrees of success. Film music is among the most popular forms of music. Indian film music is a mixture of western and Indian music and uses everything possible from orchestration to full concert orchestras in the western style, which mix Indian and foreign instruments. Lyrics are provided by some of the leading Urdu and Hindi poets and some of the well-known Indian musicians set them to music. This is Indian pop music—amusing, entertaining, catchy, and very popular with the masses. It gets All India Radio and Indian television their peak popularity programmes and forms the base for AIR's commercial channel, *Vividh Bharati*.

All India Radio's *Vada Vrinda*, which has attempted to experiment with orchestration of Indian *ragas* and incidental music, however, has not been quite so successful because of the limitations of transferring the tonal niceties of Indian music into regimented form. There is a tendency to either play in unison or to allow individual instruments to take undue priority, neither of which really allows orchestration in the usual sense. Much more successful have been the experiments with incidental music in Indian films, and even more so, with ballet music. Uday Shankar's group was a pioneer in this respect and his associates such as Ravi Shankar. Vishnu Shirale, film musicians such as Anil Biswas and Salil Choudhury, and several others have conducted very interesting experiments in this field.

In this sense, Indian music carries on splendidly both in tradition and in experiment and has much to be proud of.

Ballet

One of the greatest fruits of independence was the recognition of the four main Indian classical schools of ballet as something so rich in tradition, meaning, and grace, that far from being disreputable, it became fashionable for the daughters of the affluent and the intellectual elite to take ballet lessons as part of their upbringing. Several pioneer women dancers from good, educated backgrounds had already taken up this art before freedom. But, equally, there are older women who still say that while they were afraid to take up dancing because of social fear, their daughters do so freely.

Indeed, in Madras there is now a saying that to get a good husband a girl has to dance well, and it is almost part of the dowry.

But from this has arisen a strange problem. Since independence, government patronage of ballet had included a large number of scholarships, lasting two to three years. Hundreds have received and are continuing to receive training with splendid teachers. But while dancers are being churned out by the hundred, panic is setting in; after the third year of training it is realized that there are not nearly enough performance outlets for them to be able to continue dancing as a full-fledged career.

Audiences are also a sad story. Before independence, there was a highly cultivated generation of serious-minded, cultured theatregoers and real connoisseurs of ballet. But the debased, cheap dances of the Indian cinema have made the taste of ballet audiences go down. While those who have made a big name in classical ballet are in great demand and firmly established, it is becoming increasingly difficult for the new generation of younger dancers to make a name precisely because of the lack of outlets, so it all becomes a vicious circle. Because of this, serious-minded dancers often have to go into cabarets or films.

The reverse is the case in foreign countries, where Indian ballet is receiving much greater attention. This started soon after the Second World War, with increased cultural exchange between India and other countries. There is a good response to Indian ballet as the world becomes more familiar with it. Top Indian dancers have found such a gratifying interest abroad that some of them have settled in foreign countries. Others teach and perform regularly while keeping their roots in India. M. Balasaraswathi, our prima ballerina, Birju Maharaj, a top Kathak dancer, and several others give regular performances to crowded halls. Leading dancers such as Indrani Rehman, Shanta Rao, and Sonal Mansingh perform regularly at festivals in Europe.

But on the other hand, highly trained classical dancers, who are also top actresses in films, have come across ironic situations when performing, for instance, for Indian immigrants in foreign countries. Vijayanthimala, Hema Malini, Asha Parekh, and male dancer Gopi Krishan, while setting out on tours with *gurus* and classical musicians and every intention of giving serious recitals, find their film fans demanding popular dances in the film style and some of them have even been booed for performing pure classical dances.

Audience problems have also arisen in what should have been normal outlets, such as universities, where the student community has not always encouraged the sort of intellectual calm required for proper appreciation of ballet.

The economic crisis and petrol shortage has more recently affected ballet and other recitals to the extent that even invitations by card have not tempted people to make the effort to attend a recital which might be at some distance.

Yet, despite everything, ballet continues to be taught, studied, and performed and enjoys widespread interest and appreciation.

The performances of Ram Lila all over north India during the festive season, the village performances of Kathakali, the liveliness of folk dances in rural India, the devotional dances of Manipur, the revival of Odissi, Kuchipudi and other dance forms by dedicated dancers have all kept ballet alive and healthy.

Painting and sculpture

Painting and sculpture, in spite of a few big names, had remained in something of a state of decline before independence, and it took a little time for them to make proper progress afterwards. The eternal argument between the traditionalists and the moderns still continued. While the first were accused of harking back to the past with pale imitations of Ajanta, the second were accused of aping Paris and being un-Indian. However, Indian painting and sculpture are slowly moving towards a synthesis of the traditional Indian and the foreign modern. This is a problem faced by artists in every non-western country which does not have a substitute for Paris. Besides, Indian artists have now reached out for wider horizons.

Young artists fresh from training school are finding a livelihood, by the time they are thirty, in commercial art channels like packaging, printing, illustrations, textile designing, designing of machines, and other functional aspects of art. Meanwhile, from the tourists in search of decorative pieces to famous museums in search of modern Indian art, there has been a spurt in the sales of Indian paintings and some established painters and sculptors now sell their pieces at four, five, and in one spectacular instance, six-figure sums and make a comfortable living from art.

Many Indian artists have found creative expression abroad. Raza won the French Critics' Prize in Paris. Avinash Chandra, Newton Souza, Samant, Bimal Banerji, and S.V. Rao are in the U.S.A.

Krishna Reddy, Raza, and Shakti Burman have settled in Paris. Even more spectacular has been the success of Vishwanathan and Narendra Srivastava, both in their thirties, who have been given studios by the city of Paris; Srivastava for designing a script. Earlier, Paritosh Sen designed a Bengali script in Paris.

Many new slants have crept into Indian art which are now becoming cults abroad. There are fantasy painters, such as Bikash Bhattacharya. In Bengal alone, there are Ganesh Pyne and Jogesh Chaudhuri, and graphic artists Sanat Kar and Somenath Hore. Talented sculptors Sarbari Roy Choudhury and Niranjan Pradhan have also made a name.

Iconoclastic artist Swaminathan has greatly influenced the younger generation, and K.G. Subramanyam and Jyoti Bhatt of Baroda have exercised corresponding influence in their sphere. Other exciting new names are Ghulam Sheikh and Vivan Sundaram who, together with Bhupen Khakar, have set trends in pop art. They keep the contemporary scene very lively.

Tantra has also been a highly successful cult in painting. Ajit Mukherji's collection was exhibited in Europe and created tremendous interest. Artists G.R. Santosh, Biren De, and Haridasan are established names in this genre. At the other end, there is miniature painting, folk art, and other less controversial traditional influences which exist side by side.

The established painters continue to enjoy success, whether it is M.F. Husain with his Indian motifs merging with abstract elements, or Krishen Khanna increasingly given to social satire as during the Bangladesh struggle. Gujral continues with his contribution to civic and other murals.

In Madras the Chola Mandal Group has won renown for itself. It is an artists' village which houses some of our best modern artists. Vasudev of Mysore and several others keep the focus on the south as much as on the east, west, and north. And all the time, there are exhibitions of art, artists travel from one end of the country to exhibit in another. There is the usual healthy controversy accompanying triennales, national exhibitions, and other major occasions. As one moves around India, one sees more of modern murals, tiled walls, civic sculpture, decorative art for public buildings, trade fairs, cinema and hotel foyers, and fountains with a distinctive touch. There is certainly a boom in art.

The position in the field of sculpture, however, has been

nowhere near as happy because there was no creative movement parallel to that in painting. Ram Kinkar had ploughed a lonely furrow at Santiniketan, but he shone in solitary splendour. To Baroda University goes the credit for giving a stimulus to sculpture. Its experiment was backed by thinking and analysis. Now there are twelve Indian universities, with departments and three or four with faculties of fine arts, which lay stress on sculpture as well as painting. In earlier times, sculpture in India enjoyed religious patronage. But as in the British times, post-independence India also saw our city fathers commissioning dull statues of leaders, inspired mostly by photographs. In recent years some industrial houses have started commissioning sculpture. The late Homi J. Bhabha and the Tata Institute of Fundamental Research were pioneers in collecting Indian art, including sculpture. Indian sculptors such as Amarnath Sehgal have also found success abroad.

But the problems of sculpture are many. The cost of production, the space involved, and the comparatively limited sales do not make it a profitable vocation. The demand for sculpture is low and there are very few side jobs for sculptors, apart from teaching. There are, in fact, no clear channels for sculpture to be absorbed by society.

All this has led to limited experimentation. Brave pioneers such as Prodosh Dasgupta, Sankho Choudhury, Dhanraj Bhagat, Chintamoni Kar, and Premoja Chaudhuri stood almost alone on the earlier sculpture scene, and their successors are few.

Indian sculpture, notwithstanding Kaushik and the others, still moves in limited grooves. In spite of variations in materials and style, it remains small in dimension and comparatively conservative, and hardly anything has come forth on a monumental scale worthy of a great nation. Due to lack of technological advance in method, Indian sculpture is still largely handicrafted rather than machine-made and that also limits its scope.

That some sculptors have made a breakthrough at all seems therefore an achievement. But it is not enough.

Theatre

Considering its formidable classical roots the Indian theatre, in the matter of involvement with contemporary life, existed only in embryo form at the time of independence. Indeed, one of the main

criticisms against the theatre (except for the honourable exceptions of the commercial theatres which were carrying on to the best of their ability in some regions) was that it either lived in a cocoon, with amateur dramatics of the most snobbish westernized intellectual level, or lived lustily and vulgarly with whatever was the local form of the debased *tamasha*. Tagore, of course, had carried on with his dance dramas, but at the time of independence they were almost entirely urban-patronized.

The embryo consisted in the almost lone efforts of the Indian People's Theatre Association, a leftist body which sprang to life when Russia entered the fray during the Second World War. Eminent artistes such as Balraj Sahni, Shombhu Mitra, and his wife Tripti Bhaduri were members, as were several eminent writers, poets, musicians, and dancers IPTA, as it was popularly known, evolved a contemporary genre which extended also to ballet, film, (K.A. Abbas's *Dharti ke Lal*, which was about the Bengal femine), song (Suchitra Mitra), and most important of all, theatre.

Another lone effort was that of Prithviraj Kapoor, whose Prithvi Theatres, the first repertory company of its kind in free India, travelled the length and breadth of the land. Its plays dealt with down-to-earth problems such as communal bitterness, the turmoil of Partition, and refugees. It set a most admirable example in the establishment of a socially involved popular theatre. As in the case of IPTA, and in some cases with the active cooperation of former members, what can be described as a genuine people's theatre soon started evolving slowly in some parts of India.

Shombhu Mitra, Utpal Dutt, and a host of others in Bengal, P.L. Deshpande and later Satyadev Dubey and Vijay Tendulkar in Bombay, B.V. Karanth and Girish Karnad in Karnataka, Habib Tanvir and Mohan Rakesh in Delhi, G. Shankara Pillai and others in Kerala, gave new meaning and new dimensions to modern Indian theatre.

With the setting up of the National School of Drama in Delhi, and the dedicated efforts of Alkazi and his students, a new generation of young people trained in various branches of the theatre arts started appearing on the Indian theatre scene. There was a good deal of theatre exchange with foreign countries and international experts. We have had an Indian play in Kabuki style, Bertolt Brecht in Hindi, experimental plays by Indian playwrights

employing traditional techniques such as those of the *jatra* and *yakshagana*, and indeed, one suddenly found interesting and exciting plays being avidly performed and discussed.

Curiously enough, except for some playwrights such as Badal Sircar, who professedly aim at modern, middle-class, and sophisticated urban audiences, the other contemporary playwrights and directors, as well as artists, have gone back to traditional In dian theatre styles, from folk theatre to classical, for inspiration. Thus Utpal Dutt experimented with the *jatra* form of Bengal with his ultra-left Marxist plays, as did a host of others especially during the height of the Naxalite movement in Bengal. Kerala has been inspired by the Kudiyattam and Koothu traditions, B.V. Karanth uses *yaksha gana* techniques, Habib Tanvir uses the folk *nautanki*, as does Dina Gandhi. Vijay Tendulkar writes plays based on the Marathi *tamasha*, and, as Girish Karnad has said, it is because the values followed by the urban middle classes do not differ much from those of villagers that most urban folk have artistic roots in the village. This is why the plays towards the end of the period under review could be taken outside Calcutta or Bombay or Bangalore or Delhi, and were equally appreciated by people in small towns and villages. As long as the roots remain traditionally Indian, there is nothing to fear.

But, having struggled back to some sort of direction, the Indian theatre still has a long way to go in practical terms. It is still impossible for theatre enthusiasts to find plays running regularly, as in other countries which have a living theatre. There is a dreadful paucity of theatres in which to perform, particularly in north and south India. The east and west have done comparatively better. The colossal waste of the various Rabindra theatres built all over India at much expense and with grandiose sentiments at the time of Tagore's centenary is a sign of bad planning.

The new medium, television, is still woefully lacking in anything approaching real television theatre. Ironically, the many products of the National School of Drama, some of them of great talent, find it difficult to earn a living through active theatre. Their training and the enormous public funds spent on them have not shown corresponding returns as far as the vast potential theatre audiences of India are concerned.

Perhaps the biggest lacuna on the Indian theatre scene is good playwrights with original plays on contemporary themes. Too

much stress is still placed on adaptations of foreign plays, sometimes using foreign techniques unsuitable for Indian plays. While in some regions, such as Bengal and Kerala, playwrights double as novelists and writers for stage and screen, there are not nearly enough of them in other parts of India to keep productions going on anything like a regular level. The involvement of theatre, particularly in Bengal, with very immediate politics sometimes makes it of passing interest and attractive only to audiences of a particular political bent. In the process, satires on contemporary life and problems have not always made the impact they could and should in a developing country. Indian theatre still has to find its grass roots.

Films

Curiously enough, the worst sufferer from independence in terms of quality was the Indian cinema.

At its peak, just before the Second World War, it was the war itself that caused it to lose in quality what it won in quantity of a most doubtful kind. The immediate post-war years saw the influx of a large number of war profiteers who looked on films as an easy investment with quick returns. Some of the worst features of the Bombay film derive from the decline of the established studios and the introduction of freelancing in every sphere. Stars were no longer the disciplined artistes of the studio days and their fabulous fees were no indication of their talent or acting skill. The new phenomenon of playback singers, whose frequent songs were dubbed on to the lips of the stars of the moment, replaced the famous singing stars of the thirties and early forties. The chaotic plots, with everything from villains and night clubs to comic episodes and numerous songs and dances thrown in for good measure, transposed the cinema into the worst type of escapist mass entertainment.

It was not so much the ingredients that were un-Indian. After all, classical Sanskrit drama also had songs and dances and comic episodes. It was the reckless way in which they were used. As what was known as the box office formula for instant success came in, quality went out by the front door, and everything in Indian films seemed a negation of Indian values. A slump became inevitable, and it came in the early fifties with resulting panic and gloom.

But out of the ashes emerged a more responsible cinema, conscious of the fact that it had responsibilities. India's first international film festival after independence, held in 1952, brought us the masterpieces of de Sica, Rossellini, Rene Clair, Kurosawa, and other exciting new names from abroad. It had an immediate leavening, as well as sobering effect on Indian films. Bombay and Madras remained largely entertainment-orientated, but together with this, serious film-makers appeared on the scene, such as Bimal Roy, K.A. Abbas, fresh from IPTA, and Guru Dutt, with other younger directors followed. Some of the finest Hindi and Urdu writers settled in Bombay to write for films and evolved a communicative new language for dialogue which is the nearest India has got to a truly national language which remains non-controversial because it is so Indian. Even Bombay film music evolved a style of its own, with bold experiments in incidental music and film songs which are pop not only in India but in almost every continent. All this made films of the popular variety India's newest folk art, and, of course, they remain the largest medium of mass entertainment in India.

However, there is a healthy dichotomy in the Indian cinema which is all to the good. The regions richer in culture, talent, literature, artistic traditions, and with literary activity flourishing in every sphere, from theatre to poetry, are inevitably poorer in funds. But because of this very reason, film-making has remained a challenge. Regional films cater to local mass audiences, but they also draw the educated bourgeoisie of the type which patronise the theatre. Some of the regional cinemas found an inbuilt audience because of their tradition in theatre. While Bombay and Madras lead in resources, including colour and all the modern technical gadgets, film-makeis in Bengal, Karnataka, and Kerala, for instance, have made noteworthy films of international quality within their limited resources. Their social content, their sensitive direction, their restrained acting, their inherent dignity and worth have enabled regional films to win national awards as well as put India on the international film map. Satyajit Ray, of course, is now a household word everywhere. Others of his generation continue to keep the flag flying.

But even more heartening is the emergence of a new generation of film-makers as well as artists who are willing to experiment

and are able to do so because of increased opportunities for film training as well as film-making.

The setting up of the Film Institute in Poona encouraged a steady output of trained film personnel with fresh ideas and a professional attitude. The Film Finance Corporation, with a limited budget but anxious to encourage new talent, at last provided a reliable and responsible source for funds at reasonable rates of interest for film-makers who were young and experimental, or older directors who wanted to try out something different outside the commercial orbit.

As a result, a whole new generation is emerging on the Indian film scene. The focus has shifted to the south, with some of the top national awards going to films from Karnataka and Kerala. They coexist with the glossy products of Bombay and Madras.

Indeed, with all its faults, the Bombay film, as compared with the films of sex and violence of the west, has remained largely innocent as well as harmless. At least it did not kill anybody and has provided entertainment for those who need it most. As long as serious films continue to be made, the dichotomous nature of the Indian cinema is its greatest strength.

India also remains one of the most steady producers of short films Newsreels and documentaries continue to be compulsory viewing with each feature film at a cinema. While this may sound high-handed, it has at least ensured the growth of documentary-consciousness in India. The average product of the Films Division might be uninspiring, but some highly interesting experimental films have been government-sponsored. *Through the Eyes of a Painter*, by M.F. Husain, which won the Golden Bear at Berlin, and India's first at this festival, was sponsored by the Films Division, which also includes outstanding film-makers on its rolls.

Above all, Indian films are very popular in foreign countries, and film songs enjoy very high ratings in the External Service of All India Radio and on foreign networks. Many other countries, such as Egypt and Algeria, show Indian films on a weekly basis on television. In that sense, India's cinema has won international prestige with its best products as well as a fund of goodwill on the popular plane.

At the time of writing, India's film industry is the largest in the world. And it offers a variety as well as scope, which are its most enviable assets.

Projection for Future

The main conclusion at which one arrives in the course of an assessment of the Indian cultural and artistic scene, during the past twenty-five years and up to the present, is that the original intellectual dichotomy has been to a great extent smoothened out on the post-independence scene. But it still lingers in various fields.

Indian culture has survived down the centuries but it has always remained open to ideas from outside, as well as exported its intellectual nuances and its civilized values far and wide. This has entailed a certain hybridism in its national life and culture which is inevitable as long as India keeps its cultural doors wide open.

What has to be decided now for the future is to what extent it should allow its own identity to get swamped by outside influences.

Do we produce Brecht in Urdu, a Hindi play in the Kabuki style, and *Ho Chi Minh* and *Hitler* in the *jatra* style because of our catholicism or because our own playwrights and directors have not produced anything correspondingly great or distinct at home? Do we stage the latest West End success in English in mixed Indian accents and *Oliver* with public school children because we have not yet cut the umbilical cord with the British? Or is it because we have not yet found themes and a modern genre of our own?

While admittedly there has been much progress in production training and playwriting, whether for the stage or screen, the influence of Antonioni and Bresson or Brecht and Lorca persists. Where are our own Brechts and Bressons to influence the new generation and those of the future? While Husain and Tagore remain Indian to the core, can one deny the influence of Picasso? Is there any country in the world which has not felt the impact of Picasso?

While the export of the sitar and Ravi Shankar and his influence on the Beatles is admirable, Bombay film music still borrows heavily from the west. So the scales are even. But Bombay pop is also one of our most popular export to the neighbouring countries, as is the Bombay film. So what values are we to hold dear?

Looking to the future, one envisages India's place in a world which might be getting more politically confused every day, but where a certain universality in culture and the arts is becoming

increasingly evident. Mass media, particularly television, have made the world a much smaller cultural planet. Where the Beatles, Ravi Shankar, and Bob Dylan collaborate in a concert for Bangladesh and the film and LP of the concert find millions clamouring for more all over the world, a fine line cannot be drawn between Indian music and foreign, or between audiences in developed countries or developing countries.

But there are propitious signs that the more modern and experimental arts, such as painting and cinema, will find in the next decade, an Indian identity which will be modern Indian and not modern universal. Just as the traditional arts, whether classical or folk, will not only be preserved with care but will remain purely Indian.

India's cultural and artistic resilience remains its main strength and often the envy of the rest of the world.

PUBLIC HEALTH AND POPULATION CONTROL

D. Banerji

In the course of the two hundred years of colonial rule, almost every facet of Indian life was subordinated to the commercial, political, and administrative interests of the ruling power. The country was backward in the field of agriculture and industry. Society was divided into a thin upper crust of highly privileged persons at one extreme and a huge mass of the deprived and the degraded at the other. India was a desperately poor country. The majority of its people had to undergo intense hardships; they suffered from hunger and malnutrition; half the children born died before the mother completed her childbearing period, to most of the people clothing was a luxury, their dilapidated huts had surroundings which were grossly insanitary; and more than nine-tenths of them were illiterate.

Disease literally thrived under such conditions (Government of India 1946 b: 1-5). The expectation of life at birth was 26.9 years for males and 26.5 years for females. Nearly half the total number of deaths were among children under ten years, and in this age group half the mortality took place within the first year of life. Out of every thousand children born alive, 162 died before they could complete one year. As many as twenty mothers lost their lives for every thousand live births. Hunger and malnutrition and a variety of communicable diseases were some other major causes of death in the country. Malaria, the most predominant of the communicable diseases, accounted for an estimated 100 million cases every year, out of which one million died. Tuberculosis, cholera, smallpox, enteric fevers, dysenteries, tetanus, and

diphtheria also took a heavy toll of life. Millions became blind due to trachoma, conjunctivitis, and smallpox; many more were crippled or debilitated because of the wide prevalence of leprosy, filaria, worm infestations, and venereal diseases.

It is significant that even at that time sufficient professional knowledge was available to deal with most of the major health problems of the country. It only needed appropriate social action to extend the benefits of that knowledge to the suffering masses of the country. Thus, the problem of providing health services to the people of India was mainly political, economic, and social, and only marginally technological.

The health services system of India at the time of independence projected the political, economic, and social values of the colonial rulers. Medical services were needed to support the British army and British administrators living in India. Later on, medical services were made available to the native gentry which constituted a tiny section of the total population. Only a small fraction of rural and urban masses could get some form of medical care from the limited number of hospitals and dispensaries run by government agencies, missionaries, philanthropic institutions, and private practitioners. Public health services were provided to them only when there were massive outbreaks of epidemic diseases such as plague, cholera, and smallpox (Government of India 1946 a: 35-49). Personnel of the Indian Medical Service of the British Indian army played a key role in framing this colonial pattern of health services system of India.

The colonial character of the health services also influenced almost all aspects of medical education in India. It was instrumental in shaping the institutions, in developing the course content, and perhaps most important of all in shaping the value system and the social outlook of Indian physicians. The first medical college in India was established in 1835. It was quite natural that British teachers should have nurtured such institutions in their infancy. However, along with the "scientific core" of medical sciences (which was a most welcome diffusion of a cultural innovation from the western world), there came certain political, social, and cultural overtones which were definitely against the wider interests of the country (Banerji 1973 a: 485-88). Opportunities for medical education in these institutions were made available only to the privileged upper class of society. The Medical Council of India accepted

the British norms of medical education in order to gain recognition for Indian medical degrees from the General Medical Council of Great Britain. This enabled some physicians, "the select among the telect," to go to Great Britain higher medical education. Acquiring fellowships or memberships of the various royal colleges was generally considered the pinnacle of achievement in their respective fields. Free India continues to carry much of the burden of this colonial heritage.

Developments after Independence

Paradoxically, the policy frame for the health services of independent India was provided by the report of a committee set up by the British Indian Government in 1943, in the wake of the Constitution of the famous Beveridge Committee in Great Britain (Government of India 1946 b). This committee was asked to draw a blueprint of health services for post-war British India. British and native health administrators and public men of the colonial period were members of this committee and Sir Joseph Bhore was its chairman. The committee took enormous pains to collect relevant data available at that time and used it to make a remarkably insightful analysis of the health situation in the country. The committee showed exceptional foresight and courage in making some bold and forthright recommendations. Its report was published in 1946.

The guiding principles underlying the committee's recommendations were (Government of India 1946 b: 5-6):

1. No individual should fail to secure adequate medical care because of inability to pay for it;
2. Health programmes must, from the beginning, lay special emphasis on preventive work; and
3. The need is urgent for providing as much medical relief and preventive care as possible to the vast rural population of the country because they "receive medical attention of the most meagre description although they pay the heaviest toll when famine and pestilence sweeps through the land."

The committee insisted that the doctor of the future should be a "social physician protecting the people and guiding them to a

healthier and happier life" (Government of India 1946 b: 6). Such a doctor should place prevention of disease in the forefront of his programme and should so combine remedial and preventive measures as to confer the maximum benefit on the community.

The committee made two types of recommendations: one was a comprehensive blueprint for the somewhat distant future covering a span of twenty to forty years, and the other was a short term scheme covering two five-year periods. Rural India was the focal point of the recommendations (Government of India 1946 a: 4).

In the long term plan (Government of India 1946 a: 17-34), the smallest unit was a primary health unit, serving a population of ten to twenty thousand. Some fifteen to twenty-five of the primary units were to constitute a secondary health unit, and about three to five of the latter were to form the district health organization serving a population of about three million. A health centre was to be established at the headquarters of the district: secondary and primary units, from which different types of health activities were to radiate into the territory covered by each type of unit, were to be linked to it. Also, a district health centre was planned to have general and special hospitals with a total bed strength of about 2,500. Similarly, there was a provision for 650 beds at the secondary health centre and seventy-five beds at the primary health centre.

Over and above three physicians, twenty nurses, and thirty-one other personnel who were to be engaged in hospital work, each primary health unit was to have three physicians, six public health nurses, six midwives, two sanitary inspectors, two health assistants, one fitter mistry, and ten "inferior servants" for community health work for a population of 10,000 to 20,000. In addition, the committee recommended staff and resources for special services to deal with the more important diseases prevalent in India such as malaria, tuberculosis, venereal diseases, leprosy, and mental diseases.

To provide referral hospital facilities and logistic and supervisory support to the primary health units, the committee recommended adequate staff at the secondary and district health centres.

Taking note of the insufficiency of funds and trained personnel, the committee also suggested short term (ten year) proposals (Government of India 1946 a: 35-68), which were considered to be the "irreducible minimum if tangible results are to be achieved"

(Government of India 1946 b: 11). As a short-term measure, a primary health unit was to cover a population of 40,000 instead of 10,000 to 20,000 and it was to have a staff of two medical officers, five public health nurses, four midwives, four trained *dais*, two sanitary inspectors, two health assistants, two clerks, one mistry, one pharmacist, and fifteen "inferior servants." There were to be four beds—two for maternity and two for emergency. By the end of the stipulated ten-year period a thirty-bed hospital was to be made available for every two PHUs and a secondary health centre was to have five hundred beds. No district health centre was visualized in this short term plan.

To forestall any criticism of the recommendations on grounds of practicability, the Bhore Committee pointed out the spectacular achievements in health in the Soviet Union within a span of twenty-eight years (1913-1941) and asserted that its recommendations were quite practical, in fact relatively modest, provided there was the will to develop the health services of the country (Government of India 1946 a: 10).

Soon after taking office in 1946, the interim Government of India accepted the recommendations of the Bhore Committee (Borker 1961: xvii). Enunciating the health policy of independent India at the first conference of the provincial health ministers held in 1946 (Borker 1961: 19), Jawaharlal Nehru observed that in the past little attention was paid to health which was the "foundation of all things." He asserted that economy in this sphere might mean greater expense in the long run and that "the health of the villagers required special attention as the country derived its vitality from that and hence benefits of health must be extended to the whole countryside." Provision of health services to the entire population became one of the planks of the directive principles of state policy in the Constitution of India. The aim, according to Nehru, was to develop a "National Health Scheme which would supply free treatment and advice to all those who require it" (Borker 1961: xi).

The outlays on health in the five-year plans did not, however, fully conform to the policy frame of the government. The Health Survey and Planning Committee (Mudaliar Committee), which was set up in 1959 to review the developments that had taken place since the publication of the report of the Bhore Committee and formulate health programmes for the third and subsequent five-

year plan periods, formally admitted (Government of India 1961) that the idealism of the Bhore Committee (and, by implication, of Prime Minister Nehru) was "unrealistic" and it commended that "pragmatism" of the health programmes of the government of independent India. In effect, it endorsed the then prevailing approach of the government which involved expansion of a medical education system which was urban and curative in its orientation, expansion of city-based hospitals, and continuation of specialized mass campaigns against major communicable diseases at time when only a portion of the population was covered by primary health centres. The Mudaliar Committee also recommended consolidation rather than expansion of the primary health centre complex (Government of India 1961).

Following these trends, hospitals and primary health centres, medical education and research, control of communicable diseases, family planning, water supply, and environmental sanitation formed the main heads for determining plan outlays. There has been a sustained increase in outlays on hospitals and primary health centres and on medical education during 1947-1974. Massive investments were made in the First, Second, and Third Plans for the control and/or eradication of malaria. However, contrary to expectations, it has continued to corner the bulk of the outlay on communicable diseases during the annual plans of 1963, 1964, and 1965 and in the Fourth and Fifth Plans. The increase in outlay on family planning has been even much more spectacular: it went up from Rs 7 million in the First, to Rs 30 million in the Second, to Rs 270 million in the Third, to Rs 3,150 million in the Fourth Plan. Compared to this, the outlay for all health programmes for the Fourth Plan was a meagre Rs 4,350 million (Government of India 1973 a: 20). Outlay for water supply and sanitation shot up from Rs 490 million in the First to Rs 4,070 million in the Fourth Plan (Government of India 1973 a: 20).

Professional Education

A major part of the investment in health went towards establishing new medical colleges and specialized hospitals attached to them. It is significant that when the country had only about 18,000 graduate physicians and about 30,000 licenciate physicians (Government of India 1946 a: 35), one of the first major decisions of the popular

Government of India in the field of health was to abolish the three year post matriculation licenciate course in medicine (Government of India 1961: 313). While recognizing "the great lack of doctors," a majority of the members of the Bhore Committee, probably "strongly influenced by the recommendations of the Good-enough Committee in the United Kingdom" (Government of India 1946 a: 340), asserted that resources may be concentrated "on the production of only one and that the most highly trained doctor" (Government of India 1946 a: 349).

The Medical Council of India also issued repeated warnings against reviving the licenciate course. The Mudaliar Committee emphatically rejected the idea of reviving such a short term course because they were "convinced that the proper development of the country in the field of health must be on the lines of what we consider as the minimum qualification for basic doctor" (Government of India 1946 a: 349). It went on to state:

> India is no longer isolated and is participating in all problems of international health. The WHO has laid down certain minimum standards of qualifications. In view of India being an active member, participating in all public health measures on an international basis, we think it will be unfortunate if at this stage once more the revival of a short term medical course is to be accepted (Government of India 1946 a: 349).

The concern was thus to conform to the so-called international standards. Considering the complex issues involved in setting up medical colleges, progress has been truly phenomonal (Government of India 1973 a: 20). In 1946 there were only fifteen medical colleges. The number rose to forty-two in 1956-57, to fifty-seven in 1961, to eighty-seven in 1966, and went up to 103 in 1974. The admission capacity shot up from 1,200 in 1946 to 13,000 in 1974. The total number of physicians increased from 18,000 graduates and 30,000 licenciates in 1946 to 137,000 graduates in 1974. To meet the growing need of teachers for medical colleges and specialists for various hospitals, four institutions were specifically established to impart postgraduate medical education to physicians. In addition, there are seventy-five other institutions which also provide facilities for postgraduate medical education (Government of India 1974 a: 176-84).

There was also a considerable increase in the number of other health functionaries. As against 7,500 nurses in 1946, there were about 88,000 nurses in 1974; during the corresponding period the number of auxiliary nurse midwives went up from 5,000 to 54,000 and that of sanitary inspectors from 4,000 to 32,600 (Government of India 1973 a: 20). It is, however, significant that against the desirable nurse-doctor ratio of 3:1, the existing ratio remains 3:5. The shortfall is even greater in the case of auxiliary nurse midwives.

Along with the proliferation of expensive teaching hospitals for medical colleges, each having a number of specialities and super specialities, a number of general hospitals were established in urban areas. The number of hospital beds shot up from 113,000 in 1946 (Government of India 1961: 72) to the present figure of 330,000 (Government of India 1973 a: 72). The development of medical colleges, teaching hospitals, and other hospitals and medical care facilities has accounted for a large proportion of the investment for health services in the country's five-year plans (Government of India 1961: 76, 1973 a: 18). The recurring cost for these institutions account for over three-fourths of the annual budget of a state (Raina 1963: 5).

Control of communicable diseases

Malaria. After some pilot projects, a National Malaria Control Programme was launched in 1953 with the help of the United States Technical Co-operation Mission, the World Health Organization, and the United Nations International Children's Emergency Fund (UNICEF) to cover all the malarious areas of the country which involved a population of 165 million (Borker 1961: 111). It achieved a phenomenal success; for instance, the number of malaria cases for every hundred persons visiting hospitals or dispensaries declined from 10.2 per cent in 1953-1954 to 4.0 per cent in 1958-1959 (Borker 1961: 112). This success emboldened the administrators to think in terms of totally eradicating the disease from the country. The danger of the mosquitoes developing resistance to DDT, the main weapon for malaria control, was put forth as an additional reason for embarking on the eradication programme. Besides, pressure was also put on India by foreign consultants from WHO and elsewhere to launch the eradication programme as it

was to become a part of the global strategy propounded by the WHO (Borker 1961: 1).

It was also stated, perhaps to provide economic justification for the decision, that while the control programme was estimated to cost about Rs 270 million in the Second Plan and Rs 350 million during the Third Plan, and was thereafter to continue to remain a heavy item of expenditure, "the cost for the eradication programme was estimated to be Rs 430 million in the last three years of the Second Plan and Rs 580 million for the entire Third Plan with the annual expenditure becoming negligible thereafter" (Government of India 1973 b: 113). The National Malaria Eradication Programme (NMEP) was implemented in four phases : preperatory phase, attack phase, consolidation phase, and maintenance phase. The immediate successes of the NMEP were spectacular. However, a disastrous snag developed in implementing the maintenance phase of the programme (Government of India 1973 b: 4-6). It turned out that among other factors, because of the preoccupation of the administrators with specialized mass campaigns against malaria and other communicable diseases, they had not paid adequate attention to building a permanent health service system—the so-called health infrastructure—strong enough to carry on the malaria surveillance work effectively at the village level. This has been responsible for a series of setbacks to the National Malaria Eradication Programme, resulting in the reversion, at a very considerable cost, of large segments of the maintenance phase population on to the consolidation or attack phases. Instead of getting rid of malaria once and for all by 1966, as it was envisaged in the late fifties, forty per cent of the population is still to reach the maintenance phase (Government of India 1973 b: 10). The National Malaria Eradication Programme, thus, continues to drain huge quantities of scarce resources even today making it more difficult to develop the health services infrastructure.

During the last four years, for instance, less than three per cent of the additional populaton (9.4 units) has entered the maintenance phase (Government of India 1973 b: 5). Meanwhile the country is forced to set aside very large quantities of its scarce resources to prevent the programme from sliding still further.

Smallpox. The National Smallpox Eradication Programme (NSEP) was launched in 1962-63 (Government of India 1973 b: 31-8). Prior to that, some patchy smallpox vaccination work used

to be carried out by vaccinators employed by local bodies and other agencies. The NSEP envisaged deployment of an army of over twenty-five thousand vaccinators (with its own supervisory hierarchy) exclusively to undertake the task of vaccinating the entire population of the country within three years. Unfortunately, adequate coverage could not be achieved and smallpox epidemics continued to be reported from different parts of the country. Further "strengthening" of the staff at the PHC and district levels during the subsequent ten years also failed to yield the desired results (Government of India 1973 b: 33).

Because of these repeated failures to deal with the problem, India earned the unenviable distinction of being one of the very few countries which posed a threat of smallpox to the rest of the world. The World Health Organization, therefore, offered much more generous help in men and material to persuade the Government of India to launch in 1973 yet another specialized mass campaign to eradicate the disease. This campaign consisted of strict surveillance-cum-containment and intensive primary vaccination. Particular attention was given in this programme to the states of Uttar Pradesh, Bihar, Madhya Pradesh, and West Bengal, which accounted for ninety per cent of the cases reported in the country (Government of India 1973 b: 33). There have been serious setbacks even in this campaign. There was a major outbreak of the disease in West Bengal, with the city of Calcutta itself being one of the principal foci. That state alone reported 10,960 cases and 2,036 deaths between 1 January and 21 September 1974 (Government of India 1974 b). A more devastating epidemic was reported from Bihar which accounted for 121,039 cases and 21,012 deaths (Government of India 1975 b) within the same period. Experts, however, contend that despite these serious setbacks smallpox will be eradicated from India by 1979.

Leprosy. There are no reliable epidemiological data concerning leprosy as a community health problem in India. The latest estimate is that in an endemic population of 372 million there are 3.1 million leprosy cases—twenty-five per cent of whom are infectious—and thirty per cent of all cases suffer from various degrees of deformities (Government of India 1973 b: 69-81). Under the National Leprosy Control Programme, thirty-one and one hundred and three specialized subsidiary leprosy centres were set up during the First and the Second Plans respectively. The programme was

reorganized during the Third Plan. For the high endemic population (0.5 to 1 per cent prevalence) leprosy subsidiary units were upgraded to leprosy control units. Survey, education, and treatment (SET) units were established for populations with moderate endemicity (0.5 to 0.1 per cent prevalence). A leprosy control unit had, among others, one medical officer, two supervisors, and twenty paramedical workers to provide special leprosy services to a population of three hundred thousand (Government of India 1959: 16). A SET unit, having one paramedical worker to serve a population of twenty thousand, is attached to various rural health institutions (Government of India 1969: 15-6).

Till the end of 1972-73, 238 leprosy control units and 1,480 SET units had been established to cover 92.2 million of the endemic population from which 1.08 million cases have been recorded (Banerji 1971 a: 72). Thus, even within the endemic population, 276 million persons harbouring 2.02 million cases of leprosy control remain to be covered by the National Leprosy Control Programme (Government of India 1973 b: 72).

Filaria. Even twenty-five years after independence, the problem of filariasis remains to be delimited. A survey has not been completed in 115 out of the 260 districts in which filaria is endemic (Government of India 1973 b: 95). At the end of the Fourth Plan, 136 control units, twelve headquarters bureaux, and three research-cum-training centres were functioning to provide protection to about 15 million out of the 136 million persons who are exposed to the risk of filariasis in the 125 endemic districts which have been surveyed so far (Government of India 1973 b: 95).

Cholera. Pending the completion of permanent sanitary measures, provision was made in the Fourth Plan to deploy special cholera workers at 1,266 blocks of thirteen states or union territories where the disease is endemic. However, only 406 such blocks could be established (Government of India 1973 b: 61-2), Unfortunately, these measures have not made any epidemiologically significant dent on the cholera programme, even in the blocks that have been covered by the national programme.

Tuberculosis. In sharp contrast to the other communicable disease control programmes, the tuberculosis programmes in the country offer a very instructive example of developing an alternative and obviously much more effective approach to deal with an important national health problem within the constraints of

available resources and existing technical knowledge. All these years, the aim was to deal with tuberculosis as a public health problem (Banerji 1971 b). Taking note of the constraints existing in the early fifties, a mass BCG campaign was all that could be implemented to have any epidemiologically relevant programme for the country. Later, in 1955-1958, to gain a deeper insight into the problem, a national sample survey was conducted (ICMR 1960). Among other findings, it revealed that 1.8 per cent of the population suffered from radiologically active tuberculosis and that, contrary to the then prevailing impression, the disease was as prevalent in rural areas as in the urban areas. Another major breakthrough was achieved in 1958 when the research of the Tuberculosis Chemotherapy Centre, Madras, revealed that both clinically as well as epidemiologically, the treatment of tuberculosis patients at home is as efficacious as treating them in sanatoria (Tuberculosis Chemotherapy Centre 1959). Some valuable epidemiological and operational studies were also conducted at the tuberculosis research unit of the Indian Council of Medical Research at Madnapalle (Frimodt-Moller 1964: 17) and at the New Delhi Tuberculosis Centre (Banerji 1971 b: 14). Making use of these findings and generating additional data on certain key areas, the National Tuberculosis Institute at Bangalore developed a series of interdisciplinary operational research studies which involved participation of health administrators, epidemiologists, clinicians, microbiologists, public health nurses, laboratory scientists, social scientists, statisticians, and engineers to formulate in 1962 a nationally applicable, socially acceptable, and epidemiologically effective national tuberculosis programme for India.

The sheet anchor of the national tuberculosis programme is the district tuberculosis centre which is required to organize tuberculosis work in the entire district as an integral part of the general health services. The mass BCG campaign was also integrated with the district tuberculosis centre as a first step towards its integration with the overall immunization programmes of the general health services. The national tuberculosis programme, thus, was specifically designed to sink or sail with the general health services.

So far 278 district tuberculosis centres have been set up in the country. In addition to the National Tuberculosis Institute, there are seventeen state tuberculosis training and demonstration centres. There are 547 tuberculosis clinics and about 39,500 indoor beds

for tuberculosis patients (Government of India 1973 b: 40).

National family planning programme

India can claim credit for being a pioneer in officially sponsoring a countrywide family planning programme. In the fifties and in the early sixties, following the traditions of the planned parenthood movement of western countries, family planning clinics were established in urban and rural areas. However, when it was realized that the range of such clinics was very limited, taking the cue again from the community development movement in the United States, an extension wing was added to these clinics by establishing an enormous network of family planning extension workers (Raina 1963 : 18), family planning field workers, auxiliary nurse midwives, and an elaborate hierarchy of supervisory staff at the block, district, state, and central levels. Substantial additions were made again to the programme in the mid-sixties when some foreign consultants projected the intra-uterine device (IUD) as the answer to the prayers of family planning workers and succeeded in persuading the decision-makers in India to undertake a massive programme to popularize the use of this device (Government of India 1966 a). As a result of these expansions over 125,000 persons were being employed for doing only family planning work. When the IUD programme also failed, population control was reshaped into a "target oriented time-bound programme, adopting the cafeteria approach." This involved (Banerji 1971 a: 1617) offer of "monetary incentives" to doctors, motivators, and acceptors; mobilization of the law and order and tax collection machinery for family planning work; and the exerting of administrative pressure on field workers to ensure that they attain certain pre-determined family planning targets. When this also proved inadequate, recourse was taken, in the early seventies, to mass vasectomy camps (Government of India 1973 e: 63) which involved much more extensive use of pressure through the district administrative machinery along with enhanced incentives and a massive publicity drive.

While modifications and changes in the programme have resulted in a number of additions to it, efforts to weed out its redundant components have been very inadequate. This has given a somewhat jumbled appearance to the programme (Banerji 1971 a: 61-87, Government of India 1973 d).

The urban population is served by a total of 1952 family planning clinics and 2,333 other institutions which also do family planning work. There are 5,178 family welfare planning centres and 31,151 sub-centres providing services to rural populations. In addition to these, 728 mobile units—329 for IUD insertion and 399 for sterilization—supplement the activities of the rural family planning agencies. Conventional contraceptives, with the main emphasis on the condom (Nirodh), are being distributed free of cost through all family planning institutions. Condoms are also sold commercially at highly subsidized rates through more than 220,000 retail outlets. Oral contraceptive pills are provided by 319 pilot projects, and 124 institutions are offering post-partum family planning services. Family planning services are also being provided through the organized sector, such as government ministries and departments, labour organizations, industrial undertakings, and the employees' state insurance scheme.

Apart from extensive mobilization of all mass media units of the Ministry of Information and Broadcasting and of strengthening these units and establishing mobile audio-visual units at the district level, other media for mass communication, including the indigenous media, have also been pressed into service to provide a massive communication support to the programme (Banerji 1971 a: 15-6). Payment of cash incentives, use of the law and order and tax collection machinery, and the application of administrative pressure on health and family planning workers for attaining the assigned targets, have been the other methods adopted to promote family planning (Banerji 1971 a: 17).

Recognizing the weaknesses of the campaign approach, the Government of India has recently veered round to the idea of providing an integrated package of health, family planning, and nutrition services with particular emphasis on the weaker sections of the community (Government of India 1973 f: 234). This package in turn, is part of a bigger package of the Minimum Needs Programme of the Fifth Five Year Plan (1974-1979) which is meant to deal with some of the very urgent social and economic needs of the population of the country (Government of India 1973 e: 81-91).

An integrated health service system for rural areas

The Bhore Committee had prepared a blueprint for an elaborate

health service system with the "countryside as the focal point," but it took the Government of India over seven years to start opening primary health centres to provide some elementary curative and preventive services in an integrated form to the rural population (Dutt 1965). These primary health centres were a far cry from what was suggested by the Bhore Committee. They did not have even a fourth of "the irreducible minimum requirements" of staff recommended by the committee (Government of India 1946 a: 11). Further, it look more than ten years to cover the rural population in the country even with these rudimentary and grossly inadequate primary health centres.

The entry of the National Malaria Eradication Programme into the maintenance phase and the concurrent development of an extension approach to family planning provided a transient impetus to integrated health and family planning services through multipurpose male and female workers (Banerji 1971 a). But the clash of interests of the malaria and family planning programmes again led to the formation of unipurpose workers for malaria and family planning (Government of India 1966 b). What was even worse, application of intense pressure on workers of primary health centres to attain predetermined family planning targets led to the neglect of whatever health services were earlier being provided by the PHCs, thus causing a series of further setbacks for different health programmes (Banerji 1971 a: 40). Maternal and child health, malaria and smallpox eradication, environmental sanitation, and control of other communicable diseases such as tuberculosis, leprosy, and trachoma are examples of the services which suffered as a result of the preoccupation of health workers with achieving the prescribed family planning targets.

Following the recognition of the fact that a unipurpose and high pressure campaign approach, which does not ensure the concurrent growth and development of these segments of health and nutrition services (and also growth and development in other socio-economic fields), will not be able to yield the desired results, decisions have already been taken to integrate malaria, family planning, maternal and child health care, smallpox, and some other programmes, and thus provide an entire package of health, family planning, and nutrition services to the community through male and female multipurpose health workers (Government of India 1973 e, 1973 f).

National water supply and sanitation programme

From 1954 to March 1972, 1,348 urban water supply and sewerage schemes at the cost of Rs 4,878 1 million and 3,227 rural water supply schemes at a cost of Rs 886.5 million were approved under the programme (Government of India 1972 a). As a result of this disproportionate investment, while ninety per cent of the urban population is provided with some degree of protected water supply, only four per cent of villages have a piped water supply, and while about forty per cent of the urban population has a sewerage system, it is almost non-existent for the rural population (Government of India 1973 c: 9).

Indigenous systems of medicine

The Indian systems of medicine—Ayurvedic, Siddha, and Unani —were subjected to two contradictory pulls after independence. Because of their being firmly rooted in the culture of the people for centuries and their rich heritage, they invoked considerable admiration and even a certain degree of emotional attachment from large sections of the population. At the same time, long neglect of these systems of medicine had led to a sharp deterioration in the body of knowledge, in their institutions for training and research, in their pharmacopoeia and drug industry, and in their corps of practitioners. The merits of the traditional systems were recognized, but the decline in their contemporary practice did not go unnoticed. While the leaders of independent India built the entire health services on the lines of the western system, they have, from the very beginning, shown sympathy for the Indian systems of medicine and have made some grants available for conducting research in these systems, for supporting educational institutions, and for providing some services to the community (Government of India 1974 c).

The government is at present financing about 9,000 dispensaries and 19› hospitals which offer services according to the Indian systems of medicine. There are 44,460 institutionally qualified and 111,371 non-institutionally qualified Ayurvedic registered practitioners in the country; the corresponding figures for the Siddha and the Unani systems are 6,013 and 18,507, and 625 and 14,785 respectively (Government of India 1974 c). The government runs two postgraduate colleges in Ayurveda and one in Unani;

there are also ninety-one Ayurvedic, ten Unani, and one Siddha undergraduate colleges (Government of India 1974 c).

Impact of Health and Family Planning Services

Despite inadequacies and failures, impressive gains have been registered in the fields of public health and family planning in the last twenty-five years. It has been possible to reduce the incidences of malaria by over ninety-nine per cent. The expectation of life at birth has been increased from thirty-two years in 1941-50 to over fifty years at present; the infant mortality rate has fallen from 189 per thousand live births during 1941-50 to the present value of 139 (Government of India 1972 a). However, the fact that India has the unenviable distinction of being one of the few countries in the world still harbouring smallpox, dramatically draws attention to the inadequacy of its health programmes. The surging outbreaks in 1974 of the disease in the two most populous states of the country, claiming over 100,000 seizures and 10,000 deaths in one and over 30,000 seizures and 5,000 deaths in the other, at a time when these states were receiving massive support from the Indian Government and from the World Health Organization, shows that even twenty-seven years after independence the health services in these states at the village level are woefully inadequate. A nationwide study involving eighteen villages in ten states, which account for four-fifths of the population of the country, has revealed that the situation in the other states is also grossly unsatisfactory, even though it is evidently better than the two states mentioned above (Banerji 1973 b: 2281-88). These findings were underlined by a committee of the Government of India which observed:

> Almost all the national programmes have suffered because they have not received adequate attention from the medical officer in charge and his team of para-medical workers. In most of the primary health centres, the lady health visitors, the auxiliary nurse midwives and other paramedical workers are not available in the required number. Even when they are available, they are comparatively young and inexperienced and they have failed to win the confidence of the community and their impact on the community is negligible. Because of the failure of lady health visitors and auxiliary nurse midwives, the untrained dais are preferred by

villagers. Ignorance, apathy, fear and lack of confidence among the paramedical staff at large are responsible to a considerable extent for under-utilization of the capacity of these workers (Government of India 1974 d).

After more than a quarter century of independence, over three-fourths of the mothers are unable to get the services even of an auxiliary nurse midwife at the time of childbirth. This accounts for the still very high rates of maternal morbidity and mortality in the country. As a vast majority of the population does not get a protected water supply and elementary facilities for environmental sanitation, tens of millions continue to fall victim to such easily preventable diseases as cholera, dysentries, enteric fevers, hepatitis, poliomyelitis, and various worm infestations (Banerji 1974: 1333-46). Despite heavy investment in the specialized national programmes against leprosy, filariasis, cholera, and trachoma, it has not been possible to make any epidemiologically significant dent on these health problems (Government of India b: 1-106). Widespread poverty, hunger, malnutrition, poor housing, and environmental insanitation, and an overwhelming sense of helplessness, frustration, and dejection have created an ecological setting which accounts for the very high rates of infant mortality and morbidity in the country. Half the population living below subsistence level suffers from undernourishment and malnutrition (Danekar 1971).

Because of frequent and serious setbacks in the implementation of the National Malaria Eradication Programme, there is now a grave threat of a resurgence of this disease. To forestall such an eventuality the country is compelled to keep on pouring large resources into the programme. As against the envisaged expenditure of Rs 1,015 million, the National Malaria Eradication Programme has so far sucked in over Rs 2, 500 million (Government of India 1972: 225, Dhir 1971: 1-12). In addition, Rs 967 million have been set aside for it for the next five years (Government of India 1973 b: 23-4) and even this allocation might have to be raised. In spite of this, the chances of eradicating malaria in the foreseeable furture do not appear to be very bright.

The health service system of the country had hardly recovered from the consequences of the costly failures of the mass campaigns against malaria, smallpox, leprosy, filaria, and trachoma, when a

large bulk of investment in health was cornered by another specialized campaign against rapidly rising population.

However, despite the enormous financial inputs and the good intentions of planners and political leaders and despite recourse to means which, according to some critics, were questionable on social, moral, ethical, and political grounds, even in terms of reduction of the birth rate, the population control programme has failed. According to the Registrar General's sample registration scheme of birth and deaths (Registrar General 1973: 1-17), the birth rates per thousand for 1968, 1969, 1970, and 1971 were, respectively 39.0, 38.8, and 38.8 for rural areas. Interestingly, the birth rates for 1970 and 1971 for the urban population were, respectively, 29.7 and 30.0 (Registrar General 1973: 17). It would be hasty, however, to attribute this fall only to the programme; the impact of socio-economic factors in urban areas has also to be taken into account.

A demographer has estimated that it would have required a total of over fifty-five million sterilizations between 1966-1981 to bring down the birth rate to thirty in 1981 (Agarwala 1967). This requirement should be seen against the total performance of the programme between 1956 and March 1974: 14.83 million sterilizations and 5.07 million IUD insertions. It is to be compared to the achievement of 3,084 million sterilizations and 346,225 IUD insertions in 1972-73 (Government of India 1972 a: 86-9), there were only 0.905 million sterilizations and 358,708 IUD insertions in 1973-74 (Government of India 1974 e). The figures for the first three months of 1974-75 are 0.148 million sterilizations and 66,135 IUD insertions.

There are serious doubts about the reliability and accuracy of the very scanty and sketchy data on the mass camps which are collected by government agencies (National Institute of Family Planning 1973: 3). Even within these serious limitations, the data provided by the Department of Family Planning (Government of India 1973 b: 57-64) on acceptors in mass vasectomy camps provide a very disturbing profile: the government records indicate that the average number of living children were 4.1, 3.92, and 4.4 and the recorded age of the wife was below thirty years in 43.2, 24.2, and 6.4 per cent respectively in the Ernakulam, Madurai, Ramanathapuram, and Gorakhpur mass vasectomy camps. In the Bulandshahar camp, the average recorded age of the wife was 35.2

and in the Madurai and Ramanathapuram camps, the average recorded age of the last living child was 8.2 years.

More careful and independent studies of the regular programme conducted by agencies like the Planning Research and Action Institute, Lucknow (Planning Research and Action Institute 1967), and the Gandhigram Institute of Rural Health and Family Planning (Srinivasan and Kachirayan 1967) indicate that in over sixty per cent of the cases, the performance of vasectomy was of little demographic significance.

The decision-makers committed a fundamental mistake in taking a narrow view of the problem of rapid population growth in India. They did not adequately realize that for controlling population growth, a family planning programme forms only one component of a wider spectrum which embraces a combination of programmes for dealing with different social and economic problems of the country. Population control was considered, rather simplistically, to be a precursor of developments in other social and economic fields.

It is significant that at a time when there were such glaring deficiencies in the preventive and curative services that were made available to the vast masses of people in the country, most of whom live in villages, enormous resources of the country were made available for establishing big hospitals, many of them having super specialities and ultra modern equipment like intensive care units and artificial kidneys. Because of this approach while the privileged classes, which form a small fraction of the population of the country (and which, incidentally, include the political and business leaders, the bureaucrats, and the professionals), were able to get sophisticated medical care at little or no cost from community-supported institutions, on the pretext of lack of resources the vast masses of the people were condemned by the decision-makers, both at the political and bureaucratic levels, to suffer and often die of such easily preventable and/or curable diseases as tuberculosis, leprosy, enteric fevers, anaemias, conjunctivitis, diphtheria, acute abdominal conditions, ectopic pregnancy, or septic abortion. At a time when, because of administrative laxity, millions of tuberculosis patients, who are literally knocking at the doors of rural institutions for help, are being turned away with bottles of useless cough mixture (Banerji 1971 b), the decision-makers at the highest levels do not find anything wrong

in making passionate pleas for controlling the menace of cancer in the country (Government of India 1973 b: 119, 1974 f : 15-6). They conveniently overlook the fact that for the cost of preventing a case of cancer it is possible to save anywhere between 50-500 persons from death and debility caused by such diseases as tuberculosis, post-partum haemorrhage, leprosy, hookworm infestations, and trachoma. By following this value system they have gone on to make investment for cancer control programmes. For the privileged classes to which they belong cancer obviously is a matter of concern. Apparently, considering themselves to be much more important members of the community, they see nothing wrong in having sophisticated services for themselves even when such services are to be offered at the cost of denying some very elementary life-saving health facilities to the masses.

Community need was again invoked in justifying the abolition of the licenciate course and in the rapid proliferation of costly undergraduate and postgraduate medical institutions in India. Invocation of community need came in as a very handy excuse for creating opportunities for professional education of the so-called international standard for the children of the vocal and politically powerful classes. Compelling the Government of India to start another medical college in Delhi in 1971, to accommodate the left-over premedical first divisioners of Delhi, is a dramatic instance of display of power by this class.

In the course of the five and a half years' academic work in medical colleges the students, who mostly belong to the upper classes, get further alienated from the masses of the people. Their peer group—the teachers—sets the tone. Service to the community gets subordinated to the old colonial tradition of providing better and more expensive services to the privileged few. In promoting this trend these teachers get active support and inspiration from the so-called experts from abroad. In order to create for themselves and for their students job opportunities in the affluent countries, the teachers, with strong backing from agencies like the Medical Council of India and the Indian Medical Association, make special efforts to ensure that education, research, and practice of medicine in India conform to the standards set by the affluent countries. Because of this concern for maintaining so-called standards medical and public health services are made inaccessible to the large masses of people in the country.

To be sure, soon after independence, at the instance of the government and of the Medical Council of India, upgraded departments of preventive and social medicine were created in medical colleges to bring about social orientation of medical education in India. However, as in the case of so many other ambitious and morally lofty government programmes—such as compulsory education; uplift of the tribals, Harijans, and other down-trodden groups; community development and democratic decentralization, and so forth—it was also ensured concurrently that the very spirit of this programme is stifled, if not totally destroyed, by actively sabotaging in various ways its actual implementation. Instead of mobilizing the finest brains in the profession to bring about this social orientation, most of the positions in the departments of preventive and social medicine were filled by the discards who were found intellectually inadequate to get into the highly competitive and prestigious clinical disciplines, or even the paraclinical and preclinical disciplines (Banerji 1973 a). This gave enough opportunities to the threatened foreign-trained super specialists to ridicule the entire discipline of preventive and social medicine and bring it down almost to the bottom to the prestige hierarchy of disciplines in a medical college (Ramalingaswami and Neki 1971: 204-09). Significantly, the political leaders, who are beholden to these super specialists for their personal needs of various kinds winked at this systematic desecration of the philosophy of social orientation of medical education in the country.

One of the cruellest ironies of the system of medical education in India is that the resources of the community are deliberately utilized to train doctors who are not suitable for providing services in rural areas where the vast majority of the people live and where the need is really desperate. By identifying itself with the highly expensive and urban- and curative-oriented system of medicine in the west, the Indian system created conditions which encouraged doctors to look down on the facilities available within the country, particularly in the rural areas, and look for lowly jobs abroad. As if that is not enough, the community is being pressurized to spend more resources to attract some of these people back to the country by offering them high salaried and prestigious positions and making very expensive super-sophisticated

medical gadgetry available to them. These foreign-trained specialists, in turn, actively promote the creation of new doctors who aspire to go abroad to earn a lot of money and to specialize. Emphasis on areas of specialization that are prevalent in the affluent countries, incidentally, causes further distortion of the country's health priorities.

Thus, in sharp contradiction to the basic recommendations of the Bhore Committee, which gave an overriding priority to providing preventive services to the impoverished toiling masses, because of the interplay of certain political and social forces, the present community health services in India are not only curative- and urban-oriented but they are available and accessible mostly to the privileged classes.

Reasons for Poor Performance

At first sight this inventory of failures appears bewildering. How could the decision-makers go on making a series of costly mistakes? And how could they get away with them? When, however, these are seen against the background of the political, social, economic, and international forces that have given shape to the various development programmes in India since independence, one can find an explanation.

As has been pointed out repeatedly by Myrdal in contrast to the poverty-stricken masses, the national political leaders in India were all members of the privileged upper class, and after independence their new positions of responsibility and power rapidly invested them with still greater privileges. Many who had borne heavy burdens of personal sacrifice in the independence struggle saw in their own advancement a symbol of the national political revolution. Also, as politics became increasingly concerned with practical issues and the pressures of vested interests on them grew stronger, a new type of politician with few ideological inhibitions about working for special interests invaded the arena of politics (Myrdal 1968: 66, 113, 223, 227, 291).

While these politicians felt compelled to commit themselves to building an egalitarian society and to espousing such values as the right to work, to health, to special care for the weaker sections of the community, and to free and compulsory education to all

children up to the age of fourteen by 1960 (Basu 1970: 230-35), they were not prepared to effect the necessary social, political, and administrative changes for attaining these goals. They hypnotized themselves into believing that the values of a privileged class, which most of them had inherited from the colonial era, will not come in the way of effecting a social and economic revolution in the country. Similarly, they also believed that they could usher in a revolution without changing the structure and functions of a bureaucracy which is thoroughly soaked in colonial traditions.

Alienation of these national political leaders from the masses, their westernized values, their lack of competence, and their reluctance to come to grips with urgent social problems, along with pressure from certain powerful vested interests (both from within the country and from abroad), combined to induce the leaders to depend heavily on foreign agencies for technical and monetary assistance. The appeal of the western conceptual approach draws further strength from the fact that it is well fitted to rationalization of opportunistic interests in the developed western countries and among the influential intellectual elite of the developing countries (Myrdal 1968:20).

Two key political decisions of the new leadership shaped the health services system of the country after independence. Following the political commitments made during the struggle for independence, provision of health services to the vast masses of the people —particularly for those living in rural areas—was made an important plank of the health policy of the government. The other political commitment, which turned out to be even more sacred and of overriding importance, was to bring about the desired changes in the health services system without making any basic changes in the then existing machinery of the government. Those who were called upon to prepare plans of expanding and enriching public health services had some obvious limitations and handicaps. They were steeped in the traditions of the British Raj and belonged to the small elite of the country. Political independence brought to the fore two additional issues which profoundly affected the cadre of the Indian Medical Service. First, the exit of the British officers after independence caused a sudden vacuum in the higher ranks. This came as a windfall to a number of not so competent officers, who were catapulted into positions of key importance because of the very large number of vacancies caused by the departure of the

British. Secondly, by adhering strictly to the seniority rules, when the health services were expanded rapidly to meet the requirements of the newly formulated health programmes, the administration drew more and more from the relatively small group of people who had entered the services in, say, 1930-35, 1935-40, or 1940-45 to fill the key positions. In consequence, a large number of the key posts in the health services got filled by persons who, even by colonial standards, were not considered to be bright.

Such a massive domination of the organization by men who were trained in the colonial traditions and whose claim to a number of vital posts in development administration was based mainly on their seniority in the cadre led to a virtual glorification of mediocrity with all its unfortunate consequences (Banerji 1971 a: 55-7). What was even worse, such a setting was inimical to the growth and development of the younger generation of workers. Often these young men had to pay heavy penalties if they happened to show any enterprise, initiative, and imagination in their work. Conformism often earned good rewards. This ensured perpetuation of mediocrity within the organization.

Because of their being inadequate for the job, these administrators went out of the way to appeal to foreign experts for help and the latter generously responded to such entreaties. A large number of foreign experts were invited to play a dominant role in almost every facet of the health services system of the country (Banerji 1973 c: 773-77).

The fact that despite their obvious importance, preventive services have received a much lower priority in the development of the health services system of India provides an insight into the value system of the colonels of the Indian Medical Service, the British trained bureaucrats of the Indian Civil Service, and the political leadership of free India. The colonels did not appear to relish the prospects of dirtying their hands by getting involved in problems which required mobilization of vast masses of people living in rural areas. The rural population raised in the minds of these decision-makers the spectre of difficult accessibility, dust, dirt, and superstitions. Therefore, when they were compelled to do some preventive work in rural areas, they characteristically chose to launch military style compaigns against some specific health problems.

Undoubtedly because of the enormous devastation caused by

malaria till the early fifties, this disease deserved a very high priority. But the programme became a special favourite of the colonels not only because it required relatively less community mobilization, but it also provided them with the opportunity to build up an administrative framework to launch an all-out assault on the disease in a military style. The strategy involved preparatory, attack, consolidation, and maintenance phases; unity of command; surprise checks and inspections; and authority to "hire and fire." Significantly, some of the followers of the colonels went so far as to compare the malaria campaign with a military campaign (Ramakrishna 1960: 3-4). Another enthusiast for military methods wrote an entire book (Borker 1961), with a preface from the late Prime Minister Jawaharlal Nehru, describing the saga of the growth of the health services in independent India as if he was describing a military campaign.

Concluding Comment

Making available to the people, especially to those in rural areas, the basic health services in an integrated form and free of cost was a guiding principle of the recommendations of the Bhore Committee. The leadership of independent India accepted this goal, but they did not bring about the structural changes in the health services system essential for the creation of a propitious climate for implementing the recommendations. The leadership belonged to the privileged upper classes and its class bias was evident in the development of health services in the country. As politics became increasingly concerned with practical issues, with active support from other pressure groups belonging to the privileged classes, the leadership tended to accord much higher priority to developing expensive curative services in urban areas and to opening up opportunities for costly medical education which benefited mostly the children of the vocal and politically powerful classes. Because of this implicit value system, despite their overriding importance, the preventive services did not receive the share they deserved. Again, of the investment in preventive services the urban areas received a disproportionately high proportion. When the administrators were compelled to undertake preventive work in rural areas, instead of building a sound base for developing preventive services on a permanent basis, they chose to launch, with full backing from

the political leadership, military style campaigns for specific health problems.

Unfortunately all these mass compaigns have failed to attain even the limited objectives that were set for them. Thus, despite enormous inputs, in terms of health status, India remains today among the most backward countries of the world. It is one of the few countries which still harbour smallpox. Only four per cent of the villagers have a protected water supply and facilities for environmental sanitation are virtually unknown. More than nine-tenths of the mothers are denied even the most elementary maternal services. Poverty, hunger, and lack of health facilities account for the very high rates of infant mortality and morbidity. Communicable diseases such as tuberculosis, leprosy, filaria, cholera, enteric fever, worm infestations, trachoma, venereal diseases, diphtheria, and tetanus continue to account for the very high rates of morbidity and mortality. Population growth continues almost unabated.

Because of the failure of the present system to meet some of the basic needs of the population of the country, the future may be promising. Repeated failures in the field of health and various other social and economic fields are already generating considerable pressure on the system for change. Compelled by this situation, the ruling elites have yielded and have adopted the strategy of the Minimum Needs Programme, which has a high public health content built into it. As a result of this lack of inner motivation for change among the ruling elites, a new approach to integrated health, family planning, and nutrition is being developed. These are half-hearted measures and their failure is likely to generate positive pressures for change—pressure from within the masses of the people as well as from within the ruling elites themselves. This combined pressure, it is hoped, will be able to counter the forces which may be unleashed as a reaction to the proposed changes and steer the country on a course leading to all round social, political, and economic development, including integrated development in fields of health, family planning, and nutrition.

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METRO CITIES AND NEW TOWNS

K.C. Sivaramakrishnan

The Indian census has adopted a six-fold classification of city sizes. As of 1971, Class I cities, i.e., cities over 100,000 people, numbered 142 and accounted for 57 million people, more than half the total urban population in the country of 108 million. Here we shall deal principally with the metropolitan cities—those having a population of more than one million people—namely, the Calcutta Metropolitan District, Greater Bombay, Delhi, Madras, Hyderabad, Bangalore, Ahmedabad, Kanpur, and Poona (see Table 1). This is a selection based mainly on size.

The metropolis, in current parlance, signifies many things: for some it is a large-sized urban agglomeration, for others it may be any major city with a few suburbs. Economists tend to underscore the preponderance of manufacture and trade and commerce in the metropolis in relation to its hinterland. For the Greeks, the metropolis was the "mother city," the primate in its area. Stretched, this definition could embrace every provincial capital in this country. There are nearly two dozen of these, covering perhaps every size-class category in the census. A comparative account of them is neither feasible nor is it likely to be useful. Even by Indian standards a million is an appreciable size-mark. The nine cities chosen for coverage in this chapter have many of the characteristics usually thought of as metropolitan—all are major focal points in their respective regions, all have a sizeable combination of manufacture and tertiary employment and contribute a major share to the nation's economy, their populations are drawn from all over the country, and they have sustained high rates of growth

TABLE 1
POPULATION GROWTH IN NINE METRO CITIES SINCE 1901

(*Figures in millions*)

City	*1901*	*1911*	*1921*	*1931*	*1941*	*1951*	*1961*	*1971*
1 Calcutta	*0.933*	*1.016*	*1.053*	*1.221*	2.167	2.698	2.927	3.148
1 (a) CMD						(5.370)	(6.720)	(8.180)
2 Greater Bombay	*0.813*	*1.018*	*1.244*	*1.268*	1.686	2.966	4.152	5.970
3 Delhi	*0.214*	*0.237*	*0.304*	*0.447*	0.695	1.437	2.359	3.287
3 (a) Delhi urban area								(3.647)
4 Madras	*0.541*	*0.555*	*0.578*	0.713	0.856	1.416	1.729	2.469
4 (a) Metro area							(2.246)	(3.169)
5 Hyderabad urban area	0.448	0.502	0.405	0.466	0 739	1.129	1.251	1.796
6 Bangalore urban area	0.161	0.189	0.240	0.309	0.410	0.786	1.206	1.741
7 Ahmedabad urban area	0.185	0.216	0 274	0.313	0.595	0.877	1.206	1.653
8 Kanpur urban area	0.202	0.178	0.216	0.243	0.487	0.705	0.971	1.275
9 Poona urban area	0.164	0.172	0.198	0,250	0 324	0 600	0.737	1.135
Total					7.959	12.614	16.538	
Total considering 1a for 1951						15.286		
Total considering 1a and 4a for 1961							20.848	
Total considering 1a, 3a and 4a for 1971								28.686

SOURCE: Census of India.

(see Table 2). Together these nine metro cities account for 26 per cent of the country's total urban population and more than half the total population in Class I cities. Demographic facts apart, these metro cities have also been the cradles of political and social resurgence in the country. Notwithstanding the anti urban sentiments frequently expressed by some, several national leaders[1] have passed through the portals of the metro city halls where they received their first lessons in political action (Bose 1972).

TABLE 2
RATES OF POPULATION GROWTH IN METRO CITIES

Cities	*% increase in 1951-61 decade*	*% increase in 1961-71 decade*
Cl. I cities (Total 113)	44.5 (Total 147)	56
CMD	25.1	22
Greater Bombay	40.0	44
Delhi	64.2	54
Madras	22.1	43
Hyderabad	10.8	44
Bangalore	53.5	43
Ahmedabad	37.5	38
Kanpur	37.7	31
Poona	22.8	54
Urban India	34.0	38

SOURCE: Census of India.

NOTE: The 1951-61 rate of urban India is adjusted for change of definition of urban area in 1961: conf. Ashish Bose, *Studies in India's urbanization.*

As for new towns, this chapter deals mainly with the towns built anew where there was practically no settlement. The 1961 census identifies 497 settlements as "new towns" but this is only a label conferred by the census on those settlements which for the first time satisfied the criteria for being classified as urban. Their aggregate population was 4.8 million and only thirty-six of them had a population of more than 0.02 million. On the other hand, some of the new towns we shall consider in this chapter

[1]Pherozeshah Mehta in Bombay, Surendranath Banerjee, Chittaranjan Das and Subhash Bose in Calcutta, Vallabhbhai Patel in Ahmedabad, Gokhale in Poona, and Nehru in Allahabad are some instances.

have more than 0.2 million people and are already "urban agglomerations" such as Chandigarh and Durgapur. The new towns that came up after independence are either large industrial townships (such as the steel towns) or new capital cities (such as Bhubaneswar, Chandigarh, and Gandhinagar). They exceed fifty in number. Together all these new towns account for no more than 1.7 million (see Table 3). While in the two decades between 1951 and 1971, the urban population went up from 62 to 108 million, the new towns represent less than 4 per cent of this increase. The very substantial investments made in building these new towns, which represent a large-scale and deliberate effort in the creation of new urban settlements, and the fact that most of the new towns consist of young, first generation communities merit attention as subjects for study.

TABLE 3
NEW TOWNS BUILT AFTER INDEPENDENCE WITH POPULATION (1971)

A. New towns classified as urban agglomerations and others of Class I census type.

Chandigarh urban area	232,940
Durgapur	206,638
Bhilai Drug urban area	174,370
Rourkela urban area	172,502
Bhubaneshwar	105,491
Bokharo Steel City	107,159
Total	999,100

B. New towns as part of metro cities, urban agglomerations, or other Class I cities.

New town	*Agglomeration or large city in which located*	*Population*
Jagannathnagar (Heavy Eng. Corporation)	Ranchi	55,663
Doranda	"	23,954
Govindapura (Heavy Electricals)	Bhopal	53,922

H.A.L. Township	Bangalore	15,164
H.M.T. Township	,,	11,154
I.T.I. Dooravaninagar	,,	9,875
Bharat Electronics Township	,,	6,825
Pimpri-Chinchwad	Poona	83,542
Kadakvasla	,,	9,270
Sindri	Dhanbad	46,385
Bhuli	,,	20,876
Noonmati	Gauhati	6,416
New Bongaigaon Rly. Colony	,,	11,043
New Gauhati Rly. Colony	,,	6,148
Kalyani	CMD	18,310
Faridabad	Delhi	85,762

C. Other new towns

Name	*State*	*Population*
Gandhinagar	Gujarat	24,055
Jawharnagar	,,	5,710
Fertilizernagar	,,	5,327
Kandla	,,	17,995
Barauni	Bihar	8,348
Gomia	,,	20,884
Maithon	,,	10,163
Panchet	,,	5,425
Bugda	,,	8,753
Chandrajura	,,	8,544
Hirakud	Orissa	15,040
Nayanangal	Punjab	9,997
Pandoh	,,	6,048
Naharkatya	Assam	10,744
Namrup	,,	7,972
Man town	Rajasthan	22,179
Ramchandrapuram	Andhra	11,146
Pochhampad	,,	13,346
Srisailam	,,	23,439
Neyveli	Tamil Nadu	58,285
Manimuthar	,,	11,181
Chittaranjan-Rupnarayanpur	West Bengal	47,141
Farakka	,,	8,096
Sen Raleigh	,,	5,186

SOURCE. Census of India 1971 (the listings are only partial).

Developments before Independence

Demographers might view the timing of India's independence as inconvenient. It came four years ahead of the 1951 decennial census. There are hardly any reliable estimates of India's urban population on the eve of independence and practically none for the metro cities. By 1941 Bombay, Calcutta, Madras, and Delhi had passed the million mark, but not the other five. For the nine cities under review the 1941 census returned a total figure of 7.9 million. In 1951 it was 15.28 million (Table 1). The effects of Partition and the large influx of refugees, especially into Calcutta, Bombay, and Delhi account for a substantial part of the increase. By a rough estimate the combined population of these nine cities may be placed around 10 million.

Metro cities in the twentieth century

Even at the beginning of the twentieth century, Bombay and Calcutta were established centres of manufacture and trade. During the nineteenth century Bombay had witnessed the link of the seven islands and reclamation on a vast scale. In the twentieth century, the city added to its docks and factories and extended northwards towards the mainland. The opening of the Suez Canal in 1889 established Bombay as the principle gateway to India. Still Calcutta had an edge over Bombay. One assesment placed the value of export and import trade through Calcutta in 1901 at over £ 110 million (Moorhouse : 66). These two primates, close to a million people each at that time, expanded vastly in the next four decades. By 1941 Calcutta city (not Greater Calcutta) had 2.17 million people and Bombay city 1.7. By then they were among the world's larger cities. With the shifting of the capital in 1911, Delhi had begun to grow, but still by 1941 it had a population of less than 0.7 million, trailing behind Madras and Hyderabad. Ahmedabad and Kanpur had emerged as premier centres of manufacture, mainly in textiles in the western and northern parts of the country. Banglore and Poona, however, until a few years after independence maintained their image of provincial cantonment towns, a salubrious haven for retired colonels.

Of the nine metro cities, Delhi (and also Ahmedabad and Hyderabad to some extent) could claim a long history going back to periods long before the arrival of the British The premier metro

cities of Bombay, Calcutta, and Madras came up entirely during the British period. The first two were spurred by commercial greed and both drew vast streams of impoverished migrants from their hinterlands. Both commenced as port cities, as syphons to transmit the country's wealth to Whitehall; though in later days, with the opening of the Suez Canal, attention began to shift to Bombay. Both represent the first Indo-British encounter in nineteenth century industry and city building. But the scope and substance of the encounter differred in the two cities: in Bombay it was a unison of the elite commercial classes characterized by enlightened self interest, in Calcutta it was a halting and complex conflict between the native gentry on the one hand and a coalition of the vested interests of the British trade and imperial officialdom on the other.

"To me," Lord Curzon had written in 1903, "Calcutta is the Capital not merely of a Province, great as that Province is, but of the Indian Empire. As such, it appears to me fitly to symbolise the work that the English have done and are doing in this country. For though, of the enormous population of 1,100,000 souls . . . not much more than 30,000 are returned as Europeans and Eurasians, yet a glance at the buildings of the town, at the river and the roar and the smoke is sufficient to show that Calcutta is in reality a European City set down upon Asiatic soil . . . the second City to London in the entire British Empire . . . one of the most striking extant monuments to the energy and achievements of our race" (Moorhouse 1971:260). Yet, only eleven years later, E.P. Richards, the first Chief Engineer of the Calcutta Improvement Trust, observed in his report "many Europeans who lived in Calcutta possessed little or no knowledge of the dense back blocks that compose three quarter of the City . . . at least 800 acres of 2,500 acres in Central Calcutta must be classified as 'rank slum,' at least 2,50,000 people were living in houses unfit for human habitation . . . urban, built up Calcutta has no street system. It would require the creation of 110 miles of ordinary 30-40 ft. streets to bring Calcutta into line with even the old built up sections of European Cities" (Moorhouse 1961: 262-3). Three years before, the capital had been shifted to Delhi.

Rise of railway towns

The dichotomy between the English and the native quarter could,

in fact, be observed throughout British India. A commentator of the period observes, "There are two Indias: the India of the Presidency and the chief provincial Cities . . . there are two countries: Anglosthan, the land especially ruled by the English in which English investments have been made and Hindusthan, practically all-India fifty miles from each side of the Railway Lines" (Digby 1901). As part of this Anglosthan and within the fifty mile belt from the railway lines, sprang up the railway colonies. In some cases they were only a collection of employees' quarters and station buildings, but several of them were sizeable settlements with offices, bazaars, temples and churches, schools, playgrounds, and all other paraphernalia of towns. Though the different railway companies were not conscious of the fact, these settlements constituted the nuclei of urbanization in many parts of the country. Kharagpur and Asansol in eastern India, Tundla and Itarsi in the north, Manmad, Hubli, or Bhusaval in the west, and Waltair, Arkonam, and Villupuram in the south are now familiar names which originated mainly as railway towns. By 1941 there were over thirty such railway settlements with populations of ten thousand and above in each (see Table 4). These railway towns in many respects are the precursors of new town development in India after independence. Though one might have wished the contrary, the form and substance of post-independent new towns in the country are much the same as the railway towns built several decades earlier.

TABLE 4
RAILWAY TOWNS OR TOWNS WHICH ARE MAINLY RAILWAY SETTLEMENTS : POPULATION VARIATION SINCE 1941.

Towns	*Population in*			
	1941	*1951*	*1961*	*1971*
South India				
Villupuram	23,829	35,684	43,496	60,242
Storanur	8,581	11,596	14,307	22,038
Jalarpet			16,411	20,069
Arkonam	16,626	22,674	30,690	43,347
Gudur	12,105	20,056	25,618	33,778
Vijayawada	86,184	161,198	230,397	344,607
Waltair[1]	70,243	108,042	182,004	355,045
Golden Rock[2]	16,412	19,812	19,560	21,115
Bellary	56,148	70,322	85,673	125,183

Central India				
Wardha	28,359	39,827	49,113	69,037
Bhusaval	36,352	54,346	79,121	96,800
Itarsi	16,679	22,748	33,668	44,199
Jhansi (Rly. Colony)	4,023	4,957	8,369	9,940
Bina	8,979	12,720	27,476	33,106
Bilaspur	37,460	39,099	86,706	98,410
Raipur	63,465	89,804	139,792	205,986
Western India				
Ratlam	44,939	63,403	87,402	106,666
Manmad	16,838	18,350	31,551	40,061
Dhond	12,828	18,848	27,168	35,970
Hubli	95,572	129,609	171,326 (incl. Dharwans)	379,166
Northern India				
Gorakhpur[3]	95,127	132,436	180,255	230,911
Samastipur	13,293	19,366	25,726	31,566
Mugalsarai (Rly. Colony)		8,135	10,486	15,029
Tundla ,, ,,		5,249	7,392	9,144
Moradabad ,, ,,		7,836	11,728	14,062
Eastern India				
Mokameh	19,984	29,308	35,745	38,164
Jamalpur	39,401	44,172	57,039	61,731
Kharagpur (Rly. Colony)	37,871	50,384	66,545	73,434
Asansol[4]	69,475	94,764	168,689	241,792
Kanchrapara	24,015	56,668	68,966	78,768
Dinapore			8,322	
Chakradharpur	14,807	19,948	30,906	34,967
Adra	7,518	10,577	13,215	18,838

SOURCE: Census of India.

NOTES: This is only an illustrative list. Attempt has been made to indentify those towns which originated mainly as railway settlements or where such settlements brought about a substantial expansion of existing towns.

[1]Waltair since covered under Vizag agglomeration.

[2]Golden Rock since covered under Tiruchi agglomeration.

[3]Gorakhpur is the headquarters of N.E F. Rly.

[4]Asansol since included in Asansol-Burnpur town group.

To the general run of railway towns, cantonments, and civil stations, the rise of Jamshedpur was in some ways an exception. Begun in 1908 in the wake of the first Indian enterprise in the modern iron

and steel industry, Jamshedpur quickly added other major industries such as the tin plate factory in 1920 (from which comes the ubiquitous four gallon can), the locomotive factory in 1921, and a foundry in 1927. By 1941, Jamshedpur was India's largest new town with 165,000 people. With a population of 342,000 (456,000 for the urban agglomeration) it continues to be to this day.

Independence and after

Growth of metro cities

In the picturesque language exclusive to its annals, the report on the municipal administration of Calcutta for 1947-48 observes, "When the year under review opened the evil heritage of the preceding year continued in full blast and the city was still in the grip of murderous communal frenzy . . . through Mahatma's untiring efforts and the miraculous alchemy wrought by the advent of India's independence after centuries of slavery, Calcutta witnessed on the eve of 15.8. 1947 a delirium of joy and exhilaration which wiped out for the time being every stress of communal hatred and the two communities vied with each other in showing their mutual love and affection" (Calcutta Corporation). Seven months later, the Calcutta Corporation became one of the first elective bodies to be superseded by a state government of independent India. These strange happenings, to a measure, reflect the critical times experienced by India's metro cities, especially Calcutta and Delhi, which received a sizeable influx of refugees consequent to the partition of the country. Out of a total of about eleven million refugees from East Pakistan, who are estimated to have come to India between 1947 and 1970, nearly four and a half million are accounted for within West Bengal and at least one million within the metropolitan district. The metropolitan district, incidentally, is a planner's delineation covering about 533 square miles of which the city of Calcutta itself is only about 39.75 square miles. The rest of the area is broken up into 34 municipal and 65 non-municipal urban units besides 500 odd semi-urban villages. According to the 1951 census the CMD population was 5.37 million, which rose to 6.72 in 1961 and to 8.30 in 1972. This made Calcutta the fourth largest metropolis in the world after Tokyo, Shanghai, and New York. Despite this enormous figure the rate of growth of the CMD and Calcutta city in particular, has been

low. In the 1961-71 decade the CMD's annual rate of growth was only 2.1 per cent compared to 3.3 per cent to 4.4 per cent in other metro cities. The saturation and serious deficiencies in the central city has kept its population static during the decade. The slow growth for the CMD area is explained by a variety of factors such as decline in industry, loss of employment in the wake of recession, and industrial and political unrest.

Greater Bombay, as we know it now, is one municipal unit covering an area of about 160 square miles. Before independence, however, the Bombay Municipal Corporation mainly covered the Bombay island with an area of about 26.18 square miles. In 1950, 1957, and again in 1965 the limits of Bombay Corporation were expanded successively. For this area the 1957 census returned a population of 2.9 million, which went up to 4.15 million in 1961, and to 5.90 million in 1971. It is estimated that in the decade 1951 to 1961,0.7 million constituted the net inmigration.

The Delhi urban area of 126.8 square miles, during the twenty-five years after independence has overtaken Madras to become the third largest city in the country. Though less than 0.7 million in 1941, Delhi doubled itself to 1.4 million in 1951 and went up to 2.35 million in 1961 and to 3.64 million in 1971. The effects of Partition on Delhi were somewhat different from Calcutta. An estimated 0.1 million left by 1948, but by 1951, the refugee inflow had reached 0.48 million (Mitra 1970: 11).

The Madras city, which had already crossed the one million mark by 1947, continued to expand. By 1951 the population of the Madras metropolitan area, i.e., the area delineated by the planners and covering the Madras Corporation as also the surrounding urban areas (440 square miles in all), was 1.7 million. It went up to 2.3 million in 1961 and to 3.4 million in 1971. During 1951-61 inmigration accounted for 37 per cent of the increase. Apart from Madras, Hyderabad also crossed the million mark and by 1951 recorded a population of 1.12 million. It increased to 1.25 million in 1961 and to 1.79 million in 1971. Size apart, the Hyderabad-Secundarabad agglomeration underwent a substantial change in its character from a cantonment-cum-provincial capital town to a centre of industry. Bangalore and Poona are two other cities which have similarly changed. In 1951, Bangalore's population was less than a million. The setting up of important new industries and expansion of existing units such as the Indian

Telephone Industries, Hindustan Aeronautics, Bharat Earth Movers, Hindustan Machine Tools and so forth, have given a generous stimulus to Bangalore's industrial growth. In 1971 Bangalore had a population of 1.74 million compared to 1.2 million in 1961. Poona crossed the one million mark in 1961. Of the remaining two cities in our list, Ahmedabad grew from 0.59 million in 1941 to 1.65 million in 1971 and within the same period Kanpur grew from 0.48 million to 1.27 million.

Occupational shifts

A comparative assessment of the occupational pattern in metro cities before and after independence is exceedingly difficult be cause of the considerable difference in the scope of information in the relevant census counts. For instance, the 1931 census adopted a very elaborate classification of occupations such as primary, mining, industry, transport, trade, public force, profession, liberal arts, domestic, and so forth. This occupational classification, however, is available only for certain leading cities such as Bombay, Calcutta/Howrah, Kanpur, Delhi, Hyderabad, Madras, Poona, Karachi, and Rangoon. There is no information for Ahmedabad and Bangalore. The 1941 census, conducted during the war period, does not contain information on the occupational pattern in the cities. The 1951 census, on the other hand, adopted a very different and rather simplistic six-fold classification of occupations, viz., cultivators, non-cultivating landowners, production other than cultivation, commerce, transport, and other services. It was only in 1961 that the census provided a rational definition for urban areas as also for the occupational pattern. The substantial functional changes undergone by metro cities are indicated in Table 5. While industrial and commercial employment in Bombay and Calcutta increased substantially, the emergence of Delhi and Madras as major industrial regions and of Bangalore and Poona as important centres of manufacture are noteworthy phenomena of this period.

Income and employment

Calcutta and Bombay have maintained their position as primate cities in their regions and they have also been significant contributors to the nation's economy. For instance, the CMD and Greater Bombay account for forty-seven and thirty per cent of the value

TABLE 5

OCCUPATIONAL PATTERN IN METRO CITIES (1961)

(Figures in millions)

City	*Total workers*	*Agriculture*	*Manufacturing*	*Construction*	*Trade and Commerce*	*Services*	*Non-workers*
Greater Bombay	1.686	0.005 (0.3)	0.665 (39%)	0.044 (2.6)	0.303 (17)	0.617 (36)	2.466
Calcutta (Industrial Region)	2.530	0.103 (4.07)	0.933 (36%)	0.069 (2.7)	0.468 (18)	0.895 (35)	4.625
Delhi	0.746	0.006 (0.8)	0.155 (20%)	0.032 (4.2)	0.143 (19)	0.390 (52)	1.612
Madras (Industrial Region)	0.712	0.047 (6.6)	0.167 (23%)	0.027 (3.7)	0.113 (15)	0.315 (44)	1.533
Hyderabad	0.373	0 007 (1.8)	0.058 (15%)	0.013 (3.4)	0.064 (17)	0.209 (56)	0.877
Bangalore	0.391	0.025 (6.3)	0.118 (30%)	0.021 (5.3)	0.049 (12)	0.154 (39)	0.815
Ahmedabad	0.375	0.015 (4.0)	0.186 (49%)	0.010 (2.6)	0.058 (15)	0.103 (27)	0.831
Kanpur	0.316	0.010 (3.1)	0.107 (33%)	0.008 (2.5)	0.057 (18)	0.119 (37)	0.654
Poona	0.224	0.005 (0.2)	0.052 (23%)	0.008 (3.5)	0.034 (15)	0.101 (45)	0.513

(Figures in brackets indicate percentage)

SOURCE: Census of India 1961

NOTE: The Madras and Calcutta industrial regions, for the purpose of this Table, may be taken to correspond roughly to the respective matropolitan areas.

added in the secondary sector in the states of West Bengal and Maharashtra respectively. Their per capita incomes are also two or three times above the national average (Table 6). The high per capita incomes in metro cities, however, hide the grossly disproportionate distribution of that income. This is true not only of metro cities but also of all urban areas as a whole. A survey by the National Council of Applied Economic Research reports that 86 per cent of urban households in the country receive an annual income of less than Rs 3,000, i.e., less than Rs 250 per month

TABLE 6
INCOME AND VALUE ADDED FOR CALCUTTA AND BOMBAY

Item	*India*	*West Bengal*	*CMD*	*Maharashtra*	*Greater Bombay*
			(*Figures in Rupees*)		
Net income in 1961	133.0 mill.	10.9 mill.	4.9 mill.	15.32 mill.	8.16 mill.
Per capita income	304/-	312/-	737/-	388/-	1,024/-
Net value added by secondary sector	19.9 mill.	1.9 mill.	0.9 mill.	2.3 mill	0.7 mill.
Net value added by tertiary sector	30.2 "	2.8 "	1.3 "	2.9 "	0.9 "
Net value added per worker (secondary sector)	1,270/-	1,271/-	—	1,504/-	—

SOURCE : *India—a reference annual 1971-72:* Government. of India. I.B. R.D. Calcutta Urban Development Project—Background Studies 1973.

(National Council of Applied Economic Research 1942). A study politan District 63 per cent of the households receive a monthly income of less than Rs 300 and another 46 per cent receive a monthly income of less than Rs 200 (Kingsley and Kristoff 1971). Commenting on the poverty in Poona, Gadgil has observed "that this should have happened at the end of a series of years of comparatively uninterrupted economic activity is a matter of concern and provides a challenge to planners and framers of policy" (Sovani 1956). Gadgil might as well have been writing about any other city in the country. In the Indian context, poverty is more visible in the urban areas; the larger the city, the larger is the spread of

poverty and the sharp contrast it presents to the ostensible symbols of urbanization.

The conceptual and statistical problems in quantifying unemployment and underemployment are formidable. According to the National Sample Survey (from the nineth to the fifteenth rounds during 1955-60), Calcutta, Bombay, Delhi, and Madras had a combined labour force of 37 per cent of the population. Unemployment was placed around 8 per cent. A 1971 estimate for the CMD places the labour force around 40 per cent (mainly due to the reduction of the working force consequent upon increased female/male ratio) and unemployment around 10 per cent (Dandekar and Rath 1970). A 1963 estimate placed overall unemployment in Bombay around 6.9 per cent of the labour force (Lakdawala and others 1963).

Population densities

Metro cities continue to have high densities, especially in their central parts. A 1941 estimate places 400,000 per square mile as the maximum reported density for Calcutta, 256,000 for Bombay, and 112,000 for Madras. According to the 1961 census, the average densities in metro cities vary from a low 3,500 per square mile in Madras to 25,200 in Ahmedabad, 24,600 in Bombay, and 13,700 in Calcutta (Brush 1962). A 1971 assessment indicates that densities in the central parts of Indian metro cities are quite high compared to some other cities in the world. For instance, Bombay and Calcutta have an average density of 45,600 and 32,849 per square kilometre as against 31,842 in Manila, 26,181 in Manhattan, 15,320 in Tokyo, 13,945 in Singapore, and 13,900 in Shanghai (Brush 1962).

These high densities are also reflected in the acute housing conditions. The census makes a distinction between households and housing units. A 1961 assessment for the CMD revealed that per 2.24 million households, 1.38 million housing units existed with an average of 4.85 persons per housing unit. Corresponding figures for Madras (1961) are 0.35 million households, 0.27 million housing units, and 6.20 persons per room. Bombay's 1.02 million housing units have 5.26 persons per room. These figures are against the average of 2.6 persons per room in urban India (Brush 1962). The high average of persons per unit vis-a-vis the

number of housing units is another reflection of the crowded living conditions faced by the urban poor.

Shelter apart, metro cities also lack in minimum facilities like water supply and sanitation. According to an assessment of the Ministry of Works and Housing, at the end of the Fourth Plan period, 1,282 out of a total of 2,921 towns had arrangements for drinking water supply and of these only 188 had water-bound sewerage. While some impressive gains have been made under the National Water Supply Programme in bringing water supply to many towns, this basic amenity continues to be scarce in many metro cities. For instance, daily per capita water supply is 12 gallons in Bangalore, 19 in Madras, 27 in the CMD area, 34 in Bombay, 45 in Ahmedabad, and 48 in Delhi. These arithmetical averages naturally obscure severe shortages in many parts of the cities. As for sewerage, while the existing networks in Bombay,

TABLE 7

FACILITIES AVAILABLE FOR SAMPLE OF RENTER FAMILIES, CALCUTTA, 1963

Monthly Income (Rs)	*No. of families in sample*	*Per cent with exclusive use of*			*Average floor space sq. ft. per family)*	*Rent and Taxes paid as % of income*
		Separate kitchen	*Toilet*	*Drinking water supply*		
1-100	362	15.7	1.9	0.8	84	16.3
101-200	558	30.5	5.7	13.6	113	13.8
201-350	437	48.9	25.6	31.9	174	14.5
Sub-Total	1,357	32.5	11.1	16.1	125	
351-700	388	66.7	51.2	49.2	267	13.3
701-1,200	143	88.3	79.2	83.0	366	12.8
1,201 and above	91	99.0	93.5	94.1	578	11.1

SOURCE: 1. Derived from State Statistical Bureau 1963 Survey.
2. See Kingsley and Kristoff, *A housing policy for metropolitan Calcutta*: Ford Foundation Planning Advisory Group with CMPO: 1971.

Delhi, and Madras cover 68 per cent, 65 per cent and 60 per cent of the population respectively, the CMD's facilities cover a mere 26 per cent. The cities of Kanpur, Hyderabad, Bangalore, Ahmedabad, and

Poona have only limited systems of sewerage and partial sewage treatment facilities. Even where sewer networks exist, the removal of human waste continues to be a problem. For example, in the CMD area there are more than 150,000 service privies or basket latrines and in Bombay they number about 12,000. The low level of services is reflected in the majority of the households, particularly of the poorer income groups. A paradox apparent in the city scene is that the less the family income, the more is the proportion of the income payable as rent and the less the level of services provided (Table 7).

The high concentration of population in metro cities, the preponderance of poor incomes which keep a substantial portion of the population outside the effective demand for pucca housing, the lack of investments to sustain an adequate level of services and utilities against rising populations and so forth, have brought about and enlarged the growth of slums in urban areas. It is estimated that at least one-fifth of the total urban population in the country, i.e. nearly 22 million, lives in slums. All the nine metro cities have slums. While squatter settlements such as the *jhuggi jhompris* of Delhi, the *jhopad pattis* of Bombay, and the *cheris* of Madras are the more visible and recent forms of slum growth in post-independent India, the tenancy slum settlements of Calcutta, Kanpur, and Ahmedabad confirm that in origin, form, and substance, slum growth stemmed directly from the distress-induced migration into cities during the late nineteenth century industrialization and cyclical famine conditions in Bihar, north-east Uttar Pradesh, and western India. The migrants, upon arrival in the city, discovered that they were already priced out of it. This led to some interesting manifestations of enterprise among a class of landlords and middlemen. In Bombay and Ahmedabad the only shelters available for the poor migrants were the *chawls* put up by landlords, which were packed to a high density. In Calcutta and Kanpur, lands of marginal quality, usually poorly drained, were leased out by a landlord to a middleman who put up some semi-permanent huts and rented out portions to the migrants. The first waves of migrations into these metro cities were sex selective and male-dominant; their prime purpose was to somehow eke out a living in the city in order to support the families left behind in villages. It is well known

that every year a sum of Rs 300 million is sent out of Calcutta in small postal remittances (Mitra 1963).

The location of slums in metro cities is not uniform. In Calcutta they are to be found everywhere: in fact, 97 out of 100 municipal wards have slums. In Bombay some of the earliest parts of the city around the southern portion of the island are comparatively free of slums, which are to be seen more prominently in the suburbs and extended suburbs within Greater Bombay. In Delhi, apart from the *katras* within the walled city, slum growth has been spurred largely by the growth of the tertiary sector and the construction industry. Much of the slum growth in India's capital, located on the fringes of New Delhi and in the sizeable unbuilt spaces in the urban area, is a post-independence phenomenon. In Ahmeadbad and Kanpur the slums have tended to be located in areas adjoining the industries.

The response to the problem of slums in the urban areas, more particularly in metro cities, has also been a measure of the nation's response to the problems of the urban poor and generally to the problems of large city growth. In the pre-independence period, the attitude of most municipal and public authorities was characterized by the pretension that the problem did not exist. In the thirties, attempts were made to incorporate certain provisions in the municipal Acts to compel slum landlords to carry out certain improvements, or alternatively for the municipal authorities to carry out such improvements at the landlords' expense. These attempts largely failed. In the post-independence period the general reaction to slum growth was one of righteous indignation. Nehru's view that the slums are a blot on our society and their being allowed to continue in our cities is an even greater shame, is well known. Efforts to provide pucca housing to slum dwellers commenced in 1956 and continued till the end of 1971. In this fifteen-year period the sum total of units built in the nation in the slum clearance areas comes to 88,804, i.e., less than $\frac{1}{2}$ per cent of the total slum population. The high costs of construction have kept out the majority of slum dwellers from these housing units even when substantial rent subsidies have been provided for. An alternative approach towards meeting slum growth that was attempted was the scheme for open developed plots, tried mainly in Delhi and Madras, in which small-sized plots with water supply and sanitary facilities on a grou basis were provided to slum families.

But this scheme has had to be discontinued because of the scarcity of land in urban areas.

Planning and development

The planning and development response to problems in metro cities has been uneven. The first effort towards comprehensive planning for a large city commenced with the exercises connected with the Delhi master plan. This plan, however, is focused mainly on land use and subsequent programmes have also tended to concentrate on land development and on promoting settlements in new areas on the Delhi fringe. The effects of the plan and the development programmes of two decades are still to be felt within the congested parts of old Delhi. The availability of large tracts of open land, a massive land acquisitory programme initiated and substantially completed in the early stages of the development effort, the advantages of government investment usually available to a national capital, high per capita incomes, and a thriving urban real estate market spurred mainly by upper income groups are some of the principal factors which underscore the success of Delhi's planning and development effort which, at the same time, also limit the applicability of the experience to other metro cities. Some major criticisms of Delhi's development efforts are: it has aggravated the disparity in housing and living standards, pushed up the cost of land, encouraged land speculation, and generally failed to tackle the problems of low income groups.

Planning for metropolitan Calcutta, commenced in 1961, is said to be the first metro city planning effort focusing on infrastructural requirements and the city's economy rather than on land use. The basic development plan for the Calcutta Metropolitan District, published in 1966, identified the massive deficiencies in an area, analyzed the main issues and constraints to the economic and physical development of the district, projected the future population (approximately 15 million by the end of the century) and its broad spatial distribution within the CMD, and proposed a set of urgent action programmes to arrest further deterioration in the infrastructure and to foster growth in the metropolis. With political conditions prevailing in the state and economic uncertainties in the country following the recession in 1966, it was not possible to take up any large-scale programme as suggested by the planners. In the mid-seventies, the Centre intervened

effectively and a programme for the Fourth Plan period, costing approximately Rs 1500 million, was drawn up. Finance was to be secured from the Centre, the state, and locally mobilized resources. Till the end of the Fourth Plan about Rs 1300 million have been utilized in water supply, extension of sewer systems, improvements on road networks, *bustee* improvement, augmentation of health and primary education facilities, strengthening of waste disposal services, and so forth. About two-thirds of the funds for the programme have come from the state plan and from locally raised resources (mainly market borrowings serviced through the levy of octroi) and the balance as loans and grants from the Centre. It is far too early to say whether the pace of investment has begun to overtake the pace of deterioration, though major beginnings have been made. The real significance of the Calcutta effort lies perhaps in the fact that these efforts mark the involvement of the Centre in metro city problems, to a meaningful extent for the first time in contrast to its past tendency to treat them as only the concernof the states.

Greater Bombay rides on two plans for the present. The first plan prepared in 1964 by the municipal corporation, urged a Rs 9000 million investment, mainly to sustain the infrastructure for a ten million population by 1991. The Bombay metropolitan regional plan of 1990 considers this figure prohibitively expensive and impossible to service and hence urges a two million people settlement in New Bombay across the Thana Creek. In 1970, the City and Industrial Development Corporation (CIDCO) was created as a new town authority under the Maharashtra Regional Town and Country Planning Act to build the twin city. New Bombay is envisaged as a poly-nucleated settlement, where the units are self-sufficient in most services, sharing a common metro level business district and industrial centre and linked to each other by mass transit services. This is probably the first instance in the country where the building of a major city has been entrusted to a company set up by the government, and marks an interesting departure from the traditional reliance on municipal and statutory bodies.

The Madras Metropolitan Plan of 1941 estimates the 1991 population around 5.3 million. It aims at keeping the city population at 3 million and distributing the rest in urban nodes within the metropolitan area linked on radial corridors. A Madras Metropolitan Development Authority was established early in 1973 to

defend, interpret, and implement the plan. In Bangalore and Hyderabad studies have been made to delineate metropolitan areas, while a functional water and sewerage board has been created for Bangalore. Neither city has set up metropolitan planning and development machinery. Poona and Ahmedabad are yet to initiate metropolitan level planning exercises.

The importance of applying a regional approach to the problems of development in a metro city context was highlighted, perhaps for the first time, in an international seminar organized in 1967 by the Indian Institute of Technology, Kanpur, on the urban and industial growth of the Kanpur region. The seminar noted with concern the increasing obsolescence of the industries in Kanpur and the weakening of its occupational base and urged the industry's modernization as also fresh linkages within and outside the region through agro-based industries. The seminar advocated comprehensive regional planning under the aegis of a regional body, for the integration of rural-urban economy in the region with Kanpur as a focus (Singh 1967). There is little evidence of a follow-up on the seminar's recommendations.

On the whole, the response to the problems of metro cities has been crisis-prone and restricted. It has been noted earlier that the Delhi experience was limited and was an exception in many respects. The efforts commenced in recent years in Bombay and Calcutta underline a concern for the deteriorating living conditions, but this concern does not appear to be based on the understanding of the role and contribution of metro cities to the national economy and their interaction with their respective hinterlands. At the national and state levels, response and effort have alternated between fright and negligence. "The situation in Bombay and Calcutta is so difficult as to make it almost a law and order problem" observes the Fourth Plan document (Government of India 1966). Unemployment, congestion, and violence all too visible in the metro scene are symptoms which continue to be mistaken for the real malady, i.e., poverty and the failure of political, social, and administrative instrumentalities to cope with the problem. The planning and development machinery set up or proposed in the metro cities is itself an exercise in circumvention, ignoring or avoiding the fragmentation of administrative entities, the requirements of local self-government, the obsolescence or irrelevance of existing municipal forms and institutions, and need

for integration of urban-rural and state-national planning efforts (Sivaramakrishnan 1974).

Rise of new towns

The partition of the country, followed by the influx of refugees and their resettlement, marked the beginning of the building of new towns in post-independent India. Several refugee resettlement towns like Nilokheri in Punjab, Gandhidham in Gujarat, Ulhasnagar in Maharashtra, and Ashokenagar in West Bengal were set up There were also a dozen or so "model towns" mainly in the Punjab area that came up during the forties and fifties. These "towns," however, were at best large residential neighbourhoods and could not appropriately be described as new towns. Chandigarh (probably the most widely known new town in India) and Bhubaneshwar are the two capital cities built soon after independence. Gandhinagar, the third capital city, followed much later.

Building of new towns as a significant spatial phenomenon in Indian however, commences with the constructions of several large-scale industrial townships all over the country, especially in eastern India. The setting up of the Damodar Valley Corporation and the construction of a series of power generating stations provided a stimulus to new industrial centres in the valley. It was also part of the Plan strategy to locate new industries away from large and established cities. The Third Five Year Plan went on to emphasize the preference for backward areas in the location of public sector projects. It was felt that the lack of facilities in such backward areas was not irremediable. There was also a latent hope that the effects of such large projects would trickle down to the surrounding areas. While the locations for the industries were chosen after a good deal of study, the townships themselves were regarded only as appendages to the industries. There was no conscious policy or thinking of a settlement pattern as such based on these industrial townships. The decision stemmed mainly from a welfare objective and the view that it was good policy to put up housing and other amenities for the workers and keep them satisfied.

This was the general background in which fifty odd industrial townships came to be set up in the fifties and sixties (Table 3). Some of these like Durgapur, Bhilai, Rourkela, and Bokaro have already grown into urban agglomerations well beyond the initial idea of

limited company townships. Other settlements like the Heavy Electrical township at Bhopal (Govindapura), the Heavy Engineering Corporation township at Ranchi (Jagannathnagar), the Hindus tan Aeronautic, the Hindustan Machine Tools, I.T I., and Bharat Electronic townships in Bangalore, the fertilizer factory township at Sindri, and the refinery township at Noonmati have contributed to the expansion of existing cities and their emergence as urban agglomerations. Apart from these, there are several industrial townships which do not form a part of any urban agglomeration but are sizable towns on their own, e.g., Neyveli, Chittaranjan, Hirakud, and Nayanangal. Taken together all the new towns of India account for a population of about 1.7 million which, in turn, represents less than 4 per cent of the increase in the urban population from 62 million in 1961 to 109 million in 1971. Nevertheless, the desires and objectives professed in establishing these townships, the substantial investments and planning efforts that have gone into them, and their character as young communities are matters which merit a special study. Unfortunately there is hardly any date which could help a comparative assessment of the new towns. The Committee on Plan Projects in 1963 undertook what was in effect a post-mortem of industrial townships and came up with certain broad guidelines for their planning (Government of India 1963). Most of the information that is available otherwise focuses mainly on the architectural and layout planning aspects such as in the case of Chandigarh. The author has came across only one comparative assessment of India's new towns published so far (Ved Prakash 1969).

Nature of town-planning

Chandigarh, Bhubaneswar, and the steel cities of Durgapur, Bhilai, Rourkela, and Bokaro are probably the most widely knownnew towns of India built after independence. In contrast to metro cities, the founding of these new towns was marked by substantial and detailed planning. Chandigarh's claim to fame is mainly because of Le Corbusier's association with its planning and because of its many unusual and attractive features. Bhubaneshwar, less grand in conception, was planned by Otto Konigsberger. A whole generation of Indian town planners and architects has been influenced by the Chandigarh experience. Perhaps the fact that Chandigarh was conceived as a purely administrative

town (though fortunately the city has been able to emerge out of this narrow concept) and that the site, scale, and form of the city did not have to take into account the preponderance of low incomes, requirements of industry, and industrial labour, limits its value as a planning model to other new towns.

The planning standards of new towns have been quite high, but they had little relevance to existing urban and socio-economic conditions. Gross densities in new towns vary from 16 to 61 per acre and the space taken up for circulation from 20 per cent to 42 per cent. Similarly, public utilities show wide disparity. Per capita daily water supply is 30 gallons in Chandigarh, 60 in Durgapur, 80 in Rourkela, and 90 to 100 in Bhilai. In providing community facilities, the standards have also varied considerably. One primary school for 2,500 is provided in Bhilai against one for 12,500 in Neyveli. Nayanangal has one high school for 4,000 boys and girls against one for 25,000 in Faridabad. The location of residences and other facilities also do not bear any relevance to important aspects of the city's functions. For instance, in

TABLE 8
CAPITAL AND MAINTENANCE COSTS IN SOME NEW TOWNS

Name of town	*Per capita capital cost*	*Per capita maintenance cost*
		(*Figures in Rupees*)
Chandigarh	4384	190
Bhilai	3810	257
Rourkela	3119	214
Durgapur Steel Township	3999	234
Pimpri	2352	169
Namrup	2884	205

SOURCE : Ved Prakash, *New towns in India, op. cit. 44.*

NOTE: The maintenance costs exclude costs of buildings except housing: the calculations are also based on the estimated capital costs.

the Durgapur steel town the residences of lower income employees are farthest from the steel plant and the management maintains a large transport fleet to carry its workers to the plant and back, whereas the residences of the higher salaried employees, many of whom have their own transport, are located nearer the

plant. Per capita capital costs have likewise varied from a high Rs 4,400 in Chandigarh to a modest Rs 2,400 in Pimpri. Consequently the operating and maintenance costs have also varied well above the capacity of the citizens to meet them (Table 8).

None of the major new towns has made adequate provision for trading and commercial facilities and for the accommodation of the tertiary population's sector. The genuine and lofty concern for decent living and amenities for industrial labour is in sharp contrast to the total disregard for the service populations, an inevitable concomitant to any urban growth. Unplanned commercial areas and squatter settlements have consequently sprung up in large numbers on the fringes of most new towns. In Durgapur, the Benachity Bazaar—previously a small rural settlement between the steel plant and the steel town—has burgioned into a commercial area with nearly 1,000 establishments, a 50,000 strong trading community, and a monthly turnover of around Rs 4 million. Squatter settlements which have sprouted along the peripheries of the steel townships and the interstices of unacquired and unbuilt lands between the different industries and company townships, account for another 20,000 people. Likewise Bhilai, the steel town, is grilled with a ring of squatter settlements, commercial areas, and a series of temporary cinema houses locally referred to as "Bhilai's Hollywood." Bokaro Steel City, the latest of the steel towns, is serviced by Chas—the strip bazaar—which threatens to overwhelm any plans the city might have for setting up commercial facilities elsewhere.

Generally speaking, the extent of planning in new towns has been confined to the limited requirements of the concerned factory and housing (as much as possible) for the employees. Schools, hospitals, and recreational facilities have been provided, but once again for the factory employees and their dependants only. Provision for other important functions and needs in the city has either been ignored or kept to the minimum. The main reason for all these deficiencies is that the new towns were conceived primarily as company townships—settlements captive to the particular industry—confined to its limited needs and not as the focal points of new urban growth.

New towns and their regions

Considering the volume and range of investments the new

industrial townships offered a valuable opportunity for bringing about a sizeable socio-economic impact on at least their immediate surrounding areas. The nature of the industrial investments also offered scope for substantial development of ancillary and small-scale industries, besides numerous economic activities, as part of the supporting systems for urban daily life. Unfortunately, the establishment of new towns was not preceded by careful assessment of socio-economic characteristics and potentialities in their respective regions. An elaborate diagnostic survey was initiated in the fifties covering the upper, middle, and lower Damodar valleys in the states of Bihar and West Bengal. Since a few other significant industries and new towns were coming up in the valley, the diagnostic survey could have helped substantially in their planing. Unfortunately the diagnostic effort itself consumed the greater part of the sixties by which time the form and substance of the new towns had become a *fait accompli.* In the case of Durgapur, the Indian Institute of Technology, Kharagpur, was invited in 1959-60 to undertake a regional and physical planning study not only for Durgapur, but also for its surrounding agricultural areas in Bankura, Burdwan, and Birbhum districts. The findings of the study were not intergrated, however, into the plans for Durgapur. A few years later, in 1966, a rural industries project was established in Durgapur with a jurisdiction covering several community development blocks around the new towns as also in Bankura district. This project has been instrumental in setting up 200 ancillary units and some 900 small-scale industries in various fields such as food processing, cattle and poultry feed, a supporting unit for daily system, agro-engineering industries, and construction materials. About 20,000 full-time jobs and an equal number of part-time jobs have been created. Similar projects have been taken up for the Adityapur area near Jamshedpur and also in Rourkela. While these projects have certainly demonstrated how potentialities in new industrial settlements can be successfully exploited, their performance remains to be evaluated with respect to the scope and quality of socio-economic changes brought about by them.

On the physical scene, however, the establishment of new towns has been marked by considerable disruption of village units in the area. In most cases, in Durgapur, Bhilai, and Rourkela, for example, strenuous efforts were made for the resettlement

of village units. By and large the principle was accepted that displaced households should have preference for employment in industry. Where possible, entire village units were shifted to fresh locations and in other cases displaced village households were grouped in new resettlement colonies. For example, in Durgapur, displaced families in more than half a dozen villages were grouped in a large resettlement colony known as Gopalmath which has presently a population of nearly 10,000. Similarly, in Rourkela several tribal villages were grouped in three or four resettlement colonies. These colonies were provided with some services like drinking water supply, paved roads, and electricity. There have been several interesting studies about the urbanization and acculturization processes in these resettlement colonies and villages shifted to accommodate large projects. Roy Burman, in an exhaustive study relating to Rourkela, reached several interesting conclusions (Roy Burman 1961). It was found that even among tribal communities, youth were attracted towards industrial occupations with preference for living in resettlement colonies while elders preferred resettlements with the earlier village units intact. Community life in these resettlement colonies, despite admixture of castes and tribes and proximity of living, still revolved around earlier tribal or caste ties. "The atmosphere of the colony was marked by free floating tensions as also free floating integration, not a nesting pattern where conflicts are community-wise but a mixture. Mundas of one block in a resettlement colony would side with Mundas of another block when there is community interest, but again Mundas and Orans will join each other in an inter-village or inter-community conflict against Mundas or Orans of another village. . The old village ties have been dysfunctional but they are still continuing, caste and community values have become irrelevant but are continuing. Factionalism of the old villages have lost their meaning but are very much there. All these trends are symptoms of cultural lethargy but taken together serve the important function of reducing the harmful effects of each of them in isolation; separately, each is a symbol of the past: jointly they constitute a prop for the new" (Roy Burman 1961).

Unfortunately the socio-economic and community aspects of new towns themselves have not received even a fraction of the attention that social scientists have given to uprooted village communities and resettlement colonies. One of the most significant

social aspects of new towns in independent India is their cosmopolitan population. In his analysis of migration and linguistic dispersal Ashish Bose estimates, on the basis of the 1961 census data, that 6.3 million Punjabi, Hindi, Rajasthani, and Bihari speaking people have migrated to the states of Kerala, Tamil Nadu, Mysore, Andhra, Maharashtra, Gujarat, Orissa, West Bengal, and Assam. As against this, 2.38 million Tamil, Telugu, Malayalam, and Kannada speaking people have moved to other states (Roy Burman 1961). No figure of the linguistic breakup of the population of new towns, based on the 1971 census, are as yet available, but even to the most casual observer it would be apparent that each new town has a mixed population of several diverse linguistic and cultural groups. Available information suggests that while linguistic groups do not reside in specified portions of new towns, linguistic identity as such is sought to be preserved. The presence of several linguistic cultural associations in each township is a pointer to this. The new towns merit a careful social assessment from another angle as well: they are a large concentration of first generation industrial labour. Unlike Jamshedpur and Burnpur, Rourkela and Durgapur represent the first encounter with sophisticated industry for the Oriya and the Bengali. The effects of such an encounter are not only confined to economic and occupational aspects but also have profound influences on attitudes and community behaviour and, perhaps more importantly, on political developments and industrial relations. Unfortunately there is no study which focuses on these aspects on the new communities which have come up in India's new towns.

Available evidence leads us to the conclusion that the concept of company townships is an anachronism in contemporary society. The post-independence company township, to a large measure, is a derivation from the paternalistic tradition of railway towns A job in the railways has been usually regarded as a kind of family insurance in perpetuity. Preference to children in employment; subsidized accommodation, education, and even foodgrains; free transport and medical care; and other privileges are some of the features of the "one big family" of the railways. Public sector industries have followed on these lines and these "families" now constitute a privileged group among the working classes. Their privileges are distinctly above those enjoyed by the workmen of earlier industries or for that matter other sections of society. It cannot be

denied that the living conditions of a worker in a steel town or other company townships is far above those of say, a jute mill, engineering, or textile worker in Calcutta, Bombay, or Kanpur. Still, for a variety of reasons, the industrial township has been nowhere near the throb and vibrance of older cities. By and large the new towns are viewed by residents as drab, unattractive, and rigidly stratified. The absence of any facilities for land or house ownership, the failure to evolve institutions which would allow and foster citizen participation in the running of new towns, and the near total mix-up of employment and residence with the management are some of the factors which cause new towns to be regarded as captive settlements. Chittaranjan (built in the fifties for the locomotive factory), a town of nearly 50,000 people, is encircled with a fence and declared a protected area to prohibit entry without permit. This is an extreme form of the pattern. Here the management provides everything from housing to schools, cinemas, clubs, football fields, hospitals, and cremation and burial grounds. The general manager functions not only as the chief executive of the locomotive works, but also as the presiding deity of community life. Other new towns such as those established with steel plants, fertilizer plants, or refineries are not very different. Even community facilities and institutions in the townships are not the product of spontaneous community action but conferments from the management. In the absence of scientific studies it is not possible to identify or analyze the reactions of new town residents to the phenomenon. To the casual observer, the sight of railway stations in new towns crowded with people heading for the nearest big city for the weekends, might seem an indictment of life in the new towns. Perhaps two decades is not enough time to permit development of the kind of social links and institutions which tend to make life in towns agreeable. An international seminar on new towns held in Moscow in 1964 observed that in company townships "social life was constrained and social intercourse tended to concentrate on references of irritation with the management" (United Nations 1974).

Trends for the Future

"The history of population projections on the whole is a history of failure," observes one of the country's leading demographers

(United Nations 1974). Still for what it is worth, we may note that India's urban population according to UN projections will exceed 200 million in fifteen years. The Town and Country Planning Organization, Government of India, estimates that Class I cities will increase from the present 147 to 185 by then and possibly over 300 by the end of the century. If so, we will have quite an array of metro cities apart from the sizeable expansion of existing ones. Bombay and Calcutta would probably double in size and become "mega" cities with Delhi coming as a close third. Other existing metro cities will continue to expand and at least a dozen more million plus cities will come into view such as Nagpur, Lucknow, Coimbatore, Madurai, Allahabad, and so on (Table 9).

TABLE 9

POPULATION PROJECTION FOR METRO CITIES

Existing metro cities	*1961*	*1971*	*61—71% growth*	*2001*
			(*Figures in millians*)	
CMD	6.7	8.3	22.1	16.0
Greater Bombay	4.1	5.9	43.8	11.3
Delhi urban area	2.3	3.6	53.9	9.6
Madras metro area	2.2	3.2	42.9	4.5
Hyderabad	1.3	1.8	44.0	
Bangalore	1.2	1.7	43.0	3 3
Ahmedabad	1.2	1.7	38.1	3.3
Kanpur	0.9	1.3	31.1	2+
Poona urban area	0.7	1.1	42.8	2+
New metro cities				
Nagpur urban area	0.7	0.93	34.6	2+
Lucknow urban area	0.6	0.81	26.0	
Coimbatore urban area	0.5	0.73	46.0	
Madurai urban area	0.5	0.71	30 0	1.5 to 2
Jaipur urban area	0.40	0.63	52.0	
Agra urban area	0.50	0.63	25.0	
Varanasi urban area	0.49	0.6	19.0	
Indore urban area	0.39	0.56	45.0	1 to 1 5
Jabalpur urban area	0.37	0.53	45.4	
Allahabad urban area	0.41	0.51	25.0	
Surat urban area	0.29	0.49	65.0	

SOURCE: Census of India 1961

Given a surprise free world the following may be taken for granted:

Despite family planning programmes, rates of population increase will not substantially decline.

Despite present development efforts and the oft-predicted green revolution, rural development programmes will not significantly reduce migration flows into cities.

Efforts towards industrial dispersal or balanced regional development would not succeed to such an extent as to make any noticable deflection from large city growth.

The existing patterns of income distribution are unlikely to change substantially and the urban poor will continue to dominate the scene.

It is in this context that the present efforts to resurrect metro cities are to be assessed. In the sense these efforts have commenced as joint Centre-state endeavours, they are, as noted earlier, nationally significant. But it is equally important to note that these efforts have so far been limited to only holding or marginally improving the levels of certain basic services such as water

TABLE 10

RATIO OF FEMALES TO MALES IN METRO CITIES PER THOUSAND MALES

City	*1941*	*1951*	*1961*	*1971*
Bombay	598	601	663	
Calcutta (Corpn. area only)	455	580	612	
Delhi	656	753	777	
Madras	910	921	900	
Hyderabad	921	987	929	
Bangalore	898	882	872	
Ahmedabad	714	766	803	
Kanpur	641	698	738	
Poona	889	968	883	
All Class I cities	720	788	798	
All Cities	831	860	845	859
All India	945	946	941	932

SOURCE: Census of India 1941, 1951, and 1961. Ashish Bose, *Studies in India's urbanization*, p. 281

City-wise figures for metro cities not yet available.

supply and sanitation. Given the inevitability of large city growth, infrastructure schemes have to be integrated with conscious efforts towards institution-building in the metro city and with efforts to devise better fiscal and administrative mechanisms which alone can ensure adequate performance of metro city systems and sustain the improvements being attempted or made. This is not to deny the need for improvements or underrate their significance, but only to point out the scope and extent of the effort involved even for a holding operation.

Buildings and sewers alone do not make a city. From society's point of view the metro city's significance is more as a melting pot of different ethnic, linguistic, or religious groups, a meeting ground for cross-fertilization of ideas, and a cradle for economic, social, and political initiatives. Substantial linguistic dispersal in the wake of migration between the southern and northern states has been noted already. Most of this dispersal has taken place in cities. Yet, as Nirmal Kumar Bose points out, in Calcutta linguistic groups live in separate, identifiable parts of the city (Sinha 1970). The phenomenon is not only confined to Calcutta. Matunga in Bombay, where most of the south Indian migrants live, and Sowcarpet in Madras provide similar indications. The breakdown of traditional barriers of caste is also something usually associated with urbanization. "Since caste has its own sub-structure of production organization based on a theoretically recognised monopoly of occupations and a traditional exchange of goods and services," Nirmal Kumar Bose upholds the view that the caste system is doomed under the massive weight of industrialization and urbanization (Sinha 1970). Nevertheless, in his pioneering survey of Calcutta Bose noted that traditional caste ties had persisted. "In an economy of scarcity new types of urban occupations have not thrown up new forms of trade organization; at least not to an adequate extent. So one relies for economic support more upon his co-religionists or even members of his own caste or inhabitants of the village or district from which he comes." The city, the survey concluded, was in a state of "immature or imperfect urbanisation" where communal tensions were likely to be a recurring feature (Sinha 1970). Here again the phenomenon is not confined to Calcutta. In the history of metro cities, since independence, communal and caste flare-ups have been a sad but recurring item. The emergence of the Shiv Sena in Bombay, based

mainly on hatred towards migrants, especially south Indians, and its rapid rise as a political force of considerable power, and the formation of militant units in Madras to protect the interests of Tamils against migrants from Kerala, are a disturbing outcome of the imperfect or immature urbanization that Bose speaks of. It would seem that metro cities have only a veneer of social and cultural pluralism.

Those concerned with the urban mess in the country frequently comment on the lack of an urban lobby in the Indian polity. The so-called conflict between the rival claims of *rural* and *urban* development is cited as a reason for this neglect. The indifference to urban problems continues to be a hangover from a Gandhian and anti-colonial past. For some, such indifference is not only natural but justified as well, and metro cities should "pay the price for having prospered in the past by draining the life blood from the countryside" (Park 1962). Whatever be the colonial or parasitic past, it is futile to deny its present contribution to national economy and the vital need to keep these great engines running. Given the large population increase and the concomitant large city growth it is equally devious to withhold attention or effort from metro cities on the ground that their problems should be viewed in the wider socio-economic and regional context. While it is not denied that present efforts are directed mainly towards the infrastructure in metro cities, these measures are complementary and not contradictory to any larger and wider programme of economic or spatial development. In fact, the failure lies in our not being able to evolve the institutional devices which would have the strength and jurisdiction to take note of regional issues. The Damodar Valley Corporation, probably the first multi-purpose inter-state developmental effort in the country, is now vivisected beyond recognition and is nowhere near the region-wide planning and development mandate which once underscored the dream. Inter-state organizations or zonal councils have not been particularly effective in perceiving development issues in a region or reconciling them. The crux of the problem continues to be the absence of a conscious and deliberate policy for settlements which would view metro cities or new towns, villages or market towns, as parts of a functionally integrated system in a rural-urban continuum. However, the problems of urbanization *per se* and their high

visibility in metro cities have helped generate much debate and interest. It is to be hoped that in the near future this will lead to a national policy for human settlement.

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SCIENCE AND TECHNOLOGY

A. Rahman

During the last twenty-five years considerable resources have been invested in the development of the infrastructure and organization of science and technology. In addition to the direct investment in research and development activities, which is given in Table 1, more than the equivalent amount of resources has been invested in creating educational facilities to train scientists and technologists to man these research institutes. According to one estimate, there are at present more than nine hundred research and development institutes in the country (Rahman 1973, Rajgopalan and Rangaswamy 1968); and the present number of scientists and engineers is more than one million. Statistical data about scientific research organizations and manpower is given in Tables 2 and 3.

It is significant to note that the major thrust to development came after independence. Before independence, the scientific and technological activities were only confined to a small area. During the Second World War, however, the Government of India was compelled to have second thoughts and some facilities for research and development were created to help war efforts. After independence, the role of scientific research and development was redefined and the emphasis changed in the context of overall economic planning. A survey of the developments over the last twenty-five years would be useful to:

1. Highlight the forces and social pressures which motivated developments in science and technology and the direction

TABLE 1

ESTIMATED R AND D EXPENDITURE IN CENTRAL, STATE AND PRIVATE SECTORS

Sector	*1958-59*		*1968-69*		*1969-70*		*1970-71*		*1971-72*		*1972-73*		*1973-74*	
	Expen-diture	*%to total*	*Expen-diture*	*%to total*	*Expen-diture*	*%to tolal*	*Expen-diture*	*%to total*	*Expen-diture*	*% to total*	*Expen-diture*	*% to total*	*Expen-diture*	*% to total*
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*	*15*
Central sector (including universities)	27.66	96.0	109.60	83.4	121.26	82.9	146.20	84.3	156.07	85.4	195.60	83.8	209.64	82.2
State sector	1.00	3.5	11.99	0.1	12.22	8.3	12.58	7.3	9.53	6.5	10.76	4.7	12.87	5.0
Private sector	0.15	0,5	9.85	7.5	12.81	8.8	14.59	8.4	25.35	8.1	27.82	11.5	32 96	12.8
Total	28.81	100.0	131.44	100.0	146.29	100.0	173.37	100.0	190.95	100.0	234.18	100.0	255.47	100 0

SOURCES: (1) Till 1970-71 as quoted in Rahman *et. al, Science and technology in India*. ICCR Publication, 1973.
(2) From 1971-72 to 1973-74, data have been collected from the records of the Department of Science and Technology.

TABLE 2

STOCK OF SCIENTISTS, ENGINEERS AND MEDICAL PERSONNEL

Category	*Stock at the end of the year*						*Growthr factor*	
	1950	*1955*	*1960*	*1965*	*1970**	*1971*	*1950-60*	*1960-70*
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*
Science graduates	66,900	1,14,400	1,85,800	3,00,900	4,80,200	4,20,000	2.8	2.6
Science postgraduates	17,000	30,000	51,400	93,400	1,52,700	1,39,200	3.0	3.0
Engineers and technologists (degree)	21,600	37,500	62,200	1,06,700	1,85,400	1,85,400 (No significant change)	2.9	3.0
Engineers and technologists (diploma)	31,500	46,800	75,000	1,38,900	2,44,400	2,44,400 (No significant change)	2.4	3.3
Medical graduates	18,000	29,000	41,600	60,600	97,800	97,800 (No significant change)	2.3	2.4
Medical licenciates	33,000	35,000	34,000	31,000	27,000	27,000 (No significant change)		
All scientific and technological personnel	1,88,000	2,92,700	4,50,000	7,31,500	11,87,500	11,13,800 (Difference due to estimate efforts)	2.4	2.6

SOURCE: *Technological manpower bulletin*, Division of Scientific and Technical Personnel, CSIR, June 1970.

*Estimated.

TABLE 3

STOCK OF SCIENTISTS BY CATEGORY

Category	*Stock at the end of the year*					*Growth factor*	
	1950	*1955*	*1960*	*1965*	*1970*[a]	*1950-60*	*1960-70*
Graduates in general science	60,000	1,02,900	1,65,600	2,61,500	4,20,000	2.8	2.5
Graduates in agricultural science	6,700	10,100	15,700	30,600	47,200	2.3	3.0
Graduates in veterinary science	200	1,400	4,500	8,800	13,000	22.5	2.9
Postgraduates in:							
Mathematics	3,900	6,500	10,700	17,800	28,200	2.7	2.6
Statistics	200	600	1,500	3,400	5,200	7.5	3.5
Physics	3,000	4,800	7,500	12,800	20,800	2.5	2.8
Chemistry	4,700	7,000	10,700	18,000	29,100	2.3	2.7
Geo-sciences	400	1,000	2,000	4,200	6,600	5.0	3.3
Geography	900	2,300	4,700	9,200	14,500	5.2	3.1
Zoology	1,100	2,100	3,500	6,500	11,100	3.2	3.2
Botany	1,200	2,100	3,700	6,600	11,400	3.1	3.1
Agriculture	1,000	2,000	3,700	7,700	13,500	3.7	3.6
Social sciences	500	1,400	3,000	6,600	11,000	6.0	3.7
Other sciences	100	200	400	600	1,300	4.0	3.3

SOURCE: Same as Table 2.

[a]Estimated

that they have taken, i.e., the historical basis of these developments;

2. Indicate the salient achievements and to assess their social relevance for the country; and
3. Identify gaps in scientific organizations or programmes, with a view to plug them and change the emphasis for the future, i.e., the tasks ahead.

Science and Technology before Independence

Science and technology were introduced by the British as a substitute to the traditional systems with a very specific objective. The objective, as defined by Macaulay, was to produce people who would not only speak and dress like the English but would also think like them. In other words, the overriding consideration was that the developments should, in the ultimate analysis, not only help colonial rule but also strengthen it. This will be amply evident as we proceed to describe the various developments of this period.

During the period in which British rule was firmly established in India, England had passed through the birth pangs of the industrial revolution. Its industrial structure was rapidly expanding and the mercantile activities of British traders were at their zenith. Both these activities demanded a continuous supply of raw materials. Colonies were developed, therefore, as the major sources for cheap raw materials, both agricultural and mineral. In order to meet the demands of the latter, extensive surveys were carried out in order to develop these for the industries in England.

Scientific surveys

In line with these developments, the initial scientific investigations were those concerning natural resources. Geographic characteristics, climatic conditions, and minerals attracted attention, and scientific survey organizations like the Survey of India and the Geological Survey were established. Later the Botanical Survey and the Zoological Survey were set up to explore flora and fauna.

The Trigonometrical Survey of the Peninsula of India was established in 1800 and was expanded as the Great Trigonometrical Survey of India in 1818. The topographical and revenue surveys were grouped together under the Surveyor General of India in 1917

and a school of surveying was established in Madras. The Trigonometrical Survey was consolidated in 1878 with the Survey of India. The main function of the Survey of India was to undertake topographical and cadastral survey for purposes of revenue collection and better control of the colony. It is no surprise then that the inaccessible regions remained untouched because the need of the colonial government could be met by the survey of accessible regions alone.

In 1851, the Geological Survey of India was established and Dr Thomas Oldham, then a professor of geology at Dublin, was appointed the first geological superintendent. The beginnings of geological studies may be traced, however, to the last quarter of the eighteenth century. Benjamin Heyne, a member of the United Brothers and superintendent of Samulcotta nurseries, carried out research in mineralogy and metallurgy. A series of discoveries of Siwalik fossil and subsequent research on them were done by H. Falconer and P.T. Cautlay, who were jointly awarded the Wollasten medal of the Geological Survey of London in 1873.

The Botanical Survey of India was established in 1890 with Sir George King as Director. Zoological research in India dates back to the appointment of Edward Blyth as the curator of the museum of the Asiatic Society in 1841. In 1866 his successor, John Anderson, became the first superintendent of Indian museums, with zoological and anthropological collections under his direct charge. In 1916, the zoological and anthropological sections of the Indian museum were converted into the Zoological Survey of India.

Though these surveys constituted the beginnings of western scientific research activity in India, we have not clubbed them with other scientific research organizations of the period. This is deliberate. It is because these organizations were the limbs of the administration and were designed primarily to serve specific purposes of administration alone. Secondly, there was a deliberate policy to keep Indians away from responsible positions in these departments. The first appointment of an Indian (Dr P.N. Bose) in a graded post did not take place until 1980 (Sen 1968). Even in graded posts, there were differences in emoluments between Europeans and Indians (Sinha).

We can now take a quick glance at other developments in science and technology.

Scientific and technical education

Education in India in the early nineteenth century was neither widespread nor geared to the promotion of science and technical arts and crafts. A few centres then functioning in Bengal, Bombay, and Madras were concerned with traditional learning Later on, a number of missionary schools sprang up in and near Calcutta as well as in the presidencies of Bombay and Madras. Historically the famous Educational Despatch of Charles Wood is important to indicate the aim of education. It says that education was to achieve "the diffusion of the improved arts, science, philosophy and literature of Europe, in short of European knowledge" (Indian National Science Academy 1971). It also recommended the creation of the departments of public instruction in Bengal, Madras, Bombay, the Northern Western Provinces, and the Punjab, each under a Director of Public Instruction. Three universities were established at Calcutta (January 1857), Bombay (July 1857), and Madras (September 1857). They were only affiliating and examining bodies in the faculties of law, science, civil engineering, and medicine and surgery, besides arts. They were active in promoting collegiate education in different places and at different levels.

Engineering and allied technical education

An industrial school, the School of Ordnance Artificers, was opened in 1840 by Major Maitland, Superintendent of the Gun Carriage Manufactory. In 1850, another institution known as the School of Industrial Arts was established. In the Presidency of Bombay, a school of industry was established in 1879 at Ratnagiri. Later on, a few more industrial schools came into existence under the municipal boards. In 1887, the Victoria Jubilee Technical Institute started courses in electrical, mechanical, and textile engineering.

The first survey school was opened in Madras in 1794 by Michael Topping, the East India Company's astronomer and geographical marine surveyor at the Presidency of Fort St. George. As early as 1848, the Governor General, Lord Dalhousie, had suggested that each of the three presidency towns should have an engineering college. So engineering colleges were also established in Calcutta (1880), Madras (1885), and Bombay (1921).

Medical education

Medical education was started in the first quarter of the nineteenth century. The study of indigenous systems of medicine was part of the teaching course at the Madrassa College (Calcutta) and Sanskrit College (Banaras).

Bengal was the first Presidency to have a college for teaching western medical sciences through the medium of English in 1835. This college was set up on the recommendation of a committee appointed by Lord William Bentinck in 1833.

At Madras, a medical school was established in 1843. In 1851, this school was raised to the status of a college, which in 1855 received recognition by the Royal College of Surgeons of London. In 1845, the Grant Medical school was established in Bombay.

In addition to the medical colleges in the presidencies, 28 medical schools were established, chief among them being those at Agra (1853), Vellore (1876), Cuttack (1876), Indore (1878), Tanjore (1883), Ludhiana (1854), and Dibrugarh (1900).

Agricultural education

Agricultural education did not appear to have received sufficient attention in the beginning of the nineteenth century, as no institution was set up to impart agricultural education. The importance of agricultural education was stressed by the Agricultural Conference held in 1888. In 1897, the government accorded to agricultural education a place comparable to that it had given to other professional subjects. Bombay University was the first to recognize agriculture as a separate subject for the degree examination. Even so, it was only in 1905 that steps were taken to start an agriculture college at Poona.

Veterinary science also received some attention. The Indian Cattle Plague Commission, appointed in 1869, made recommendations leading to the establishment of veterinary colleges at Babugarh (1877), Lahore (1882), Bombay, Madras, and Calcutta (1893).

In 1882, out of eighteen professional colleges, twelve were for law and only three each for medicine and engineering. In the succeeding decade, the number of arts colleges rose from three to four. Further, out of over sixteen thousand students in 1892-1893, there were less than two thousand taking up law, eight hundred

medicine, and five hundred engineering. This, in short, gives the trends in the field of scientific education prevalent during the last two decades of the nineteenth century.

Scientific and technological research

Having discussed the emergence of scientific surveys and the factors that led to their establishment, we shall now present a brief account of research activities and the establishment of research institutes. It may be stressed that administrative and political expediency were also at the root of these developments.

Agricultural research

The beginning of the present century marks the awakening of interest in the scientific study of agriculture throughout the world. It had its repercussions in India as well. A policy for agricultural research and its improvement was put forward by Lord Curzon. A bacteriological laboratory was established as early as 1889 in Poona and subsequently it was transferred to Mukteshwar in 1893. Its Izatnagar branch was opened in 1913 and later its name was changed to the Imperial Veterinary Research Institute with headquarters at Izatnagar.

In 1921, agriculture, which had so far been a central subject, was transferred to the provinces. The latter were to deal with policy, administration, and coordination of agricultural research and education. In 1926, to examine and report on agricultural conditions and the total economy of India, with particular reference to the measures being taken for promotion of agricultural and veterinary research and education, a royal commission was set up. As a result of the recommendations of the Royal Agricultural Commission, the Imperial Council of Agricultural Research was established in 1929 with the object of promoting, guiding, and coordinating agricultural research and education in India.

The Indian Central Cotton Committee was the first to be established at Bombay in 1921, followed by the Indian Lac Cess Committee at Ranchi, the Central Sugarcane Committee at Delhi (1944), the Indian Tobacco Committee at Madras and the Indian Central Coconut Committee at Ernakulam (1945), and the Central Oilseeds Committee at Hyderabad (1947). These commodity committees undertook research on problems of particular crops with

emphasis on plant breeding, physiology, agronomy, plant protection, and seed technology.

Medical research

The alleviation of human suffering and the pioneering work of Leeuwenhock, Ehrlich, Jenner, Lister, Pasteur, et al., fired the imagination of many and attracted them to medical research. In this India was no exception. The second reason for initiating medical education and research by the British government was financial expediency. It was very expensive for it to bring British medical officers, who were working on their own initiative and with limited resources, and making important contributions to the knowledge of tropical diseases. These factors compelled the then Government of India to initiate and extend the practice of deputing its officers to study a few special research problems relating to diseases like cholera, malaria, beri-beri, kala azar, etc. A chain of institutes and laboratories were established—the Bacteriological Laboratory at Agra (1892), the Plague Research Laboratory at Bombay (1899, renamed as the Haffkine Institute in 1926), the Pasteur Institute at Kasauli (1900), and the King Institute at Guindy (1903). At the suggestion of Rogers, the school of Tropical Medicine was established in 1910 in Calcutta.

The efforts of Harcourt Butler, first member of the Department of Education, Health and Lands in the Viceroy's Executive Council and Pardy Luckis, the Director General of the Indian Medical Service, resulted in the establishment of the Indian Research Fund Association in 1911. In 1934, the Government of India decided that the association should not be administered by the government. This provided the association with greater freedom in administering the funds placed at its disposal. During the period of the Second World War, the activities of the association had to be continued on a restricted scale. After the war, the subject of medical research in India was reviewed by the Health Survey and Development Committee (Bhore Committee). As a result, it was decided to enlarge the activities of the Indian Research Fund Association and make the necessary alterations in its Constitution to reshape it from an association into a council with autonomous powers. The association was renamed the Indian Council of Medical Research in 1947.

Private research institutes

Most research activity in the physical and the biological sciences was confined to only a few departments in universities. However, by now many industrialists and enlightened people had been abroad, both for the purpose of study or in connection with business. They had seen the importance of scientific developments for the industrial transformation of the economy. As a result, a number of philanthropists helped establish scientific research organizations.

A few institutes were established by scientists or public men, and they bear the names of their founders. Some of these are: the Indian Association for Cultivation of Science, Calcutta (1876), the Indian Institute of Science, Bangalore (1911), the Bose Institute, Calcutta (1917), the Indian Academy of Science, Bangalore (1934), the Sheila Dhar Institute of Soil Science, Allahabad (1936), the Tata Institute of Fundamental Research, Bombay (1945), and the Shri Ram Institute for Industrial Research, Delhi (1947). Their development, however, was accelerated only after independence. Some of these institutes are now centres for higher study and research in their respective fields, while a few have attained the status of universities.

Industrial research

Industrial research, as it is understood today, was the last to catch the attention of the then Government of India. One need not search for its reasons. The industrial structure was not diverse or viable enough to demand independent technological capability. The only industries worth the name were textiles and sugar. These were, of course, traditional industries, but they had little demand for scientific and technological research.

It was the requirements of the First World War and the political pressure of the national movement which led to the appointment of the Holland Commission in 1918 for apprising, among others, the status of existing industrial research facilities and making recommendations for their improvement. However, very little was done till 1935 when the Government of India established an industrial intelligence and research bureau with the object of laying the foundation on which a research organization suitable for the needs of the country could later be constructed.

Council of scientific and industrial research

An Industrial Research Council was set up to advise on measures for the coordination and development of industrial research. A research branch of the Bureau of Industrial Research was located in the Government Test House, Alipore. It was the need of the war again, which forced the then government to establish the Board of Scientific and Industrial Research. This board emphasized the need of research to bring about effective coordination of the research activities of the country and to promote the application of research for national development. Recommendations in this regard were also made by A.V. Hill, then secretary of the Royal Society, who was deputed by the Government of India to study the status of scientific research in India and to suggest measures to augment them. In 1942, the Industrial Research Fund was created by the government for the purpose of fostering industrial development in the country and the Council of Scientific and Industrial Research was constituted as an autonomous body to administer this fund.

The Research Planning Committee, with Sir R.K. Shanmukham Shetty as its chairman, recommended that the scheme of national laboratories should be expanded to provide for specialized institutes for fields like food technology, metallurgy, fuel, glass and silicate, oils and paints, buildings, roads, leather, electrochemicals, etc. After independence, scientific research emerged as a portfolio under the Prime Minister in August 1947. The Department of Scientific Research was created in June 1948 and the Council of Scientific and Industrial Research was brought under the umbrella of this department.

Scientific and professional societies

Whereas earlier discussion has been related to governmental efforts, from the last quarter of the eighteenth century there was another stream to develop awareness for science and technology. This was the establishment of a number of scientific and professional societies. It would be apparent from the brief account in succeeding paragraphs that this movement gathered momentum in the first quarter of the twentieth century. Thus, it took more than a hundred years for the movement to become self-sustaining. This clearly indicates the fact that for this stream to become viable and effective, certain prerequisites must be fulfilled. These are:

(*i*) a diversified science and technology organization, and (*ii*) a large number of scientists and other enlightened persons interested in making science and technology a societal force.

Public interest in scientific research in India began with the foundation of the Asiatic Society in Calcutta in January 1784 by Sir William Jones, a judge of the Supreme Court. He was also the first president of the society. Through the effort of this society, the Indian Museum was founded in Calcutta in 1866. The society published in its transactions a number of papers on physics, chemistry, geology, and medical sciences.

The Agricultural Society of India was established in 1820. Later its name was changed to the Royal Agricultural Society.

The Indian Association for the Cultivation of Science, founded in 1876 by Dr Mohandra Lal Sircar, became one of the foremost scientific centres in the country. Mention may also be made of the Bombay Natural History Society which was founded in 1883 and of the Indian Mathematical Society, Poona, which came into existence in 1907.

As a result of the efforts of MacMohan of Lucknow and Simon of Madras, the Indian Science Congress Association was formed in 1914. Later, the Banaras Mathematical Society (1918), the Indian Botanical Society (1920), the Institution of Engineers (1920), the Geological Mining and Metallurgical Society (1924), the Indian Chemical Society (1924), the Sugar Technologist Association of India (1926), the Institution of Chemists (1927), the

TABLE 4
CUMULATIVE GROWTH OF SCIENTIFIC SOCIETIES

Societies registered established till the end of	*Physical sciences*	*Medical sciences*	*Engineering sciences*	*Biological sciences*	*General*	*Cumulative growth*
1900	—	—	2	1	1	4
1910	1	3	3	1	2	10
1920	1	3	6	2	4	16
1930	3	4	10	5	5	27
1940	4	7	12	9	6	38
1950	6	10	12	16	9	53

TABLE 5

GROWTH OF PERIODICALS AT THE END OF THE YEAR

Areas/years	*1820*	*1850*	*1900*	*1920*	*1940*	*1947*	*1950*	*1955*	*1960*	*1964*
General, pure and applied and physical sciences	2	4	10	14	36	40	53	68	91	101
Biological sciences	—	—	5	6	12	17	22	30	42	48
Medical science	—	—	2	7	31	32	41	58	85	92
Agricultural and horticultural sciences	—	4	12	18	7	14	21	28	39	47
Animal husbandry and veterinary sciences	—	—	—	6	3	4	4	7	10	14
Engineering sciences	—	—	1	14	17	18	24	37	59	67
Chemical technology	—	—	—	—	3	6	9	21	29	29
Manufactures	—	—	—	—	2	3	4	8	12	15
Management	—	—	—	—	—	—	—	3	5	4
Building industry and architecture	—	—	—	—	2	2	2	6	9	9
Non-research in the above areas	—	—	1	12	27	39	53	76	124	149

SOURCE: Compiled from scientific journals in India Research Survey and Planning Organization, CSIR, New Delhi, 1967.

National Academy of Science (1931), the Indian Science News Association (1935), and the Entomological Society of India (1938), were the other important societies established for encouragement and promotion of research in various fields of science and technology. Table 4, given above, highlights the growth of scientific societies till 1950.

Scientific journals

Scientific journals play an important role in the dissemination of knowledge in different fields of science and they have an important position in the scientific and technical infrastructure of a country. The first general science journal was called *Gleanings of Science* (Calcutta, 1829-31). Table 5 gives the growth and diversification of scientific journals in India since 1820 (Rahman 1973). Analyzing the growth of journals in India, certain periods of growth are evident both with regard to the overall growth as well as specialization. First, there are definite periods when a spurt in publication activity took place. The net addition was 2 per decade between 1820 to 1850, 4.4 between 1850 to 1900, 18 during 1900 to 1920, 23.5 between 1920 to 1940, and 134 between 1940 to 1960. In terms of international developments, India was publishing 2 journals while elsewhere 100 journals were being published at the beginning of the nineteenth century; by 1850 the respective figures rose to 8 and 1,000; in 1900 comparative figures were 31 and 5,000; while in 1964, a conservative estimate would be 607 and 27,000 respectively.

TABLE 6
GROWTH OF SCIENTIFIC INSTITUTIONS BEFORE INDEPENDENCE

Year	*Fields*				*Total*
	Science	*Agriculture*	*Medicine*	*Engineering*	
1900	9	2	1	1	13
1930	9	9	8	2	28
1940	5	4	3	2	14
1947	5	9	1	4	19
	28	24	13	9	74

SOURCE: Compiled from *Direction from scientific institutions in India*, 1969. New Delhi: INSDOC.

Secondly, the rate of mortality was relatively high before independence, especially during 1900 to 1940. Since independence, a large number of journals have been started but relatively few have ceased publication.

Thirdly, there are different periods in which different branches of science appear to get special attention, as seen from the number of journals published.

Lastly, the publication of journals in India, as in other countries was, to begin with, primarily the business of societies. Various government departments started their publications by the middle of the nineteenth century. The latter were bringing out more journals than the societies only during 1900 to 1920. Since 1920, societies have again taken the lead and the gulf is constantly increasing. Private publishers and industrial establishments were publishing a few of them by the end of the nineteenth century; higher educational institutions and the alumni associations started even later. Each of them has played a restricted role both with regard to growth and specialization.

TABLE 7

RESEARCH INSTITUTES ESTABLISHED BEFORE 1947

Year	*Government*	*Non-government*	*Total*
1900	12	1	13
1930	25	3	28
1940	12	2	14
1947	16	3	19
Total	65	9	74

SOURCE: Compiled from *Directory of scientific research institutions in India*, 1969. New Delhi: INSDOC.

In the beginning of the twentieth century more journals were published in geology and geodetic survey and meteorology as compared to mathematics, statistics, chemistry, or physics. This, incidentally, also suggests the emphasis on research in these areas during the period as a result of the government's involvement.

It is significant to remember here that though the scientific and technological developments were motivated by the expediency of alien rule, a number of outstanding scientists appeared on the Indian scene. They won international recognition as well.

TABLE 8

SCIENCE FACULTIES IN INDIAN UNIVERSITIES AT THE TIME OF INDEPENDENCE

University	*Year of establishment of university*	*SCIENCE*		*ENGINEERING*		*MEDICINE*	
		Department	*Year of establishment*	*Department*	*Year of establishment*	*Department*	*Year of establishment*
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*
Agra	1927	Botany	1920	Civil	1944		
Aligarh	1921	Chemistry	1920	Electrical	1944		
		Geography	1933	Mechanical	1944		
		Mathematics and Statistics	1920				
		Physics	1920				
		Zoology	1932				
Allahabad	1887	Botany	1922	Chemical	1939		
		Chemistry	1922	Technology	1939		
		Mathematics	1922				
		Physics	1922				
		Zoology	1922				
Andhra	1926	Physics	1933	Chemical	1939		
		Applied Physics	1939				
		Chemistry	1945				
		Botany	1945				
		Geology	1941				
		Mathematics	1932				
		Zoology	1947				

1	2	3	4	5	6	7	8
Annamalai	1929	Botany	1931	Engineering	1945		
		Chemistry	1929	Technology	1945		
		Mathematics	1929				
		Physics	1929				
		Zoology	1931				
Banaras	1916	Botany	1919	Metallurgy	1923	Ayurveda	1918
				Mining	1923	Surgery	1927
		Geography	1946	Electrical	1919		
		Geology	1921	Mechanical	1919		
				Chemical teaching	1934		
Bombay	1857	—	—	—	—		
Calcutta	1857	Anthropology	1920				
		Applied Mathematics	1916				
		Botany	1918				
		Geology	1928				
		Geophysics	1941				
		Pure Chemistry	1916				
		Pure Mathematics	1922				
		Physics	1916				
		Physiology	1933				
		Statistics	1941				
		Zoology	1919				

1	2	3	4	5	6	7	8
Delhi	1922	Physics and Astrophysics	1922			Physiology	1944
		Chemistry	1922			Pharmacology	1944
		Anthropology	1947			Pathology	1944
		Botany	1947			Medicine	1944
		Nursing	1946			Tuberculosis	1944
		Zoology	1947			Social and Preventive Medicine	1944
						Surgery	1944
						Obstetrics	1944
						Gynaecology	1944
Kerala	1937	Marine Biology and Fisheries	1938				
		Statistics	1945				
Lucknow	1931	Botany	1921			Anatomy	1921
		Chemistry	1921			Forensic Medicine	1921
		Physics	1921			Medicine	1921
		Mathematics and Astronomy	1921			Ophthalmology	1921

1	2	3	4	5	6	7	8
		Zoology	1921			Obstetrics and Gynaecology	1921
						Pathology and Bacteriology	1921
						Pharmacology and Therapeutics	1921
						Physiology	1921
						Radiology	1921
						Social Medicine and Public Health	1921
						Surgery	1921
Madras	1857	Anthropology	1944				
		Botany	1933				
		Chemistry	1933				
		Geography	1932				
		Mathematics	1927				
		Statistics	1946				
		Zoology	1933				
Mysore	1916	—	—				

1	2	3	4	5	6	7	8
Nagpur	1923	Biochemistry	1946				
		Geology	1946				
Osmania	1918	Botany	1924	Engineering	1929	Medicine	1926
		Chemistry	1918	Technology	1945		
		Mathematics	1918				
		Physics	1928				
		Geology	1945				
		Zoology	1924				
Patna	1917						
Rajasthan	1947						
Panjab	1947 (re-established in independent India)						
Saugar	1946	Botany	1946	Applied Geology	1946		
		Chemistry	1946				
		Geology	1946				
		Mathematics	1946				
		Physics	1946				
		Zoology	1946				

In conclusion, therefore, the status of scientific and technological development during the pre-independence era could be summed up as:

1. Despite the indifference on the part of the then government, considerable apparatus of scientific surveys and research in universities and other institutions was in existence in India on the eve of independence.
2. Whatever the reason, during the first half of the twentieth century, a blueprint for scientific development for social transformation was also available. The A.V. Hill Report, the National Planning Committee of the Indian National Congress, and the plan formulated by industrialists had seeds for giving economic and social purpose to future scientific activities; and
3. Most important of all is the fact that scientific developments could look to the inspiring leadership of Jawaharlal Nehru at the political level. He created a climate whereby science in India enjoyed considerable political support.

The picture as it existed on the eve of independence is given in Tables 6 to 9.

TABLE 9

MASTER'S DEGREE HOLDERS IN SCIENCE BEFORE INDEPENDENCE

Subject	*Outturn in 1947*	*Stock*
Chemistry	257	3603
Applied Chemistry	35	416
Biochemistry	2	59
Geography	5	92
Geography (M.A.)	61	508
Geology	26	260
Applied Geology	1	42
Mathematics	95	1330
Applied Mathematics	10	67
Mathematics (M.A.)	83	2082
Applied Mathematics (M.A.)	—	42
Statistics	15	42

Statistics (M.A.)	3	15
Physics	142	2457
Applied Physics	27	281
Agriculture	79	508
Botany	53	978
Microbiology	3	13
Zoology	67	831
Anthropology	1	84
Anthropology (M.A)	2	35
Physiology	8	73
Psychology	5	94
Psychology (M.A.)	4	149

Post-independence Developments

It is a Herculean task for any historian or serious student of contemporary scientific developments in India to condense all the developments of the last twenty-five years in the brief space of an essay. It was possible to offer a synoptic view of these developments in pre-independence India because the developments were limited and slow, but their growth after independence is truly breathtaking. It was left to the Second World War to radically alter the character of science all over the world. Scientific activities not only became a costly activity involving organized group work, but its social control became all the more important. The net impact of these developments was that science and society became more intimately involved and integrated. It was under these circumstances that the political leadership of India decided to launch plans for economic development and social transformation. It was felt by the leadership that to push the stagnant economy, to fight the abject poverty of the masses, and to give the people of India a reasonable quality of life in a period of about twenty-five years, promotion of science and technology on the widest scale was essential. National decisions in this direction meant that future developments in science and technology were anticipated to be closely related to these objectives. How far these objectives have been met and whether scientific developments have taken place in an uncoordinated manner will be evaluated in the last section. Here we shall attempt to delineate the following:

1. Main economic and social objectives that science and technology were expected to fulfil;

2. Specific programmes undertaken during the various plan periods; and
3. Some very important and salient achievements.

Social and economic objectives

Although during this period, i.e., 1947-72, the country has strained through four five-year plans and also a small period of Plan holiday, it is significant to note that the basic objectives of economic and social programmes have not changed significantly. Each plan had only marginally altered the "relative" priorities among these objectives. The basic objectives have always been:

1. Sustained economic growth;
2. Expansion of economic capacity;
3. Utilization of manpower and provision of work opportunities;
4. Economic stability;
5. Balanced social development; and
6. Progress towards a more unified and integrated economy.

The additional objectives were those enshrined in the Indian Constitution i.e., equality of opportunity, socialistic pattern of society, etc. The content of social development was meant to include:

1. Equitable distribution of income and wealth;
2. Provision of adequate educational facilities for the entire community, including adults;
3. Provision of essential services and social assistance and security;
4. Establishment of favourable conditions for the development of children, adolescents, youth; and
5. Accelerated development and measures in support of the non-integrated groups of society, a description appropriately applied in India to groups such as the scheduled castes, the tribal communities, and the large number of urban poor.

The planners had mentioned that science and technology could

become powerful engines for bringing about this social transformation. Therefore, they drew up programmes of scientific research and the creation of scientific organizations accordingly.

In the next section a brief account of the various programmes of research and development is presented. This bird's eye view will enable us to see the relationship between science plans and plans for economic and social development on the one hand and the type of technologies that were being developed on the other.

Structure of research organization

Before we examine the programmes of research and development in India, it would be useful to outline the structure and organization of scientific research in India as it existed on the eve of independence and also as it exists today.

Before independence, we had councils for agricultural and industrial research, scientific surveys, and a medical research fund association. University departments were small and few in number.

The Atomic Energy Department, the Defence Research Organization, and the University Grants Commission were established immediately after independence. The Indian Space Research Organization, the Electronics Commission, and the National Committee on Environment and Pollution were established towards the end of 1970. For coordination and guidance at the national level, a Scientific Advisory Committee for the Cabinet was set up in 1960. In 1968, it was replaced by the Committee on Science and Technology (COST). These committees were forerunners of the present National Committee on Science and Technology (NCST) which was established in 1970. This committee has been charged with the responsibility of preparing national science and technology plans. We shall refer to this later.

We shall now discuss some of the important programmes of research and development.

Council of scientific and industrial research

Since independence, there has been a greater emphasis on the provision of additional facilities for the promotion of scientific and industrial research. The most significant development in this sphere has been the establishment of a chain of national laboratories and research institutes in different parts of the country, under

the Council of Scientific and Industrial Research established in 1945 as a sequel to the A.V. Hill Report.

In the First Plan programmes, the establishment of these laboratories and research institutes had a special importance. In a country like India, where medium and small-scale producers contribute to a considerable proportion of industrial production, research and development is part of a social infrastructure established and financed by the public. These industries cannot afford to have research facilities of their own. Such efforts are complementary to the objective of promoting the development of small-scale and cottage industries. A few industries have set up cooperative research associations, with the government assisting with substantial contributions towards developing research facilities.

The primary object in the Second Plan was to develop existing facilities and bring the work of scientists in national laboratories and of research workers in universities and other centres to bear as closely as possible upon important problems in different fields of national development.

This marks an important stage in the industrial and technological progress of the country. In every field of development, there were pressing problems which called for scientific study and investigation and the application of the results of research. It was especially important, therefore, to coordinate programmes of research in national laboratories and institutions with the requirements of national planning.

In the Third Plan, the following objectives were specified for developing programmes of scientific and technological research:

1. Strengthening the existing research institutes and expanding facilities for research over a wide field;
2. Encouraging basic research in universities;
3. Encouraging, in particular, research in engineering and technology;
4. Training research personnel and expanding the programme of research fellowships and scholarships;
5. Carrying out research on the development and manufacture of scientific and industrial instruments;
6. Coordination of research work carried out in national laboratories, universities, technical institutions, laboratories of

scientific associations and research wings of government departments; and

7. Utilization of the results of research after establishing their validity through pilot plant production, full-scale field experiments, etc.

A closer link was stressed between national laboratories on the one hand and industrial units and new entrepreneurs on the other so as to provide the latter with process know-how, and wherever possible, produce design data and information to facilitate design and fabrication for commercial plants.

During the period of this Plan, as the field of enquiry and investigation widened, larger funds were allocated for science and technology. There was an intensive search for talent. The number and quality of research workers improved, the pace of research was accelerated, and results were achieved with greater speed.

Atomic energy

The principle aims of the Department of Atomic Energy (DAE) are to develop the use of atomic energy for the production of electrical power and to develop its uses in agriculture, biology, industry, and medicine through a widespread use of isotopes as tracers in scientific investigations and as sources of radiation. Since India has the largest deposits of thorium in the world, the ultimate aim is to base nuclear power production in the country on thorium, a task which will require long-range research and the solution of many difficult technological problems in physics, chemistry, metallurgy and engineering. The atomic energy programmes provide for the building up of nuclear power stations, development of ancillary technologies based on indigenous resources, and production of special materials, fuel, and equipment.

The department has always been directly under the Prime Minister and this explains the prestige it enjoys. In its administration, it is guided by a commission—the Atomic Energy Commission—established in the early fifties.

Agricultural research

The Indian Council of Agricultural Research is the main body to guide and evolve policies for research, education, and development of agricultural technology. It has a number of central

research institutes. In addition, a number of agricultural universities are involved in agricultural research. Research on local problems is carried out at a large number of research stations assisted by the Indian Council of Agricultural Research and commodity committees for cotton, jute, oilseed, tobacco, sugarcane, areca-nut, coconut, and lac. Research on plantation crops is sponsored by separate boards for tea, coffee, and rubber. The Indian Council of Agricultural Research and the commodity committees also assist coordinated research projects of a regional or all-India character.

Research on various commodities under the commodity committees was generally aimed at increasing yield and improving quality. Breeding work on different crops for obtaining high-yielding varieties resistant to disease will be developed further. Technological research on cotton, jute, tobacco, etc., was aimed at improvement in the methods of processing, packing, and manufacture. In the case of jute and lac, the effort was to evolve new uses. Emphasis was also laid on the utilization of by-products such as coconut husks, jute sticks, coir, tobacco wastes, lac wastes, cotton seed hulls, and so forth. The commodity committees have now been wound up and research institutes transferred to the Indian Council of Agricultural Research.

An important development in the Second Five Year Plan was the setting up of seventeen composite research stations on cotton, oilseed, and millet. The establishment of these research stations has provided a coverage for fundamental research applicable to a wide range of agroclimatic conditions. Research on soil conservation problems is undertaken under the auspices of the Central Soil Conservation Board.

For the Third Plan, the Indian Council of Agricultural Research had a programme for enlarging facilities for research in the states through the expansion of existing agricultural institutes and by setting up experimental stations in different regions based on soil and climate. On the basis of recommendations by the Review Committee for Agricultural Research, these stations in the states have now been transferred to agricultural universities, along with the responsibility for extension services.

Medical research

The Indian Council of Medical Research has generally been

supporting work in the field of medical science and particularly in communicable diseases like tuberculosis, cholera, leprosy, infantile diarrhoea, filariasis, and in fields like cardio-vascular diseases, metabolic disorders, intestinal parasitism, and venereal and other diseases.

Demographic, medical, and biological research in family planning was carried out during the Second Plan. A large number of mechanical and chemical contraceptives have been tested. Research on oral contraceptives, including meta-xylo-hydroquinone and indigenous medicines, was undertaken. The Human Variation Unit at Bombay carried out work on the distribution of genes in certain areas. A long-term study on twins and consanguinity, begun in 1954, was also carried out. These investigations were continued and expanded during the Third Plan. Besides continuing work in these fields, during the Third Plan, attention had been focused on problems of metabolism concerning proteins and corbohydrates. Investigations were sponsored on intestinal infestation with amoeba and various helminthic parasites. Research on mental diseases was continued at the All India Institute of Mental Health. Research on problems of maternity, child welfare, nutrition, as well as on related problems, was expanded. Research facilities in medical colleges had been strengthened. Research on occupational health was taken up at two or three new centres in addition to work at the All India Institute of Hygiene and Public Health.

The adoption of the metric system of weights and measures will bring about standardization both at the national and international levels and simplify calculations of different kinds. A reform of this character is best undertaken in the early stages of industrialization when it can be effected with the minimum of cost and the least amount of dislocation, for delay aggravates difficulties. It has, therefore, been decided to introduce the reform, according to a phased programme, with immediate effect—spreading it over a period of ten to twelve years, by the end of which it is expected that units of weights and measures based on the metric system would be universally used in the country.

To bring the benefits of standardization to the common man, the government enacted the Indian Standards Institution (Certification Mark) Act, and set up the Indian Standards Institution. The institution organizes series of short-term orientation and

review programmes in standardization for teachers and instructors from technical institutions. This would assist them in using Indian standards in their day-to-day work of basing technical textbooks and information material on Indian experience and standards. Training programmes in company standardization are also organized in order to provide opportunities for developing an inplant standards quality. This has led to many participating units achieving substantial economic benefits.

For providing quick service to the certification marking process, the institution not only expanded its laboratories at the headquarters, but also set up laboratories on a smaller scale at its branch offices in Bombay, Calcutta, and Madras. These offices are also undertaking testing work of some of the products in their respective regions. This has been done to cope with the increase in samples received for testing and also to meet the growing need for pre-shipment inspection of goods meant for export. At the end of 1970, the institution had issued more than 2,300 licences covering goods with an annual production value of over Rs 430 crores (Indian Standards Institution 1971).

At the international level, the institution actively participated in the work of international standardization and rendered assistance to neighbouring countries in the establishment and promotion of standards activity. In order to share its experience and knowledge in the field of standardization, the institution provided facilities for training overseas standards engineers in the technique of standardization.

The number of Indian standards in force, as in April 1970, increased from 5124 as on 31 March 1969, to 5749 till 31 March 1970.

Small-scale industries

It has been stated earlier that the industrial structure in India at the time of independence consisted mostly of medium and small-scale units. The plans for scientific development gave considerable attention to the technological development of these units. A number of important programmes were undertaken in this field.

Two experts from West Germany visited India and submitted a report on designing and developing machines and tools required for small-scale industries. Their suggestions for setting up a central experimental workshop and a number of regional workshops for

developing prototype machines and fabricating such machines were considered by the then Ministry of Consumer Industries. A few of these workshops, equipped with up-to-date machinery needed for actual manufacture of machines and machine tools, have been established. They have special sections for foundry work and facilities for carrying out certain specialized processes such as heat treatment, electroplating, etc.

The Small Industries Service Institutes that have been set up at Bombay, Calcutta, Madras, New Delhi, Hyderabad, Trivandrum, Patna, Ludhiana, and Rajkot, and other similar institutes that were proposed to be set up during the Second Five Year Plan period, were expected to undertake such experimental work as they might come across during their normal work of providing technical assistance and guidance to small industrial units. One of the functions of the Small Industries Service Institutes is to demonstrate, advise, and improve the techniques of manufacture in small-scale industries. For the present, these institutes rely upon available information and known practices and methods which can be introduced under the prevailing economic conditions. During the Third Plan period, it was proposed to provide extension services in the field of small-scale industries, especially in engineering goods, spares and parts, electrical appliances, ceramics, glass and pottery, leather goods, sports goods, polishes, etc.

Improvement in technology is also being attempted by the introduction of improved tools, implements, and machines on a size that will suit the industry; by adoption of methods or processes most suitable in the circumstances; and by improvement and standardization of the quality of raw materials and supplies, etc.

Improved tools and machines are being introduced by popularizing better tools, implements, and machines used in one part of the country to the other; collection of information on better tools, implements, and machines used by similar enterprises abroad and their introduction in our units; and the designing and development of suitable tools, implements, and machines in cases where suitable tools and machines are not available.

Research utilization

For scientific research to make its full contribution, it is necessary that the results of laboratory work should be utilized in actual practice by being translated into commercial production. The

importance of this subject was recognized in the establishment of the Industrial Research Utilization Committee (now Industrial Liaison Committee) in 1941. The CSIR has taken special steps to involve industry in research and provide incentives for its utilization. Extending a helping hand to support the formation of industrial cooperative research associations and organizing a get-together of industrialists were a few such steps. Private industrialists and managers of public sector industries were associated with committees charged with the task of formulating research programmes, taking policy decisions, and watching the progress of work. The CSIR has devoted much attention to securing a better utilization of the results of research and has come to the conclusion that, even when pilot plant experiments have been completed, in several cases there may still be a gap before commercial production can be undertaken. It will be necessary in such cases to instal semi-commercial or prototype plants to effectively demonstrate new processes and their economic possibilities. When this has been done, it will be possible to decide whether industrial development of the research is to be taken as a state-sponsored undertaking or whether it can be handed over to private industry for development on a commercial scale. For this purpose, the CSIR also took the initiative for the establishment of the National Research Development Corporation of India (NRDC) for the development and exploitation of inventions and patents arising out of not only the CSIR laboratories but other research institutions in the country as well. While institutions engaged in research have to develop and maintain contacts with industry so that the results obtained by them are applied in practice, it is at the same time the responsibility of managements in industry to be on the alert for new inventions and innovations in their field of work. The CSIR began to give importance to liaison and has established strong groups both in individual laboratories and at the headquarters for liaison work.

To induce industry to invest in R and D, the Indian Income Tax Act permits expenditure on research to be treated as an item of business expenditure.

Some Significant Achievements

An attempt will now be made to present a synoptic view of the major achievements of research and development during the first

twenty-five years of Indian independence. The most important achievement is that the country can now boast of a varied and viable research and development system, including a large number of universities with research facilities. An allied infrastructure is being generated. If these facilities are properly coordinated and monitored, self-reliance in technology can be easily achieved.

Industrial research

The research establishments of the Council of Scientific and Industrial Research generally undertake R and D activities to utilize the country's industrial resources. Studies are undertaken to develop new processes and products to suit indigenous raw materials. Alternatives are sought for materials which are scarce (or in short supply) so as to obviate dependence on imports. Beneficiation techniques are developed for upgrading subgrade materials for use in industry. Attempts are also made to utilize industrial wastes and other by-products. The council has worked out 371 processes and released them to industry. Of these 164 are in production. Some 1,482 patents have been taken out; about 60 per cent of them are on live register. About 10 per cent of these have been exploited. Table 1 shows the research output and utilization which gives an idea of the contribution of CSIR in this respect.

Ferrites of different kinds are finding increasing use in various telecommunication equipment, receiving sets, and other electronic equipment. These used to be imported, but know-how of the processes of soft ferrite, hard ferrite, and professional ferrites has now been developed and they are being produced within the country for home consumption. In the area of communication systems, television receivers have been designed and are under production. The current products include an electrostatic photocopying machine, cathode ray oscilloscope and tubes, single crystal and polycrystalline silicon of semi-conductor grade, an electronic desk calculator, helium-neon and argon lasers, thin film devices, microwave components, kystron, etc.

Stress has been laid on the design and development for indigenous manufacture of radio equipment in the VHF, UHF, and SHF (microwave) bands, coaxial systems, and electronic exchange. Among some of the other accomplishments are the development of revised versions of 6 MHz coaxial lines equipment, an audio-distribution system for carrier coaxial stations, different type of junctions

for use in the cross-bar system, Mark II EM VFT equipment, and so forth.

A large number of optical systems, especially micro and projection optics, external and internal focussing dumpy level objectives, eye pieces of various types, collimator objective, etc., have been developed. Medical electronic instruments like a cardioscope with monitor and alarm, and cardiac pacemaker and stimulator have also been developed. Other items in the series are: various types of sophisticated instruments, like a vapour phase, chromatograph strip-chart recorder, osmotic balancer; glass electrodes for PH meters, which were hitherto imported; various devices and instruments useful in aeronautics research to indicate pressure, displacement strain, temperature, vibration, velocity and acceleration, and several data and digital systems needed for data logging and processing.

Chemicals occupy an important place in the field of industrial development and concerted efforts in the field of organic and inorganic chemicals have yielded fruitful results. Know-how for acetanilide, bionone, nicotine sulphate, etc., have been developed and released to industry. A process for the production of benzyl chloride, vitamin C from glucose, semi-refined morphine, synthesis of organic compounds dioctyl and dibutyl phosphates—widely used as plasticizers, extraction on hard wax from sisal waste, and special surface coating from organic waste materials like cashew nut shells' liquid, has been developed. A process has been developed for the activation of Fuller's earth, which is specially suited for bleaching mineral oils and dark coloured vegetable oils. Preparation of cuprous oxide, an important ingredient of anti-fouling points, has been taken up.

To overcome the shortage of potassium mineral, know-how has been developed to recover potassium from sea water which is a rich source of this material.

In the field of petroleum technology, hydrosulphurization processes for desulphurization of distillate fuels have been developed in collaboration with the French Institute of Petroleum. This process is being exploited by the Indian Oil Corporation. Designs have been worked out for propylene recovery from Baruni coke gases for making acrylonitrile fibres and studies have been conducted to evaluate the possibility of utilizing naphtha from

Nahorkatia crude as a raw material for the production of petrochemicals and aromatics for the Barauni petrochemical complex. Know-how has been developed for producing optical glass which is a strategic material used in optical instruments, gun sights, and range finders, quartz crystal for the electronic industry and mica bricks and other insulating materials like foam glass, etc.

Extensive surveys for coal and carbon products have been carried out and they have unearthed over 1.3 billion tons of new sources of coking coal, besides large quantities of coal suitable for blending in coke making. The planning of coal washeries has been taken up and 90 per cent of the total number of washeries within the country have been laid out on the basis of a new plan developed by research and development groups. Developmental efforts have established that inferior coals can be blended up to 6 per cent after suitable processing with coking coal for metallurgical coke. Low temperature carbonization of different Indian coals for the production of efficient smokeless domestic fuel on a large scale has been undertaken, and pilot plants have been designed to study various aspects of this project. Processes for the production of high grade activated carbons, using indigenous raw materials, have also been developed. These are necessary for various industries, namely, glucose, vegetable oil, chemicals, pharmaceutical industries, etc. Other processes involving carbon products, such as search-light carbons, various types of carbon blocks, brushes, etc., have also been developed. Some of them are at the pilot plant stage and are awaiting commercial exploitation.

Low-shaft furnaces with an estimated capacity of fifteen tons per day for conducting smelting trials, using substandard raw materials such as soft iron ores and iron ore fines, have also been set up. Studies on light petroleum naphtha injection for iron smelting have been conducted and it has been shown that naphtha can be successfully injected for iron smelting, thereby bringing down the consumption of coke. An aluminothermic process for producing ferroalloys has also been developed. This is essential for the manufacture of carbon-free ferrochromes, ferrotungsten, and so forth.

Various aluminium alloys suitable for cold rolling, polishing, and stamping characteristics along with corrosion-resistant and wear-resistant properties have been developed. Hot-dip aluminizing techniques for coating steel wire and plates with aluminium have also been developed. This was leased out to various firms and

is under commercial exploitation. The development of aluminium as a substitute for copper in the electrical industry has been the main basis of these developments, since indigenous resources of copper are meagre.

In the domain of food and agro-based industries, one of the most important contributions has been the development of baby food. It is being marketed under the trade name of Amul Baby Food. Various other types of infant foods, based on groundnut flour and humanized milk food fortified with methionine, have been developed. A groundnut protein isolate has also been developed and is being commercially produced within the country. This is likely to be used to combat protein deficiency and also as a substitute for imported milk powder and for toning of animal milk. A process for high protein edible grade flour has been developed from cotton seed which meets international standards. An economic process for parboiling rice has been evolved to yield a better product.

The storage and preservation of large quantities of foodgrains is still a major poblem. As our agriculture is dependent even now on the vagaries of nature, storage assumes great significance. Therefore the development of economical and safe fumigants is very important. With this in view, the Durofume process has been developed and this has proved effective, economical, and safe for fumigation of foodgrains. Fumigant tablets for home and farm storage have also been developed. They are finding wide application and promise good economic returns. Various processes have been developed for the production of mango cereal flakes, fruit juice powders, pectin from raw papaya and pectin-rich materials, fruit bars, tamarind juice concentrate, liquid fruit from guava and banana pulps, whole egg powder, substitute foods (tapioca macaro), instant coffee, etc.

Various techniques have been developed for the curing and preservation of raw hides and skins, and for processing and manufacturing industrial leather.

A new type of foundation, namely, under-reamed pile and multi-under-reamed pile has been developed and popularized in those areas where soil is expansive. These foundations obviate damage to the structure due to the movement of soil.

New *tusser* races have been evolved and interspecific hybridization has been achieved which is likely to double the silk yield.

Sugar is one of the oldest industries in the country and considerable progress has been achieved in improving the techniques of sugar production. The country is short of sulphur and the traditional methods call for good quality sulphur for refining sugar. A new process, namely, the defeco-melt-crystallization process, has been evolved which obviates the use of sulphur without impairing quality. The other one concerns the demineralization of cane juice by an ion exchange process. The by-products of the industry, namely bagasse, molasses, and press mud have also been utilized for various products, e.g., biogas and biofertilizers, fodder yeast, lactic acid, and sugarcane wax. A new chemical, instol, has been developed which works as a good substitute for various imported chemicals used in the sugar industry. This has been patented and is being used by the industry.

With regard to diesel engines in railway traction, one of the major innovations has been the Suri Transmission. Other major developments in diesel traction include ZDM3 narrow gauge diesel hydro-mechanical 700 hp locomotive, WDS4 diesel hydro-mechanical 700 hp locomotive, WCG broad gauge DC freight locomotive for the Bombay Ghats, a push-pull broad gauge locomotive for the Bombay suburban section, and a 1400 hp diesel shunter for heavy shunting in steel plants. Designs were also developed for re-power-packing of YDM1, WDS1, and Bhilai Steel Plant locos as well as power packs for metre gauge diesel rail cars and diesel cranes of 10T and 20T capacities?

In the field of power research, special attention has been given to generation, transmission, and distribution problems and indigenous manufacture of various types of electrical machinery. Among the major achievements in this field are the development and manufacture of indigenous hot-sticks in India, a fault-locating device for unarmoured power cables, and a test kit for lightning arrester. A new test for quickly determining the acid content of transfer oils and a new design for lightweight structures in electrical distribution systems, to replace reinforced concrete poles, have also been developed.

It may be interesting to note that in 1947 there were only eleven hydroelectric power stations in operation. The number of hydroelectric power stations in 1969 was sixty-three, excluding micro hydel stations. In addition, two nuclear power stations are in operation and a third is under construction.

Atomic energy

A major advance has been the completion of the 380 MWe Tarapur Atomic Power Station and the 400 MWe Canada-aided station at Rana Pratap Sagar in Rajasthan. In Tamil Nadu work is in progress on the Kalpakkam Atomic Power Station which is wholly India-built, with almost 80 per cent indigenous content.

The Atomic Mineral Division has already discovered deposits of monozite in Bihar, larger than those already known to exist in Kerala, bringing the total known resources to 500,000 tons of thorium ore, containing 9 per cent and above of thorium. It has also discovered uranium deposits, one of which at Jaduguda near Jamshedpur is under exploitation. Deposits of beryl and lithium ores have also been discovered.

Among the chief facilities at the Bhabha Atomic Research Centre (BARC) are three research reactors: APSARA, CAR (Canada Air Reactor), and ZERLINA. APSARA is a one megawatt pool-type reactor using enriched uranium as fuel. This reactor was completely designed and built by local talent. The control system was also designed and installed by the engineers working at BARC. There is a major facility at Trombay for the production of fuel elements from nuclear grade uranium from the uranium metal plant. This facility was designed and commissioned by the Metallurgy division of BARC. Another useful fuel processing plant, known as Project Phoenix, for the recovery of plutonium from irradiated fuel elements has also been designed and built with complete indigenous know-how at BARC. The Fertilizer Corporation of India at Nangal has set up a plant to produce heavy water. Another plant to produce it is being planned at Rana Pratap Sagar.

Electronic instruments play a vital role in the field of nuclear energy. A number of instruments, including those needed for the survey and prospecting of atomic minerals, monitors for checking the radiation levels in laboratories, and medical instruments, etc., have been designed and developed. Techniques for the production of transistors, resistors, zener diodes, silicon rectifiers, thermo-electric modules, and other essential electronic components have been evolved. An online computer, TDC-12, has been designed and is under commercial exploitation at the Electronics Corporation of India. A gas liquid chromatograph has

been developed and released for commercial production. There are plans to develop all the electronic instruments required for the atomic energy programme in the country.

A large variety of radio isotopes are being produced for use in various branches of science. There are over 350 such radioactive preparations. These contribute in a significant way to the field of industry, agriculture, and medical diagnosis and therapy.

Agricultural research

The major developments in agricultural research have taken place in plant breeding, fertilizers, agronomical practices, and application of plant protection chemicals, i.e., weedicides, pesticides, fungicides, and insecticides. The "green revolution" can largely be attributed to these developments.

Plant breading efforts have resulted in the development of high-yielding, disease-resistant, more nutritive, and early maturing varieties. The scientific improvement work in this direction was initiated with maize. After the successful completion of the maize improvement, high-yielding hybrids programmes extended to five other major food crops. With respect to rice, these efforts resulted in the development of Taichung-Native I and IR-8, besides other varieties. Recently two new Indian rice strains—Jaya and Padma—were released. They are better both in quality and quantity. Jaya is earlier in maturing and about 8 to 10 per cent higher in yield than IR-8. Padma is also an early maturing variety and is suitable for multiple cropping in states like Bihar, Bengal, and Orissa. The other high-yielding strains which were developed are Hamsa for Andhra Pradesh and IR-5-114-3-1 and BB8 b-12 for waterlogged areas. Recently two high-yielding long-duration varieties—Pankaj and Jagannath—suitable for heavy rainfall areas have been released. Wheat, the second major crop in India, is cultivated on about 15 million hectares of land. Research efforts were also mobilized to develop high-yielding varieties of wheat. This led to the introduction of dwarf, lodging-resistant, and fertilizer-responsive varieties from Mexico, i.e., Sonora-64 and the development of an Indian high-yielding variety, i.e., Lerma Rojo. These varieties were approved by the Central Variety Release Committee in 1965 for cultivation in the irrigated areas of India. Other strains worth mentioning are Kalyan Sona, Sonalika, Safed Lerma, Kiran, Chhoti Lerma, and Sharbati Sonora. Some of the varieties are richer in

protein and lysine content and will help in reducing protein deficiency in the Indian diet. Efforts are also being made to evolve a dwarf variety—the 3 gene dwarf—with a still greater degree of resistance to lodging and disease and with more nutritive value. Similarly, efforts are also being made to improve other crops. An early maturing variety of Sorghum—Swarna—has been released. This is high-yielding and has a better grain quality than CHS-1, a high-yielding and early maturing variety developed in 1964. Pulses are the main source of protein in India and constitute an important item in the Indian diet. Most pulses are poor in yield. A comprehensive research programme was, therefore, undertaken to improve pulses. A few of the newly evolved high-yielding varieties are C-214, C-706, and R-107. Among vegetables, a good deal of research work has been done on the potato. Research has also been aimed at developing the early maturing, high-yielding varieties of various oilseeds, such as groundnut, linseed, sesame, and mustard seed. Three hybrid varieties of *bajra* called "HB2," and "HB4," with superior yielding ability, have been approved for general cultivation.

To meet the growing needs of the textile industry, research has been aimed at improving the quality and quantity of cotton and jute.

The introduction of high-yielding varieties necessitated the development of a new set of agronomic practices for maximizing the production per unit of land and time. A number of cropping patterns fitted into relay cropping or multiple cropping cycles have been evolved and tested. Double and triple crop rotations have been successfully demonstrated all over the country. The techniques for maximizing production and for increasing the efficiency of costly inputs like fertilizers, water, pesticides, and labour have been developed.

Research programmes in animal sciences are related to evolve productive strains through breeding with the aim of increasing the availabity of both edible and commercial products like milk, meat, eggs, wool, fish, hair, and skin.

Methods for producing edible caseins from skimmed milk, yeast, protein from whey, and dried starter cultures for curds and cheese have been developed and perfected. A "coffee-complete" for instant use with hot and cold water has been developed.

Investigations have led to the location of several fresh and

brackish water fish seed collection centres, artificial spanning of Hilsa through stripping, and an increase of fish yield from 600 kg/ha/yr to about 3,000 kg/ha/yr through composite farming. Methods have also been developed for freezing and canning varieties of commercially important fish. Research has also shown the possibilities of commercial exploitation of several previously unexploited species of marine fish and prawns.

Medical research

Two fundamental trends apparent in medical research are: finding practical solutions for outstanding health problems, and pursuance of basic research for the sake of knowledge.

In recent years, to meet the challenge of the changing patterns of disease, attention has been focused on industrial medicine; environmental sanitation problems; social, psychological, and preventive medicine; dental diseases; maternal and child welfare; the study of blood diseases, particularly anaemias—as also that of cardiovascular diseases, in particular ischemic or coronary heart diseases—and of cancer.

This major contribution of medical research has been in connection with plague, malaria, typhus, cholera, leprosy, filariasis, tuberculosis, influenza, and viral diseases. The problems of maternal and child health and anaemic pregnancies have received considerable attention. A deficiency of folic acid was found to be responsible for the causation of some types of anaemia.

Family planning has been given the highest priority in developmental efforts. It aims at reducing population growth to a level of 25 per thousand population as soon as possible. Considerable inputs have been made into biomedical research in different aspects of population control.

Space research

A rocket propellant plant has been set up at Thumba to make a solid propellant block under licence from France. These high quality propellants have been flight-tested for evaluation purposes. Electronic instrumentation, which can stand extreme environmental conditions such as acceleration and the force of gravity, are being flight-tested in the current programme with sounding rockets. A total of over three hundred sounding rockets have been launched from TERLS so far. Some rocket-borne experiments have been

carried out to supplement our meagre knowledge of the dynamics and composition of the upper atmosphere at equatorial latitudes. Valuable data on wind velocities, spheres and regions of turbulence along the vertical in the neutral atmosphere from a latitude of 80 km from E region up to 180 km, have been obtained by analyzing photographs of clouds formed by the release of sodium and self-luminescent vapour from the rockets. Measurement of winds, in the neutral atmosphere between 30 to 60 km, have been carried out with a series of Judi-dart rockets by using chaff pay loads.

An extensive programme of studies in radio astronomy is under way. The present investigations are centred around a radio antenna array, consisting of 32 dishes, each 1.82 metre in diameter, to study radio emission from the sun. A large cylindrical radio telescope, about 500 metre long and 30 metre wide, has been set up at Ooty. This would study distant radio galaxies in our universe by the noon occultation method.

A study in X-ray astronomy with joint rocket experiments has been undertaken. The studies aim at understanding the determination of the flux and the energy spectrum and the SCO-X-1, Centaurus X-2, and TAU-X-1 sources besides a general survey of the southern celestial sky.

Orbiting meteorological satellites launched by NASA are equipped with an Automatic Picture Transmission system (APT), which can take and transmit cloud pictures every 208 seconds with high resolution infra-red-radio-metre cameras. Such pictures are received at the Colaba Meteorological Centre. Operationally, this information is being used for the issue of cyclone and storm warnings, for aircraft flight briefings, and in aiding ship navigation.

A modest beginning in space communication was also made when the experimental satellite communication earth station successfully transmitted and received messages and television pictures for NASA's ATS-2 satellite and established contact with Japan.

Defence research

Considerable resources are earmaked to the development of defence research in the country. Emphasis on this activity has increased since 1962 and considerable development has taken place in various fields. In 1969-70 alone, over one thousand research

and development projects of direct interest to the services were in progress in various organizations.

In the field of armament, tracer ammunition of 7.62 mm calibre weapons, a propellant for 105 mm anti-tank ammunition, and smoke ammunition for mortars have been developed. A number of escape aid cartridges, a stress visual night signal for the air force, and a day and night signal cartridge for the use of the navy have also been developed. In the field of metallurgy, tungsten carbide cores and noses for APDS/T ammunition, magnets for rocket launchers, and shatter alloy castings of various types of copper crushers have been developed and some of them are under production The new items which are being developed are an improved version of one anti-tank mine, a non-detectable mine, a new type of the anti-personnel mine, a limpet mine for the navy, a silent version of the SAF carbine, an improved version of the tear gas grenade, and some infra-red equipment.

Some other important equipment that has been developed includes telephone loudspeakers for intercommunication for field artillery, a transistorized metallic mine detector, and a number of antennae. The bulk production of indigenous radar systems has also started and another modified version is in an advanced stage of development. Various functional testers for field trans-receivers, radio wire integration units, and several sophisticated electro-medical instruments have also been developed.

The floating bridge equipment MK III has been developed for strategic operations by the army. A breakthrough in welding aluminium alloy INDAL has been achieved. This will facilitate the development of a variety of lightweight bridging and allied equipment needed by the services.

An armoured petrol car on an existing vehicle chassis has been developed for use in the field. A number of tasks, from improvement in the Vijayanta tank to the building of different kinds of trailers and recovery vehicles have been undertaken. Substitutes for several special types of oils and lubricants have been developed and introduced to obviate the import of these items. Some important projects completed include the Sonar Range Radar and Corner reflectors for use with battle practice targets and balloon targets, and monitor panels for a fire control system.

Evaluation

A critical evaluation of the directions and achievements of science and technology during the last twenty-five years is a complex and difficult task. First, it involves identifying the trends in these developments and relating them to other social and economic forces. Second, there is the need to evaluate what type of science—science for the elite or science for the masses—is being developed. Third, the spillover effects of these developments into the programmes of future development also need to be identified. Lastly, in the light of this critical appreciation, future tasks for science and technology have to be indicated. This would include the identification of gaps in programmes past and present as well as new tasks for the future.

Growth and need coordination

It is necessary to point out here that efforts during the last twenty-five years have been, by and large, to create an infrastructure of a chain of national laboratories and research centres under various agencies, especially government departments and universities. These facilities have been considerably expanded and augmented. Many of these departments have grown by a factor of two or three. Related activities like instruments have also been expanded. During the last ten years, special efforts have been made to develop design and fabrication facilities with a view to encouraging the utilization of indigenous research and development programmes.

It is significant to note that all these sectoral developments have taken place almost in relative isolation from one another. The programmes of the Department of Atomic Energy, till the Fourth Five Year Plan, were developed as non-Plan activities. Similarly, the activities of the other sectors of R and D were developed with reference to the programmes of the sector itself, but without any reference to the total Plan. The Planning Commission, it seems, did not insist on having an integrated view of the programme of scientific and technological development and the total programmes of economic and social transformation. Neither was an attempt made at any level to work out the technological tasks and the identification of technological problems that required immediate solution as a result of various programmes of industrialization.

As far as organizational developments are concerned, they seem

to have developed "as an extension of the pre-independence programme." It is essential, therefore, that future developments should be based on specific, revealed, and identified needs of society. The pattern of development in the last twenty-five years must be radically re-examined and new tasks—both long-term and short-term—should be identified. The hunches and enthusiasm born out of the foreign visits of decision-makers should now be replaced by objective study and analysis in order to form the basis of future programmes or organizational developments. The motivation should be to evolve an indigenous alternative technology rather than an import technology.

In order to achieve the growth of indigenous alternative technologies, it is essential that present science policy and planning methods are re-analyzed and the gaps identified. Only this can help redraw objectives of R and D, integrating them with social and economic objectives. So far, there has been a wide disparity in these objectives and this has consequently had a deleterious effect on the credibility of R and D apparatus. It has also hampered the development of indigenous capability and confidence. The first panel of scientists and technologists convened in 1955 at the instance of Jawaharlal Nehru was a major effort in taking a critical look at the total canvas of science and technology. The panel consisted of eminent scientists and technologists drawn from various government departments, universities, and research laboratories. They represented almost all sectors of industry and agriculture. Through its subgroups the panel made major recommendations for programmes that should be undertaken to meet the immediate problems of national development. As is usual with any government-sponsored committee, the recomendations of the panel were forwarded to the various implementing agencies with a view to including them in their programmes of development. This was the end of the good work of the panel. The Planning Commission did not make any serious attempt to examine the extent of the implementation of recomendations by the first panel. A second panel met in 1960, but its deliberations also met with the same fate. The lesson from this is that panels and committees are not the most successful instruments for evolving coordinated programmes. Keeping this in view, the National Committee on Science and Technology was set up in 1970. It was to evolve an institutional plan of science and technology. The committee has finalized its programme.

Once again, the promise in the approach paper notwithstanding, the programme seems to be generating elitist technology.

An important milestone in the deliberate utilization of science and technology for programmes of national development was the Scientific Policy Resolution passed in 1958 (Government of India 1958). According to this, the aim of the scientific policy of the Government of India was:

1. To foster, promote, and sustain, by all appropriate means, the cultivation of science and scientific research in all its aspects—pure, applied, and educational;
2. To ensure an adequate supply, within the country, of research scientists of the highest quality, and to recognize their work as an important component of the strength of the nation;
3. To encourage and initiate, with all possible speed, programmes for the training of technical personnel, on a scale adequate to fulfil the country's needs in science and education, agriculture and industry, and defence;
4. To ensure that the creative talent of men and women is encouraged and finds full scope in scientific activity;
5. To encourage individual initiative for the acquisition and dissemination of knowledge, and for the discovery of knowledge, in an atmosphere of academic freedom; and
6. In general, to secure for the people of the country all the benefits that can accrue from the acquisition and application of scientific knowledge.

The Government of India has decided to pursue and accomplish these aims by offering good conditions of service to scientists, by according them an honoured position in society, by associating them with the formulation of policies, and by taking such other measures as may be deemed necessary from time to time.

It would again be apparent from these aims that whereas the government was eager to utilize science and technology as an aid to its programmes of economic development, the Scientific Policy Resolution was silent over the specific methods by which this was to be achieved. The Committee on Science and Technology (COST) undertook a survey to assess how far the intent of the resolution had been implemented. The report is

generally apologetic in its tone and it does not do full justice to the task that it undertook. However, there are notes of dissent which bring out clearly how the implementation of the resolution faltered. K.N. Raj and H.N. Sethna in their note of dissent have given a very clear picture of the quality and type of science that has developed in the country. They say (Government of India 1959):

> . . . it fails to state clearly what is wrong with the organization of institutions engaged in scientific and technological research. An earlier draft of the Report had referred to feudalism in this sphere, this to our mind, is the correct description of the values and methods of decision-making in evidence in most of these institutions. This is also responsible in no small measure for the failure of Indian scientific institutions (including in the academic field) to attract and retain the available talent and for the phenomenon of brain drain.

Vikram Sarabhai also dissented from the COST evaluation of the implementation of the Scientific Policy Resolution and his views were (Rahman 1973):

> . . . our performance clearly indicates that the policy makers at the top, responsible for organization and commitment of resources for development, do not have an appropriate understanding of the purpose and content of the Scientific Policy Resolution and the investments that are required in order to derive returns from the effort . . . .
> . . . . We should clearly note the failure of the Planning Commission in not recognizing the meaningful applications of science and technology as investments for national development and for not according appropriate priority for undertaking these tasks.

It is significant that measures for coordinating various activities were also nearly absent. This created a climate in the scientific estate of the country in which competition was to grow in size and become diverse, without any attempt at evaluating what the different organizations were doing. This ushered in an era of parallel development and proliferation of scientific research organizations in the country. At the highest political level, a

committee of ministers for science has been set up to coordinate political decisions regarding science and technology. There is still no effective mechanism, however, to coordinate the programmes and their implementation. The major emphasis in organizational development for the future should be to evolve such a mechanism and make it viable. This would consist of evaluation, monitoring, and data bank systems.

Apex organization for policy and planning

Whereas we have indicated the uncoordinated nature of scientific development in India, it is also necessary to identify the omissions in the organization and programmes of scientific development. One of the major lacunae in the country, till 1970, was the absence of an apex body which could take an overall view of scientific developments in the country and relate them in a meaningful way to social development programmes. In 1970 the Committee on Science and Technology (COST) was established to work out programmes of national development in science and technology in an integrated manner. The COST was also required to issue an annual report on the status of science and technology in India. The need for this report was felt to be one of the major weaknesses during the sixties. It was impossible for anyone to know the size of the total resources in men and money employed on scientific and technological research in India or the relative sectoral investments in these activities. In addition, other infrastructural information was unavailable. In the absence of this data, any meaningful planning of scientific research at a national level was fraught with difficulties and inaccuracies. The COST did bring out three annual reports until it was replaced by the National Committee on Science and Technology (NCST) in 1972. In the annual reports brought out by the COST, the major emphasis was on presenting a statistical picture of the scientific and technical developments in India as they existed when these reports were published. In the first report, the COST also identified some areas of importance such as fuel, mineral, etc., where concentrated efforts were required. But for these, no other implementation report is available. This has happened because the COST had only an advisory role and no executive authority for implementation. The National Committee on Science and Technology has so far not issued any annual report.

National committee on science and technology

Since its inception, it has been involved in the gigantic task of formulating the science and technology plan for the country to be implemented during the Fifth Five Year Plan. In reality, this is the first attempt on a broad basis to involve more than two thousand scientists and technologists of the country in planning.

The committee has made a detailed study of the status of research and development, as well as of technology, in various industrial sectors. It has drawn out a plan of S and T development. The plan, however, fails to indicate:

1. How to achieve a transfer of results from laboratory to production, and then its horizontal diffusion;
2. How the plan links itself to the development of industrial structures; and
3. To what extent this plan would benefit the weaker and underprivileged sections of society.

It is suggested that for the development of a socialist and egalitarian society this last issue is vital.

Technological policy

The technological policy of the country defines the type of technologies to be developed, either through import or indigenous efforts. It thus combines in itself the problems of choice in technology on the one hand and the goods and services to be made available to society on the other. It also determines how and what kind of technology would be permitted to be imported under various types of arrangements. Through the first and second industrial policy resolutions, we have indicated the division of industry between public and private sector, but have not indicated the kind of technology to be imported. Both in the private and public sector, we have not gone in for repetitive technology that could be classified as elitist. This has also affected the indigenous R and D efforts. The industrial entrepreneur looks forward to technology that can match foreign technology. This has given a foreign orientation to our research programmes. In the decades to come this emphasis would have to be changed and greater stress laid on the development of alternative technology. This functional technology will have to be energy-saving, suited to local raw

materials, and employment-generating. Only then can our technological development be oriented to narrowing down economic disparities.

Reorientation of education

Lastly, we must emphasize the role of scientific and technical education. The present system is not geared to the requirements of society. The most potent example of this is the ever-increasing size of the army of educated unemployed engineers, technologists, and scientists. This is an indication of a bad match between the educational system on the one hand and industrial development on the other. The two systems are connected through technology. In future we need to coordinate more effectively the content of technological developments and educational programmes. Secondly, there is an urgent need to de-link our educational programme, particularly that for science and technology, from its relationship with advanced countries. These programmes should be related more to the problems of the country and its social situation. A large number of challenging tasks need immediate solution, remedies for which cannot be obtained from elsewhere, as such problems do not exist in other places.

To sum up, during the last two and a half decades, we have created the infrastructure that is essential for technological development. What we now need is a purposeful programme and the political will to implement it properly and effectively.

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PUBLIC ORDER

B. Venkataraman and D. Venugopal

Public order signifies the state of tranquility prevailing among the members of a society as a result of the internal regulations enforced by the government constituted by them (AIR 1950). It is synonymous with public peace, safety, and tranquility. Breach of public peace embraces a variety of behaviour patterns destroying or menacing public order and includes not only acts of violence but also acts of incitement to violence (AIR 1960). Public safety, on the other hand, means security of the public or their freedom from danger. Public tranquility is absence of disorder caused by upheavals of national significance like civil strife, civil war, and revolution affecting the security of the state, and also by incidents of local significance.

The contravention of law always affects order, but before it can be said to affect public order, it must affect the community or the public at large. Clarifying the distinction between law and order, public order, and disorders affecting the security of the state, Justice Hidayatullah observed, "Just as public order apprehends disorders of less gravity than those affecting 'security of State,' law and order also apprehends disorders of less gravity than those affecting public order. One has to imagine three concentric circles. Law and order represents the largest circle within which is the next circle representing public order and the smallest circle represents security of State. It is then easy to see that an act may affect law and order but not public order just as an act may affect public order but not the security of State (AIR 1960a)."

The paramount need for the state to ensure public order is well

understood. If personal life and property cannot be safeguarded and if people cannot live without fear of their fellow citizens, force and fear—and not argument and accomodation—will rule the democratic processes. In the words of Justice Jackson: "The choice is not between order and liberty, but between liberty with order, and anarchy without either." In governance, therefore, doctrinaire logic is tempered with practical wisdom. The Constitution First Amendment Act of 1951, in the interest of public order, introduced reasonable restrictions on the exercise of the rights of citizens to:

1. Freedom of speech and expression;
2. Freedom to assemble peacefully and without arms; and
3. Freedom to form associations or unions.

Types of public disorder

Figure 1 presents an analytical framework of the various types

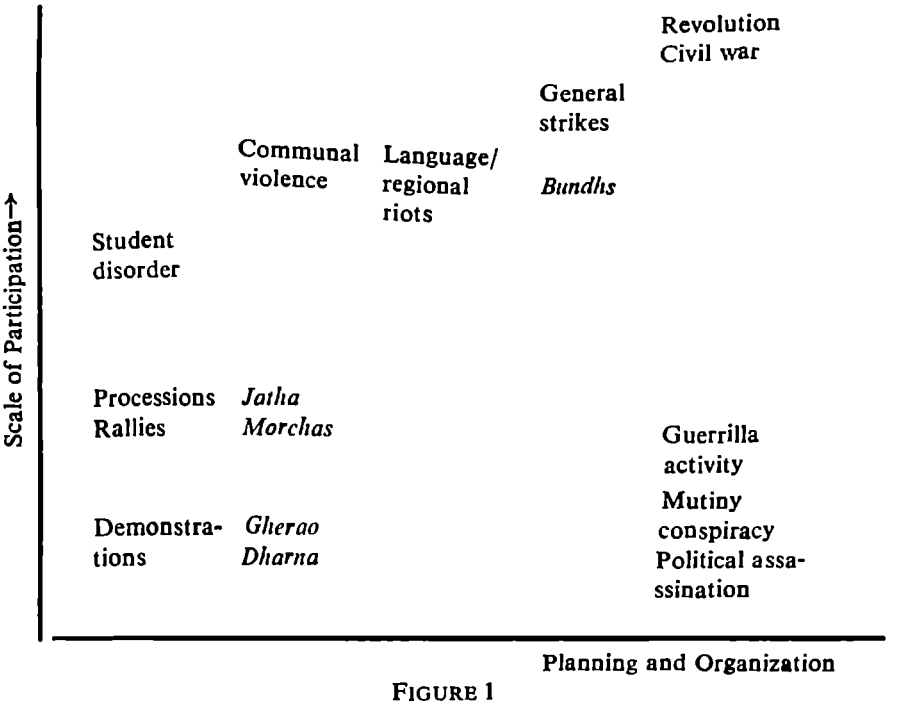


FIGURE 1
AN ANALYTICAL FRAMEWORK OF TYPES OF INTERNAL DISTURBANCES
(After Ted Gurr, 1970, *Why men rebel:* Princeton University Press)

of internal disturbances in a country like India, with reference to the scale of participation and the planning and organization that has gone behind the happenings.

The ultimate forms of disorder are revolution and civil war marked by highly organized political violence with wide participation. Such activities are result-oriented, designed to upset the existing power structure, and are accompanied by large-scale violence. Almost equally well-planned and organized, but with very limited participation, are conspiracies, political assassinations, *coup d'état* and mutinies. Similar, but with a slightly higher scale of participation, are small-scale terrorism and guerrilla activity. With lesser planning and organization but with a considerably higher scale of participation, either willing or forced, are the general strikes and *bundhs* during which the life of the community is sought to be disrupted for a limited period. The language riots and those based on regionalism have some elements of organized political violence with a fairly high degree of participation. Student lawlessness is often more unorganized and can occur on the spur of the moment. Many demonstrations, hunger strikes, and similar forms of protest involve only small-scale organization and participation. *Dharna*, picketing, and *gherao*, though limited in participant numbers, call for a higher degree of planning and mobilization. Processions and rallies are largely ceremonial in character, while *jathas* and *morchas* are meant to convey a message of protest; all of them involve a sizeable number of people.

For purposes of motivation, acts of public disorder can be broadly categorized as:

1. Demonstrative;
2. Eruptions of frustration;
3. Conflicts of social cleavage;
4. Coercion to confrontation; and
5. Overthrow.

(1) *Demonstrative agitations.* Demonstration by means of processions, meetings, rallies, and so forth, is a recognized form of articulation of public grievances and such articulation in a peaceful manner and by an unarmed gathering is a legitimate right of every citizen. As such, modern political and social groups make full use of them. Generally the motive is as much to attract the attention

of the public as of the authorities. Emerging political groups agitate in this manner on some specific issues for gaining popular support. Established political parties use this method in the early stages of the politicization of an issue, or to keep an issue alive. It is also used to bring an incipient issue into public view.

Most of the participants in demonstrative agitations are the aggrieved persons who want to articulate their grievance, and the workers of the party sponsoring the agitation. Sometimes participants are hired, for larger crowds are considered to add to the effectiveness of the agitation.

Normally these agitations are peaceful. It is only when an issue has high emotional overtones that incidents of lawlessness occur, requiring police intervention. Should there be any casualty owing to police action in handling the agitators, the dispersed crowd invariably indulges in violence; and if the general public atmosphere is also emotionally surcharged, riots are very likely—"police excess" being the "provocation."

(2) *Eruptions of frustration.* Not infrequently, breaches of public peace occur owing to spontaneous eruption of passions. The initial participants are usually the volatile, privileged, and status conscious groups. Later, the idle free-floating sector of the population may join. Student violence against public transport systems, cinemas, etc., belongs to this category. Acts of lawlessness that occur during scarcity conditions, the violence being directed against *godowns*, trucks carrying foodgrains, ration shops, etc., are also of this genre.

(3) *Conflicts of social cleavage.* Conflicts between two groups of citizens occasionally cause serious disorders. The alignments of the two conflicting groups may be variously based on religion (as in the Hindu-Muslim riots), language (as in the Assamese-Bengali riots), or caste (as in the upper caste-Harijan incidents). The target of attack is the other group. In the case of communal riots and incidents involving Harijans, the social cleavage is inherited and mobilization of these groups before the outbreak of violence does not necessarily require the activities of political groups. However, in the case of "sons of the soil versus outsiders" and language riots, especially in the context of border disputes, the incipient cleavage is brought to the surface by activists or political groups. Our impressionistic assessment is that it is not essentially the illiterate and the poor who form the core of the agitators but the aspiring

literates. The degree of violence in such conflicts depends upon the atmosphere of estrangement, distrust, and fear. Such violence, once it spreads, does not easily lend itself to control and occasionally necessitates the aid of the army.

In villages, partisanship in land disputes leads to a large number of riots and such riots are a separate class by themselves.

(4) *Coercion to confrontation.* In demonstrative agitations public protest is mainly confined to the articulation of a grievance—with some dramatization—to attract attention. But when the protesting group tries to impose its views, it adopts tactics ranging from coercion to confrontation. Such situations have an in-built potential for violence even though violence may not always be pre-planned.

Such protests are directed specifically against the authorities—the public against the government, the students against the university administration and/or government, and the tillers/labourers against the landlord and/or government. The protesting groups are mobilized by modern social and political groups on issues which involve some injustice or other or for demands which appear legitimate to the protestors. To create a proper effect, they involve organizational effort and mobilization of men and material sources, and the choice of a critical political moment. In modalities, they involve disobeying prohibitory orders, courting arrest, obstructing traffic, picketing and *dharna*—both involving obstruction and intimidation, *hartal*, *gherao*, and *bundh*. It would be noted that all of them, except *hartals* and strikes when they are not banned, are illegal. Police action generally exacerbates feelings, making the police the target of attack. The original issue recedes into the background and the propriety of police action becomes the contentious issue. Not infrequently, when passions are already aroused by the agitation and the protestors are in sufficient strength, police action may result in some casulties, leading to attacks on the police, and mob violence directed against the transport system, and public and private property. It is at this stage that unruly and anti-social elements enter into the fray, altering the nature and the course of disturbances.

(5) *Overthrow.* The motivation behind political assassinations, terrorism, guerrilla activity, and revolution is the overthrow of established authority and the political system through premeditated acts of violence. Revolution, involving widespread popular participation, is possible only when the relationship between the

government and the governed are highly vitiated and the social context provides the opportunity for dissident action; for localized rebellions, however, such conditions in a limited geographical area would do. In far flung border areas, the mobilization of tribals, the who are in the process of developing a sense of belonging with the Indian polity, resulted in such rebellions in the Naga Hills and in the Mizo Hills in north-east India. When confronted with armed forces, the open rebellion is transformed into guerrilla and terrorist activity.

Public Order before Independence

Soon after the 1857 mutiny, the British codified the regulatory system for the maintenance of public order. Crime and punishment was enunciated in the Indian Penal Code of 1860 and criminal procedure was laid down in the Code of Criminal Procedure, 1861. The Police Act of 1861 was enacted following the work of the Police Commission which went into the structure and organization of the police, consistent with the needs of the government. Though initially policing was entrusted to civil constabulary, the indispensability of the "military police" for containment of major outbreaks of civil disorder was soon recognized, and the reserve police, armed and trained to deal with such disturbances, became part of the police system. All these essentials for the maintenance of public order are continuing—without any radical changes.

But the political and social contexts of public disorder have undergone a radical change since independence. Prior to independence, without self-detemination and self-government, constitutionalism and nationalism could not go together. In the absence of representative government, protest against authority was legitimate. Correspondingly, from the government's point of view, protests meant a threat to the established authority and, therefore, had to be dealt with firmly. Both the potential and the actual use of coercive state powers, which were unfettered by fundamental freedoms, was much greater; this was more so as the government was not accountable to the people for its actions. Exercise of the coercive power of the state was seen by the population to be a natural consequence of their action. The government applied its powers equally on all participants and at all times, with the result that

political violence with massive participation was thwarted. This, however, led to two extreme developments. One was the formation of secret societies, hatching of conspiracies, and terrorist activities. The other was the non-violent civil disobedience movement launched by Gandhi. This revolutionary leader propounded doctrinal justifications for non-violence for the overthrow of foreign rule. Nevertheless violence did occur in the civil disobedience movement, as is inevitable with large-scale and fervent participation in any movement.

There were also social cleavage conflicts in the pre-independence period, but they were mainly inter-religious (like the Hindu-Muslim) and intra-religious (like the Shia-Sunni) riots. These riots arose mainly from traditional issues like observance of religious festivities, music before mosques, and cow slaughter. Not until almost the end of British rule was communal violence incited for political purposes. Without a representative government and its attendant electoral politics there was comparatively less need for political groups to untilize the social cleavages for political mobilization. This could well be one of the reasons for the lower incidence of confrontation between social groups before independence.

Public Order since Independence

In the freedom struggle the lesson regarding the effect of protest on the functioning of the political systen had been learnt. Public protest involving a threat to public order and *satyagraha* came to be recognized as a not improper response to the alleged failures of the government and as a useful tool for compelling official attention and constraining decision making.

An effort is made here to analyze the various types of disorder occurring in the country after independence.

Communal violence

Every new nation has its birth pangs. In the case of India it was all the more acute as independence involved a partition of the subcontinent. The period preceding the partition, and soon after, was marked by communal violence of a magnitude not witnessed in recent history. The first incident of the series occurred at Calcutta on 19 August 1946, when the Muslim League launched "Direct Action Day." Riots also took place at Allahabad. Serious riots

broke out again in Calcutta in September and October. By the end of October, more than one hundred persons were killed and over five hundred injured. Communal riots occurred in Bombay in September when Muslims mourned the formation of the Interim Indian Govenment. These claimed over five hundred lives.

In October and November the riots spread to Bihar with the observance of Noakhali Day to mourn the loss of Hindu life in East Bengal. These resulted in the death of about 5,000 people. Rioting continued in Calcutta, Lahore, Amritsar, and villages in Punjab. According to official figures the total casualties in the subcontinent in the six months from 18 November 1946, were 4014 killed (of which 3024 were in Punjab) and 3616 injured. The partitioning of the province of Punjab between India and Pakistan led to several weeks of anarchy and one of the biggest population movements, involving over eight million people, in recorded history. The mass influx of refugees led to renewed communal riots in Delhi and Calcutta in September 1947. The invasion of Kashmir in October 1947, by tribesmen operating from Pakistan, further vitiated communal peace. Following a fast by Mahatma Gandhi in January 1948, communal harmony was restored. Communalism, however, continued to take its toll. Following Mahatma Gandhi's assassination the Government of India came down heavily on communal organizations and declared the Rashtriya Swayamsevak Sangh (RSS), Muslim League National Guards, and Khaksars as unlawful associations and took into custody a number of members of these organizations. When communal riots again broke out in Calcutta and some Assamese villages in January-February 1950, provoked by reports of the ill-treatment of Hindus in East Bengal, the Prime Ministers of India and Pakistan signed an agreement on the minority problem for stabilizing communal relations in the subcontinent.

The emotional impact of the assassination of Gandhi by a Hindu; the constitutional guarantees to religious minorities, and the general support given by Muslims to the dominant political party— the Indian National Congress—all tended to stabilize the situation and communal peace returned to India. Sporadic incidents of communal violence did occur as a result of local provocations like religious festivities, property disputes, and minor political issues. In September 1956, the republication of a book, *Religious Leaders*, by Bharatiya Vidya Bhavan became a communal

issue on the grounds that the book allegedly contained material derogatory to the prophet Mohammad. Riots occurred in Moradabad, Agra, and Aligarh. From 1954 till the end of 1960, the number of persons killed in communal violence was 316.

The communal riots in February 1961 at Jabalpur and neighbouring towns in Madhya Pradesh brought home the fact that communal peace could not be taken for granted. These were followed by increased incidents of communal violence. Thus, from 26 incidents of communal violence in 1960, their number rose to 60 in 1962 and to 61 in 1963 (Government of India 1965-66).

The year 1964 saw the most serious communal conflagration since 1947. In January, as a reaction to the reported violence against the Hindus in East Pakistan, communal violence occurred in West Bengal. Disturbances broke out in March in the tribal belts of Bihar, Madhya Pradesh, and Orissa. The industrial towns of Rourkela and Jamshedpur were also seriously affected. The initial provocation for these incidents came from stories of atrocities reported to have been committed on the minorities in East Pakistan, as narrated by refugees passing through these areas. The wild rumours, and the guillibility and excitability of the tribal population, contributed to the killings that occurred. The Home Ministers of both India and Pakistan met in April to bring about communal harmony among the people of both countries.

Although demands have been made since independence to ban the slaughter of cows, the year 1966 witnessed a renewed agitation on this issue and a demonstration before Parliament resulted in violence and arson.

In subsequent years communal peace became disturbed with increasing frequency. As against 133 incidents in 1966, the incidents of violence in the years following were respectively 209, 346, 519, and 521 (Table 1). Some of the major riots that occurred were at Ranchi in 1967, at Allahabad in 1968, and in Ahmedabad and Bhiwandi in 1969. The deterioration of communal relations was indicated by the intensity and pervasiveness of violence during these riots. In 1971 and 1972, communal violence was on the decline, the number of incidents being 321 and 240 respectively. The state-wise breakup of the available figures is given in Table 1.

TABLE I
INCIDENTS OF COMMUNAL VIOLENCE : 1968 to 1972

State	*1968*	*1969*	*1970*	*1971*	*1972*
Andhra Pradesh	44	6	18	16	8
Assam	11	14	34	22	9
Bihar	98	99	79	66	30
Gujarat	4	213	19	28	22
Haryana	1	—	—	1	1
Jammu and Kashmir	—	—	4	3	—
Kerala	8	22	5	14	13
Madhya Pradesh	18	26	44	21	22
Maharashtra	39	23	164	35	30
Madras	2	4	7	7	3
Mysore	7	11	8	12	16
Orissa	6	12	7	9	3
Punjab	—	—	1	3	1
Rajasthan	10	15	13	10	8
Uttar Pradesh	83	28	48	43	45
West Bengal	13	41	60	30	25
Delhi	1	5	8	1	2
Manipur	—	—	1	—	1
NEFA	1	—	—	—	—
Tripura	—	—	1	—	1
Total	346	519	521	321	240

Information with respect to remaining states and union territories is nil.
SOURCE: Answer to Rajya Sabha starred question No. 243 on 29.7.71.
Answer to Rajya Sabha unstarred question No. 688 on 10.5.73.

Political agitations

(1) *Communist and other leftist agitations.* At the time of Indian independence the communists were hostile to the government and were inciting violence, especially in West Bengal and parts of the composite Madras state. This led to the banning of the Communist Party of India in parts of the country in 1948 and 1949. Communists were active in both the rural and urban areas. The major agitation in rural areas was the peasant uprising in Telengana during 1946 and 1948.

(2) *Naga and Mizo rebel activity.* Parts of north-east India have been experiencing contained unrest and small-scale guerrilla and terrorist activities since the time of independence, due to the

activities of Naga and Mizo rebels. A section of the Naga National Council, under the leadership of Z. Phizo, was demanding an independent Naga state. Failing to achieve their objective some of them took to arms in 1955, and to meet the situation troops had to be deployed in the region. The terrorist and insurgent activities of these rebels continued even after the formation of a separate Nagaland within the Indian Union in 1963. The Naga rebels and the Indian forces agreed to a cease-fire only in 1964.

Some of the Mizo, under the banner of the Mizo National Front, have also been demanding an independent Mizo state. Their guerrilla and terrorist activities, started in early 1966, were initially confined to parts of the Mizo Hill district of Assam and later spread to neighbouring areas. The efforts of security forces to deal with the insurgents by regrouping the villages in border areas led to armed clashes. The liberation of Bangladesh and the consequent loss of their base in Chittagong hill tracts has reduced the activities of the rebels.

(3) *Naxalite violence.* The relatively poor performance by the Congress in the 1967 elections and the mass jubilation over the installation of United Front governments in some states, led a section of the Communist Party of India (Marxist) to assess that the "enemy is beset with crisis and internal quarrels" and that the popular antagonism towards the ruling class would be dissipated by the ineffectual parliamentary politics of left-wing parties. When the masses were ready for revolution and the ruling class weak and discredited, they felt, that the time was for wresting the initiative and not for wasting it on a mass movement based on economic grievances.

The first attempt at such instant revolution was made in Naxalbari, in the Darjeeling district of West Bengal, with surrounding forests, plantations and agricultural land, and a sizeable tribal population. In May 1968, under the leadership of Kanu Sanyal and Charu Mazumdar, a "liberated zone" was established, the land of non-cultivating owners was taken over, existing laws and courts were declared unlawful, legal documents were destroyed, some rich peasants and "lackeys" were tried and executed by the "people's court," and village committees established to run the administration. The Communist Party of India (Marxist) in the United Front ministry in West Bengal sought to interpret the episode as a struggle by the tribals for their economic and democratic rights and was not in favour of treating it as a law and order problem.

Ultimately police was sent to the area and, with little or no resistance from the rebels, controlled the situation. The revolt lasted about fifty days, affecting an area of 274 square miles with a population of 0.15 million.

TABLE 2

VIOLENT INCIDENTS INVOLVING NAXALITES/EXTREMISTS[1]

State/Union territory	*No. of incidents in*			*No. of murders till end of May 1972*
	1968	*1969*	*1970*	
Andhra Pradesh	19	269	85	95
Assam	—	1	9	12
Bihar	—	—	152[2]	96
Himachal Pradesh	—	1	1	1
Haryana	—	—	—	2
Kerala	2	3	20	10
Madhya Pradesh	—	—	1	—
Orissa	—	26	9	8
Punjab	1	12	25	70
Rajasthan	—	—	—	1
Tamil Nadu	—	—	3	5
Tripura	—	1	47[3]	7
Uttar Pradesh	1	—	7	2
West Bengal	8	78	1610[4]	956

Other states and union territories were not affected.

[1]In addition to the Communist party (Marxist-Leninist) other groups operated in different parts of the country including the Revolutionary Communist Committee (Nagi Reddi group—Andhra Pradesh), Committee of Communist Revolutionaries (West Bengal) and Kerala Communist Revolutionary Party, Workers Revolutionary Party (Kerala) and Kunnikal Narayanan Group (Kerala) *vide* unstarred Rajya Sabha question No. 1026 answered on 18.8.70.

[2]Figure for 1969 and 1970

[3]Till 31.10.1970.

[4]Till 15.11.1970.

SOURCE: Answer to Rajya Sabha starred question No. 243 on 29.7.71.

The Naxalbari uprising, though so easily dealt with, became a symbol of armed rural rebellion and provided inspiration not only to similar attempts elsewhere but also eventually to the creation of the Communist Party of India (Marxist-Leninist). Srikakulam, a hilly district of Andhra Pradesh bordering Orissa, and with a predominantly tribal population, had witnessed a tribal movement in

1959. However, in 1968 the local leader Pachadi Krishnamurthy, under the guidance of Charu Mazumdar, gave up the line of a mass movement based on economic struggle and started guerrilla action; killing about one hundred persons in a gruesome manner. The revolt was confined to six *taluks* of Srikakulam in Andhra Pradesh and spilled over to the Koraput and Ganjam districts of Orissa. It was put down by 1970.

Similar uprisings took place in Debra and Gopiballavpur in the Midnapur district of West Bengal in 1969; in Debra a local advocate provided the leadership, while at Gopiballavpur some students from outside (who came in response to Charu Mazumdar's appeal to students to foment and aid rural uprisings) organized the movement.

In Kerala the Naxalite revolt was led by Kunnikal Narayanan in 1968.

Mushahari, of the Muzaffarpur district of Bihar, was also the centre of guerrilla activity in 1968-69. By May 1969 it was claimed that the Naxalite movement had spread to twenty villages of the area and also to some areas in Darbhanga, Purnea, Saharsa, Singhbhum, and south Monghyr of Bihar and Purulia of West Bengal.

In U.P. the forest covered Lakhimpur-Kheri area, bordering Nepal, also saw some Naxalite activity. Though some murders were committed the policy of killing "class enemies" was not adopted.

Naxalite activity entered another phase in April 1969 when "actions on educational establishments," much on the lines of the Chinese cultural revolution, were launched in Calcutta. Even though the Chinese-style movement was started in the Gandhi Centre of Jadavpur University, the statues and writings of Mahatma Gandhi were destroyed, and the property of the centre despoiled. Stalwarts of the Bengal renaissance—Tagore, Vidyasagar, Vivekananda, Asutosh Mukherjee, Ram Mohan Roy—were made the targets of attack and a campaign for the boycott of examinations was launched. The participants in this "festival of idol-smashing" were mostly students with good academic records, from families of economic and social standing.

In August 1970, an "annihilation" campaign of "class enemies" was launched in Calcutta. Teenage dropouts and anti-social elements joined the movement. Brutality was its essence, expressive of "the intensity of hatred for the class enemy." But most of the

victims were not the elite; they were unarmed policemen, police informers, homeguards, CPI (M) cadres, petty businessmen, money-lenders and the like. The Naxalites also claimed that they had liberated some areas in the Calcutta industrial belt. Apart from Calcutta, Naxalite activity was also in evidence in the 24-Parganas, and in the Midnapur, Hooghly, Burdwan, Darjeeling, Jalpaiguri, Nadia, Birbhum, Murshidabad, and Howrah districts of West Bengal. In Assam it manifested itself in Goalpara, Kamrup, Nowgong, Cachar, and Jorhat.

States' reorganization riots

The demand for the formation of a Telugu-speaking Andhra state increased with the attainment of independence. The Congress Committee recommended the formation of Andhra, with the undisputed Andhra districts of the composite Madras state and without the city of Madras. The Government of India, however, did not consider its formation propitious, in view of the outstanding disputes and the unresolved questions in its formation. To force the issue, one, Potti Sriramulu, went on fast. During his fast, and particularly after his death on 15 December 1952, there was lawlessness in a number of towns in Andhra districts and the government accepted the demand for a separate Andhra state.

This led to intensification of the demands for a Kannada-speaking Karnataka, a merger of the Tamil-speaking areas of Travancore-Cochin with Madras, and a separate Punjabi Suba. In view of such demands, the States Reorganization Commission was appointed in 1953 to enquire into the feasibility of reorganizing the states on a linguistic basis.

The proposals for the states' reorganization made in the Commission report seriously affected public order in Bombay (as well as in other parts of Bombay state), Cuttack, Puri, Calcutta, Ahmedabad, and parts of the Punjab. Besides independent organizations, many political parties also participated in these activities which resulted in a great loss to property and the death of about one hundred persons in different areas.

In Madras state public order was not vitiated for the redrawing of state boundaries, but for radically redefining relations with the Centre. In October 1957 the Dravida Kazhagam, led by E.V. Ramasamy Naicker, launched an agitation against Brahmins, the National Flag, and the Indian Constitution. In June 1960 the

Dravida Kazhagam and an organization called the "We Tamils," launched a campaign in Madras to burn maps of India minus Tamil Nadu to press their claim for secession of Tamil Nadu from the Indian Union. No serious violence, however, took place.

The proposal for the reorganization of Bombay state into Maharashtra and Gujarat, with effect from 1 May 1960, again led to agitations. The alignment of opposition parties in Marathi areas —Samyukta Maharashtra Samiti—started a civil disobedience campaign for the merger of Marathi-speaking areas (Belgaon, Nipani, and Karwar) in the proposed Maharashtra. An agitation was also started against the inclusion of Vidarbha in Maharashtra and for the formation of a separate Vidarbha state as recommended by the States Reorganization Commission.

With the massive victory for the Akali Dal under the leadership of Master Tara Singh in the elections to the Shiromani Gurdwara Prabandhak Committee—an elected body managing the Sikh places of worship—in January 1960, and with the reorganization of Bombay into Maharashtra and Gujarat, Master Tara Singh launched an agitation for a Punjabi Suba (a Punjabi-speaking state). During this agitation, a total number of 21,538 Akalis were arrested by November 1960. Sant Fateh Singh, who led the agitation after Tara Singh's arrest, began an indefinite fast in December 1960. On the Prime Minister's assurance that the non-formation of a Punjabi Suba was not due to any discrimination of the Sikhs, Sant Fateh Singh ended his fast. A general amnesty was granted, except to those involved in the perpetration of violent acts. However, the agitation for a Punjabi Suba was revived by Sant Fateh Singh in 1965. This led to counter demands by Jana Sangh leaders and to violence in a number of towns in Punjab. After the reorganization of the state in 1966, the boundary disputes between the new states of Punjab and Haryana led to some incidents.

Under the leadership of some prominent Congressmen, the demand for the separation of Telengana district from Andhra Pradesh gathered momentum in 1968. From May onwards *satyagraha* and student strikes were observed in Hyderabad and violent disturbances broke out in June. Students in the Andhra region started a counter agitation, which in turn reactivated the agitation in Telengana, leading to violence and to the army being called to aid the civil authorities. After a period of peace, after a change in the

Chief Ministership, the agitation was revived in the Andhra region following a reversion of the ruling of the Andhra Pradesh High Court by the Supreme Court, and the upholding of rules relating to service safeguards to Telengana residents. The widespread violent agitation led to the imposition of President's rule in the state in January 1973.

Language riots

The agitation by the Assam Sahitya Sabha, supported by sections of different political parties for the recognition of Assamese as the state language of Assam, led to serious disturbances in July 1960. This provoked counter agitations by the Bengalis and the hill people of the state. The resulting acts of violence against Bengalis in Shillong and the plains made thousands of them leave their homes. This outburst, locally known as "Bengali Kheda" (Drive Away Bengalis), gave expression to the resentment of the Assamese against the Bengali Hindu middle class who "dominated" the government and professional services. The state government observed that the riots were "manifestations of a deep-seated social and economic malady and of a sense of frustration." The influx of Bengali refugees from Assam provoked riots in the border towns of West Bengal. A *hartal* was observed in West Bengal on 16 July protesting against the Assam riots and Independence Day was observed in Calcutta as a day of mourning.

The Sangram Parishad, supported by members of many political parties, launched an agitation in May 1961 in Cachar district for the recognition of Bengali along with Assamese as the official language. During the agitation the police had to open fire, resulting in the death of ten persons. This led to the spread of disturbances and army help was sought to control the situation. In West Bengal a *bundh* was observed on 24 May. To counter the Sangram Parishad, non-Bengalis formed a Shanti Parishad and a number of minor clashes occurred between the two.

The Assamese language issue, besides leading to friction between the Bengalis and the Assamese, led to an estrangement of the hill population. Under the leadership of the Assam Peoples' Hill Leaders Conference, a demand for the creation of a separate state comprising the hill districts was made with sustained vigour. In the Mizo Hills district the Mizo National Front, formed to carry out relief operations during the famine in the district in 1959,

transformed itself into a political party demanding an independent Mizo state.

The next outburst of violence in Assam occurred in the Brahmaputra valley in October 1972 over the question of the medium of instruction in Gauhati University. The All Assam Student Union's call to make Assamese the medium of instruction in the state's universities led to riots in Darrang, Nowgong, and Sibsagar districts. Local Bengalis were attacked in the disturbances.

The adoption of Hindi as the official language of the Union led to widespread riots in Madras state in 1965. The Dravida Munnetra Kazhagam, as also the students, worried about their employment prospects with the switch-over to Hindi, and organized under a Tamil Nadu Students' Anti-Hindi Agitation Council, spearheaded the agitation. The protest started on a gruesome note with one DMK supporter burning himself alive; four others did the same thing later, while two committed suicide. The following riots led to extensive damage to property, especially the property of the Government of India. There were protests in Kerala, Andhra, Mysore, and West Bengal, but generally on a peaceful note. The intensity of feeling in the matter made the Prime Minister assure non-Hindi speaking people that English would also be continued as an official language so long as it was wanted.

The Official Language Amendment Bill, which sought to give legal form to the assurance on the language question to the non-Hindi population, led to protests both from the protagonists and the opponents of Hindi. Anti-English riots, with student participation, occurred in Varanasi, Allahabad, Gorakhpur, and other towns of U.P. in November 1967. Rioting also spread to parts of Madhya Pradesh, Rajasthan, Bihar, and Maharashtra. In Madras, anti-Hindi demonstrations countering this agitation were peaceful initially, but later turned violent. Riots also occurred in Andhra Pradesh and Mysore.

Violence against scheduled castes/tribes

There have been increasing instances of personal violence, offences against property, and indignity against members of scheduled castes and tribes arising out of caste and tribe considerations (Tables 3 and 4). Among the states, Uttar Pradesh, Madhya Pradesh, and Rajasthan alone account for over 60 per cent of the cases involving scheduled castes. With regard to incidents affecting scheduled tribes,

63 per cent of them occurred in Rajasthan and Maharashtra. According to the Scheduled Castes and Scheduled Tribes Commissioner's Report "atrocities were committed by the landlords, Government employees including police, *panchayat* members, etc."

TABLE 3
NUMBER OF CASES OF PERSONAL VIOLENCE, OFFENCES AGAINST PROPERTY, AND INSULT AND INDIGNITY AGAINST SCHEDULED TRIBES ARISING OUT OF TRIBE CONSIDERATIONS

State/Union territory	*1967*	*1968*	*1969*	*1970*	*1971*	*1972**
Gujarat	23	23	29	47	52	37
Kerala	1	—	19	25	15	8
Madhya Pradesh	66	90	105	66	120	114
Maharashtra	220	227	222	215	309	233
Orissa	94	76	55	132	126	112
Rajasthan	318	343	348	439	364	402
Uttar Pradesh	121	112	122	151	133	131
Total	843	871	900	1075	1119	1037

Information with respect to remaining states and union territories is nil.
*Till October 1972.
SOURCE: Answer to Rajya Sabha starred question No. 648 on 14.12.1972.

The abolition of untouchability, and the introduction of adult franchise, local self-government, and constitutional safeguards have rightly produced expectations about rights and status among scheduled castes and tribes. The claims of these disadvantaged groups, however, are viewed as threats to their relative status by the higher castes. And the political and economic power of the dominant castes places obstacles to Harijan emancipation. It is obviously when the Harijans try to assert their rights that they become victims of social boycott or personal violence.

The initial awakening among the educated youth of the scheduled castes and tribes, resulting in impatience, is now progressing to an attitude of defiance. The growth of volunteer organizations, like the Dalit Panthers in Maharashtra, is a case in point. The violence that results is "not necessarily at the instigation of interested political

parties but should be regarded as a sign of no-confidence in the bureaucratic apparatus or even a lack of confidence in constitutional or legal means of securing justice."

TABLE 4

NUMBER OF CASES OF PERSONAL VIOLENCE, OFFENCE AGAINST PROPERTY, AND INSULT AND INDIGNITY AGAINST SCHEDULED CASTES, ARISING OUT OF CASTE CONSIDERATIONS

State/Union territory	*1967*	*1968*	*1969*	*1970*	*1971*	*1972**
Andhra Pradesh	—	4	5	10	20	25
Gujarat	192	172	195	226	268	229
Jammu and Kashmir	1	4	8	—	1	—
Kerala	94	92	142	168	199	231
Madhya Pradesh	395	508	484	488	641	567
Madras	110	14	14	5	16	412
Maharashtra	132	155	188	208	238	237
Mysore	37	50	38	50	39	33
Orissa	273	191	178	285	230	217
Punjab	90	81	89	96	80	86
Rajasthan	355	336	307	359	411	352
Uttar Pradesh	659	631	596	795	980	921
West Bengal	—	1	—	1	—	—
Chandigarh	—	—	1	2	1	—
Delhi	—	—	4	3	1	—
Goa, Daman and Diu	—	—	1	4	5	2
Himachal Pradesh	1	2	3	1	4	4
Pondicherry	—	—	—	—	2	—
Total	2339	2241	2253	2701	3136	3316

Information with respect to remaining states and union territories is nil.
*Till October 1962.
SOURCE: Answer to Rajya Sabha starred question No. 648 on 14.12.1972.

Student agitations

Student activism dates back to the period of India's freedom struggle. But the nature and character of student activism has changed after independence. The reasons are not difficult to find. In the place of a man of Gandhi's stature who inspired students to activism, there is now a local leadership aiming mainly at local seats of power. Instead of nationalism, regional and other local loyalties are becoming important. The earlier target was British

imperialism; now it is either the "remote and unsympathetic" Centre or the "corrupt" state government. These motivations apart, the objective conditions have also changed. There has been an explosion of higher education and a large number of institutions are as young as the students who entered them, with their respective problems of growth. Job opportunities have not kept pace with the growth in education.

Thus, the unrest has a number of causes: "the uncertain future facing educated young men, leading to a sense of frustration which breeds irresponsibility; the mechanical and unsatisfactory nature of many curricular programmes; the totally inadequate facilities for teaching and learning in most of the institutions; the inefficiency and lack of scholarship on the part of many teachers . . . the absence of imagination and tact combined with firmness on the part of heads of institutions, the prevalence of what has come to be known as teacher politics . . . the attempt by political parties to interfere in their work—and by no means the least, the impact of the conditions of public life in the country, the failing standard of discipline among the adults and a weakening of their civic consciousness and integrity" (Report of the Education Commission 1964-66: 296-7).

Student politics in India has tended to follow the lines of national politics. Anti-authority attitudes and political issues have aroused students to indulge more in violent agitations than in issues related to their academic life. Broadly it can be generalized that frustrations in the political dimension, evocative of popular response, have also attracted student protests. The average student, however, is not politicized. Surveys so far conducted have revealed that students are only notionally involved in political developments and are not really politically oriented. With significant exceptions in West Bengal and Kerala, student turmoil is more a spontaneous expression suiting the mood of the moment rather than goal-oriented in political terms. Often their action is merely to affirm their "right" to be treated as a privileged class or their ability to occasionally affect public affairs and decisions or only to wrest concessions for leading a soft academic life from the soft authorities.

Notable among the student protests (apart from Naxalite activities in Calcutta, dealt with elsewhere) are the Orissa student agitation in 1964 against the "corrupt Patnaik Ministry," language riots in Madras and other southern states in 1965, pro-United

Front demonstrations in Calcutta in 1966 and later, and a series of riots in some northern states in 1966-67 (Altbach 1968). In Orissa a coordinated series of student demonstrations, carried out by a well-organized student committee, forced the resignation of the government in 1964. In 1965, the widespread riots in Madras and other southern states against the "imposition of Hindi" as India's official language, sparked off by students, led to a national crisis and made the Union government reconsider the issue. In 1966, all colleges in Calcutta had to be closed down when violence broke out during student demonstrations in favour of the leftist United Front. There was a spate of student lawlessness, beginning from September 1966 and lasting till January 1967, in Madhya Pradesh, Uttar Pradesh, Orissa, and West Bengal. An alleged assault on a student by a policeman in Gwalior sparked off the first incident. Almost as a chain reaction, the riots spread to various towns in the different states.

Quantified data presented in Tables 5 and 6 are with respect to cases of student indiscipline in colleges for the years 1958-1966 (Rudolph *et al.* 1971: 1655-68), and of the student agitations for the years 1964-75 to 1969-70 (Pant 1973).

TABLE 5
STUDENT INDISCIPLINE IN COLLEGES

Year	*Number of cases*	*Per cent violence*
1958	93	4
1959	120	2
1960	80	3
1961	172	2
1962	97	1
1963	109	19
1964	395	29
1965	271	41
1966	607	42

The spurt in the number of cases of college students' indiscipline in 1964 and 1966 (the data on indiscipline also includes that pertaining to student participation in agitations) and the steep increase in their violence content from 1963 are noteworthy. From these figures it would appear that since 1966-67, both the number of

agitations and the proneness to violence have increased compared to previous years. In the six-year period ending with 1969-70, West Bengal, Kerala, and Tamil Nadu accounted for one-third of the student agitations. In Bihar the incidence of violence in student protest was quite high. Other states where student protests were fairly frequent were Uttar Pradesh, Orissa, Andhra Pradesh, Madhya Pradesh, Mysore, and Punjab. However, student protest was not as pervasive as it was commonly thought to be. For instance, in 1969-70, one-fifth of the districts in India did not witness

TABLE 6
STUDENT AGITATIONS 1964-65 to 1969-70

Year	*Number of agitations*	*Per cent violence*
1964-65	1801	23
1965-66	1732	15
1966-67	3073	34
1967-68	2941	32
1968-69	2606	27
1969-70	3326	34

any student agitation. Thirty-three of the districts accounted for half the unrest. But there is no gainsaying the fact that student protests on campus and off campus issues were a major cause of anxiety. Political parties made no secret of their interest in recruiting cadres from among students. While only a small percentage of students were politically committed, many of them could be temporarily motivated for political purposes in opportune circumstances. A generally permissive attitude towards students was shown by society and the administration. These factors taken together would presage continued student involvement in the general turmoil. This apart, as in the pre-independence period, involvement of students in civil disobedience movements on the one hand and in terrorist movements on the other cannot altogether be ruled out.

Agrarian agitations

Breaches of public peace in the countryside in India are fairly frequent. Data on agrarian agitations available for the period

1967-1970, however, indicate that mobilization of the countryside for violent protests (involving public disorder) is limited and unevenly distributed among states (Table 7). In the four-year period, there were 5,424 agitations of which 64.7 per cent were violent. During these years, the number of protests and their proneness to violence was on the increase.

TABLE 7
AGRARIAN PROTESTS AMONG MAINLY AFFECTED STATES: 1967-70

State	*1967*	*1968*	*1969*	*1970*
Andhra Pradesh	46	53	121	287
Assam	27	—	—	—
Bihar	22	82	90	649
Gujarat	48	82	—	—
Kerala	20	62	109	148
Madhya Pradesh	—	—	—	164
Madras	—	73	100	—
Maharashtra	—	78	56	101
Mysore	—	—	61	—
Orissa	—	—	—	143
Punjab	—	—	—	100
Rajasthan	—	49	—	280
Uttar Pradesh	26	103	—	399
West Bengal	145	95	498	371
All India	402	833	1236	2953

SOURCE: K.C. Pant, *Young Indian*, 1973, Nos. 29-30.

West Bengal, Bihar, Uttar Pradesh, Andhra Pradesh, Rajasthan, and Kerala accounted for more than two thirds of the agrarian protests. It would appear that kharif crop areas are affected more than the rabi crop areas. Violence during the protests in these states is also striking; they account for 75 per cent of the violent agrarian agitations.

Significantly, agrarian unrest was centred mainly on the issue of allotment of land to the landless and grant of ownership rights. Violence arose either in forcible occupation of land or while offering resistance to eviction. The second set of issues related to the right of harvesting and the sharing of produce. In 1969, there were a number of violent incidents on this score in West Bengal. In 1970,

Bihar and Kerala were also affected. Owing to the political mobilization of peasants on these issues inter-party clashes occurred. In 1969 and 1970 there were 161 such clashes, besides 184 instances of looting and thirteen murders on agrarian issues. These were mainly confined to West Bengal and Kerala.

Wages and employment have not figured prominently in agrarian protests. Demand for distribution of land (including the *benami* and *khas* lands) to the landless elicited far greater response than increase in wages; therefore political parties placed a premium on the demand of land for the landless. The Communist Party of India launched a land grab movement in 1970, which led to the arrest of more than 12,000 people in Tamil Nadu and over 6,000 in Andhra Pradesh. In West Bengal and Bihar, however, sharecroppers and sub-tenants (as distinct from landless labourers) were sought for political mobilization. Even landowners' issues are sponsored by parties, including the leftists, if they provide a suitable opportunity for tactical opposition to the government. In March 1959 the Communist Party of India launched a peasant agitation in Punjab against the betterment levy imposed by the government to cover the cost of new irrigation works. Numerous clashes occurred with the police. In July 1972 opposition parties in Tamil Nadu supported the farmers' agitation against the increase in the price of electricity. A *bundh* was observed and the police had to open fire at several places to control the situation.

Instability and unrest became conspicuous in the tribal areas of Andhra Pradesh (Srikakulam), Bihar (Chota Nagpur area), Orissa (Koraput district), and West Bengal (Darjeeling district). The alienation of land from the tribals, the domination of tribal economy by moneylenders, and the poor state of development because of inaccessibility, provided the breeding ground for tension.

The study of agrarian agitations from 1967 shows that districts with a comparatively higher degree of agrarian unrest (fifty-seven were identified for the four-year period) have a large proportion of the underprivileged either as landless labourers or those whose primary source of livelihood is wage labour. In forty-four out of these fifty-seven districts the scheduled castes and tribes formed a higher percentage of the population than the state's average.

A striking feature of recent agrarian unrest has been the effort made by political parties to sponsor militant mass action directly, or through their peasant organizations. The role of leftist parties

has been prominent. Permissive attitudes to gaining objectives through direct action have been manifest under some of the governments formed after 1967. Generally, justification for such action is the inability so far of the governments to implement the land reform measures. The obstacles in the implementation of land reforms under a lawful procedure are the resistance put up by the landed classes through litigation, the apathetic role of the administration, and the structural difficulties, especially that of property rights in the Constitution. As a result, militant movements largely consisting of potential beneficiaries under radical political leadership are considered inevitable.

Election violence

In a democracy, political compaigning without fear and casting of votes without intimidation or coercion are crucial. The reports of the Election Commission on the 1952 and 1957 general elections reveal that only in seven and four polling stations respectively was adjournment of the poll ordered owing to breach of law and order. In 1962 there was not a single case of adjournment of the poll on this score. In 1967, however, the poll was adjourned in twelve polling stations in Bihar, and in five others a re-poll had to be ordered. Sporadic incidents of violence were also reported from Andhra Pradesh, Assam, Haryana, Madhya Pradesh, and West Bengal. The hostile activities of the Nagas disturbed the poll in six places in Manipur. The situation worsened during the mid-term elections in 1968-69. The Election Commissioner received complaints of intimidation and coercion in Bihar, Uttar Pradesh, and Haryana. His own impression was that the possibility of undue influence and intimidation being exercised by the powerful and economically better off sections of the community over the weaker and poorer sections could not be altogether ruled out. In Bihar there were twenty-five cases of adjourned poll or ordering of fresh poll because of violence by turbulent mobs at or near the polling stations. In the 1971 elections, there was an increased incidence of violence. During the Parliament/Assembly elections, the poll was adjourned on account of violence or the threat of it in sixty-two polling stations in Bihar, eighteen in Jammu and Kashmir, three each in Haryana and Uttar Pradesh, and one each in Nagaland, Orissa, and Andhra Pradesh. In West Bengal, where abnormal conditions prevailed owing to Naxalite violence and inter-party clashes,

the military had to be brought in to patrol the streets of Calcutta during the elections.

Data with regard to violence from the filing of nominations to the declaration of results, are available only from 1967. Dhanagare's (1968: 747-59) computation of the 1967 elections revealed 375 cases of violence, of which 206 occurred in urban areas. The incidence was the highest in Bihar (98). There was more violence in urban areas than in rural areas, Kerala being the notable exception. The intensity of violence tended to be greater in rural areas, particularly in Andhra Pradesh, where twenty-five persons were killed, twenty of them from rural areas.

During the 1971and 1972 elections, there were, respectively, 2,291 and 1,078 incidents of violence resulting in the death of 244 and 58 persons (Table 8). To generalize on the state-wise breakup, it would appear that states without single party dominance or states with dissensions in the dominant party are more prone to the incidence of election violence.

TABLE 8
INCIDENTS OF VIOLENCE IN CONNECTION WITH THE ELECTIONS: 1971 AND 1972

State/Union territory	*No. of incidents*		*No. killed*	
	1971	*1972*	*1971*	*1972*
Andhra Pradesh	104	172	1	13
Assam	17	80*	2	—
Bihar	158	143	4	10
Gujarat	61	61	2	—
Haryana	21	16	—	1
Jammu and Kashmir	14	34	—	—
Kerala	158	—	3	—
Madhya Pradesh	51	51	1	2
Madras	370	—	3	—
Maharashtra	45	61	—	—
Mysore	36	84	—	1
Nagaland	4	—	—	—
Orissa	19	—	—	—
Punjab	10	38	1	—
Rajasthan	45	17	—	—
Uttar Pradesh	113	—	12	—
West Bengal	1,027	239	215	—
A. and N. and L. Islands	1	—	—	—

Chandigarh	3	—	—	—
Delhi	21	39	—	—
Goa, Daman and Diu	2	9	—	1
Pondicherry	1	—	—	—
Manipur	—	18	—	—
Tripura	10	16	—	30
Total	2,291	1,078	244	58

*Includes 1 incident of Meghalaya.

SOURCE: Answer to Rajya Sabha starred question No. 94 on 1.4.71.
Answer to Rajya Sabha unstarred question No. 199 on 1.4.71.
Answer to Rajya Sabha starred question No 575 on 13.4.72.
Answer to Lok Sabha unstarred question No. 1433 on 29.3.72.

Senas and volunteer organizations

In the past few years violent agitations over grievances relating to economic opportunities, imbalances in the economic development of different regions, and indequacy of employment opportunities in urban areas have occurred. When there was a feeling of lack of employment opportunities in a region, in some cases with aggressive cultural consciousness, local groups tried to direct the feeling of grievance of the masses against the immigrants to the region, under the banner of "domination of the locals by others." In the 1960s this saw a growth of volunteer organizations, called *senas* (armies) attached overtly or covertly to political parties. These *senas* not only provided the institutional outlet but also created the scapegoat in the "outsiders," changing the target of attack from the government to the "outsiders."

In March 1969, there were 57 *senas* and volunteer organizations in various parts of the country, the most prominent among them being the Shiv Sena of Bombay with a membership of over 80,000 and the slogan "Maharashtra for Maharashtrians," the Lachit Sena in the Brahmaputra valley with the slogan "Assam for Assamese," and the Kannada Chaluvaligars (for restricting Tamil and Telugu migration to Bangalore).

In Bombay, from 1967, virulent propaganda against south Indians was followed by their being physically assaulted. Some of this was attributed to the activities of the Shiv Sena which espoused the sons of the soil principle for employment in Bombay. In 1969, while demanding a merger of the Marathi-speaking areas

of Mysore with Maharashtra, the Shiv Sena volunteers tried to prevent the entry into Bombay, of the Deputy Prime Minister. This was followed by widespread looting and arson of business establishments and private houses owned largely by non-Maharashtrians.

In Assam an agitation against outsiders, especially Marwaris, was launched in the Brahmaputra valley by the Lachit Sena. Riots occurred in Gauhati, on the Republic Day of 1968, where students had called for the boycott of the Republic Day as a protest against the proposal for reorganization of the state. There was widespread arson and looting of industrial units and property, and the victims were generally non-Assamese.

During 1968, there was unrest among the tribals in Bihar, leading to clashes with the police at Chiri Ranchi and Chainpur. The unrest was reportedly a result of the exploitation of Adivasis by the plainsmen, and the lack of employment opportunities.

Industrial labour disputes

Industrial labour's articulation of grievances and collective bargaining have not infrequently led to public disorder. Inter-union rivalries have also occasionally resulted in clashes. The contribution of industrial labour, and hence their bargaining power, is disproportionate to their numerical strength of eight per cent of the work force in the country (Vijayaraghavan 1967). Political parties are naturally concerned to see that trade unions are organized and run in a way to further their political strength. However, political mobilization of the labour force is quite limited, the verified membership of the central trade union organizations being but a small portion of the modern industrial sector of about ten million workers. The trade unions generally toe the line of the political party to which they are attached. They invariably lend support to general strikes and *bundhs* in response to calls given by political parties on issues unrelated to labour problems. However, no systematic data relating to breaches of public peace caused by labour unrest are available.

Public order under certain state governments

After the 1957 elections in Kerala, a government under the Chief Ministership of E. M. S. Namboodiripad came to power. The Chief Minister's announcement that police should not interfere with "peoples' movements" led to a series of labour troubles in the

state. The government introduced the Education Bill which aimed at almost complete control of private educational institutions and gave rise to the fear that the aim was to introduce surreptitious indoctrination of communist ideologies. There were complaints of interference by the Communist party and by ministers in the administration of law and order, and of discrimination in labour disputes. A general feeling of insecurity had grown among the non-communists and they united to support a widespread agitation to remove the government. The seven-week long agitation led to the imposition of President's rule in the state.

After the general elections in 1967 certain problems relating to maintenance of public order came up under the governments formed in West Bengal and Kerala. The policy of non-interference with "peoples' movements" led to difficulties in ensuring proper functioning of the Central agencies and offices and the security of Central Government properties, installations, and institutions. It was noticed that during the agitations trains stopped completely either due to or out of apprehension of physical obstruction by those supporting such general stoppage of work. There were also cases of suspension of the services performed by Union agencies such as internal civil aviation, as a result of the unwillingness of the state government concerned to provide police protection to the staff connected with such agencies. Similarly, Central Government offices, industrial undertakings, and plants were compelled to close because the assistance of state authorities was not forthcoming.

In view of all this, the state governments' attention was drawn by the Centre to their constitutional obligations under articles 256 and 257 (Government of India 1967-68).

In West Bengal, the Labour Minister in the United Front government issued a directive that the police was not to intervene in labour disputes. The Chief Justice of the Calcutta High Court held that *gheraos* were unlawful when accompanied by confinement or restraint, and the fact that this was done by members of a trade union as an instrument of collective bargaining, gave rise to no special treatment or exemption from liability under the law.

The Government of India promulgated the Essential Services Maintenance Ordinance in September 1968 when it had become clear that some unions of government employees would try to organize a total stoppage of work on 19 September 1968. All

state governments were advised with regard to the action to be taken against Central Government employees found to be violating the provisions of the ordinance. The Government of Kerala, however, regretted their inability to issue the necessary instructions to district authorities. The Centre had therefore to invite the attention of the Kerala government to the constitutional provisions under which the state governments had to exercise their executive power to ensure compliance with the laws of Parliament.

The Centre had to post the Central Reserve Police in Kerala to protect Central government offices and installations. The state government objected to the decision on the grounds that it had not been consulted and that the step was not likely to help the maintenance of smooth relations between the Centre and Kerala. It was explained to them by the Centre that the attitude of the state government towards the problem of maintaining law and order in connection with the agitation of government employees had left no option but to post the C.R.P. without previous intimation to the state government (Government of India 1968-69).

Magnitude of public disorder

A uniform system of maintenance of crime statistics throughout the country was introduced in 1953. As defined in the Indian Penal Code, rioting is involved when violence is used by a group of five or more persons. The number of cases of rioting reported, however, is not a very reliable indicator of the magnitude of public disorder. Some may not really be breaches of public order but petty quarrels; some may be sham cases registered to impute blame or to exaggerate cases of fight and fray. Nevertheless the number of riots during a period give a broad indication of group involvement in acts of violence.

Table 9 records the cases of riots registered state-wise for 1953 to 1972. Over the twenty-year period from 1953, riots have increased more than three-fold, from 20,529 in 1953 to 65,781 in 1972. Expressed in terms of population the number of riots was 5.5 per 100,000 population in 1953 and 11.7 per 100,000 population in 1972. There was a steady increase in the incidence of riots in the country, with the post-1967 period registering a sharp rise.

The picture, however, becomes variegated at the state level, both in terms of the incidence of riots and the change in the incidence

TABLE 9
NUMBER OF RIOT CASES

State/Union territory	*1953*	*1954*	*1955*	*1956*	*1957*	*1958*	*1959*	*1960*
Andhra Pradesh	1,169	1,682	1,761	1,798	2,034	1,910	2,217	2,370
Assam	984	1,015	1,418	1,092	1,057	1,163	1,349	2,490
Bihar	3,588	3,583	4,078	3,768	3,922	3,597	4,206	4,359
Gujarat								446
Haryana								
Himachal Pradesh	18	35	29	30	29	26	41	36
Jammu and Kashmir	208	170	231	257	243	251	272	325
Kerala	380[2]	556[2]	315[2]	474	870	1,478	1,893	1,114
Madhya Pradesh	1,026	1,155	1,223	1,385	1,327	1,595	1,612	1,649
Madras	1,732	2,090	2,293	2,092	2,047	2,335	2,205	2,511
Maharashtra	1,161[1]	1,310[1]	1,105[1]	3,407[1]	2,014[1]	1,963[1]	2,237[1]	967
Meghalaya								
Mysore	178	260	239	726	709	933	862	1,035
Nagaland								
Orissa	1,111	1,191	1,031	896	879	916	1,121	1,103
Punjab	236	243	269	265	356	203	201	206
Rajasthan	1,082	884	992	1,078	999	1,004	1,134	953
Uttar Pradesh	2,975	3,110	2,795	3,087	3,002	3,045	2,900	2,743
West Bengal	3,159	3,868	4,003	4,149	3,988	4,321	4,412	4,123
A. and N. Islands	1	1	—	—	2	3	4	4
Chandigarh								
Dadra and Nagar Haveli								
Delhi	69	83	73	79	84	68	81	63
Goa, Daman and Diu								
L. M. and A. Islands								
Manipur	20	41	45	28	38	25	52	170
Pondicherry								
Tripura	41	50	73	85	119	105	181	214
Naga Hills and Tuensang Area					31	1	7	9
Total	20,529	22,777	23,609	24,700	23,750	24,942	26,987	26,890

Since all part B and C states do not figure in the Table for the years 1953, 1954 and 1955,
[1]Figures relate to Bombay state.
[2]Figures relate to the states of Travancore and Cochin.
SOURCE: Government of India. *Crime in India.* New Delhi: Ministry of Home Affairs.

REPORTED : 1953-1972

1961	*1962*	*1963*	*1964*	*1965*	*1966*	*1967*	*1968*	*1969*	*1970*	*1971*	*1972*
1,963	:,046	1,898	2,354	1,874	1,777	2,277	2,492	3,218	3,388	2,953	3 054
1,814	1,450	1,482	1,619	1,612	1,993	2,113	3,126	4,192	3,111	3,154	4,390
4,530	4,469	4,883	5,882	6,093	6,469	8,282	8,048	8,384	10,239	10,054	10,053
385	464	492	696	330	417	495	573	1,356	484	548	624
					82	66	94	101	107	72	93
45	40	59	68	67	50	9	30	47	49	67	115
325	367	334	445	359	417	627	604	725	736	563	586
1,181	969	1,042	1,187	1,053	1,317	1,839	2,321	3,089	4,269	3,840	5,107
1,468	1,365	1,280	1,410	1,397	1,414	1,494	1,801	2.081	2,170	2,390	2,474
2,146	3,155	1,889	2,007	3,270	2,308	2,461	3,253	2,817	3,057	4,023	5,183
838	873	697	1,336	1,493	1,358	1,427	1,534	1,767	2,043	1,729	2,099
											33
966	991	1,016	1,082	1,080	1,024	1,080	1,802	1,563	1,953	1,797	2,576
		12	—	5	19	4	17	13	14	28	31
980	926	921	1.552	1,085	1,224	1,435	1,944	2,021	1,992	1,650	1,746
165	151	122	159	135	50	48	47	29	44	31	52
1,060	1,273	1,569	1,614	2.040	2,495	2,646	3,132	3,050	3,381	4,045	4,627
4,856	6,057	5,997	6,094	6,057	6,540	7,116	7,114	7,337	14,015	14,561	12,398
4,152	4,056	3,883	4,613	4,454	5,233	8,514	7,220	13,137	16,337	11,799	9,488
2	10	—	4	2	5	1	10	12	16	16	11
					2	4	7	3	9	5	4
				—	—	1	—	—	—	1	3
39	84	86	89	72	102	95	78	93	201	240	447
			43	44	44	40	27	17	21	16	37
		—	—	1	—	2	2	1	—	—	—
76	121	166	153	124	135	170	170	240	311	152	176
			33	63	31	15	29	75	48	94	124
202	220	286	253	230	190	186	326	428	336	286	250
6	9										
27,199	29,096	28,114	32,693	32.940	34,696	42,447	45,801	55,796	68,331	64,114	65,781

the state-wise break-up for these years does not add up to the all-India total.

over the years. Table 10 presents data on the incidence of riots per 100,000 population in 1957 (that is, immediately after the reorganization of states to make comparisons in time feasible) and in 1972. Riots in Punjab (undivided), Himachal Pradesh, Delhi, Uttar Pradesh, Madhya Pradesh, the state of Bombay, and Mysore have

TABLE 10
NUMBER OF RIOT CASES REPORTED PER 100,000 POPULATION

State/Union territory	*1957*	*1972*	*Percentage variation of 1972 over 1957*
Andhra Pradesh	6.5	6.9	6.2
Assam	11.7	28.9	147.0
Bihar	10.1	17.4	72.3
Gujarat	4.2*	2.3	—45.2
Haryana	2.2[1]	0.9	—59.1
Jammu and Kashmir	5.5	12.4	125.5
Kerala	6.4	23.2	262.5
Madhya Pradesh	5.1	5.8	12.1
Madras	6.8	12.3	80.9
Maharashtra	4.2*	4.1	—2.4
Mysore	3.7	8.6	132.4
Orissa	6.0	7.8	33 3
Punjab	2.2[1]	0.4	—81.8
Rajasthan	6.3	17.4	176.2
Uttar Pradesh	4.7	13.7	191.5
West Bengal	15.2	20.8	36.8
A. and N. L. Islands	6.5	9.3	43.1
Delhi	4.8	10.4	116.7
Himachal Pradesh	2.6	3.3	26.9
Manipur	6.6	16.0	142.4
Tripura	18.6	15.7	—15.6
Naga Hills	8.4	6.0[2]	—28.6
India	6.6	11.7	77.3

*Figures relate to the state of Bombay.
[1]Figures relate to undivided Punjab.
[2]Figure relates to Nagaland.

not been of significant proportions in 1957. In 1972, however, Uttar Pradesh and Delhi had become riot prone. The high incidence of the breaches of public order in Bihar, West Bengal, and the north-

east states and the increase in disorder in Kerala, Uttar Pradesh, Delhi, Rajasthan, Jammu and Kashmir, and Mysore are noteworthy.

Riots in cities

Table 11 gives the number of riots in eight major cities of India from 1956. These cities (Ahmedabad, Bangalore, Bombay, Calcutta, Delhi, Hyderabad, Kanpur, and Madras), with 3.5 per cent of the country's population in 1961 and 3.9 per cent in 1971, account for 3.1 per cent of the total riots during the period 1956-1972. Thus, taken as a whole, these cities are less prone to riots than the entire country. This statement, however, is subject to the qualification both with respect to certain years where this position did not hold good and with respect to certain cities where the rate of the incidence of riots was higher.

In 1962, largely owing to the language disturbances in Madras, and in 1969 over the communal riots in Ahmedabad, the incidence of riots in the eight cities with reference to their population was higher than the national average. City-wise, riots in Calcutta are high compared to its population, while the number of riots in Kanpur, Madras, and Ahmedabad are around the national average. Bangalore, Delhi, Hyderabad, and Bombay have been relatively peaceful cities. The popular impression that urban centres are more prone to public disorder is not borne out by available data.

The police force

There has been a general increase in the size of the police force, which carries out the various tasks related to the maintenance of public order over the years. There are wide variations between the states in the strength of the force with reference to the population. In Nagaland, Andaman and Nicobar Islands, Lakshadweep, Minicoy and Amindivi Islands, Chandigarh, Delhi, and Manipur, the relative strength of the force is high; in populous states like Bihar, Uttar Pradesh, Kerala, and Tamil Nadu their proportion is low. For India as a whole, the growth of the police force has not only kept pace with the growth in population but also slightly outstripped it. While in 1960 there were roughly twelve policemen for each thousand, in 1971 there were 12.9 policemen per thousand population. In terms of area, in 1971 there were 22.1 policemen per 100 square kilometres; the number of policemen per square kilometre

TABLE 11

NUMBER OF RIOT CASES IN CITIES: 1956-72

City	*1956*	*1957*	*1958*	*1959*	*1960*	*1961*	*1962*	*1963*	*1964*	*1965*	*1966*	*1967*	*1968*	*1969*	*1970*	*1971*	*1972*
Ahmedabad	N.A.	N.A.	N.A.	N.A.	33	34	49	35	218	32	54	27	39	709	58	51	78
Bangalore	{22	22	34	12	10	14	10	20	39	27	23	27	100	60	118	59	70
Bombay	319	97	80	99	156	136	142	144	256	273	304	280	260	577	338	290	214
Calcutta	260	220	339	383	248	226	194	211	217	184	307	521	543	799	1,217	1,143	661
Delhi	79	84	68	81	63	35	73	81	70	61	90	88	69	86	178	203	388
Hyderabad	18	16	42	49	44	30	26	20	22	25	26	46	116	217	93	54	43
Kanpur	12	7	12	38	14	43	94	81	N.A.	90	124	109	95	116	242	235	214
Madras	28	15	28	26	23	30	1,115	15	31	35	24	64	94	49	75	210	205
Total	738	461	603	688	591	548	1,703	607	853	727	952	1,162	1,316	2,613	2,319	2,245	1,873
Percentage of riots in cities to the total for India	3.0	1.9	2.4	2.5	2.2	2.0	5.9	2.2	2.9	2.2	2.7	2.7	3.3	4.7	3.4	3.5	2.8

was higher in West Bengal (75.9), Kerala (47.0), Punjab (46.6), and Nagaland (41.1). The union territories of Delhi and Chandigarh, which are essentially urban areas, are heavily policed. Policemen are less numerous per square kilometre in the less densely populated Jammu and Kashmir (4.0), Himachal Pradesh (10.6), Rajasthan (11.2), Madhya Pradesh (12.9), and the Andaman and Nicobar Islands (14.4).

From the point of quelling public disorders, the strength of the armed component of the police force is significant as the armed police is used as a reserve striking force when it is found that the situation is beyond the resources of the unarmed police. Table 12

TABLE 12
PERCENTAGE OF THE ARMED POLICE TO THE TOTAL POLICE FORCE: 1960 AND 1971

State/Union territory	*1960*	*1971*
Andhra Pradesh	33.5	26.0
Assam	58.6	34.4
Bihar	44.4	24.6
Gujarat	44.6	20.6
Haryana		22.5
Jammu and Kashmir	18.4	29.7
Kerala	43.3	10.2
Madhya Pradesh	22.1	38.0
Madras	28.8	10.7
Maharashtra	39.1	9.9
Mysore	26.7	22.7
Nagaland		63.4
Orissa	32.5	23.5
Punjab		23.8
Rajasthan	37.3	21.4
Uttar Pradesh	38.6	23.7
West Bengal	35.3	38.0
A. and N. Islands	31.4	72.4
Chandigarh		45.8
Dadra and Nagar Haveli		38.4
Delhi	77.0	24.2
Goa, Daman and Diu		30.0
Himachal Pradesh		6.9
L.M. and A. Islands		—
Manipur	50.8	49.5
Pondicherry	45.3	—
Tripura	53.0	23.0

gives the percentage of armed police to the total police force for the years 1960 and 1971. In 1960 approximately two-fifths of the police force were armed, while in 1971 only around one-fourth were armed. This decrease can be attributed to the growth of the armed police force raised by the Centre. The Crown Reserve Police, the precursor to the Central Reserve Police, were first raised in 1939 with a strength of one thousand and has since grown into a large force. In 1971 it was sixty battalions strong (Government of India 1971-72). The Border Security Force was formed in December 1965 for policing and patrolling the Indo-Pak border and for deployment within the country in the event of internal disturbances. It also absorbed some of the armed police battalions of the border states. The Assam Rifles had also grown into twenty-one battalions by 1972 and were assisting in the maintenance of law and order in the north-east region (Government of India 1971-72).

There is a high armed police component in the police force of the Andaman and Nicobar Islands, Nagaland, Manipur, Chandigarh, West Bengal, Madhya Pradesh, Assam, and Jammu and Kashmir. It would be noted that most of these are border states, and Madhya Pradesh has the special problem of dacoity. The preponderance of civil police in Madras, Kerala, Himachal Pradesh, Madhya Pradesh, and Maharashtra is also noteworthy. State-wise comparisons, however, cannot be stretched too far since in the event of internal disorder, all states are free to avail of the armed police of any other state and the Centre.

Policy Issues of Public Order

It is only in the case of violent attempts at overthrow of established authority, communal outbreaks, or violence directed against the underprivileged and the dispossesed that a clear policy for the decisive application of force to suppress the violence seems fully warranted. In the case of group protests which over the years are increasingly involving violence, the policy options are less clear (Bayley 1962; 1969: 280-82). A policy of control would be warranted on the following grounds:

1. Saving human life and property from damage and destruction;

2. Upholding the rule of law and preserving the legitimacy of the government;
3. Proving that wilful breaking of law and coercive tactics do not pay; and
4. Maintaining the discipline and peace necessary for governance and development.

All these flow from the reasoning that organized defiance of law is neither proper nor necessary in a parliamentary democracy. Arguing on these lines, Chavan considered that organized defiance of law is permissible only under exceptional circumstances or when undertaken by exceptional men. Under the former any government that is itself out to destroy the values of parliamentary democracy can be replaced by direct action. Under exceptional men come persons of the stature of Mahatma Gandhi acting "by reason of conscience."

Rajni Kothari (1960) has argued, however, that "by and large parliamentary Government has failed to embody the idea of democracy . . . . Under it there is little scope for popular participation . . . . Decisions taken at the seat of the power and enforced by its agents come as a *fait accompli* to the people. Grievances accumulate. The normal channels provided for removing the accumulated grievances prove to be impotent when serious disagreements are in issue. The stage is set for Direct Action." This argument has been carried further by some to the effect that "public protests are inevitable and will grow more and more under parliamentary governments because they have become fetters on the concrete democratic rights of the vast majority of the population" (Desai 1965).

There is also a utilitarian explanation. According to Myron Weiner (1962: 216) "only when public order is endangered by a mass movement is the Government willing to make a concession, not because they consider the demand legitimate, but because they then recognize the strength of the group making the demand and its capacity for destructiveness."

As for political strategy, the reasoning runs as follows: "Laws for small reforms are made in Parliament every day, but for laws to bring about big changes in society, the prompting has to come from outside, and only then does Parliament put its seal on it . . . . Laws of radical change are made as much on roads, fields, factories, and schools etc. as in Parliament or the Assemblies . . . . Often enough laws are not utilised even after they are enacted, for the

desire or the strength to have them implemented is not present in the concerned sections of society. Making laws and arousing the people's strength both are its (the party's) aims. Those who say that popular movements are undemocratic, do not understand the inter-relationship of law making and people's strength" (Samyukta Socialist Party 1967).

Yet another practical approach is to stage protests and demonstrations not really for the fulfilment of demands but to elicit a repressive response from the authorities so that unpoliticized sections of the public can be politically educated about the "repressive" nature of the system. Confrontation with the authorities is also sometimes motivated to develop resistant attitudes and action among the protestors for more serious resistance in the future.

The process of suppressing public protests, when they effect public order, is not without its adverse effects on the democratic polity (Bayley 1969: 281-83). Such protests provide a safety valve for accumulated grievances. In the Indian context political agitations provide to the groups, not having a share in political power, a sense of participation and relevance in the polity. The use of force to end lawlessness in protests can thus become counter-productive. It can provide even the non-democratic opposition an opportunity to appear as champions of democracy, highlighting "the police excess" as a political issue in itself. It puts the police in an unenviable position and tends to alienate the people from the police. The ramifications of this problem are best understood by outlining the reaction of two officers of the Indian police. Mullick advocates a policy of non-interference by authorities in strikes and *hartals* "where life and property is not in danger and only police inconvenience is suffered." Handoo (1967) suggests that the police be disarmed to obviate the psychology of confrontation with the protestors and to encourage the law abiding public to stand beside the police and to take the initiative in containing lawlessness.

In conclusion, people taking issues to the streets is being considered as a supplement or corrective to parliamentary politics. In democratic terms it is also sought to be justified on the ground that "it introduces an element of direct democracy by enabling individuals to make a direct impact on the decision making process" (Carter 1973: 147). As for the law enforcers, maintenance of public order is made a contentious political issue, the politicians contesting with the government, "duty as well as the tactics of the Government meeting the challenge" (Bayley: 1969).

Outlook for the Future

Problems in public order during the seventies are more than likely to follow the directions already visible. Dramatic economic improvement seems difficult. To the extent that the normal tasks of administration and economic welfare legislation or reforms are not efficiently executed an undue load is thrown on the law enforcement authorities. The fact remains that administrative behaviour does not change sufficiently or soon enough. Our political institutions have to become more versatile in their working so as to increase the participation of the citizens. Hence it seems that whatever political accommodation is achieved will be at a higher level of disorder than in the western democracies.

Two other special problems of the seventies may be mentioned. Demographically, the dominance of the young in India's population will be an accentuating factor. The massive additions to adolescent population will pose a problem that cannot be resolved. The young who swell the ranks of the "educated unemployed" will make insistent demands on society, most of which cannot be satisfied. Secondly, growing urbanization in the country may accentuate the urgency of the problem. Not possessing the advantage of having an industrial revolution like the west, where it produced larger cities ahead of the basic transformation in the economy, in the near future we cannot hope to have any rough balance between employment opportunities in the modern sector and concentration of population in urban areas. The rural populace are becoming better informed and more aware of their interests. So far they have not been effectively organized to stand up for themselves. The chances are that sooner rather than later they are going to break out of their inarticulation and passivity.

All these appear to portend another decade with strains all around. The inter-connected goals of control of disorder, keeping open channels of protest, and correcting social injustice will have to be pursued earnestly and with a sense of urgency.

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ECONOMIC DEVELOPMENT: FAILURE OF A STRATEGY

Prem Shankar Jha

The last twenty-five years of planned development in India have witnessed a strange paradox: a progressive refinement of planning techniques has gone hand in hand with an increasing divergence between the targets and achievements of each successive Plan. The First Five Year Plan (1951-52 to 1955-56) was little more than a collection of ongoing projects, and its projections were derived from a simple application of the Horrod-Domar growth model. Yet in terms of achievements it was by far the most successful Plan this country has ever had. Aided by good rains, the country exceeded the target for food production, and exceeded or attained nearly all the targets set for other areas of the economy.

The refinement of planning techniques set in with the Second Plan. Within the overall framework of the Harrod-Domar growth model, the economy was split into more and more sectors with detailed input and output calculations being made for each. The targets for the Fifth Plan (1974-75 to 1978-79) have been calculated on the basis of a sixty-six sector input-output model. For the Sixth, the Planning Commission is believed to be building a five-hundred sector model. But the success of any planning exercise must ultimately be judged by its results for the economy. By this test, each succeeding Plan after the Second has been an increasingly resounding failure.

Official spokesmen and a number of economists have sought to explain the paradox in one or more of the following ways:

1. That the statistics on which the plans are constructed have been either inadequate or faulty;
2. That the policy measures which were a precondition to the success of the Plans were never carried out; and
3. That setbacks occurred which upset all the culculations of the planners but which could not possibly have been foreseen by them.

There is some truth in all these explanations; but neither singly nor together can they explain the systematic divergence of targets and achievements which characterize the last thirteen years of planning (the Third and Fourth Plans and the three intervening years of "Plan holiday"), and the alarming growth of the gap in the first two years of the Fifth Plan, when investment, instead of going up by 40 per cent as the planners had proposed, has gone down by up to 20 per cent with relation to the peak attained during 1972-73, the penultimate year of the Fourth Plan.

The first contention is the easiest to dispose off: inaccurate statistics can lead to a divergence in sectoral targets, with overproduction in some sectors and underproduction in others. But they will not lead to a systematic divergence of general aggragates like national income, net investment, or the index of industrial production, unless they all happen to be inaccurate in the same direction. This would be a very tall assumption to make even for one Plan period, let alone two or three Plan periods—the Third and the Fourth, not to mention the Fifth. If all the statistical inaccuracies do not bias calculations in only one direction, then underproduction in some sectors resulting from over-optimistic input assumptions should be offset wholly or partly by overproduction resulting from unduly pessimistic initial assumptions for other sectors of the economy. In any case, the lack of accurate data is an argument against excessive elaboration of the planning model. It cannot serve as an excuse for the repeated failure to attain even the broadest of targets.

In one sense the second explanation is a tautology. The later five-year plans, after all, were not cooked up out of thin air, there must have been a set of policy measures which, if vigorously implemented, would have made their implementation possible. The question however is: what were the policy measures? And were they feasible within the framework of a federal democracy?

The Second, Third, and successive Plans have been based on three broad premises: that the government would enact land reforms to remove institutional hurdles to greater agricultural productivity; that in the heavy industrial sector, there would be enough skilled labour and managerial expertise available to ensure that new projects are completed on time and within the budgeted sums of money; and finally, that the government would impose austerity on the people and self-restraint on itself to generate the maximum of investible resources, and then make sure that it is not frittered away in non-developmental spending.

TABLE 1
TARGETS AND ACHIEVEMENTS IN SUCCESSIVE PLANS

Increase in	*I Plan*	*II Plan*	*III Plan*	*IV Plan (provisional)*
Net income				
Target	10-11%	25%	34%	28%
Actual	18%	21.5%	13.5%[1] (19.6%)	13%
Investment (% of net income)				
Target[2]	6.75%	11%	14-15%	16-17%[3]
Actual	7.3%	12.5%	13.4%	10.8%
Foodgrains				
Target	17%	15%	32%	30%
Actual	20%	18%	—12%[1] (8%)	9%[5]
Industrial production				
Target	—	64%[2]	70%	57%
Actual	35%	40%[4]	64%	9.5%

[1]The comparison is invalid because of a drought in 1965. A better index is the growth from 1960-61 to 1964-65, figures for which are given in brackets.

[2]Of factory establishments (Second Five Year Plan, page 69).

[3]17-18% in Third Plan draft and 13.8% in Fourth Plan draft.

[4]Third Plan, page 39.

[5]Taking 107 million tonnes as the best that can be achieved (1970-71 was 108 4 million tonnes) under the present circumstances. This is a rather optimistic estimate. The average yield of 1970-71 to 1973-74 is around 104 million tonnes.

As it turned out, the first two assumptions were quite unrealistic. The government's attempt to enact land reforms was frustrated

and actually perverted by the dominant farm lobby to enable landowners to increase their holdings at the expense of tenants and sharecroppers. What is more, the government soon discovered that it was nearly impossible to transplant a sophisticated technology from a rich to a poor nation and expect it to work well from the start. Every single major industrial project in the public sector took two years longer on an average and cost 40 per cent more to set up than the planners had anticipated. And when they were ready to work, the government found that the country had neither the managers nor the skilled workmen who could operate them efficiently.

Finally, so far as practising self-restraint and imposing austerity on the people is concerned, it is the aim of this paper to show that this was precluded at least partly by the strategy of planning the government itself adopted.

While the Planning Commission and other advocates of the strategy of growth embodied in the Plan have blamed the government's failure to take to policy decisions needed to make it succeed, the government itself has put most of the blame for the miserable performance of the economy in the last twelve years, on unforeseen setbacks. These include the Sino-Indian war of 1962 and the resulting increase in defence expenditure, the Indo-Pak war of 1965, and the suspension of American aid which followed it, the two droughts of 1965 and 1966, the Bangladesh crisis of 1971, and the drought of 1972.

These blows did undoubtedly hurt the economy, but they cannot by any means be considered decisive. To begin with, it is true that after the Sino-Indian war, the expenditure on defence was trebled in four years from around Rs 300 crores in 1962 to over Rs 900 crores in 1966. But this did not lead to a decline in the rate of investment. Indeed this reached its peak of 13.4 per cent of the national income in 1965-66, the very year of the first great drought and the Indo-Pak war. Nor was there any slackening in the rate of growth of industrial output, which averaged nearly 10 per cent a year during the Third Plan. These misfortunes did not dampen the growth of investment and industrial production, the windfall of five good harvests in a row, coinciding with the wheat revolution (1967 to 1971), and did not even slightly arrest the steady decline in investment and savings and the stagnation of industry and employment, which began in 1966-67.

If none of the three reasons given above can explain the failure of the Plans, then only one other possibility remains: that it is not the Plans but the strategy of growth underlining them which is at fault.

This is the central hypothesis of this paper. In what follows it will be argued that the strategy of economic growth which was adopted in 1956 has generated forces that have made further growth impossible. These forces took ten years to emerge and showed themselves overtly in 1965-66, and since then the economy has for ten long years been in reverse gear—going backwards. As a corollary to this it may be added that today the very use of terms like "development," "growth," "take-off," or even "improvement," in the context of the economy, constitutes a monstrous self-deception on the part of the government and a fraud on the public. India is the first country to have proved Gunnar Myrdal's thesis that economic development is not automatic and that a secular decline is as much of a likelihood as a secular growth.

In what follows I propose first to show that 1965-66 is really the turning point of the economy, when growth turned into decline, and then go on to analyze first the immediate and then the root causes of this turnabout.

The Turning Point

As Table 2 will show, every single important indicator of the state of the economy points unambiguously to the change of fortune that took place after 1965-66. Together, they paint a picture which even an undergraduate in economics cannot fail to recognize.

Industrial production

The reversal in trends is most clearly visible in industrial production. Table 2 makes this amply clear.

Thus while the production of steel, cement, and paper went up by 300 per cent in the first fifteen years, it has gone up by only 11 per cent, 40 per cent, and 31 per cent respectively in the next seven. For sugar the figures are 220 per cent and 12 per cent, for textiles 61 per cent and only 7 per cent, and for power generation approximately 700 per cent and 90 per cent. Not surprisingly, the general index of industrial production rose by 176 per cent in the

first fourteen years of planning, but only by 26 per cent in the next eight.

TABLE 2
GROWTH OF INDUSTRIAL PRODUCTION

Industrial production	*1950-51*	*1965-66*	*1972-73*
General index (1956—100)	73 (1951)	203 (1965)	256 (1973)
Finished steel (million tonnes)	1.10	4.50	5.10
Cement (million tonnes)	2.70	10.80	15.50
Textiles (million yards)	4,618.00	7,440.00	7,924.00
Sugar (million tonnes)	1.10	3.50	3.90
Paper (thousand tonnes)	114.00	55.80	733.00
Power generation (billion volts)	4.20	33.00	63.60

Agriculture

The trends in agricultural production are less clearcut partly because of the monsoon, and partly because of the major technological breakthrough embodied in the wheat revolution. Even so, there has been a marked decline in the rate of growth in the second decade of planned development in comparison to the first. Whereas agricultural production went up by 46 per cent between

TABLE 3
RATE OF GROWTH OF OUTPUT OF SELECTED CROPS

	1949-50 to 1959-60	*1959-60 to 1969-70*
Rice	3.30	1.88
Maize	4.30	3.52
Jowar	2.80	—0.73
Bajra	3.20	5.39
Pulses	3.10	0.48
Oilseed	3.40	1.80
Sugarcane	4.00	1.67
Cotton	4.90	0.75
Jute	2.70	0.60

1950-51 and 1960-61, it rose by only 28 per cent in the next ten years. Similarly, the production of foodgrains rose at a compound

annual rate of 3.30 per cent between 1949-50 and 1959-60, and 2.64 per cent between 1959-60 and 1969-70. Indeed if one separates the figures for wheat from the rest, the decline is even more dramatic, as Table 3 indicates only too clearly.

In the above Table, *bajra* and maize show relatively good rates of growth because production has benefited from the introduction of new seed varieties, while the decline in the growth of jute products is explained partly by a shrinkage in the acreage under jute in the sixties. This has taken place because, while competition from synthetics in the world markets has held jute prices in check, the domestic price of rice, its main competitor, has soared.

Per capita production

But the remaining figures tell the same story. There has been a sharp decline in the rate of growth of output, to levels below what is needed to keep pace with the rise in population in the sixties (2.3 per cent per year). As a result, per capita production (gross) of all foodgrains except wheat, maize, and *bajra*, and particularly of pulses, edible oil and cotton, has declined during the sixties. Table 4 illustrates the extent of the decline.

TABLE 4
PRODUCTION PER CAPITA OF MAIN CONSUMER GOODS

Commodity	*Per capita (gross) production*		
	1951	*1965*	*1972*
Cereals (kg)	124	140	146
Pulses (kg)	21.2	22.5	17.4
	1950-51	*1965-66*	*1971-72*
Sugar (kg)	3.0	5.1	6.7
Edible oils (kg) (including *vanaspati*)	3.2 (1955-56)	4.4	4.0
Textiles (metres) (cotton and manmade)	14.4 (1955-56)	16.8	14.1

National income

The sharp reversal of trends, which had occurred in the first half of the sixties, is not reflected to any significant extent in the rate

of growth of national income, which grew by 45 per cent between 1950-57 and 1960-61, and 42 per cent between 1960-61 and 1970-71. But this is partly because, as the figures cited so far show, the real break occurred in 1965-66, halfway through the decade; whereas the national income grew by 20 per cent in four years between 1960-61 and 1964-65 (a year of good monsoons), and by 20 per cent in the seven years from 1964-65 to 1971-72 (another year of good rains).

But this does not put the picture in a correct perspective. The apparent constancy of the growth rate, even between the two decades, makes a basic structural change in the economy which amounts to a weakening of the sinews of growth. For most of the growth in the second decade is in the service industries—transport, communications, trade, banking, insurance, real estate rentals, public administration, defence, and other services, whose share of the national income has risen from 28.8 per cent in 1960-61 to 35.7 per cent in 1972-73, while that of industry, construction, public utilities, and agriculture has declined from 71.7 per cent to 65.2 per cent. Symptomatic of this shift is the fact that while employment in organized industry has grown by 20 per cent in the sixties, that in trade and transport has grown by 50 per cent.

The national income figures are in some ways deceptive. This raises the question once again of the appropriateness of this particular estimate as an index of economic growth in a poor country, and the need at the very least is to supplement national income figures with estimates of net material product (the concept used by the USSR and the East European countries) which does not take most of the service industries into account.

Employment

The trends in the indices of current output are alarming enough, but the picture they present is strongly reinforced by those to be found in the key indicators of economic growth—savings, investment, and employment.

Total non-agricultural employment in the organized sector rose from 12.09 million in 1961 to 15.46 million in 1969, a rise of 28 per cent. In the next seven years, however, it grew from 16.19 million in 1966 (the discrepancy is caused by the adoption of a more comprehensive definition of the organized sector) to 18.82 million, an increase of only 16 per cent.

But even these figures fail to tell the whole story. Of these 7.05 million in 1961 and 11.88 million in 1973, there were government servants of whom, in turn, around 730,000 in 1961 and 2.3 million in 1973 were in the public sector companies run by the Centre. The rest are a mixed bag of salaried employees ranging from railway workers and employees in the public utilities at one end of the scale, to an army of peons at the other.

Since jobs have been created in the bureaucracy in response to political rather than economic compulsions, the rate of growth of the total employment is a poor index of the rate of growth of productive employment. A better index of this is the rate of growth of employment in the organized private sector. While private entrepreneurs are by no means immune to pressure to create sinecures, they are generally more wary of doing so because of the need to safeguard the profitability of their enterprise.

While employment in the organized private sector grew from 5.04 million in 1961 to 6.68 million in 1966, a rise of 33 per cent, during the Third Five Year Plan in the subsequent seven years, it rose to just 6.94 million, a rise of only 4 per cent. No other developing country can boast of so dismal a performance.

Savings

As Table 5 shows, there is a dramatic break in the trend in savings in 1965-66. Net savings rose from 5 per cent of national income in 1950-51, to 11.1 per cent in 1965-66, and then declined to 8.4 per cent in 1968-69. Thereafter it rose once again to 11.4 per cent by 1971-72 but declined to 10 per cent in 1973-74. How far the higher average rate of saving in the last three years of the Fourth Plan over that of 1969-70 represents a real increase in savings, i.e., the nation's capacity to add to its future wealth, is highly debatable.

This is because whereas the steady increase in savings that occurred between 1951 and 1965 resulted from a rise in tax revenues and voluntary savings as a ratio of national income, the small revival in savings after 1969-70 has been achieved through unprecedented deficit financing and an accompanying rise in the supply of money. Indeed money supply, which rose by 10 per cent in 1968-70, grew by 16.9 per cent in 1972-73 and 14.3 per cent in 1973-74. This has helped raise inflationary pressures to a dangerous pitch, and led to a net shift in incomes from the poor

and the fixed income groups to the self-employed rich. This has inevitably been reflected to some extent in a rise in savings by the household sector.

TABLE 5
ESTIMATES OF NET DOMESTIC SAVING AT CURRENT PRICES AS A PERCENTAGE OF NATIONAL INCOMES

Sector	*1950-51*	*65-66*	*68-69*	*69-70*	*70-71*	*71-72*	*72-73*	*73-74*
Public sector		3.2	2.0	2.2	2.2	2.0	1.9	1.7
Private corporate sector		0.4	0.2	0.4	0.6	0.5	0.3	0.3
Household sector		7.5	6.2	5.9	7.3	8.9	8.8	8.0
Total	5.0	11.1	8.4	8.5	10.1	11.4	11.0	10.0

But unlike taxation, in which the government retains some control over the incidence of forced saving, the rise in prices which results from deficit financing invariably hurts the fixed income groups and the poorest and most disorganized people in the country. Thus the price of the increase in forced saving has been a cut in the consumption of the fixed income groups and the poorest and least organized sectors of the working population. This is bound, eventually, to lead to a decline in general health and the workers' capacity for sustained work, a rise in malnutrition among children, and perhaps a rise in the death rate.

There is no way of estimating how much damage this will do to both present and future increases in output, but the mere fact that it cannot be conveniently calculated does not mean that it should be left out of account. Forced saving through large-scale and sustained deficit financing cannot but lead to the running down of human capital, and quite probably, in the long run, of physical capital as well.

Investment

The trends in investment exactly parallel those in savings, but with even more marked peaks and dips. Net investment rose from 4.9 per cent of the national income in 1950-51 to 13.4 per cent in 1965-66 and then fell steadily to 9.6 per cent in 1971-72. The

reason is that the period of rising domestic savings coincided with a steady increase in foreign aid, while the decline in domestic savings after 1965 has been accompanied by a decline in net foreign aid.

A detailed analysis of the decline in investment shows that it is caused primarily by the fall in savings out of the current revenues of the government. As Table 5 convincingly shows, the entire decline in savings has taken place in the government sector.

Government saving out of current revenues has thus gone down from a peak of 3.2 per cent of the national income in 1965-66 to 1.7 per cent in 1973-74. Since in the same period its total revenues have increased marginally from 14.1 per cent to 14.7 per cent of the national income, this means that savings out of government revenues have declined from around 23.4 per cent to a bare 11.5 per cent.

A more detailed picture of trends in investment only serves to confirm the disquieting picture given by the above figures, for it shows that there has been a decline in investment not only in proportionate but also in absolute terms. A study of investment in the private sector, based on a detailed analysis of the balance sheets of 1008 companies, reveals the trend as shown in Table 6.

TABLE 6
ESTIMATES OF INVESTMENT IN THE PRIVATE INDUSTRIAL SECTOR

Year	*1961-62*	*65-66*	*68-69*	*71-72*	*73-74*
				Rs in crores	
Investment in current prices	499	395	468	608	733
In 1961-62 prices	499	300	264	316	255

Except in the single year 1972-73 there has also been an absolute fall in investment in the public sector. Although the government is somewhat shy of giving figures for public investment in constant prices, it is possible to estimate these by deflating the actual figures of annual investment by the index of wholesale prices. Table 7 speaks for itself,

TABLE 7
INVESTMENT IN PUBLIC SECTOR

	1965-66	*66-69*	*72-73*	*73-74*
		average		
				Rs in crores
Investment in public sector				
In current prices	2341	2252	3973	4300
In 1965-66 prices	2341	1916	2484	2216

Conclusion

Even taken singly, the behaviour of each of the above indicators since 1965-66 is alarming enough to give nightmares to any responsible planner. But taken together they add up to a far more sinister pattern. The three basic facts which emerge are: (*i*) industrial and agricultural output is growing, but at a snail's pace; (*ii*) productive employment has ceased to grow; and (*iii*) savings and investment are actually declining both as a proportion of national income and in crucial areas such as the public sector, in absolute terms also. The underlying pattern is obvious. Just as a man first saves (or borrows someone else's savings), then opens a factory, then employs workers, and finally turns out a product, in a nation, saving also precedes investment, the two precede the generation of employment, and all three must come before an addition to the national project.

Thus if savings and investment decline continuously, sooner or later, employment and national products will also inexorably begin to fall. Indeed in India the decline may be about to set in. In the last three years, after 1971-72, there has been absolutely no rise in agricultural output and only the faintest signs of a rise in industrial production. This too took place only in 1972-73 when, thanks to an excellent cotton crop the previous year and the difficulties of the Bangladesh jute industry, the production of both cotton and jute textiles shot up. What is more, there is every reason to suspect that the weightage given to these two traditional industries, which has not been revised since 1960-61, is excessive. Viewed against the pattern formed by the economic indicators discussed above, it is impossible to dismiss this stagnation as

simply the product of exogenous factors like the fuel crisis and worldwide inflation.

On the contrary, there is every reason to fear that the next three or four years will witness the beginning of a decline in industrial production and also in the output of those sectors of agricultural economy which have switched to high-risk capitalist farming. The precise point at which this will happen is when net capital formation in the economy becomes negative, i.e., when annual (gross) investment is no longer sufficient to maintain the capital stock in existence and replace machinery that wears out. There are reasons to fear that this may happen long before the next rate of investment actually becomes zero. This is because under current accounting procedure, net investment includes the provision made by companies towards depreciation, minus the amount actually spent during the current year on replacing worn-out machinery. However, over any period of time, and under inflationary conditions in particular, the replacement cost of machinery tends to rise sharply from year to year. Thus, whereas a part of the depreciation reserve is being counted as net investment today, in reality even the whole of it, if put away year after year, may not suffice to meet the replacement cost of a plant ten years from now. In this sense, a number of industries in this country have already attained a negative rate of capital accumulation. In the rubber tyre industry, whereas a plant producing 850,000 tyres cost Rs 9 crores sixteen years ago, today a unit producing 500,000 tyres costs over Rs 20 crores to be set up. Similarly, in the steel industry, while the gross fixed investment of the oldest plant in 1962, that of the Tata Iron and Steel company, per tonne of steel produced was Rs 1,180, in the three Hindustan Steel plants (State 1) set up in the late fifties and sixties it was Rs 1,900 per tonne, and in Bokaro, set up a decade later, it is expected to be around Rs 4,100 per tonne. At this capital cost not a single steel plant is generating enough depreciation and reserve funds to finance expansion. And it is doubtful, if steel prices are not raised, whether they will even be able to finance replacement costs. HSL has eaten steadily into its capital during all but one year of its existence.

The above impression, based on the experience of a few industries, is reinforced by the data on capital formation by the Central statistical office (also published in the Reserve Bank's Currency and

Finance Report for 1973-74, pages 12 and 13). These show that while the gross fixed capital formation by private corporate non-financial companies and by the Centre, either directly or through non-departmental commercial undertakings, rose by about 31 per cent between 1969-70 and 1973-74, the index of wholesale prices rose in the same period by 48 per cent, showing a clear decline in the gross capital formation in real terms. What is more, in 1974, the rise in the price of goods and services entering into investment has accelerated sharply. Thus the price of machinery and transport equipment, and of intermediate products, which rose by 28 per cent and 45 per cent respectively in the four years between 1969 and March 1973, has risen by 33 per cent in the twelve months which followed till March 1974. Since the replacement cost of worn-out machinery will reflect this steep rise in prices, the rate of capital accumulation (net capital formation) is being squeezed both by the decline in real gross capital formation and the rise in replacement costs.

The pattern which has been traced out in the preceding paragraphs unmistakably shows that what India is experiencing is not economic growth but economic decline. This is difficult to grasp, as much for purely linguistic as for emotional reasons, for the lexicon of economic transformation is impregnated with what Gunnar Myrdal has called the "bias towards optimism," to the point where it is difficult even to find words in which to describe a long-term decline in the level of economic activity.

Once poor nations have been labelled as "developing countries" it becomes very difficult to talk of their regression without contradicting oneself automatically. And how can one talk of a downward "growth path?"

Yet, as Myrdal has conclusively shown, there is not a shred of justification for this optimism. Economies do not just grow. They have to be put on a growth path and then kept there. The first needs not one but an interlocking group of policy decisions. The second requires a continuous monitoring of trends and the application of corrective measures whenever the economy tends to stray off the assigned growth path.

By the same token once an economy begins to slide back towards poverty and stagnation, it becomes twice as hard to wrench it back into a growth path again.

What specific act or acts took it off this path?

The Reason Why

The immediate cause of the downturn in investment activity in 1965-66 was the inflation unleashed by the two successive droughts of 1965 and 1966. The production of foodgrains dropped from 89 million tonnes in 1964-65 to 72 million tonnes in 1965-66 and to 76 million tonnes in 1966-67. Together with the India-Pakistan war of September 1965 and the necessary but ill-timed devaluation of the rupee in June 1966, the decline in harvest pushed up the general price level by 30 per cent in two years. But inflation alone need not have caused a sharp decline in savings and investment if the government had not, over the previous fifteen years, created conditions in which every rise in prices forced a disproportionate increase in consumption expenditure by the Centre and state governments—a decline in government savings out of current revenues, and therefore a decline in investment in the public sector. It did this first by creating literally millions of sinecures in the Central, state, and local government bodies, and then by linking the salaries of around two-thirds of them fully to the cost of the living index, and giving another 25 to 30 per cent partial protection against an increase in the cost of living by means of dearness allowances.

While the national income grew by around 42 per cent between 1960-61 and 1972-73, employment in the government sector grew by 69 per cent to 11.8 millions. Add to this the periodic increases in basic salaries and the frequent upward revisions of the dearness allowance, and it is hardly surprising that the total salary bill of the Centre and state governments rose by 15 to 18 per cent a year throughout most of the 1960s.

For the first fifteen years of planned development the government was able to cover both its rising consumption expenditure as also increase the investment, by raising taxes. Tax revenues rose from around 6 per cent of the national income in 1951 to 14.1 per cent in 1965-66. But at this point the government exhausted the taxable capacity of the nation. Taxpayers countered further savage hikes in tax rates either by wholesale evasion or by putting up prices to cover the increase in indirect levies. As a result, the ratio of tax revenues to national income declined steadily to 13.2 per cent in 1968-69. Thereafter it began to rise once more under the spur of

an unprecedented increase in tax rates. But even so, in 1973-74, it was still only 14.7 per cent of the national income.

The exhaustion of the nation's taxable capacity coincided with the 30 per cent price rise in 1965-66 and 1966-67. Unable to raise more real revenues, the government had to choose between taking the politically explosive step of reneging on its commitments to pay dearness allowances and retrenching some of its employees, or cutting back investment drastically. It chose the politically easier but economically disastrous course of declaring a "Plan holiday" in the beginning of 1967 and cutting back planned investment in real terms by no less than 30 per cent. Indeed the average annual investment in the public sector, in current prices, for the three years of the Plan holiday 1966-67 to 1968-69, of Rs 2.25 crores, was almost Rs 100 crores less than the investment that took place in 1965-66. But this cut in public investment was only the beginning of the slide backwards.

In India, the public sector provides the lion's share of the demand for the output of private industry. During the Second and Third Plans private entrepreneurs had invested heavily in the cement, aluminium, copper, engineering, and other capital goods industries. These were heavily dependent on orders placed by the government which now accounted for about 60 per cent of the total investment in the country. On a rough estimate the government was getting half the cement, one-third of the paper, and half or more of the steel, aluminium, and copper produced in the country. As a result, a decline in its demand dealt a severe blow to the profitability of the private sector and caused a sharp decline in the utilization of productive capacity. Predictably the worst hit were the engineering industries. The railway wagon building industry had built up a capacity of 40,000 wagons a year, but their main buyer, the Indian Railways, cut its demand from 26,000 to 10,000 wagons a year. In the same way, the machine building and machine tools industries languished for orders. The government-owned Hindustan Machine Tools, from a comfortable surplus, went plunging into a heavy deficit and began to diversify production and look for export orders in order to keep afloat. The steel plants found themselves with a glut of steel, and the Mining and Allied Machinery Corporation, designed to produce coal mining equipment, found itself without a single order of any kind.

The government's decision on a Plan holiday triggered off a spate

of bankruptcies. A giant engineering plant like the Structural Engineering Works in Bombay, which had borrowed heavily in order to set up a new boiler plant, in the confident expectation of new orders, simply ran out of working capital and went into liquidation. And even as late as in July 1971, two years after the Fourth Plan had begun, a study of 335 industries by the Economic Times Research Bureau showed that two out of every five industries, mainly those producing machinery and structures, were working at less than three-fifths of their rated capacities. Needless to say, the existence of this excess capacity also acted as a severe brake on investment in the private sector.

The government had confidently expected that good harvests in 1967-68 and the ensuing years, and the resulting increase in agricultural income would revive the demand for industrial goods and raise the rate of industrial growth and investment once again. But this expectation was belied. In the four years from 1968 to 1971 the industrial growth rate showed a steadily declining trend from 6.8 per cent in 1968, to 7.5 per cent, 5.1 per cent, and 1.0 per cent in the succeeding three years.

The experience of these years conclusively showed that the agricultural sector was only partially integrated with the industrial, and that a rise in income in the rural areas did not necessarily cause a rise in demand for industrial products. While no one has yet given a conclusive explanation for this phenomenon, the most likely one is that a fairly large part of the increase in agricultural incomes goes into the purchase of land, and of gold, as well as into other forms of savings, and therefore does not directly stimulate industrial output. It also reveals the extent to which industrialization has occurred in response to specifically urban demands and patterns of consumption.

Even this is not the end of the story. The overall decline in investment and the slower growth in industrial output has caused a further slowdown in the rate of growth of the government's tax revenues, even as the lower level of capacity utilization in the public sector and the consequent decline in their gross profits has caused a shrinkage of tax revenues. This is because customs duties, sales and excise levies, and corporate taxes, which account for around 85 per cent of the total tax revenues of the Centre and state governments, are either directly proportional to the total turnover in industry, or directly related to its gross profits. Thus,

the cut in planned investment which was intended to alleviate the immediate financial crisis actually worsened it after a time lag of one or two years. The vicious circle forcing savings and investment to decline inexorably was thus completed. It was now operated relentlessly for ten long years. So much so that the planned investment in 1974-75 (the first year of the Fifth Plan) of Rs 4,500 crores is in real terms still appreciably below the Rs 2,361 crores invested in 1965-66. The government struggled desperately to break the grip of this viscious circle by resorting to heavy deficit financing during the Fourth Plan period, but this only served to heighten inflationary pressures. As a result the rise in prices which followed the much milder Maharashtra drought of 1972, has dwarfed the increase that took place between June 1965 and October 1967. And this has crushed the government's drive to raise its own rate of savings by bringing the mechanism of the dearness allowance into operation once again.

One is tempted to conclude, at this point, that the planning strategy adopted in 1956 would have succeeded even after 1965-66, if only the Centre and state governments had not been so prodigal in hiring people and giving them dearness allowances to protect them against all increases in the cost of living, and secondly if they had shown the political courage to weed out the sinecures they had themselves created, when faced with the multiple economic crises of 1965 and 1966.

Indeed one can go a step further and say that even the droughts of 1965 and 1966 need not have unleashed so massive an inflation and set the juggernaut of the dearness allowance rolling if the government had taken the elementary precaution of building up a large enough buffer stock of foodgrains to counteract the effect of periodic failure of the monsoons on the availability of foodgrains in the country.

But both conclusions are misleading because they are based only on an apprehension of the immediate or proximate causes of the economic regression which began in 1965-66, and not of its root causes.

To take the problem of food. The government could only have followed an effective buffer stock policy if the average availability of food in the country, taking the good and bad harvest years together, had been sufficient to feed the population of towns and villages. But one look at the figures for the amount of grains procured and

the amount distributed through the ration shops every year shows that except in 1970-71, the amount of grain procured by the Centre and state governments always fell short of the amount they sold through ration shops at subsidized prices.

Thus the basic condition for the operation of a successful buffer stock policy has never been fulfilled in India. The gap between domestic consumption and production has been filled by imports, mainly under the PL 480 programme from the USA.

It may be argued that the gap between procurement and subsidized sales could have been filled by sterner methods of procurement such as a compulsory levy on better-off farmers. This is a question to which no definite answer can be given. However, two points need to be remembered. First, India began her development with perhaps the lowest per capita availability of foodgrains of any country in the world. In 1951, this was no more than 146 kg per head per year. The scope for extracting a larger surplus from the farmer, no matter by what means, was therefore very limited. Secondly, the amount of coercion that would have been needed in order to extract say another four milllon tonnes of grain a year from the farmers was most probably far beyond the capacity of any democratic government which had to renew its mandate from the electorate every five years.

In short, in the Indian context, extra marketed surplus, whether procured by the government or brought to towns by traders, could only come from extra production. What is more, the production had to outstrip the growth of population by a handsome margin in order to make this possible. In fact, this happened only in two short periods--the first being a period of six years in the middle and late, fifties, and the second being the four-year period from 1967-68 to 1970-71. During the first, production increased rapidly because of the high priority given to agriculture in the First Plan. Agriculture was allocated 31 per cent of the total funds, and large areas of previously unused common lands and thousands of acres of forest land were brought under the plough. In the second period, output rose sharply because of the wheat revolution in the north, and the intensive cultivation of dwarf varieties of paddy in a few areas of the east and south. Neither impulse was sufficiently strong or sustained to end the country's dependence on imports or permit the creation of a sufficiently large buffer stock to fully neutralize the adverse effect of a harvest failure on prices.

If India could not produce enough food to build a buffer stock, could it not have produced other goods to sell abroad in order to buy foodgrains? In theory this was by no means impossible. India already enjoyed an excellent market for its textiles, leather, jute, and within quota limits, for its coffee and sugar. Other exports could doubtless have been developed, notably long grain rice. But again, no definitive answer can be given as this alternative was never seriously explored. The Second Plan was framed in the shadow of the protracted decline in world prices of primacy products, which followed the end of the Korean war. The planners assumed therefore (and probably with reason) that India's exports would not rise significantly in the immediate future and that the country's growth should therefore be oriented towards the attainment of self-reliance, defined not as the balancing of imports with exports, but as the minimizing of the absolute consumption of foreign exchange. In the same way, the prescription that the government should have cut back employment in the public sector in 1966 or at the very least, have refused to pay more dearness allowances in order to conserve resources for investment, shares the same weakness as the plea that it should have taken sterner measures to augment domestic procurement. Both fail to take into account the political realities of the country. The Centre and state governments have not been blind to the consequences of creating more and more sinecures in the bureaucracy. Indeed there is hardly a budget speech in which the Finance Minister has not solemnly affirmed that the government will endeavour to curb the rise in non-developmental expenditure. If they have failed it is because they have come under pressure to create jobs which they have found extremely difficult to resist within the framework of a functioning democracy.

Any realistic planning must make the creation of productive employment on a sufficiently large scale a prime objective. In other words, the strategy of growth must be tailored to the demand for jobs, rather than the reverse. This is just what the planning strategy adopted in 1956 failed to do. Beginning with the Second Five Year Plan, the government consciously adopted a highly capital intensive strategy of development. This is shown partly by the change in the relative importance it gave to investment in different sectors of the economy, and partly by the choice of projects and that between different technological alternatives or each project.

Thus, whereas the government planned to spend 8.5 per cent of the resources raised for the First Plan on industry, it actually spent less than 5 per cent. At the same time, it planned to and actually did spend 45 per cent of the funds on agriculture, irrigation, and power projects, and 24 per cent on education, health, housing, and other social services. By contrast, the share of industry went up to over 23 per cent in the Second, 20 per cent in the Third, 23.3 per cent during the Plan holiday, and around 20 per cent in the Fourth Plan. The corresponding share of agriculture, irrigation, and power went down to 32 per cent in the Second Plan and 35 per cent in the Third, and rose to 41.6 per cent and 42 per cent during the Plan holiday and the Fourth Plan under the spur of the wheat revolution and the growing agricultural crisis. Social expenditure, on the other hand, declined to 19 per cent in the Second, 17.4 per cent in the Third, 14.7 per cent during the Plan holiday, and then rose to 19 per cent in the Fourth Plan (including 3.1 per cent on special employment generation and small farmer schemes not originally included in the Fourth Plan).

Far more important than the sectoral allocation, however, was the choice of projects: practically the entire public sector investment was in capital intensive basic industries like steel, oil and petrochemicals, and in heavy engineering and electrical industries. Indeed, in this respect the projects conceived and executed by the state governments differed only in scale from those executed by the Centre. How low the potential of these industries is for employment generation may be judged from the fact that a fertilizer plant costing Rs 150 crores (in 1974) will create productive employment for at the most 1,400 people, while an oil refinery costing Rs 50 to 60 crores can be run by 500 persons. In the same way the Bhilai Steel Plant and its captive mines, which have over the last twenty years absorbed Rs 420 crores of fixed investment, employ (including featherbedding) only 47,000 persons.

The choice of technology also betrays a strong penchant for capital intensive investment. In a study of the Bhakra Nangal irrigation and power project, published in 1960, K.N. Raj had shown clearly that the location of the dam, its size, and the very long distances over which both its water and power had to be carried (water to Rajasthan four hundred miles away and power to Delhi two hundred miles away) had made the entire project enormously expensive in terms of capital and that on any purely

rational economic grounds (such as using a realistically high accounting rate of interest for capital) the government would have done well to have opted for a radically different design for the project and a different way of generating both the power and water which Bhakra eventually yielded.

The same insensitivity to the social price of capital is visible in industrial projects executed by the government. To give a few examples: in no project did the government allow for the possible escalation of costs during the construction period; at no time did the government take into account the delays which are inevitable in executing giant projects, and which correspondingly press down the present discounted value of the future stream of benefits to be expected from each project. As it has turned out, the average increase in costs has been around 40 per cent and the average delay, of two years or more. If this had been taken into account in the calculations of costs and benefits for at least the later generation of projects, it is doubtful if the government would have been able to proceed so blithely with them.

Indeed, the government's insensibility to the cost of capital is revealed in the fact that in at least five of its largest projects, Bokaro Steel, the Heavy Engineering Corporation, the Neyveli Lignite Corporation, Heavy Electricals (India) Limited, and the Khetri copper project of Hindustan Copper Limited, costing around Rs 1, 500 crores, accounting for one-fourth of the total investment in the centrally owned public sector enterprises, the government has enlarged the size of the project repeatedly without waiting for the earlier project to be completed. This has often caused long and unnecessary delays as plans have had to be redrawn and factory layouts reorganized. Needless to say, there is a vital difference between setting up a four million tonne steel plant costing Rs 1,500 crores in one go and setting up a two million tonne plant costing half this sum and letting it expand to four million tonnes by ploughing back the resources that it has itself generated. While both processes may take ten years to yield four million additional tonnes of steel, the first locks up twice as much scarce capital. This in turn means that any given amount of capital will generate at the most half as many jobs over a given period of time.

The stress on capital intensive industries in the public sector was paralleled by a corresponding shift in emphasis in the private sector. R.K. Hazari, who examined the pattern of private invest-

ment in the country as revealed by the industrial licenses issued by the Centre, concluded that between 1959 and 1966 there was a significant shift in investment away from consumer goods to basic and engineering products.

The emphasis on capital intensive development was itself a product of the closed strategy of economic planning adopted in 1956. This led to the government naturally putting primary emphasis on heavy industries, on the ground that if it was to minimize the quantity of foreign exchange consumed in order to chain a given output of a final consumer good, the right course was to break into the production chain as far back as possible. For instance, if the aim is to obtain more food, the foreign exchange cost of importing a given quantity will be greater than the cost of importing fertilizer to grow that quantity of food in India. However, this in turn is greater than the cost of importing a fertilizer plant to produce the fertilizers to produce the food. And by the same reasoning, the cost of the fertilizer plant will be more than that of a heavy engineering plant that will build many fertilizer plants.

What this means is that a given investment of capital in heavy industries gives a broadening stream of future benefits in the form of consumer goods, the size of this stream depending on how far back in the production process one starts. But the further back one goes, the longer does one defer the enjoyment of the final benefits. Thus importing a fertilizer plant forces one to wait six years, and importing a heavy engineering plant to build fertilizer plants puts back the final benefits by twelve years or more. The choice of where to break into this production chain depends on the government's ability to persuade people to postpone the satisfaction of their needs.

The root cause of the failure of planning in India is that the rate at which the government has been prepared to discount the future in relation to the present has borne absolutely no relation to the rate at which the people have been prepared to do so. What is more, under a democratic system the government has lacked the means to coerce people into changing their subjective rate of time preference. Nor is it at all certain that an autocratic regime, whether of the left or the right, would have done any better.

With a per capita availability of foodgrains of only 146 kg, a shortage of oil, sugar, and protein, in the average diet as well as

of clothing and housing, there literally was no room for tightening the belt further. What the people wanted and what they needed desperately, was an immediate improvement in their living standdards. What the government gave them in effect was a promise of better living standards at some indefinite date in the future. When the people grew impatient the government lacked the political will to force them to wait. When put so bluntly, the above statements sound oversimplified, as indeed they are. The planners did not close their eyes to the need for attaining higher consumption standards. The perspective plan for twenty years, formulated alongside the First Plan, specifically mentioned that raising consumption was of paramount importance and that the rate of saving could be raised only by saving a part of the rise in incomes not out of existing incomes. In fact, the planners envisaged that only 20 per cent of the extra income generated during the First Plan would be saved, the balance going to raise consumption standards.

However, what the planners intended and what the government actually did was quite different. To begin with, the rate of growth of population turned out to be very nearly double of what the planners had anticipated, with the result that the per capita income rose throughout the fifties and sixties at a rate of just over one per cent a year. The scope for increasing the rate of saving was therefore correspondingly reduced. But in addition to this, as pointed out earlier, the government found that the capital intensive projects it had undertaken took much longer to bear fruit than it had anticipated, and cost a great deal more. The benefits were, in consequence, correspondingly less and took longer in coming.

In these circumstances, it is hardly surprising that the patience of the people was worn thin. The pressure for an immediate improvement in living standards took two forms. The first was a demand for employment; the second was the demand by the organized sectors of the working class for better wages. Both are perfectly valid demands and in the context of a democracy, the government found both irresistible. The natural avenue for creating more jobs would have been industry, but with the bulk of investible funds committed to highly capital intensive projects generating relatively few jobs the government was forced to meet the demand for employment by creating more and more sinecures in the government services.

That the creation of jobs in the bureaucracy has been forced on

the government by the lack of jobs in industry is revealed by the structure of the bureaucratic hierarchy. Data collected by the Third Pay Commission for Central Government employees in 1969-70 show that 90.0 per cent of Central employees belonged to the Class III and Class IV services, whereas only 2.8 per cent belonged to Class I and II—the officers who make the decisions. The Commission described Class III in very broad terms as "skilled workers" (including stenographers and typists), but in any orthodox industrial classification where this category includes those who have all four types of skills namely conceptual, perceptual, manual, and motor, a large proportion would be regarded as semi-skilled. In the same way, Class IV employees are mainly unskilled workers with a sprinkling of semi-skilled persons among them. In other words, at least three out of four persons in the Central government are unskilled or semi-skilled persons—precisely those who, under a less capital-intensive pattern of development, would have been absorbed into industry and its supporting activities.

The wheel has thus turned full circle. The very capital intensive strategy of growth which the government adopted in 1956, has created conditions in which the funds needed to sustain further capital intensive investment simply cannot be raised any longer, whether by fair means or foul. Today, the country is witnessing the pathetic spectacle of its heavy engineering industries—to which it gave birth at such cost and with so much pain—soliciting orders frantically from foreign buyers because the Centre and state governments whose enterprises these were intended to build, simply do not have the money to place new orders for machinery and often, as in the case of the power generating equipment built by Bharat Heavy Electricals, to pay for what they have ordered. The country is thus denied all the downstream benefits of the very investment which it toiled so hard to make.

NATION BUILDING AND POLITICAL DEVELOPMENT

Rajni Kothari

The coming of independence in India did not constitute a sharp break from the immediate past. It was preceded by a remarkably long period of nationalist movement during which the future goals of free India were articulated, a wide-ranging programme of mass mobilization had been initiated, and a strong basis given to national integration through a unique blend of reinterpretation of old traditions and the forging of new ones. The nationalist movement also gave rise to an elaborate structure of organization in the form of the Indian National Congress which represented to the people the authoritative organ of national will. Thus, when India became independent it was not a new venture in the unknown as has been the case with some other newly independent countries. It had an available leadership enjoying widespread legitimacy, a structure of institutions, and a firm sense of the kind of society that India ought to become in the coming generations. Central to all this was the resolve both to build the nation and to develop its social and economic base through the democratic political process.[1]

[1]For a detailed discussion of both the antecedent phase of nationalist reconstruction and the logic of the resolve to build a democratic state, see my more extensive essay: Integration and performance: two pivots of India's model of nation-building. *In* Rajni Kothari, *ed.*,*State and nation building: a third world perspective*, New Delhi: Allied Publishers, 1975. The present paper is a concise statement of the political developments of the last twenty-eight years based on this larger essay.

Constructing a Policy

And yet, when the country became independent in 1947, a new set of issues emerged, some left behind unresolved by the nationalist movement, others germane to the new phase of the nation building process. For all its power, the nationalist movement was plagued by a basic conflict between Hindus and Muslims, a conflict cleverly manipulated by both the British government and the Muslim League, that ultimately forced the Congress leadership (despite strong resistance from Gandhi) to accept the partition of the subcontinent into two, as the price of independence. The period preceding and following the partition was marked by uncontrolled violence; it vitiated the atmosphere in which the new government had to function. The grim experience strengthened the resolution of the leadership to secure and preserve national unity against all threats and to build centripetal forces, despite the acceptance of a federal Constitution, largely through a strong central authority. Many other divisions besides the communal—linguistic, regional, religious—that had remained, needed to be contained and brought into a common framework. There were also important political and ideological divisions and enormous gaps between the national capital and the vast social hinterland it was supposed to serve and govern.

The nationalist movement had penetrated this hinterland through many activities and campaigns but the only structure that existed was the Congress, besides the bureaucratic framework left behind by the British. The task now was to construct a stable political framework and to integrate the enormous diversity of a segmented society within it. The agenda before the new government was not merely the articulation of a political consciousness to direct a unified struggle against foreign rule; it was nothing less than building a modern state with new *modi operandi* for evoking allegiance and loyalty and incorporating them in a solid self-sustaining structure. The makings of a nation, of course, were there, but these had to be institutionalized into an integrated framework of a state. The nation building process itself had to be carried further and deeper. The movement had left behind a powerful legacy and enormous capital and goodwill; it still remained to give these an enduring structure. And almost all major issues of integration were still unresolved.

The form of politics

These tasks were so great and the problems generated in the first years of independence—including major law and order problems—were so disturbing that a decision to work through an authoritarian structure of government could have been justified. It is a tribute to the Indian leadership that it decided not to do this but chose instead to seek to order the social diversity of India through an open and democratic framework. This decision stemmed largely from the values nurtured during the movement for independence (and in the course of experience gathered in participating in elected governments at local and provincial levels and within the Congress organization itself), and also from a deep sensitivity to the staggering diversity of India's social and spatial structure which could be integrated only by links and bonds at many levels in the framework of an open, democratic, and federal polity. A monolithic framework could not do this; the integration that such a framework would have imposed would have been based on force rather than consensus and would thus have been fragile and unstable. Weaving together the several strands of Indian history and welding together the many divisions that still characterized Indian society into a common abiding framework, could not be achieved except through an enduring consensus that could move the society towards new social and economic goals. The form of politics, in other words, derived from its central substantive focus, namely national integration. For a long time after independence this remained the central focus.

But while a democratic framework based on adult franchise and periodic elections and open competition between a number of parties was preferred as the model of ordering diversity, it was also essential to see that such an ordering did in fact produce a unity and give rise to a centre around which allegiances were crystallized and whose authority, while still open and subject to a system of periodic ratification, was accepted as both legitimate and necessary for the national purpose. The constitutional democracy that emerged sought to do just this. Although federal in form, it vested considerable authority in the Centre. And although it gave scope for self-government and autonomy at local levels, it streamlined both through the authority of a unified all-India civil service and one all-India party. The open competition among a large number of parties and factional groups that it allowed was

structured through the authority and legitimacy of the Congress, the only effective all-India party. Similarly, though free enterprise in economic life was permitted, it had to operate within the framework laid down by a Central Planning Commission. It was through this convergence of the primacy of the Centre, the authority of the civil service, the economic power of the Planning Commission, and, above all, the dominant position of the Congress in the party system that a national state, sought to be built through the democratic process, was consolidated, provided with centrality and direction, and made the keystone of a national consensus.

As the system developed, two apparently opposite but in fact complementary developments gave shape to this design: the increasing role of electoral and party politics at all levels and in all sectors of society, and the growing salience and presence of the government in social and economic affairs. The convergence of these two was essential, on the one hand, to prevent the competitive struggle for power becoming an end in itself and producing fragmentation in a society easily prone to it, and on the other hand, to make the government accountable to the people through tests of popularity based on performance. Competition could not be valued if it undermined national unity, and unity itself was of no value if it did not produce results that answered to the needs of the people. It is the interaction between competitive politics, national intergration, and governmental performance that has shaped the Indian experiment in state building. It has been cast in an enormous and intricate mould, far larger and deeper than the one in which the long movement for independence had been cast and which had produced India's entirely new self-image. This ancient society is geared, thus, to a destiny which, though not sundered from the past, is almost wholly new.

It was under Jawaharlal Nehru that the new system was crystallized. If Gandhi was the founder of the new Indian nation, fusing the past and the present to give it a common identity, Nehru was the founder of the modern Indian state, giving political and economic content to this identity and hitching it to a future—his famous "tryst with destiny." Nehru too, like Gandhi before him, had a moral standing (though of a very different kind, with accent on the intellectual rather than the ethical) and a broad-spectrum ideological appeal, but his major contribution to the building of

modern India lies in giving it a firm institutional basis, evolving a framework of consensus, and laying down the operational ground rules of the system.

The model of state building

Central to this effort was a new model of state building different from anything ever tried before, with the possible exception of the building of the Dutch state in a very different phase of world history. As we have already stated, in most successful efforts of national consolidation, the state was first built through hard methods of conquest, amalgamation, and imposition of Central rule over the territory as a whole. It was only later that economic development and political democracy were pursued as national goals. The general presumption had always been that both the emphasis on economic issues (which inevitably raises distributive claims) and the emphasis on the democratic process (which raises the same claims in the political sphere) encourage fissiparous tendencies and ultimately lead to fragmentation. So strong has been this presumption of an antithesis between unity and distributive justice that even contemporary literature on political development is not free from it.

The Indian model of state building, evolved against the background of a highly diverse society with a long history of disunity, presents a different conception of unity, true more to India's own traditions than to any prevailing theories of development. Most of these theories look upon both integration and modernization in essentially aggregative terms, as things that override diversities and local autonomies and demand total loyalty. The Indian leadership could have taken this view, imposed its will, and found justification in the long background of disunity and consequent vulnerability to external threats, the facts of Partition and large-scale violence, the presence of divisive tendencies of caste and language and religion, and the need for speedy "development" and "progress." It chose to do otherwise. It undertook integration through open interaction and competition. It looked upon integration as not a mere aggregation that overrides multiplicity, but as a process of ordering the multiplicity through interlocking various strata and levels into a loose accommodation, held together by a "system." The main characteristic of the system was its centripetality through open interaction: a strong and visible

"centre" towards which the various "peripheries" were drawn through competitive mechanisms of democratic politics Adult franchise and other representative mechanisms, such as the provision of special differential rights to certain strata (the scheduled castes and the scheduled tribes), far from being conceived as fragmentary, were in fact looked upon as means of drawing the fragments in which society was already divided towards a common centre. At the same time the provision of such rights—both the general right to vote and the special rights for some sections through reservation of seats in legislative bodies and jobs—were looked upon as instruments of breaking down social barriers. This put an end to differences that were based on birth and social status, they also legitimized differences based on secular power and competition for it. This entailed a major redefinition of the basis of unity.

Channels of integration

Such an optimistic view of the democratic process as a means of nation building may have been based on values and commitments of leaders and Constitution-makers, but how was it sustained over time and how was a system evolved out of vague intentions and pious declarations? Three major factors can be mentioned in answer to this question.

First, a positive role was assigned to government in providing order and direction to the political process. The government, with its power, bureaucratic apparatus, extensive patronage, and a central role in the economy came to be the prime focus of new India.

Second, the Congress, enjoying historic legitimacy, a massive nationwide organization, popular goodwill, and a natural position of dominance, soon consolidated itself as the chief mediator in the society-government relationship. While a number of parties came into being and operated in various regions, only the Congress was accepted as having a national mandate, the capacity for initiating and executing policies for change, and providing continuity in the midst of such change. The "state" and the "system" that emerged were democratic all right, but democracy was as much a function of what went on within the Congress as of what went on between it and the other parties. In the absence of an alternating party system, as in the west, even opposition got internalized within the Congress and leadership changes depended more on this internal process of opposition and dissent than on challenges from

the outside (though the latter also continuously took place and played an important role in influencing the internal mechanisms of change in the Congress). The crystallization of the Congress as the dominant party, with others playing the role of dissenting parties and pressure groups, converted with the centrality of the government, which, again, the Congress controlled in large parts of the country.

Third, there was a long innings in power of Nehru and his team which provided personal foci of regard, loyalty, and awe, and permitted both the government and the Congress to present a united and confident stance, occupy the centre of the stage, and draw popular support and allegiance through elections and other democratic processes. But Nehru's role in consolidating this system was much more than that of a ruler or leader of the party in power. In the early stages of state building, mere exercise of power does not produce the requisite support and allegiance. Nehru was a national leader and hero, an articulator of national will and destiny, and, above all, a teacher and a mentor. He articulated the idiom of Indian politics, tirelessly ratiocinating on the same theme—democracy, planning, socialism, non-alignment—and evolving a widespread agreement on them. Through all this he gave content and character to the emerging state and nation. He spoke to one and all—from the top leaders in the Cabinet and the Congress High Command, to party rank and file, to intellectuals and scientists, and to the people as a whole. He gave meaning to national identity, hitched it to social and economic goals, laid down criteria of performance, and appealed to the people to judge their rulers through these criteria. Nehru was a man with a vision of India. That he was also the chief political operator of the system added to rather than took away from his role as teacher and critic. As was often said (using Anglo-Saxon parlance), he was both the leader of the government and the leader of the opposition. Nehru provided cohesion and centrality to the whole enterprise which was otherwise permitted to be open, competitive, and full of conflicts.

A framework of consensus

This authoritative convergence of governmental, party, and personal power into a common centre is what enabled the competitive system to integrate the great diversity and manifold conflicts that characterized India. But what gave authority to this centre

was not just this framework of power but a capacity to carve out a framework of consensus on the basis of which that authority was legitimized. Inheriting an historical consensus from the nationalist movement, under Nehru, the Congress produced a consensus in the present around the *modus operandi* of democratic politics, and, most important of all, around a spirit of nationalism which gave a basic identity to all Indians, symbolizing their unity and providing a basis for confidence and predictability. What emerged was something wholly new in Indian history—a sense of organic belongingness, a oneness that was not just cultural and mythical but also secular and earthly, anchored in life and its needs, and looking out to a promising future. In this feeling of belongingness there was a certain optimism about India's destiny that Nehru himself had and that he nurtured in others, an optimism that often appeared naive and unwarranted, but one that was crucial to an enterprise that was nothing short of the rearing of a state and a polity out of an assortment of groups and making that state an instrument of progress for all its citizens.

Social Transformation

How did Indian society respond to a model of integration in which politics occupied such a central role? Diversities based on region and language are basically territorial and can be handled, thus, as part of the normal processes of the polity. But the basic diversity of Indian society is deeper. It has for ages been a rigidly structured society with its own system of hierarchy and segmentation, a society whose various fragments had for ages enjoyed autonomy from the processes of government and politics. Caste and community (and to some extent the village) were the core of this society, in which stratification based on inequality of status and rights provided the logic. Indeed, there was a basic contradiction between a caste society and democratic politics.

How were the two reconciled—if indeed they were?

Once again, the approach of the leadership to a seeming obstacle was not an outright rejection of the old structure and an imposition of a new one, nor the capitulation to a powerful system. It sought to combine both the old and the new. This took two forms: ideological opposition and political struggle against the worst features of the old system, and acceptance of its reality and an attempt to

make it serve new purposes through restructuring by negotiation and bargaining. The caste system could not be ignored in planning for elections and secular politics—but by making it operate in conformity with the principles of secular democratic politics its old logic was gradually eroded and given a new orientation. Crucial to this outcome was the acceptance of the game of numbers in place of the game of status and the value of mobility in place of the value of stability. The central feature of the caste system—reliance on birth-based hierarchy—was eroded as groups lower down came together politically and challenged the supremacy of upper status castes who, although numerically small, had for so long dominated the social scene.

Gandhi's injuction to the Brahmin and the Brahminized upper castes to serve the people, his own frontal attack on the symbols of Brahmin domination, his movements for the uplift of lower castes, especially Harijans and the tribals, and various anti-Brahmin movements had paved the way for the restructuring of social order. Electoral politics with adult franchise took this process much further by forcing castes and communities to seek realignments, each in its endeavour to increase behind it the number of heads to be counted according to the rules of the new game. The traditional mode was one of splitting social groups into enclaves of particularistic belonging which then operated a status hierarchy; the accent of the new mode instead was on federating into larger units with the aim of upsetting the hierarchy, at least in the ordering of inter-group relations. While the new mode apparently gave a new lease of life to caste and communal identities, its emphasis on competition as a means of secular status undermined the structures that had hitherto enveloped these identities. It proved a great liberator for the suppressed and the lowly and shook the foundation of the whole system, and in course of time made it feeble and anachronistic. The process was helped by the weightage given to specially disadvantaged groups like the untouchables, the tribals, and backward communities to enable them to surmount age-old barriers to their mobility and participation in the institutions of civil society.

In the evolution of this process—a process of the upward surge of the downtrodden—the idea of "opposition" as an expression of the democratic spirit caught on, and in course of time social opposition got aligned with political opposition. Often both the opposition of

opposition parties and that of dissident groups within the Congress—as well as movements and agitations outside the party frame—were based on the claims of the low-placed, neglected, and peripheral groups for recognition of their rightful place in the scheme of things. Ventilation of specific demands arising from persisting inequities and disparities was even more frequent. The Congress, which at the time of independence was still dominated by the upper castes, had to response to these oppositional thrusts in order to bring within its fold new and upward mobile groups. In course of time it found a quite different composition of elites and ranks occupying both governmental and organizational positions.

This process is still going on but has not yet benefited the very low castes and communities: the upper castes are being replaced or forced to accept middle castes from rural areas, but the very low castes are still on the peripheries. As the competitive system of politics is pressed to deal with the needs and demands of the marginalized strata, it is likely that the democratization of society (that has been going on for the last twenty-five years) will have to cope with the conflicts that are necessarily involved in such a process. The basic historical thrust of this process of politicization of Indian society is towards the transformation of a society based on the principle of inequality, into one based on the opposite principle. This cannot be an easy or quick process; inevitably it will have periods of stagnation caused by the resistance of entrenched interests; and there may well be bitter frustration and conflict, prolonged confrontation, and perhaps also violence. This is to be expected in an enterprise that seeks to accomplish nothing less than turning history upside down. But the direction is set by the very nature of the enterprise and the values it has generated, and it cannot be stopped, except temporarily.

We shall return to this issue in dealing with the problem of performance and see how the failure to work out a logic of the system will further threaten both the legitimacy of the democratic system and the integrative framework that it has created through its uninterrupted functioning. Meanwhile the model of democratization based on incremental political involvement of social strata provides us with a picture of the social dynamics of state and nation building in India. The general thrust of national integration

in India is toward structuring a unity out of the common involvement of diverse elements in which competition and opposition become the vehicles of a consensus. This is matched at the level of societal interactions by a similar process: by giving free scope to inter-group conflicts and opposition and then ordered by accepting a new model of reaching agreements and making decisions. The decision to make the democratic framework a basis for integration assumed such a response, for without it politics would not have been able to penetrate into society and become its living tradition. Instead of being treated as something remote and marginal and transient, politics is being internalized in the functioning of society. This signifies a major historic change in the nature of Indian society. The key to the change is the centrality and dominance of the political sector in society and culture.

The Issue of Performance

Any society that gives such a central role to politics also necessarily emphasizes the rational and deliberative aspects of the social process. By making human intervention in the historical process—which is the essence of politics—the basis of a new identity, such a society is necessarily made goal-oriented and future-directed. It follows that the whole enterprise depends on how the systems acts, not what it is; what it produces, not just how it survives; and how the products relate to real needs, not merely to abstract values. In short, such a political society is founded on the conception of purpose, of performance; hence, it must be ready to be judged by tests and criteria that flow from this conception. Structures and systems are functional only to the extent that they perform; they are not valued for their own sake. If they are found to be unable to perform, they lose their legitimacy and before long give in to new structures, to new systems. If this happens, the integration to which the prevailing structure had given rise, may itself begin to give way.

These observations are germane to the Indian model of state and nation building. Indeed, the issue of performance is crucial to the very conception of a stage and a polity, though it has largely been ignored in the literature on both political development and nation building. This is surprising, for performance provides the key to legitimacy, which is the basis of any state or nation. In the case of India it is all the more crucial because the building of the nation

and the state did not precede, but coincided with the building of the Indian polity and the system around which that polity is organized. We have argued that the adoption of this system has been central to India's strategy of state and nation building. It follows that the stability of the system and the integrity of the state are intertwined. Failure to fulfil the tests of performance will not merely erode the system's legitimacy; it may undermine the integrity of the state as well.

The model of simultaneous growth

This issue has been highlighted in recent years and has come to occupy a central place in the examination of the working of the Indian state. For twenty years after independence, the Indian leadership worked on three courses of action simultaneously—consolidating the new state on the basis of the integration of diverse components internally and maintaining the autonomy of the new state externally, building the democratic framework based on adult franchise and elections, and maintaining a modest but continuous level of economic development through planning at various levels. But while all these were simultaneously pursued, the major and overriding concern was national unity, and great care was taken not to disturb this unity even if it meant postponing decisions and policies that might give rise to unmanageable conflicts. Nehru repeatedly implored his own colleagues and others not to disturb this hard-won unity. As he put it in 1952, ". . . speaking for myself, I have been over-burdened with the thought that we must give the top-most priority to the development of a sense of unity in India because these are critical days. Any decision that might come in the way of that unity should be delayed till we have laid a strong foundation for it" (Government of India, *Speeches of Jawaharlal Nehru* 1949-53).

Such thinking led to a number of initiatives. Important sources of cleavage were removed, in part through anticipatory and in part through responsive policies and legislation, thus preventing conflicts from becoming endemic. The worst vestiges of feudalism in land relationships were removed through legislations and the article on property rights in the Constitution was amended to make this possible. A number of enlightened labour laws were put through to safeguard the rights of the labouring classes. Special rights of representation and employment were given to the scheduled castes

and the scheduled tribes which partly compensated them for the social handicaps from which they suffered. The inequities in property and other rights between Hindu men and women were removed through the Hindu Code Bill despite much resistance from orthodox quarters. And a major restructuring of the territorial boundaries of various states within the federation was undertaken by accepting the principle of linguistic identity as the basis of such restructuring, thus removing the arbitrariness on which the British had drawn provincial boundaries, and enabling efficient modes of communication with the people and fulfilling their aspirations.

All this plus a sustained drive at establishing the necessary infrastructure for economic development on the one hand, and involvement of the people through democratic elections on the other, produced a climate in which the Indian people began to feel a stake in the system and in which a widespread process of political consciousness and education was generated. The ordinary people were especially drawn towards the new framework of allegiance, for it was for the first time in history that they were seen to matter—and they knew that they mattered. The prime concern of the leadership was to build a nation; and this they were able to do in a very fundamental way, for it was based not on force but on consensus. At the same time such a strong basis of national unity was utilized to suppress separatist and secessionist tendencies, regional and communal fanaticism, and extremist ambitions of the democratic system. Such diverse threats as the secessionist ambitions of the DMK in Tamil Nadu, the still continuing fanaticism of Hindu and Muslim communal parties, and the anti-system postures of the Indian communities in the years following independence were all firmly dealt with and these parties were made to accept the democratic framework and modify their stance accordingly.

Thus a simultaneous growth of political consciousness of the people and an improvement in their general condition provided the basis on which the new state felt confident of removing threats to its own integrity and of producing a comprehensive framework of consensus on goals and procedures and, on that basis, the legitimacy and sanctity of the political system as such. The form of politics was meaningful because to most people the substance of politics made sense and was considered worth pursuing. Legitimacy thus rested on notions of utility and acceptability. The nation was strong and united because the people believed in it.

Neglect of distributive justice

Powerful and humane though such an approach was, it suffered from one major flaw, which (though it is not inherent to the Indian model of state and nation building) has now become the central issue in its continued functioning. In its simultaneous attempt at national integration, democratic consensus-making, and economic development, the Indian leadership adopted the approach of what may be called the aggregative performance. It sought to build the national state at various levels, to spread the institutional framework to which it had given rise, and to develop over the various regions a physical and economic infrastructure to initiate a planning process for generating overall growth rates. The leadership hoped that as all this spread and seeped downwards everyone, including the lowest placed, would be able to participate in the national endeavour and benefit from it. No systematic effort was made to ensure that this did in fact happen. Distributive justice was not built into the nation building design and into the development model. In other words, very little attention was paid to ensure a distributive performance (with the single exception of the reservation of seats and jobs for the scheduled castes and tribes). The presumption was that aggregative performance would necessarily give rise to distributive performance, that all strata would get involved in the administrative and territorial framework, get drawn into electoral politics, and get their share of the national economic cake. That there were in-built constraints on such a progression from an aggregative to a distributive performance was not adequately perceived.

Nature of elite

And yet, this incongruence between the aggregative and the distributive dimensions was built, not so much into the model of democratic nation building that was adopted, as in the social structure and in the nature of the elite through which the model was to be implemented. To be sure, the first decade and more of development (broadly, the period from 1950 to 1962) saw considerable progress in the rural areas and a net transfer of resources from urban to rural areas. Similarly, there was a major political shift to the rural areas under the impact of electoral politics, leading both to the emergence of new types of elite and to an increased political consciousness among the people. As argued earlier, in dealing with social response to the new polity, a substantial modification of

the social structure has taken place under the impact of the logic of electoral politics, though this has still been in terms of a shift of power from the few upper castes to the wide spectrum of middle and lower middle castes, but has left the very low castes and deprived groups untouched. These groups have doubtless benefited a little, but largely as a result of the aggregative performance mentioned above (in the form of public health and education as well as jobs for the landless in prosperous areas) and not as a consequence of deliberate distributive policies. There is no reason why the process of democratization cannot go further down and involve all strata of society, except that in the meanwhile a different kind of structure has emerged, based on the hold of powerful interests, which has made this very difficult to achieve. Unless deliberate steps are taken to dislodge these interests from their present positions, further progress of democratization will be halted.

The obstructive structure is largely the outcome of the model of economic development (adopted in the late fifties) which emphasized urban-based industrialization and modernization of the economy through heavy doses of capital and capital-based technology, much of which was imported from abroad. All this was intended to generate a large aggregate GNP which in course of time was supposed to "take off" into self-sustained growth and thus promote the making of a larger national cake for distribution to all, sometime in the future. The model was largely derived from the experience of western and Soviet societies without due attention being paid to the fact that the social and economic reality of India was quite different from what obtained in the industrialization phase of western societies, and the political reality was different from what obtained in the Soviet Union. This model of economic development may have been persuasive for groups that stood to benefit from it and identified national prosperity with their own—as is likely to be the case when an elite thinks of the nation in its own image, other than of itself in the image of the nation. In the event, the elite adopted a model that not only ignored important social and political dimensions, which in the thinking of economists may be extraneous factors, but which are in fact central in the life of societies, but also ignored economic dimensions as seen from the point of view of the masses.

The results of this model did not become clear while the aggregative performance was still in its early phase. Foreign aid and PL 480

food was flowing in on a continuing basis, a moderate rate of capital formation and investment was possible, and the overall population was still within limits. Under these circumstances a certain minimum sharing of benefits was still possible. But before long the model's principle feature, namely the crucial role of the professional, business, and bureaucratic classes in the development process, became prominent and there soon developed a conflict of interest between this class, which dominated the decision-making centres, and the rest of society, which was rural, poor, and uneducated.[2] As the conflict developed this elite fortified its dominance by policies that benefited large and medium peasantry on the one hand, and professional politicians, through a system of political financing and patronage, on the other.

The combination that emerged was very powerful and it sapped the deeper bases of democratic nation building which we have described at some length in this chapter. This gave rise to a basic divergence between political goals and economic structure, and hence between the distributive and the aggregative dimensions of nation building. The aggregative dimension emphasizes concentration, impersonalization, and transcendence of groups and classes. It emphasizes newly acquired traits and the general buildup of a new, or "modern" sector with command over resources and opportunities. It adversely affects the distributive dimension which demands dispersal. It depends on its capacity to identify individual and group consequences of policies and decisions, the willingness to relate the newly acquired to the antecedent traits, and on a respect for both traditional and modern sectors and their autonomy. Democracy emphasizes the distributive dimension, development the aggregative. If the latter (development) is not controlled by the former (democracy), the result is an elite that is essentially unrelated to the needs of society and may work against its interests.

[2]Gandhi's appeal to this class to identify itself with the people had produced dramatic results during the independence movement, and members of this class from that generation still display the old characteristics, but the structure to which the new economic model gave rise reversed the trends (from rural to urban habitation, from indigenous patterns of education and economy to westernized patterns, from a process of undercutting the old status hierarchy to its revival in a new form) and produced a basic conflict of interest,

Redeeming features

It needs to be said that in India this conflict between a middle class based elite and the people is not as sharp as in many other countries of the Third World, nor have the international trends discussed above penetrated into Indian society to the same extent. But it is true that the middle class in India has by now become quite powerful and that there are many elements in it that work against the interests of the nation and tend to weaken the nation building ethos. These issues are highly relevant to the Indian reality and could well become central if the trends in evidence during the last decade continue without check. But there are two redeeming features in the Indian case. The first of these relates to the ground forces that have been released in India, largely thanks to the operation of the democratic framework. They have surged upwards and are voicing the needs and grievances of the deprived strata of society and emphasizing the need for a distributive performance in national priorities. This plus the general exposure of the evils of society in an open system accounts for the considerable tumult in India over issues of poverty and unemployment. There is also some serious questioning of both the techno-economic model that has been adopted and the bureaucratic framework that has come into being as a result of the working of the model. This debate is still on and there is as yet no clear sign that it will be conclusively resolved in favour of an alternative model that will emphasize the distributive as against a merely aggregative performance. All one can say at the moment is that the neglect of the distributive dimension will seriously affect the integrity of the state and the nation, and that this may, in turn, produce a corrective process.

More important is the second redeeming feature of India, namely its continued accent on the autonomy of the Indian state and its general refusal to become a dependency of any external power, even if this means a slower rate of aggregate economic growth and a lower flow of foreign aid and capital. India has striven hard (and succeeded) to establish its autonomy vis-a-vis both the region where it occupies a strategic position and the global political system. India's autonomy is on the increase rather than on the decrease, and this alone will militate against both external penetration and its own elite nurturing close external linkages at the cost of internal linkages. Both these factors—the logic of democracy and the logic of national autonomy—have yet to come to fruition; they are still

subject to forces that could weaken them both. But the twin factors are in operation and, on present indications, will provide a fresh upsurge. This is precisely the meaning of the "crisis of performance" that has in recent years occupied the centre of Indian political debate.

The crisis of performance has many aspects. The ones that have been discussed in India so far are the dimensions of economic development, its administrative concomitants, and, to a lesser extent, the political aspects of governmental performance and credibility. Considered from the point of view of the perspective of state and nation building, it is basically the crisis of the distributive performance, one in which the ties of nation are counterpoised against the exclusivity of a narrow elite—in other words, by pressing and exercising the claims of the nation against the interests of a class.[3]

Focus on corruption

The new upsurge mentioned above is taking form in the framework of democratic nation building which we have spelt out above. What is emerging is a new kind of opposition (not wholly new, for it has happened in the past too, but with greater centrality and power) that is aimed against the distortions that have crept into the body politic under the impact of the parasitic economic model discussed above. The dominance of the middle class elite discussed above was based not merely on control of formal institutions and the power that came from such control, but also on an informal system of corruption through which the ties between the bureaucratic control of the state apparatus and the businessmen's control of the private sector were cemented and then extended to the agricultural gentry on the one hand, and the political boss structure on the other. Feeding into the system of corruption was the growth, over the period of planned development and the system of discretionary licenses and controls which such development and the general situation of scarcity gave rise to, what is known as black

[3]We do not ascribe any final value or transcendental meaning to nation. Indeed, nation too is no more than an instrument for basic values of freedom, justice, and equality. But it is an essential instrument, especially in societies that are still in the process of coming alive through self-regard and self-confidence. In societies that have already achieved this, nationhood and national identity are, or ought to be, less salient.

money that was accumulated in very large amounts through tax evasion, trading in licenses and under- and over-invoicing of import and export permits, large-scale smuggling and hoarding, and indulgence in a number of other economic crimes. Though the immediate operators of the system may have been the business class, its beneficiaries include a cross-section of the elite, most importantly the bureaucratic and political segments, but also the professional segment which is spread over a number of middle class occupations.

Though estimates of the diseases of corruption vary and are often exaggerated in the public mind (inevitably so, given the pathological character of the phenomenon), there is no doubt that in a span of less than a decade a massive erosion of public morality has taken place, and people in fairly high positions are found wanting in honesty and integrity. They have adopted a particular life style in utter disregard of the fact that they are living in a poor country. Being a culture that is highly tolerant of everything, especially of excesses in high quarters, the Indian public was not greatly disturbed by this phenomenon[4] until it began to hurt badly with the incidence of inflation and simultaneous evidence of maldistribution of essential commodities of life. The issue got especially highlighted because of the sense of injustice that was created by the growing evidence that while the general condition of scarcity and rising prices was on the increase, it did not affect the life style of the elite and the social strata that were tied to this elite. A politically conscious citizenry in what was still a very open and unrepressive system was, under such conditions, bound to support agitations against corruption and people's hardships. They were brought to the fore by the youth and the students. Their agitations forced opposition parties and sections within the ruling party, as well as elements that had hitherto remained aloof from active politics such as the Gandhian and Sarvodaya leaders, and, above all, the disillusioned sections from within the middle class itself—disillusioned that the democratic system was becoming anti-people—to support their movement.

The result of such upsurge has been two-fold: a dramatic growth

[4]This was helped by the fact that in the past corruption was often exposed and a few of the miscreants brought to task. They were occasionally people in high positions like chief ministers and ministers. There has been less of this in recent years.

of oppositional activity and mass protests against the government, at times resulting in the dismissal of duly elected regimes; and response to such upsurges from the centres of authority. The response has been in the form of action against known economic crimes and activation of the policy process aimed at better performance of the government in an effort to re-establish credibility and absorb some of the oppositional elements within the dominant framework of the Congress. This particular relationship of revolt and response has been characteristic of many earlier phases of democratic functioning, it is being extended to new areas and social groups. But this is a wholly new phase in Indian history—one in which legitimacy rests on real performance, not merely on integrative output and assurance of stability. It is a phase that is critical to the Indian model of building a state through the building of a nation in an open interaction between diverse identities and interests. In this process politics must provide the means of satisfying diverse claims and needs. This phase can last for quite some time, given the enormous agenda of performance and the growing social and demographic magnitudes with which state policy will have to deal. But starting with the split in the Congress party in 1969, the rationale for which was a distributive performance, there seems to be no possibility of going back. It will test the capacity of the democratic system in a basic way. It will also test the credibility of the entire Indian model of political development.

Democracy and Justice

It is one of the main presumptions of this essay that not only the identity but even the integrity of the Indian state will depend upon the efficiency with which the federal-democratic system brings together the social and regional diversity of India into a common framework of allegiance. An authoritarian model may work in societies where either statehood had been consolidated over long centuries and centralization was the dominant creed of both culture and polity (e.g., China or Eastern European countries), or where there was not much diversity to accommodate and therefore even an authoritarian centre could easily communicate with the people and respond to their needs (as in Japan or Korea or Thailand). In India it can work only through repression, and that too on a

massive scale and in so many regions at the same time. An authoritarian and oppressive regime cannot be sustained for a long period. It is difficult to see how a state or nation that has still not attained full stature and maturity can survive on that basis. The Indian model of state building out of a polycentric and historically divisive society was first effected through a massive process of national integration based on a new symbol of identity and on the new organizational ethos of the independence movement, followed by a constitutional structure of democratic participation. The Indian state could not have acquired the power and allegiance that it has without this wide open nature of the system. It now enters a different phase when both the integrity of the state and the cohesion of the nation will depend on a still deeper process of unification—a process based on a substantive network of need fulfilment through adequate distribution of the essentialities of life; in other words, on a basic structure of equality and justice.

An unjust state (in any extreme sense) can only survive on the basis of repression, but repression undermines the basic unity of a nation. Failure to perform on the distributive dimension will therefore produce a state that has ceased to be a nation. The Indian model of state and nation building is a powerful one, given its undertaking to simultaneously attain unity, democracy, development, justice, and autonomy vis-a-vis the external world. It has firmly achieved the first two, but it badly miscalculated on the third goal. The developmental aims were poorly defined and their implementation was by and large perfunctory. Regional imbalances were often left unattended, and the weak and vulnerable sections of society did not get much relief. This has in turn seriously affected the fourth without whose maximum attainment no social entity has ever survived. The same applied to the goal of autonomy. This has so far been achieved to a remarkable degree (considering its internal problems, India's external viability is indeed quite remarkable), but it too ultimately depends on internal integrity and cohesion. In short, it is on the performance of the dimension of justice that the future of the Indian state rests.

A democratic framework is ideally suited to perform along this dimension. But it is necessary that those in command of the framework—the "class"—act with commitment to the people and to the binding nexus that can hold them together. This is the test of the

present and the emerging generations of the Indian leadership. In the final analysis it is also the test of the Indian people.[5]

[5]I have in this essay analyzed and interpreted the Indian experience in state and nation building, its attempt to evolve a political community out of a highly structured historical civilization that had always undervalued political tasks and had as a result succumbed to external assault and internal disintegration. I have deliberately not employed any given theoretical framework from the literature in providing such an analysis, for it is my view that each historical situation calls for a different theoretical response. Theories are meaningless except as cognitive responses to real life; they have no life of their own. But I have had occasion to briefly and incidentally comment on some of the more fashionable theoretical paradigms—especially the paradigm of modernization, the paradigm of class analysis, and the paradigm of "stages of development" according to which it is necessary first to consolidate a state, then modernize (in terms of urbanization, economic development, development of modern communication, and so forth), and only then resort to democratization. I have found all these paradigms wanting, or, at any rate, not very useful in interpreting and explaining the Indian experience.

Without labouring in the abstract, I have provided the elements of India's own model of state and nation building—one in which integration and performance provide the twin pivots. I do not intend to tie together the various threads of my analysis in the form of any neat theoretical model, apart from the summary list of points at the start of the essay. I do not feel obliged to provide such a model. I would rather let the reader do it for himself. That is, if he feels inclined or pressed by his training and vocation to try. For myself, I value the richness of experience more than the neatness of a transient model.

UNFINISHED TASKS

S.C. Dube

History may or may not be future, but the past has an uncanny way of sneaking into the present and the present of seeping into and shaping the future. Acceleration of history is possible and man can work towards and achieve a preferred future of his own design, but these endeavours are likely to prove counter-productive if they do not take into account the currents and trends moulding society's immediate past. The roots of the future, it should be remembered, lie in its past.

The first twenty-five years of India's independence show unmistakable traces of its feudal past and bear an indelible mark of its colonial heritage, despite the country's professed intention of dismantling the structures of feudalism and colonialism grafted into its socio-cultural fabric and its economic and administrative patterns. In retrospect we find that many good-intentioned projects for progress failed to produce desired results because the country covertly legitimized some of the values and socio-cultural patterns that it was committed to demolish. Borrowed models of development unrelated to the reality of India; a strategy of growth that accepted, at least tacitly, a framework of dependency; and a basically colonial pattern of administration and Plan implementation inhibited both innovation and flexibility. As a consequence, the country's performance fell short of its promise. Despite these impediments, in several sectors the progress was substantial, but the distribution of its benefits remained uneven: the thin upper crust of society was the major beneficiary, the gains to the deprived and the underprivileged were marginal. Towards the close of the second

decade of its independence the country found itself trying to cope with a series of vexed and difficult problems: major distortions in its value configuration, resulting in the corrosion of the ethic of service; erosion of faith in the institutions of society, manifested in a growing disregard for norms of social discipline; and an uncertain idiom of the politics of a "soft" state, imparting *ad hocism* to policy processes. Even in the midst of these disquieting uncertainties India could respond to external challenges convincingly, but it appeared to lack the will to address itself creatively to internal challenges. The country wavered between hope and despair; even the most imaginative calls to action largely failed to restore to it a sense of purpose and direction. To avert disaster bold and resolute action was indicated.

As India moves towards A.D. 2001 it will have to keep in mind the factors and forces debilitating it during the first twenty-five years of its independence. It will also have to develop a capacity to anticipate problems it may have to encounter in coming decades, and act in advance to solve them. Only with sharpened problem-solving capabilities will it be able to meet the challenge of the future effectively. Its record from 1947 to 1972 has warnings as well as sailing directions for the remaning part of this century.

A summary appraisal of India's performance is attempted in the pages that follow. Critical attention will be focused first on the effectiveness of its planning strategy and then on the challenges of the emerging environment. This will be followed by a brief discussion of some critical areas for reflection and action.

PLANNING: PROMISE AND PERFORMANCE[1]

As India awakened to freedom its euphoria was tempered with an acute awareness of several gigantic problems. Moving from mobilization, solidarity building, and resistance to alien rule, it had to address itself to problem solving and nation building. Mass poverty was its most agonizing problem. The country's small elite had done well and attained for itself a reasonably high standard of living, but common people lived at a level best described as

[1]This part is condensed from a paper presented to the International Seminar on Development and Communication held at East-West Center, Hawaii, in July 1975.

subhuman. The magnitude of poverty manifested in mass hunger, disease, and illiteracy was truly horrifying. The basic task before the country was to alleviate the condition of the common man and relieve him of his misery and suffering. The leadership realized that in the economic field it had many promises to keep. Some of these promises had been made somewhat rashly, without sufficient understanding of the immensity and the complexity of the tasks involved in their fulfilment. But the country could not go back on them; the cherished goals had to be achieved.

Even before the country attained national independence, the leadership in India was beginning to think in terms of planned development. Nehru had a vision of free India and, in anticipation of winning freedom, he had set in motion a series of planning exercises. The National Planning Committee, working under the leadership of Nehru himself, carried out some exploratory studies, coming out with a rough blue-print for India's economic development. Even the British showed an awareness of the problems of India's post-war reconstruction and drew up plans for certain sectors, especially education and health. Later some alternative strategies were also outlined. A group of Indian industrialists put forward what came to be known as the Bombay Plan. Another effort in this direction was the tentative outline of a Plan to restructure India's economy and polity along Gandhian lines. In retrospect, one feels that these pioneering efforts towards thinking about planned development lacked rigour and sophistication, but nevertheless they initiated a useful dialogue, collected valuable basic data, and threw up a series of hypotheses helpful to planners in coming to grips with the economic and social realities of post-independence India.

Assumptions behind Indian planning

India launched her First Five Year Plan in 1951. In a way this Plan consolidated a large number of developmental projects that were already on the ground, but at the same time it also generated considerable fresh thinking with respect to the country's integrated and many-sided development. A process of comprehensive planning was initiated through this somewhat disjointed Plan. Some assumptions made by these planners continued to be operative even when the country was engaged in the task of shaping and reshaping its Fifth Plan. Over two decades' experience of Plan formulation and

implementation imparted a sense of realism to the planning endeavour and brought about a flexibility of approach involving situational choices and pragmatic adjustments. Over the years Indian planning techniques acquired greater refinement and sophistication. In successive Plans, however, one finds a degree of continuity with regard to the assumptions about how development takes place and how it can be achieved in a country like India.

One of the major tasks before planners was to identify the causes of India's retarded economic growth. It was recognized that during the decades preceding independence, the country had registered only a limited and partial development. In terms of per capita income and the standard of well-being, the economy had remained more or less stagnant. Industrialization had made only a feeble impact, and this, in several respects, was not very healthy. In the second half of the nineteenth century, India started receiving machine-made goods from abroad. These imports adversely affected traditional crafts aad cottage industries, without creating, at the same time, a strong impulse for development through industrialization. As a consequence, there was a general decline in productivity both in agriculture and in traditional industry. Gradually underemployment increased, although a part of it was absorbed by traditional institutions like joint family and caste. But the shock-absorbing capacity of traditional institutions was not limitless. Further increases in underemployment led to the rise of pathetic contentment, fatalism, and apathy. The environment was not propitious for economic and social progress. Available surplus was mainly used up in buying imported goods. At the end of the nineteenth century the only industries that had firmly established themselves in the country were those of cotton textiles and jute. Agriculture continued to suffer neglect. During the two world wars some more industries were set up in the country. This was made possible by a policy change dictated by the needs of the wars and by changes in the terms of trade in favour of the producers of manufactured goods as against primary producers. This trend brought about capital formation in the industrial sector. But the limited gains in the industrial sector were offset by a rapid deterioration in the agricultural sector. This condition did not augur well for the substantial and overall enonomic development of India. The occupational structure in the early years of India's independence was disturbing: 68 per cent of the country's working population was

absorbed into the agricultural sector, 14 per cent into large and small scale industries, 8 per cent into trade and transport, and 10 per cent into professions and services, including domestic service. Productivity in the agricultural sector was visibly low; in organized industry, commerce, and transport it was approximately three times more than in agriculture. The growth of organized industry as well as commerce and transport was not rapid enough to absorb the underemployed population on land. This undermployment (which was slowly emerging as undisguised unemployment, especially in the rural areas) was a pressing economic problem with major social and psychological consequences. Planning, therefore, had to address itself mainly to mass poverty and unemployment, particularly in rural areas. It was assumed that economic development could be promoted only if the country had the readiness to develop and apply modern technology to processes of production both in agriculture and industry. Underdevelopment, thus, was viewed essentially as a consequence of insufficient technological progress. In positive terms, to ensure development the country had to adopt modern technology and learn to utilize its resources towards the attainment of accepted and pre-defined ends.

While a constant effort had to be made to utilize known resources as well as to ceaselessly search for new ones, it was essential to keep in mind that the transformation of resources required application of new skills and know-how. In fact new skills and know-how are as important, or nearly as important, as capital formation. A country cannot hope to develop otherwise.

It was recognized that the rate of population growth, the inputs in planned development, and the national output were closely inter-related. Given the shortage of land and capital equipment in India, an effective curb on population growth was considered essential for rapid improvement in income and levels of living. To ensure that the population growth did not outpace economic growth, which would result in the non-availability of capital for further economic development, an effective fertility control programme had to occupy an important place in developmental plans. Efforts to stabilize the rate of the country's population growth had to take into account the effects of public health programmes and measuses to control disease, both of which contributed towards increasing survival rates. Indian planners assumed therefore, that they would have to plan for a situation which involved severe

population pressure. For the period 1951-60 the assumption was that the population would grow by 12.5 per cent; its growth for the decade 1961-70 was assumed to be 13.3 per cent, and 14 per cent for 1971-80. According to these estimates the population of the country in 1960-61 was expected to reach 408 million and in 1974-75 it was likely to go up to 434 million. Even at the time of the publication of these estimates, there were some valid reasons to suspect that they were generally on the low side The alarming estimated rate of population growth added a new dimension to the problems of the country's planned development. The prospects of registering any conspicuous gain in the standards of well-being were bleak if the increase in population remained unregulated. Fertility control had thus to become a matter of national policy.

The economic arithmetic of planning indicated the need for massive inputs in the developmental effort. The proportion of investment to national income, in the First Five Year Plan, was assumed to be about 5 per cent in 1950-51; this was expected to rise to about 20 per cent by 1968-69, and to remain stationary at that level thereafter. During the First Plan the incremental capital output ratio was 1.8:1. This fruitful output was attributed partly to good monsoons and partly to the utilization of unused capacity. For the Second Plan the capital output ratio was estimated to be 2.3:1. In the Second Plan model, for the next three Plans, the capital output ratios were assumed to be 2.6. 3.4, and 3.7 respectively. These ratios were described as "a shorth and description of the productivity of capital in various sectors." It was assumed that, besides capital input, productivity depended also on a number of other factors such as the degree of technological advancement associated with capital investment, efficient handling of new types of equipment, and the quality of organizational and managerial skills employed to use capital. As from 1956-57, the First Plan assumed a marginal rate of savings at 5 per cent. On this assumption it was postulated that the ratio of investment in the economy would reach 20 per cent of the national income by 1968-69. The framers of the Second Plan had the sobering realization that these expectations were unrealistic. According to its projection the investment coefficient was likely to go up from 7 per cent in 1955-56 to 11 per cent in 1960-61, to 14 per cent by 1965-66, and to 16 per cent by 1970-71. At this point it was likely to remain stable for a few years, going up to 17 per cent by 1975-76. The planners were

cautious in their optimism, for they said that the ". . . investment rate of 16 per cent or 17 per cent of national income is decidedly high, though not unattainable."

The planners had a clear realization that population control, savings and capital formation, and inputs required careful determination of priorities as well as a propitious social framework and an adequate structure of motivation if they were to result in an increased national output. Considerable sacrifices were needed for the attainment of long-term objectives in planning, but planning could not address itself only to a remote future. It had to take into account situational pressures, and attend to changing social needs. The First Plan (1951-56) made a general attempt to raise the standard of living of the people through increased production, but it also had to make a special effort to curb the inflationary situation and rectify food shortages. The Second Plan (1956-61) addressed itself to accelerating the growth of national economy by rapid industrialization, with particular emphasis on the development of basic and heavy industries. It had to take cognizance also of mounting unemployment, and make a special effort to expand employment opportunities. It had, at the same time to respond to the growing demand for social justice by building into its strategy, policies that would contribute to the reduction of inequalities in income and wealth and result in a more even distribution of economic power. The Third Plan (1961-66) aimed at securing an increase in national income by over 5 per cent per year and at designing patterns of investment to sustain this rate of growth during subsequent Plan periods. It continued to pay attention to basic industries and also tried to expand the country's machine-building capability. But it had to take a fresh look at the agricultural situation in the country and to formulate projects aimed at achieving self-sufficiency in foodgrains. It was responsive also to the mounting pressure for social justice and for the creation of new employment opportunities. The Fourth Plan (1966-70) emphasized self-reliance and was aimed at achieving equitable distribution of income. It accorded, once again, high priority to agriculture. The Fifth Plan has laid more stress on social justice. Besides restoring the vitality of the Indian economy, its major emphasis lies in fulfilling the minimum needs of the underprivileged sections of society

Planning is an instrument of social policy; to be meaningful it

should be oriented to a set of broad social objectives. In this respect Indian planners adopted goals enshrined in the Indian Constitution. The country was committed to democratic socialism. Its planning effort, therefore, had to function within the framework of a democratic polity and it had to move towards the realization of a just and egalitarian social order without deviating from its democratic ideals. The conflicting demands of freedom and social justice had to be reconciled with understanding and firmness. Without ruthlessly curbing the liberties enshrined in the Constitution, the country had to move expeditiously towards establishing such an order. The underprivileged, the deprived, and the degraded were to be given special attention; separate provisions were made for the development of the scheduled tribes, the scheduled castes, and generally the backward classes.

The need for fundamental alterations in the structure of society was recognized, although a clear blue-print of the new social framework was never offered. The demand for reforms was most persistent in respect of the agrarian structure, and several legislative measures were promoted to bring about changes in this sphere. Planners were also sensitive to economic and social disparities. They assumed that while accelerated economic development would necessarily usher in some processes of social change, certain changes in the structure of society were a precondition to accelerating the process of development. The exact nature of these structural modifications, however, remained undefined.

It was assumed that the private and the public sectors could coexist; the former requiring necessary social control, the latter gradully moving towards the commanding heights of the economy. Even a "joint sector" was visualized in which the private and the public sectors could collaborate, and a significant role was assigned to the cooperative sector.

Finally, it was understood that the process of development gathers momentum and becomes self-sustaining with the active involvement and participation of the people. Responding to this assumption, measures were devised to associate the people with the process of Plan formulation as well as its implementation. New institutional structures, calculated to ensure such participation, were also visualized and created.

Achievements and failures

The assessment of the results of India's efforts at planned development, both at home and abroad, is generally negative. Such a verdict is one-sided and unfair. While judging India's performance it is essential to keep in mind some of the hurdles that the country had to encounter. Ongoing confrontation with Pakistan on the Kashmir issue and allied matters, the Chinese military adventure on the Indian frontier in 1962, the Indo-Pak war in 1965, recurrent years of drought, the influx of millions of refugees from what was then East Pakistan, another war with Pakistan on the Bangladesh issue (1971), the failure of the monsoons shortly after in 1972, mounting inflation, and the unprecedented rise in the price of petroleum and petroleum products (including fertilizer) were formidable obstacles to a smooth implementation of India's developmental plans. Against these odds, the level of performance in several sectors was certainly creditable.

Take, for example, the creation of infrastructure for rapid industrialization of the country and the growth of industrial production. With 1960 as base, one finds that in two decades the general index of industrial production moved from 54.8 in 1951 to 180.8 in 1970. The progress with respect to the manufacture of machinery (including electrical machinery), metal products (especially steel), transport equipment, fertilizers, and so forth have provided conditions for the growth of a self-reliant economy.

Gains in the field of education, at least quantitatively, are breathtaking. In 1950, 22.3 million children were enrolled in elementary schools; in 1973 their number rose to 78.8 million. There was also a corresponding rise in the number of those undergoing secondary and higher education. In 1960, only 1.21 million students attended secondary school, in 1973 their number became 8.50 million; and from 0.33 million in 1950, the number of students going into institutions of higher learning had risen to 3.4 million in 1973. There was more than a ten-fold increase—from Rs 1,140 to Rs 13,000 million—in expenditure on education during the period. While one may question the quality and even the utility of this education, it cannot be denied that its phenomenal expansion has contributed in some ways.to the equalization of educational opportunity.

Similarly, impressive gains were registered in the expansion of health services. In 1949-50 the death rate was 27.4 per thousand, in 1971 it went down to 15.1 per thousand. Life expectancy at

birth was 32 years in 1951; in 1971 it went up to 50 years. Medical education and public health services underwent rapid expansion. In 1950-51 there were only thirty institutions imparting medical education, which had an annual intake capacity of 2,500 students; twenty-five years later there were 100 such institutions, some with the highest international standards, having an intake capacity of 12,500 students a year. An attempt was made to extend medical services to rural areas, and to improve their quality in urban centres. Great killer diseases like malaria, smallpox, and cholera were also being contained.

Science and technology did not lag behind either. Both in fundamental and applied research, significant achievements were made which put the country on the road to self-reliance. Development of nuclear capability, leading to the experimental explosion of a nuclear device for peaceful and developmental purposes in 1974, was but one important landmark in the country's accomplishments in the field of science and technology. Although the explosion came after the twenty-sixth year of Indian independence, preparations for it were made well in advance. Furthermore, research by India's agricultural scientists succeeded in evolving several high-yielding varieties that contributed dramatically to the country's green revolution. The full import of India's scientific and technological advancement will be evident after a decade or two.

On the negative side one finds a series of heart-breaking failures. The country was unable to make any appreciable dent into the abject poverty of its masses. Notwithstanding the much publicized green revolution, it could not produce enough food for its needs, much of which had to be imported quite often. In 1950-51 the total production of foodgrains was 55 million tonnes; in 1973-74 it had risen to 110 million tonnes. But this impressive growth presented a deceptive picture, for the gains were largely offset by the rise in population. The system of public distribution, ensuring equitable distribution, failed to work. As a result, weak and vulnerable sections were unable to afford food at the prices at which it was available; they neither had enough calories nor an adequate intake of protein. The situation with respect to milk and baby foods was worse. An unusually high proportion of children inevitably suffered from physical and mental deficiencies as a result of chronic malnutrition.

The record in the field of rural and urban housing was equally

dismal. Even if the country could learn to live with its sprawling slums, it could not find the resources to support even modest slum improvement programme providing minimum amenites of civilized life for the slum dwellers.

The situation was greatly aggravated by population growth. Despite a nation-wide programme of family planning, population increased by 2 per cent per annum in 1951-61, and by 2.2 per cent in 1961-71. These sizeable additions continued to make new demands on the planning apparatus.

Most gains of the first two decades of economic development were appropriated by 20 to 30 per cent of the upper stratum of society; it had a disproportionate share of consumer goods and the best of educational, medical, and other services. The masses found themselves relegated to a situation of perpetual poverty, characterized by chronic shortages of essential goods and nominal social services. Social inequalities increased and a parasitical class emerged, indulging in conspicuous consumption in an unabashed manner. Notwithstanding the creation of 20 million jobs in the organized sector—13 million in the public sector and 7 million in the private sector—unemployment mounted. Over 14 million people were jobless, with 8,000 names being entered on the rosters of the unemployed every day. The situation was grim: its latent injustice gave rise to anger and frustration.

In the first two decades of planning India achieved many of its output goals, but began faltering during the Fourth Plan which was, in a sense, a kind of non-starter. The basic weakness of its effort at planned development appeared to lie in its failure to formulate, to articulate, and to implement its distributive goals. The planning apparatus found itself in a state of disarray mainly because of this failure. Evidently, planning in India had overemphasized the output goals; the social goals found only a passing mention in Plan documents, and in actual implementation they were played in a low key. The country was left with the sobering realization that even a substantial increase in GNP and per capital income did not necessarily bring about the welfare and development of society at large. No serious effort was made to evolve clear and precise indicators of social development. However, a modest beginning in this direction was made in the Fifth Plan with its "minimum need" programme, which was designed to improve the quality of

life of the common man, starting with some of his basic requirements.

Economic arithmetic has a major role to play in the process of planning, but it would be an exercise in futility, were this not related to realistic political choices. Even the most carefully formulated Plans can be thrown out of gear if there is no political will to work resolutely towards their realization. In the late sixties and the early seventies one noticed a glaring absence of fit between the arithmetic of economics and the calculus of politics. This imparted a high degree of unreality to planning. Political exigencies made a series of demands on the planning process, which could rarely respond adequately. In the absence of ideological articulation and continuous political support several developmental programmes tended to drag on. Many urgently needed structural changes could not come about in Indian society because of the lack of political will.

Sustained economic and social development also presupposes a high level of organizational capability. It involves an efficient handling of series of inter-related tasks: the maintenance of law and order; the smooth functioning of supportive mechanisms; a timely and accurate anticipation of needs, problems, and crises that are likely to surface in the foreseeable future; and an adequate response to new challenges. Of course, it also assumes a sophisticated grasp over planning techniques as well as the capacity to handle effectively the operationalization of the Plans. As we shall see later, the civil services were not equipped for these tasks. The quality of planning and Plan implementation depends to a large extent on the presence or absence of an adequate and efficient information system. Indian planning had to start with a poor statistical base. The situation gradually improved, but in several sectors planning still has to proceed without reliable background data. The vertical as well as the horizontal movement of information was slow; it had often to follow a meandering and tortuous path. Feedback left a great deal to be desired. Because of this, there were annoying delays, even resulting in irrelevant planning and sloppy implementation.

It is evident that the Indian developmental effort needed a new orientation. It should have focused on the needs of the underprivileged and downtrodden who constitute the overwhelming majority in India. Output goals should have been related directly to the

requirements of enriching the quality of life of the poor. The polity and the economy should have moved together to this end; hard political choices should have been made with courage and pursued with determination. The country should have renewed its effort to strengthen its organizational structure and sharpen its problem-solving capability. "Development" that catered only to the privileged class and ignored the masses hardly deserved the name. But the socio-political environment, as we shall see later, was weighted against such initiatives.

Some lessons

The experience of the first two decades of planning was exceedingly valuable. It contained significant pointers towards rethinking about development as both a concept and a strategy. Those years were characterized by turmoil and trauma. Besides the usual teething troubles of nation building, the country had to encounter several waves of agression, face recurrent natural calamities like flood and drought, and become a helpless victim of the vicissitudes of the international economic order. Reference was made earlier to India's troubles with Pakistan and China, to the ire of nature, and to the impact of the oil crisis and other unfavourable aspects of global economic trends. India's economy was thrown out of gear, its planning was in disarray. It had to redefine its national objectives, reset its priorities in planning, and rework the strategies of development.

Indian planning and Plan implementation could not obviously ignore the changing international context—it had to relate itself to it. Reordering India's external relations was thus an imperative. The country took serious note of the fickle and even cynical manner in which inter-state relations had been conducted during the last decade. It, therefore, had to refashion its policies in a manner in which they could serve the cause of international understanding and amity without proving deterimental to India's national interest.

India always recognized the necessity of an organized pattern of inter-dependence between nations in the contemporary world, but at the same time it learned not to take continued international cooperation for granted. In the light of the experience of two decades it acquired a more realistic understanding of the politics and economics of international aid and of the visible and invisible strings attached to it. The short-range and long-term consequences

of massive external economic aid emerged more clearly. With the wisdom of hindsight, India adopted a cautious policy towards it. It was felt that while for a time some international assistance would be needed, the country would have to restrict this as much as possible. The new strategy was aimed at doing away with the need for large-scale assistance in the foreseeable future. It adopted a policy of self-reliance, two major expressions of which were a drive to promote export and planned efforts at import substitution.

Domestic economic policies were to be guided by the overriding consideration of self-reliance. With this objective in view the country started looking for a more relevant science and technology to suit and serve its needs better. Its new policy was to become self-reliant both in agricultural and industrial production.

India understood the paramount importance of national cohesion and solidarity. This understanding led to the synthesis and integration of the output, the cultural, and the order goals in developmental planning. National integration was regarded as vital for sustained economic development; in its turn, it was expected to contribute significantly to development. A conscious effort was made to integrate the output and the order goals.

The experience of two decades of planning generated new thinking on the question of an appropriate model of development for the country. It was all too clear that India would only be chasing a mirage if it tried to attain western standards of affluence in the near future. It initiated, therefore, a search for alternative designs for living which would emphasize the quality of life rather than material acquisition. There was growing disenchantment with the high consumption model: India was slowly but unmistakably moving towards a pattern which would discourage consumerism and replace it by a system of functional and efficient social services. The new objectives did not find a clear definition and articulation, but there was a ferment of thought and the country looked for viable alternatives.

An element of trial and error was inevitable in the initial efforts at planned development. If they did not produce the degree of success expected of them, planning techniques and the strategies of implementation are not solely responsible. Rapid, unanticipated changes in the socio-political environment also accounted for the hiatus and the lack of progress.

CHALLENGES OF THE NEW ENVIRONMENT[2]

In the first twenty-five years of Indian independence there were dramatic and far-reaching changes in the socio-political environment of India. These changes generated new psychological impulses and created a new political idiom. The country presented a transformation scene—one of a society undergoing rapid transition, attended by recurrent crises and growing contradictions.

In the first decade of its independence India witnessed an upsurge of rising expectations. Fifteen years later, the country was to face another upsurge—one of mounting frustrations. The gap between aspiration and achievement threw established institutional means into doubt. As a consequence, Indian society could justifiably be described as an ambivalent one. Its ambivalence covered the ends of social action as well as the appropriate means for their realization; the legitimation of both could be offered in terms of two contradictory streams of reasoning. Thus, there was the unique but somewhat baffling spectacle of the peaceful coexistence of polar opposites. Society was traditional as well as modern at the same time. It preached egalitarianism, but continued to practise consumerism without much sense of guilt. It proclaimed a universal world-view and adopted a lofty moral posture, engaging at the same time in the pursuit of narrow parochial objectives, and adopting the most questionable means for their attainment, without a burden on its conscience. Rationalization came easy to such society.

The compartmentalization of culture was a product of its ambivalence. The country lived in two worlds simultaneously—one of tradition and the other of modernity, one of "as things should be" and another of "as things are," one of ideal constructs for an ultimate future and another of existential reality for the more proximate contexts of life. A certain degree of compartmentalization inevitably accompanies the modernization of all traditional societies, but the extent of degeneration in society's moral fibre caused by it makes a difference. In a country as ethically conscious

[2]The argument in this part was developed in two lectures given to senior administrators at Srinagar and Bhubaneshwar. A summary was published by the Training Division, Department of Personnel and Administrative Reform, Cabinet Secretariat, Government of India, in *Training abstracts* (24), in 1973.

as India, the moral decay that it set in added to the scale and dimensions of the nation's problems. India underwent an acute crisis of character, the consequences of which were visible in every facet of national life.

Consider the deepening economic crisis that cast its shadow. It is generally accepted that at best India was able to hold the poverty line steady; 40 per cent of its population was and continued to remain below it; according to the most optimistic estimates it was able to reduce poverty only marginally. Of course, there were some who believed that the number of the poor—both in village and town—had in fact gone up. A country that could not change this profile of poverty in one quarter of a century, must accept responsibility for a major failure on the economic front. Add to this the growing unemployment in the country. To deepen the gloom, it had to contend with the parallel economy of black money and runaway inflation leading to acute shortages and soaring prices. For many the business of everyday living had become an unending chain of trial and tribulation.

It is not as though the country made no progress at all in the economic field, but most of the benefits of its considerable economic development were drained in supporting a parasitical class —its ostentatious living and conspicuous waste. In the rural sector the gains of the application of modern science and technology were fed into traditional avenues of status attainment. The richness and fullness of life promised to the common man eluded him. Major efforts at structural change—such as land reforms—were slow in coming, and when they did, they had so many loopholes, with the manipulative capacity of those whose vested interests they affected being so great, that their gains to the needy and the poor were minimal.

There was an impressive increase in the range and variety of social services, but quality-wise they left much to be desired and quantity-wise they fell far short of the expectations aroused. In distributive terms the country was nowhere near the attainment of the ideal of a just society. "Growth with justice," left for decades to remain only a political slogan, was gradually emerging as a political compulsion. In the fifties and the sixties the country was content with economic development, in the early seventies the demand for equality was articulated, and in the eighties undoubtedly it will become more powerful. How do we propose to

cope with the many complex problems generated by this trend?

At the societal level there was greater evidence of individualization, politicalization, and secularization. The individual was beginning to have a new image of himself, his cognitive map was considerably enlarged, and he was more conscious of what he considered his legitimate due from society. Politics had come to be recognized as the principle instrument for the attainment of individual objectives. There was a definite increase in rational thinking and in the calculation of ends and means along secular lines. But these processes operated within the framework of the compartmentalization of life; in the traditional section communal, non-rational, and ascriptive emphases continued to maintain their hold, the non-traditional sector being governed by a new civic culture which had its own paradoxes and contradictions.

Major strands in the new civic culture were: rights without restraint or responsibility, uninhibited use of coercion and violence to gain limited objectives, and the legitimation of diverse forms of corruption. The right to dissent, conferred by the country's democratic polity, had been seized enthusiastically. But the complementary assumption of a high degree of consensus being also essential to optimize performance did not appear to have been driven home. India appeared to have become a nation of critics; everyone was offering diffuse, generalized, and abstract criticism, without any effort towards making it diagnostic, specific, or constructive. Much of this criticism was counter productive. Criticism becomes useful when it does not only condemn but also charts alternative paths of action. Pressure is an essential part of politics, but it took many bizarre forms in India. The country indulged in far too heavy and senseless destruction. There was visible evidence that the payoff of the politics of pressure, agitation, and violence was greater than that of the politics of persuasion. Why was this situation allowed to develop? And how long could it continue? The cancer of corruption spread wide and penetrated deep. No reliable estimates of its magnitude exist, but the occasional glimpses that one had of its forms and dimensions in reports of the different commissions of enquiry, appointed from time to time, were enough to make one shudder. Were there any lower depths to which the country could sink? What was most appalling was that this no longer caused a sense of outrage and indignation,

and the country learned to rationalize and legitimize at least some forms of corruption.

These changes in the socio-economic environment led to the erosion of confidence in national institutions. In many contexts the paralysis of governmental authority became all too evident. Bewildered by the complexity and magnitude of the problems, the administration often adopted a ritualistic attitude. In any case, fire-fighting chores took so much of its time that it could give little attention to bold and imaginative planning for the future.

Given the grim context, what were the challenges to administration in India?

The paramount need of the time, obviously, was to take purposive action to restore confidence in national institutions and re-establish the credibility of the administration.

It was evident that in the changed environment "order" could not be maintained by crude and heavy-handed methods fashioned during the days of the Raj. Some new techniques were devised, but even those did not succeed, for the administration did not sharpen its problem-solving capability, nor address itself to offering relief to the people where it was needed most. The springs of discontent could not be located and attended to. The minimum needs of the common people were not difficult to identify; in fact they were well known. What still remained to be done, however, was to take in hand an effective and strategically phased programme. Performance alone could halt the process of the erosion of faith in national institutions.

Over the years the image of the administration was badly disfigured and a wide credibility gap was created between the citizen and the government. It is true that the administration's considerable achievements were insufficiently appreciated, especially the fact of its working under tremendous odds; nevertheless it was essential for it to make a major effort to put its house in order, for things had very seriously gone wrong. The stereotypes that had grown around it were substantially true. It was slow and equivocal, corruption within it had been increasing, and the march of unanticipated events had shocked it into a partial paralysis. It had to cleanse itself, refashion its operating culture, and offer convincing proof of its ability to handle situations and solve problems. It had to project itself in a more sensitive, responsive, and vulnerable manner to the changes in the socio-economic environment and to

the new urges and aspirations of the people. A major overhauling of the administrative apparatus seeemed to be indicated, for its success could be judged only by its performance.

The administration spent a disproportionately large part of its time in dealing with contingencies, rather than in coming to grips with hard policy issues. It must, of course, be alive to emerging situations and deal with any unanticipated turn of events. This was a responsibility it could not decline. At the same time it was becoming evident that symptom-by-symptom therapy—the method which appeared to prevail—did not really heal; at any rate, it did not offer a satisfactory long-term treatment. The entire area of policy making remained uncharted and in many sectors of national life it was difficult to say whether a definite policy did exist. What the country needed was an accurate diagnosis of the existing situation and its possible trends, a clear definition of the objectives of state policy, and a set of possible alternative courses of action with an estimate of their costs and benefits. The administration had not only to identify and anticipate presesnt-day needs and future trends, it had also to contribute towards reshaping the environment. This had to be done within a policy framework—a field that had so far remained largely neglected.

A policy, however sound, does not solve problems. Problem solving requires high-level planning and management capability, efficient communication skills, and an elasticity and pragmatism in directing the course of state action. Without all these a policy cannot move much beyond the blueprint stage. The administration must retool itself with regard to both policy planning and implementation. It must constantly look for more efficient management alternatives. Innovation, even though it involves some uncertainties, must be emphasized and the factors of its success identified. The communication gap should be bridged; not by smooth salesmanship, but by a clear exposition of social objectives and of the policies geared to their attainment. Feedback from the people can provide valuable correctives. This will not only hold in check unrealistic expectations, but will contribute towards preparing the people for the adventure ahead. In the final analysis, the challenge that administration has to take up is one of finding the right mix of institutional change, problem solving, and strategies of bringing about attitudinal and value change. A participant and problem-solving democracy can be activated only in this way. This will

need a dynamic and variable, but throughout, a pragmatic approach.

Reflection for Action

India's record of progress during the first twenty-five years of its independence was a mixed one. There was evidence of bold initiatives and purposive action, and achievement in several sectors was considerable. But in distributive terms, for a variety of reasons, the results were not as impressive as one would have wished. The magnitude of the problems was so great that the limited benefits of development could not become visible. In the context of national problems Indira Gandhi aptly remarked that the country had to keep running even to remain where it was. The ever-growing population ate up most of the results of progress, leaving the situation static, or worse. The rate of development could not keep pace with the rising aspirations of the people. Fragile bonds of nation-ness, the uncertain idiom of politics, and the inadequate strategies of planning and implementation contributed considerably to blunting the edge and weakening the thrust of developmental effort. In retrospect, one concludes inevitably that Indian planning suffered from an elite bias and lopsided priorities, it did not address itself directly to the needs of the people, and it foisted some unwanted reforms. Good-intentioned programmes, launched with much fanfare, either failed to gain momentum or were allowed to languish. Perhaps the most regrettable aspect of the process was that rhetoric often became a substitute for thought, decisions were taken and announced for dramatic effect, mistaken ritual acts were regarded as action, and statistical accomplishment was misconstrued as progress.

In respect of the major problems of population growth, poverty, and unemployment the national endeavour failed to register significant gains. The deprived and the underprivileged were beneficiaries at best of only a nominal development, the real benefits going to the more affluent sections of society. In the fields of food, clothing, shelter, health, and education few national targets were achieved; what the common man could get was woefully inadequate. There was an appreciable rise in the social services, but quality-wise the peoples' share in them was poor and unsatisfactory. Many tasks, the country set itself to, remained unfinished.

India was described, both by critics and friends, as a "soft" state. In reference to the first twenty-five years of its independence this characterization was justified. Although the country demonstrated a capacity to rise to the occasion when it had to face grave external threats, its capacity to meet domestic challenges did not extend to endemic problems that were potentially more dangerous. The questions relating to nutrition, shelter, education, and public health were not attended to with a sense of urgency or the required degree of resoluteness. They went by default because of the softness of the state. Decisions with respect to them lacked depth and extended vision, and even programmes with limited objectives were not implemented with imagination and dynamism. Peripheral considerations often defeated basic objectives. Disproportionate amounts of time and energy were expended on meeting day-to-day crises, leaving little scope for planning and action even with a two to three decade perspective. The criticism that the country found itself incapable of taking and enforcing hard decisions was valid, although neither the indicators nor the implications of a "hard" state were explicated in clear and unequivocal terms. The country was thus left in the dark about the components of a hard state. A series of nagging problems persist with respect to this notion: the interface between freedom and responsibility and between what the individual owes society and what the society owes him, remains to be worked out. The goals of equality and equity clash with the accepted ideal of freedom; they certainly involve some abridgement of conventional liberties. The limits and conditions of this curtailment need to be worked out. A reflective exercise regarding the toughening of a soft state cannot be undertaken in an abstract philosophical style; it should draw from the experience of contemporary social reality. It should also aim at charting feasible paths of action for the realization of desired objectives.

Simultaneous action in two directions appears indicated. First, the vitiated social ethos stands in need of a transformation so that society may undergo a major shift from the ethic of power and self-gratification to the ethic of service and self-imposed austerity. The reigning philosophy of consumerism must be curbed; richness of social services, and not personal consumption, should emerge as the desired social objective. Second, the paramount need for instilling a sense of social discipline should be in the forefront of all

social action; society must come before self. However, the mechanisms for the realization of this ideal are not easy to evolve. All too often those speaking for and in the name of society are themselves not above narrow personal, sectional, and class interests. Methods adopted to bring about "benefits" to society are allowed to become instruments of tyranny. In the oppressive atmosphere that is generated the individual finds himself stifled and the opportunity for him to realize his potential is severely restricted. While encouraging a societal orientation, it is necessary also to ensure that the individual's legitimate autonomy is not eroded and that the new ethos permits him to emerge, to develop, to express, and to find fulfilment. These tasks call for serious thinking and careful planning. Evidently the transformations envisioned will neither be easy nor painless; they involve imaginative forethought, variable strategy, and sustained effort A major overhauling of the structure of social relations and a reorientation of science and technology, as well as of production and distribution mechanisms, is called for. Until the need structure, the reward system, and the scheme of psychic satisfactions are reordered, objectives contemplated cannot be attained. Changes in value systems and attitude patterns are essential, but there is no proven method of bringing about such a modification without altering the base of power in society and effecting a structural transformation of its economic and social foundations.

This need was articulated before and after the attainment of Indian independence. Gandhi had a definite image of man and society built on the recognition of the cardinal principles of social justice and the supremacy of social good. He seriously questioned certain aspects of modern technology as they had emerged and were evolving in the west. The main thrust of his message was towards the creation of a new moral technology for reordering social relations. Those who dismiss him as a utopian visionary fail to assess the power of the spell he had cast on the nation during the epoch of the country's struggle for independence. Nehru's scientific humanism, contrary to common belief, was not fundamentally opposed to the basic tenets propounded by Gandhi. Nehru accepted many of the assumptions implicit in Gandhian thought. He was, however, more sensitive to the positive aspects of science and technology, without at the same time being unaware of some of their dehumanizing consequences. He pleaded for a science and

technology with a human face, regarding them basically as instruments to bring about a degree of ease, comfort, and enrichment to human life. Science and technology, in his view, were not ends in themselves; their role was instrumental. Adequate social control had to be exercised over them to prevent their misdirection. Also implicit in his thinking were certain notions of restructuring social relations on the basis of freedom, equality, and justice. In formulating plans of national development the sane ideas of both Gandhi and Nehru were either ignored, or so diluted that they practically lost meaning. With remarkable foresight Gandhi had anticipated the coming crisis of industrial civilization and his emphasis on the moral basis of social transformation was not entirely misplaced. Nehru, like Gandhi, wanted developmental effort to focus on the common man. The pressures of entrenched interests and the invisible power of western-oriented bureaucracy and technocracy, however, pushed the country towards adopting the western path of growth. Thus, the call for relevant models of development, rooted in the social reality of India and geared to its needs, received only lip service. In effect the country continued to operate on borrowed models and concepts. The consequences, in several fields, were disastrous. Western institutions failed to take root on Indian soil and the transfer of technology produced some bizarre results. It is unlikely that these and other imported ideologies will offer effective solutions for Indian needs and problems. They doubtless contain hints and pointers, but in the final analysis India can succeed only by its own creative response to the challenges of its realities.

To sum up, it is evident that India can no longer continue to pursue the tortuous and uncertain path that it followed during the first twenty-five years of its independence. Promise without performance, visible and invisible goal transfers, and the short-sighted and unimaginative handling of emerging situations brought it almost to a dead end. For survival and progress it should now strive to redefine its objectives, retool itself, and redesign its strategies.

It is time that India makes its choices and picks its options with respect to a preferred future for itself. For a meaningful intervention in history aimed at its acceleration, it is essential that the country starts giving serious thought to the possibilities of an alternative future—of new designs for living. Normative thinking—rooted in the experience of the past, related to contemporary

experience, and cognizant of future trends—is the paramount need of the time. From available indications it appears that the country will move inevitably towards the ideal of a non-consumer, egalitarian, and participant society.

Global as well as national imperatives will necessitate curbs on unabashed consumerism. Rapidly depleting natural resources and atmospheric pollution resulting from unregulated and ever-expanding industrialization will not permit world-wide diffusion of the high standards of consumption achieved by the affluent minority in the community of nations. The gap between the thin upper crust that enjoys incredibly high living standards and the large masses of people who somehow persist at sub-human standards of living is widening in India. This has created serious tensions, the nature and volume of which are likely to increase with every passing year. Demands of equity and distributive justice call for a more rational spread of products available for consumption: the floor, unbelievably low, will have to be raised; the ceiling, unnaturally high, will certainly bear considerable lowering. Efforts to perpetuate the status quo are bound to prove a perennial source of discontent. The design for an alternative future will have to consider this problem in all its dimensions and ramifications.

Closely associated with such a design is the question of the creation of a genuinely egalitarian ethos. The notion of human equality has been a part of human consciousness all through man's history, although there have been periods when it has been dormant. From the early sixties it has been articulated with considerable force and there are good reasons to believe that it is gaining strength. In any ideology for the future the concept of egalitarianism will occupy a very prominent position. The central problem for reflection in this area would be the creation of conditions for the maximization of the individual's inputs into the needs of society and of his share in the collective output.

This can best be done in a participatory culture that ensures a share in decision-making processes and also generates an atmosphere in which work is not a matter of subservience but of free will.

Creating a broad consensus on these objectives calls for the highest priority.

To accomplish the transformations envisioned in redefined social objectives, society will have to retool itself. The vision of an

alternative future cannot be translated into a reality with obsolete instrumentalities that were geared essentially to a set of social conditions and to a range of problems that have been altered irreversibly. In a world of quick change, fraught with uncertainties and crises, cognitive and reflective modes will also require thorough modifications. Our thought patterns need to be emancipated from the grooves in which they appear to have been caught. Human consciousness and mental horizons will have to be so expanded that new ways of conceptualizing problems emerge, and innovative and radical solutions, unencumbered by the dead weight of earlier intellectual conditioning, become possible. Science and technology have followed a certain evolutionary path, not because there was any inevitability about it, but because of a series of historical accidents and also because of the operation of forces that control basic decisions about man and society. Their path is alterable, and certainly they can be made more sensitive and responsive to social needs. Similarly, there is no compulsion about reordering social patterns according to some assumed imperatives of science and technology. The institutional and value framework of society, doubtless, needs restructuring, but by acts of conscious choice we can determine how science and technology on the one hand and social structure and values on the other shall relate to and interact with one another. A pattern to ensure their compatibility can be designed. This would be another strategic area for the retooling endeavour. What will be needed, in the final analysis, is a social order characterized by a high degree of rationality, enhanced psychic mobility, and sharpened problem-solving capability. A learning society geared to courageous experimentation in uncharted territories should be aimed at as the central objective of the retooled society.

The stereotyped strategies of meeting new challenges have proved themselves inadequate. The generalist bureaucracy—the old work horse—has been pressed into service to handle issues and problems for which it neither has mental equipment nor operational competence. Its inflated self-esteem is more pathetic than comic. It has demonstrated no willingness to encourage the emergence of a new operating culture in which meaningful integration of insights derived from the expanding universe of knowledge, alternative patterns of management of human and work relations, and the vision of a new order based on the contemplation of social reality

can be achieved. It has sought to dominate areas even like science, education, the arts, and culture about which it has little understanding and even less management capability. Its unimaginative and inflexible approach has seriously come in the way of institution building for the efficient handling of new tasks that call for thoughtful initiative and dynamic but variable management skills. Until functional areas requiring specialized knowledge are emancipated from the iron grip of bureaucracy and decision-making as well as operational strategies decentralized, it would be futile to look for imaginative planning and meaningful results. The bureaucracy itself will have to resocialize itself in order to emerge as an effective servicing instrument. Assertions to the contrary notwithstanding, it has contributed to the perpetuation of an atmosphere of drab routine and general oppressiveness which stifles all initiatives and approaches that deviate from the well-trodden path sanctified by precedents.

The criticism of bureaucracy does not imply that other segments of the intelligentsia have discharged their social responsibility as well as they should have. The specialist all too often views problems in the constrictive perspective of his own specialism and does not relate his potential and the possibilities of his knowledge and skills to broad issues of public policy. The intellectual has been content, by and large, with voicing his dissent and protest and has been concerned in the main with the trivialities of his specialization. On larger issues of public policy the intellectuals have rarely tried to develop and project an integrated vision. Their analyses may have offered them terminological satisfaction, but they have certainly not contributed much either towards enlarging the consciousness of the people with regard to their predicament or towards finding workable solutions to the pressing problems of the time. Many of them still carry captive minds, unemancipated from the colonial mould into which they were cast. The key to the basic problems implicit in redesigning strategies of thought and action appears to lie in building functionally specific and task-oriented institutions unencumbered by routinization and not hamstrung by inflexible procedures.

The central question to which the country will have to address itself relates to improving the quality of life of its people at large. Of primary importance are the basic needs that must be met to ensure survival at just human standards. Above anything else the

common man needs food, shelter, gainful employment, preventive and curative medicine, and security from civic violence as well as external aggression. The satisfaction of these needs at an adequate level will require a basic alteration in distributive values and in the reward system. Excessive individual consumption will have to be curbed; common services will have to be extended and enriched. This by itself will not be enough; the volume of production will have to be raised with a careful pre-planning of what has to be produced. Alongside the satisfaction of these basic needs, measures calculated to offer protection and a fair deal to the disabled, the handicapped, the weak, and the vulnerable will have to be devised. That man does not live by bread alone is a time-worn cliche, but a consideration of the quality of life has nonetheless to take account of and make adequate provision for the psychic and cultural needs of the people. Education, geared to social requirements, is now recognized as a fundamental need. Similarly, the peoples' right to participate in culture—in its enjoyment as well as in its enrichment —must be recognized. In this context we must also consider the question of the individual's autonomy and integrity as a human being. These have to be respected. Subject to the overriding considerations of public good and social responsibility, his freedom and privacy should be safeguarded. He should be assured leisure as well as the outlet for its creative utilization. Above all, members of the society should have equal opportunity for advancement and general development. Needs in this class pose a series of puzzling paradoxes. Central to this endeavour will be the creation of a new reward system that de-emphasizes material gains and invests gratification in doing what is good and just. One cannot make a fetish of individual freedom, which cannot normally be allowed to conflict with the general consensus regarding the common good. But at the same time the individual should not be reduced to the state of a soulless automaton. In a constricted and oppressive atmosphere human creativity has not been known to attain the heights it is capable of. Besides, it will be well to remember that dissent has its functional and positive aspects. Achieving the right mix of freedom and responsibility will pose problems that are delicate and difficult; ceaseless efforts will have to be made to discover ways of establishing a balance between them. Survival and cultural needs cannot be satisfied unless the integrative and adaptive mechanisms of society are kept alert and active. The individual must not be alienated

from his work and its products and social patterns should be so built that he learns to relate to fellow humans with whom he lives and works. There should be a well laid out strategy to promote community-ness and strengthen social cohesion. A conscious effort will have to be made to create consensus-building and conflict-resolving mechanisms. Thought will also have to be given to the entire range of problems relating to the generation and enforcement of norms of social discipline. Such an endeavour would assume the growth of social consciousness; purposive restructuring of roles and statuses; and the strengthening of consensus, cooperation, and discipline in society. It is difficult to visualize what may be termed a zero-change society. The universe in which human beings live keeps changing; each change, in its turn, generates stresses, problems, and conflicts. It is essential to have, therefore, mechanisms for scanning the social, the cultural, the psychological, and the physical environment. Modifications necessiated by these changes should be accurately identified and effectively attended to. Three different kinds of skills will be called for: skills in environmental surveillance, skills in forecasting problems likely to emerge, and skills in finding solutions to them through scientific, technological, and behavioural research. Finally, to sustain and enrich the quality of life the system will have to provide for the sharpening of problem-anticipating and problem-solving capabilities, for uninterrupted growth of scientific and technological research, and for the development of human engineering skills.

The situation in India today is indeed grave; the need for meaningful and purposive change is imperative. The grim context calls for serious reflection and purposive action. Both these components are of equal importance: reflection without action will be mere mental gymnastics, but action without reflection could spell disaster. The situation does not admit of easy solutions; the battles ahead will bristle with difficulties. Set patterns of thought and action are not easily amenable to change, institutional rigidities do not yield to innovation without resistance, and vested interests tend to cling tenaciously to private advantage. Political processes, it is not unlikely, will from time to time throw up the grotesque and the bizarre, such aberrations will cause major upsets. These are facts of life we must learn to encounter and resist--road blocks and speed-breakers notwithstanding, society will move gradually

towards change in the desired direction. This change is expected to come about for two principal reasons—because of man's urge for survival, and his capacity to adjust to new realities.

The challenges of A.D. 2001 are unprecedented in their range and complexity. They can be met only with a creative and dynamic response.

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