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Soviet Economy
The Mechanism of Planning

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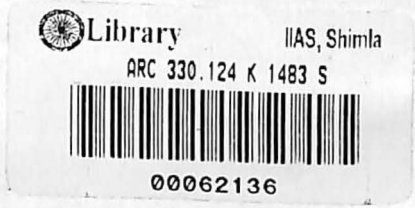
The authors of this publication, Prof. Andrei Karpenko (D. Sc. Econ.) and Leonid Pekarsky (Senior Research Worker of the USSR State Planning Committee Economics Research Institute), have many years' experience of the theoretical and practical problems of planning. They have written this book with the object of acquainting the reader abroad with the machinery of planning as it is practised in the Soviet Union.



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СОВЕТСКАЯ ЭКОНОМИКА: МЕХАНИЗМ ПЛАНИРОВАНИЯ

на английском языке

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CONTENTS

THE "SECRET": A CRISIS-FREE ECONOMY

If the reader does not happen to have a family to provide for, he is nevertheless sure to know from past experience of family life and from the community around him that there is hardly a family which does not discuss priorities in such matters as spending, purchasing things, extension of the home, etc. What is more, decisions made at a "family council" frequently do not satisfy all the members of the household equally.

The bigger the family, the more complicated it is to manage its "economy". The difficulties are greater still in such a "big family" as an agricultural co-operative. A host of problems arise here: what to sow, on what acrage and when, what to buy or to sell. And planning the economy of a nation is ever so much more intricate again. It is only natural, therefore, that one of the great problems exercising the mind of modern man is that of how to manage the economic development of society in a planned way.

Mankind is becoming increasingly aware of the pressing need for establishing ordered economic programmes: recent history shows that unified planning of the overall national economy constitutes

a powerful means for solving major social and economic problems.

Planning a national economy in line with the tasks society sets itself was first undertaken in the Soviet Union. The attention of the world was focused on the Soviet experience in economic planning. Since then planning has become an indispensable attribute of every country. The planned system of economic management established in the USSR made it possible to attain high and stable economic growth rates, turning the country, in a short time, into a powerful industrial power, increasing its national wealth many times over, and gearing production to the task of promoting the all-round development of the individual and ensuring the material welfare of each member of society.

Only sixty years ago–historically a very short span of time–Russia was an agricultural country whose industry lagged behind even the small West European nations. Prior to the Great October Socialist Revolution of 1917, Russia accounted for just over four per cent of world industrial output. Today the Soviet Union turns out twenty per cent of the world's total industrial product. The USSR's annual production now equals what was produced by the whole world only twenty-five years ago. The Soviet Union leads the world in the production of iron and steel, oil, coal and coke, cement, manganese and chrome ore, mineral fertilizers, cotton, flax, tractors, and diesel and electric locomotives.

High rates of economic growth provide for the constant raising of living standards. It is a feature of the socialist way of life that a worker is confident of the future, of the continued growth of his prosperity. His personal experience, his everyday life gives him this confidence, for underlying it is

an economy that is steadily developing according to plan.

Western propaganda has repeatedly treated the world to stories about various economic "miracles" –a West German, an Italian or a Japanese miracle. Taking advantage of favourable conditions in the world market, and making intensive use of the machinery of exploitation, it is a fact that the largest monopolies–the real masters of the capitalist economy–have managed to secure high growth rates at different periods, assisted in this by bourgeois governments which do their bidding.

But all these "miracles" were short-lived. The very essence of the capitalist system with its inherent competitive rivalry and conflict between labour and capital, gives rise to a cyclic, spasmodic development of the economy. This cannot be remedied without doing away with its primary cause–the capitalist ownership of the means of production. As the ebb follows the tide, so a period of economic growth in the capitalist world is followed by an inevitable decline; and the hardest hit by this decline are the workers who, in large number, lose what is most essential to them–their jobs and, consequently, the means of subsistence.

It is often held that statistics are boring, that they are dry and lack colour. But statistics can give food for thought, providing people with information and enabling them to make comparisons. For instance, in 1975 industrial production in Western Europe and the USA declined by 10 per cent, whereas in the USSR it went up by 7.5 per cent. The year 1975 is considered in the capitalist world to have been a most disastrous year with regard to the cost of living. By contrast, the same year saw a 4.2 per cent increase in the per capita real incomes of the Soviet population.

We have cited data for 1975. But if we take figures for the past five or ten years, or even longer periods, they would just as clearly testify to socialism's advantages over capitalism. For instance, between 1971 and 1975 industrial output in the USSR grew by an average 7.4 per cent annually, whereas the corresponding figure for the USA and the EEC countries was 1.2 per cent. In the quarter-century, 1950-1975, industrial growth rates in the USSR and other countries affiliated with the Council for Mutual Economic Assistance were more than twice those obtaining in the developed capitalist countries: 9.6 per cent and 4.6 per cent respectively. Between 1941 and 1975 industrial output in the USSR went up by almost 17 times, compared to 4.5 times for the USA. Comparison for half a century is even more striking: in 1921 the Soviet Union's production of steel was one hundredth that of the USA, whereas in 1975 Soviet steel output exceeded that of the USA by 30 per cent. And the gap is continuing to widen in favour of the Soviet Union.

Unemployment, inflation, under-capacity production, and the closing down of industries are things of the distant past even for the older generation of Soviet people. Every year sees further expansion, modernisation of industrial plant and introduction of new technology and, with this, improved working conditions.

Each year sees a substantial rise in the national income [1]—the main indicator of a country's economic potential and level of prosperity of its inhabitants. By 1976 it was 65 times the pre-revolutionary figure. At present Soviet industry produces in 60 hours an output equalling Russia's total for 1913. In the matter of housing, in 1976 2,200,000 Soviet families moved into new flats. This is 50 per cent more than

[1] The national income is regarded by Soviet statistics as the value of new output during the year, i.e., that part of the gross social product which remains after the deduction of raw materials, fuels, electric power, etc., used up in the process of production.

the number of flats built in the USA in the same year.

The figures quoted would seem sufficient to show that the "secret" of these high and stable rates of economic growth consists in the Soviet national economy being run on a planned basis, which was made possible by the socialisation of the means of production.

State planning of the national economy (within the nationalised sector, first and foremost) is a major prerequisite for the implementation by developing countries of large-scale socio-economic programmes.

This is what has prompted the authors of this work to describe the machinery of socialist economic planning in the hope that it will prove of value to countries embarking on the path of planned development of their economies.

CHAPTER I

UNITY OF INTERESTS, AIMS AND ACTIONS

1. The "Three Whales"

Social ownership of the means of production is the economic basis of state planning. The Soviet Union has no private enterprise, no capitalists, no private bankers. Every Soviet citizen is an equal co-owner of the country's wealth. This does not mean, of course, that one can take for himself whatever he thinks fit. Under socialism the principle of distribution is: "From each according to his ability, to each according to his work". The better the work performed by someone and the more he gives to society, the more he receives. Therefore, the social and economic interests of all workers are basically the same as are the means to meet them. This makes it possible for the State to direct the economy of the whole country purposefully, and plan its development effectively.

According to the ancient legend, people believed that the Earth rested on three huge whales swimming in a boundless ocean. Using this mythological image, we may say that the system of economic planning also rests on "three whales".

The first is social ownership of the means of production, which constitutes *the economic foundation for planning.* This form of ownership superseded the capitalist one as a result of the socialist

revolution, which transferred the wealth created by the working people into their own hands. Hence, power in the hands of the people constitutes *the political foundation of planning.* And, lastly, effective planning of the country's national economy necessitates the setting up of special planning agencies, or *a country-wide apparatus of planning,* which is our "third whale".

2. Necessity and Possibility

The need for people's co-ordinated activity is felt at all stages of development of social production. For the greater the number of people engaged in economic activity and the more advanced the technology employed, the greater is the need to co-ordinate their efforts in carrying out production tasks and the more imperative it is that this activity be consciously and deliberately planned.

What, then, is a planned economy? By this we mean an economy whose proportionate and balanced development is regulated from one centre and in line with a single country-wide plan. Below we shall try to show that it is social ownership of the means of production that enables us to secure a co-ordinated, balanced development of the national economy according to plan. So we can say that *the planning of the economy* presupposes a stable, continually balanced development of *all* its sectors.

The modern capitalist economy, which is marked by a high degree of the social division of labour, a complex interdependence of many lines of production and a high level of production concentration, stands in great need of planned regulation. In recent years economists, industrialists and bankers alike have been increasingly concerned to introduce a degree of order to the free enterprise system

in the developed capitalist countries with the aid of state development programmes.

But though the need for the planning of production is great, it cannot be realised in capitalist society, for the following reasons. If particular enterprises, firms, or monopolies do introduce some elements of planning in their activities, capitalist ownership of the means of production raises an insurmountable obstacle to economic planning carried out on the scale of the whole state. Capitalist production develops under the impact of the spontaneously changing relationships between demand and supply, and it is affected by the conflicting interests of the owners of concerns and monopolies, who are bent on defeating their rivals in competition and on obtaining a monopoly in the production and marketing of a certain commodity in order to secure super profits. It is highly improbable that any capitalist would ever agree to operate an unprofitable enterprise, even if this is required by a national economic plan in the interests of society as a whole. As we shall demonstrate later, such planning in the social interest is possible only in socialist society.

In other words, it is a **fundamental contradiction** of capitalism that prevents effective state planning of the national economy. This contradiction consists in the fact that the social character of capitalist production, involving tens and hundreds of millions of people, does not accord with the capitalist relations of production, based as they are on the appropriation by capitalists of that part of wage-workers' labour for which the latter are not paid.

It is precisely because the Soviet State is the owner of the means of production that it commands the actual prerequisites for controlling the economic processes in the country on a nation-wide scale.

But why is it that socialisation of the means of production (industrial enterprises, mines, the land, mineral resources), i.e., the transfer of these means into the hands of the people, becomes an indispensable condition of national economic planning?

To illustrate this more graphically, let us consider a very simple case. An individual can only plan his personal future with any assurance in relation to the objects in his possession or the objects he is

confident will come into his possession. Otherwise he will be not planning, but indulging in wishful thinking, or encroaching on things that do not belong to him.

All this applies similarly to human society. If society itself owns and disposes of its wealth, then national economic planning is feasible. In other words, the opportunity presents itself to shape the country's material future proceeding from predetermined objectives and taking steps and actions planned in advance. Putting it briefly, overall state planning constitutes an advantage society comes into possession of after private property has been replaced by public property.

To quote Frederick Engels, a founder of scientific communism: "The proletariat seizes the public power, and by means of this transforms the socialised means of production, slipping from the hands of the bourgeoisie, into public property. By this act, the proletariat frees the means of production from the character of capital they have thus far borne, and gives their socialised character complete freedom to work itself out. Socialised production upon a predetermined plan becomes henceforth possible." [1]

The sixty years' experience of the planned development of the Soviet economy bears out the correctness of these words.

Whether we wish it or not, social production develops in line with the economic laws inherent in a particular, historically shaped mode of production.

We shall deal with some of these laws later,

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[1] K. Marx and F. Engels, *Selected Works*, V. 3, M., 1967, p. 151.

now only noting that there is one leading, overriding law which is called the fundamental economic law.

3. Fundamental Economic Law

At first glance, it may seem that the organisation of the production process depends solely on the activity of managers, engineers and technicians. But this is far from being so. The organisation of production, even in a small industrial plant or a farm, is the job of a large number of people. Some are direct workers at the bench, others supply them with raw materials, fuel, tools and plant, and still others are engaged in the marketing of the output.

There are also invisible participants in this process—economic laws governing production, exchange, distribution and consumption of the material values. They exist and operate objectively, i.e., independently of whether people are aware of them or not, take account of them, or ignore them. In the latter case, inevitably, production is adversely affected. This is true of even small enterprises, not to speak of society as a whole, where ignorance of economic laws results in disorganised social production, crises and unemployment.

Economic laws arise and operate in definite socio-economic conditions. They change and disappear as these conditions change and cease to exist. People cannot decree, alter or remove them by themselves. They can only discover them, know them and use them to their advantage. As the material conditions of the life of society change and new relations of production replace old ones, many

old economic laws also lose their force, giving way to new ones.

According to the historical stages of their operation the following break-down is accepted for economic laws: 1) *general* laws for all socio-economic conditions (e.g., the law that the relations of production should correspond to the character of the productive forces. We mentioned this law when we spoke of the fundamental contradiction of capitalism); 2) *specific* laws, characteristic of the given mode of production alone (e.g., the law of surplus value operative only under capitalism); 3) economic laws *operative in several modes of production* (e.g., the law of value according to which production and exchange of goods occurs on the basis of the account taken of the expenditure of the socially necessary labour); 4) lastly, laws operative only *in one phase* of the socio-economic formation (e.g., the law of distribution according to work done (socialism) and the law of distribution according to one's needs (communism).

In the totality of laws operative in every mode of production there exists one law which expresses the main feature of the dominant relations of production. Such a law is customarily termed the *fundamental* economic law of the given mode of production. Thus, the need to provide the means of subsistence and support the life and activity of the tribal community and of each of its members underlay the fundamental economic law of the primitive-communal society. The law of surplus value whereby the capitalist gratuitously appropriates part of the labour of the wage-workers, reflects the essence of capitalism. *The fundamental economic law of socialism stipulates the ever increasing satisfaction of the growing material and cultural requirements of all the members of society secured through an*

uninterrupted expansion of social production and ever higher labour productivity.

In general outline, this law was formulated by the classics of Marxism-Leninism. Frederick Engels wrote that socialism creates "... the possibility of securing for every member of society, by means of socialised production, an existence not only fully sufficient materially, and becoming day by day more full, but an existence guaranteeing to all the free development and exercise of their physical and mental faculties." [1]

From the above, we may make the definition of the planned character of development more precise: it manifests itself as a balanced economic development deliberately maintained *to promote in the greatest degree the well-being and all-round development of all members of society.*

Stressing the objective possibility of managing a national economy according to plan, we should not lose sight of the following aspect: socialist society would have been unable to implement its fundamental law had it not translated that possibility into reality. It stands to reason that the socialist aim—the increasingly fuller satisfaction of the material and cultural requirements of the people—cannot be attained by the haphazard efforts of a multitude of enterprises and other production units. The State should purposefully co-ordinate their activity, set objectively determined targets for their proportionate development, and distribute, in accordance with them, labour, material and financial resources. In short, what is needed is deliberate, organised activity of people to run the country's economic life in accordance with the adopted plan.

Conscious guidance of the economy does not im-

[1] F. Engels, *Anti-Dühring*, M., 1975, p. 335.

ply freedom to embark on any economic policy one chooses: freedom to make a conscious choice of a particular way of development does not consist in an imaginary independence from the dictates of objective laws, but in knowing them, in reckoning with them. As Engels put it: "Freedom does not consist in the dream of independence from natural laws, but in the knowledge of these laws, and in the possibility this gives of systematically making them work towards definite ends.

Freedom of the will therefore means nothing but the capacity to make decisions with knowledge of the subject." [1]

It is precisely by planning the economy in a way that takes full account of the dictates of objective economic laws that the balanced functioning of social production is ensured. The requirements arising from economic laws are translated into planned solutions and guidelines. But before getting down to the scientific principles of planning, let us look for a moment at the techniques used in the planned management of the economy. [2]

4. Techniques of Planning

That the state national economic development plans reflect the major, scientifically determined proportions or ratio of future economic growth, constitutes the greatest of their assets. As a rule, proportions are fixed between the growth of industry and that of agriculture, the growth of the output of

[1] F. Engels, *Anti-Dühring*, M., 1975, pp. 136-137.

[2] Here, and throughout this work, the authors cite Soviet experience to illustrate a particular point, the Soviet economy having amassed the greatest planning experience of all the socialist countries.

the means of production (machine-tools, plant, etc.) and that of consumer goods (clothes, fabrics, footwear, TV sets, etc.), between the planned growth of output in the extracting industries and that in the manufacturing industries, etc. When defining those proportions, the planning agencies are guided primarily by the consideration of raising living standards and ensuring the people's welfare. In determining what capital construction to undertake–the building of a power station, or a new railway, or the development of new mineral deposits–the priority and expediency of every project is evaluated by its end effect, by the benefit it will ultimately yield to the working people. This approach stems from the fundamental economic law of socialism, and is entirely logical, for the land, mineral resources, forests, waters, mills and factories are owned by the people, who utilise them for their common benefit.

Plan balances are used as the main tool in the practice of state national economic planning. They serve to balance and correlate the current and anticipated national economic requirements on the one hand, and the resources to meet them, on the other. In compiling national economic plans, central planning agencies produce hundreds of such balance-sheets. These include balance-sheets for specific kinds of materials (coal, oil, steel, etc.), and balances for the labour force, finances, etc. These are all incorporated in the main, national economic balance in which all the basic proportions to be observed in the country's economic development are co-ordinated and interconnected.

Computerisation finds wide application in plan calculations. Economists use computers to calculate and compare the expected end results of various plans, and choose the optimal and most expedient version.

By and large, the sequence of work-stages in compiling national economic plans is as follows. First, the country's central planning bodies *draft the main guidelines for national economic development* in the next plan period (taking account of past experience, the prospects for social and economic development, and current and future requirements). Then the draft, which covers a five-year period, as a rule, is submitted for nation-wide discussion in the press, and at general meetings of workers in industry and agriculture, in research establishments, designing offices, and other offices and institutions.

The congress of the Communist Party of the Soviet Union (CPSU) thoroughly considers both the draft and the proposals and remarks made by the public, and adopts appropriate resolutions. Acting on these resolutions, the central planning agencies make balance calculations and determine the basic parameters–*the control figures*–of the future plan. These control figures are considered at factory level. Taking the figures as a basis, the collective [1] at a given enterprise then drafts its own production plan. Much scope is provided here for the exercise of local economic initiative since the control figures outline only the general tasks of the planned development of factories and farms.

After much co-ordinating and correlating work and the introduction of amendments on the basis of proposals made by local enterprises, the central agencies compile a *draft state national economic plan.*

The Supreme Soviet of the USSR–the highest body of state authority–reviews the draft: Soviet par-

[1] Collective (in Russian *kollektiv*) denotes the body of workers, engineers, technicians, economic managers and other employees working together at a Soviet enterprise.

liamentarians thoroughly examine the draft and make amendments and additions as they deem necessary. After it has been endorsed by the Supreme Soviet, the draft plan becomes *law*.

It is in place to add here that, proceeding from the balance calculations, the central planning agencies fix only the basic indices determining the future activity of local enterprises (range of items to be produced and their quantity, wage fund, etc.). Specific production issues are settled by the collectives at enterprises themselves. Suppliers and customers conclude agreements between themselves, forming a "portfolio of orders" and thus specifying their plans. Agreements contain provision for the material liability of the parties in case they fail to live up to their commitments (fines, reduction of the bonus /premium/ fund, etc.). This helps ensure that labour collectives strictly abide by the plan assignments evolved on the basis of the concluded agreements.

Planning is closely associated with *socialist emulation*. This nation-wide movement dates back to the first years of Soviet government. Already at that time, when there was widespread economic dislocation due to the imperialist war and subsequent struggle against the counter-revolution and military intervention, the workers and peasants, who had now become the masters of social production, initiated mass campaigns to fulfil their planned targets and assignments ahead of the scheduled time. Today, too, factory and farm collectives throughout the country take part in the labour emulation movement, finding ways of further increasing output, raising quality and reducing production costs. As a result, benefit accrues both to the nation as a whole and to the particular production collective, which receive bonuses for overfulfilment of the planned targets.

Thus, national economic planning is organised so

as to combine harmoniously centralised economic management with local economic initiative, scientific analytical work with the experience and initiative of the millions of the working people. This rules out the possibility of economic recessions, crises, inflation and unemployment because the general guidelines of economic development are determined scientifically and in compliance with the dictates of economic laws. The long-term plans drafted in keeping with these guidelines are all properly balanced. Business relations between enterprises and their mutual commitments are stipulated in detail in special agreements they conclude between themselves. Prices on output are fixed and regulated by the State in a planned manner. In a word, any plan assignments relating to the national economy as a whole, to an economic sector or to a particular enterprise become effective only after feasibility studies guaranteeing their fulfilment have been made.

Of course, what has been said above does not mean that the planned development of the economy is all plain sailing. Hitches and miscalculations can occur, and planned time-limits for launching new projects and supplying plant and raw materials are not always observed. As a result, difficulties crop up, giving rise to partial disproportions, idle operation or rush work. But these shortcomings are not typical occurrences, they are overcome, and national economic plans are, in the end, effectively implemented.

We have given a general outline of how the state plan comes into being. Now we pass to describing the *basic principles* of socialist planning.

CHAPTER II

PRINCIPLES OF SOCIALIST PLANNING

1. From Theory to Practice

As we have said in the preceding chapter, objective economic laws (the fundamental economic law, the law of the planned, proportionate national economic development, the law of distribution according to work done, the law of socialist accumulation, etc.) operate in socialist society. Unfortunately, space does not permit us to dwell at length on the operation of these laws. But for the interested reader this subject is dealt with in other Novosti Press Agency publications. Here we shall only remark that these laws provide the *possibility* of managing the economy of the country as a whole in a planned way. But to turn this possibility into reality requires deliberate effort, which consists, first, in acquiring a fuller knowledge of the dictates of economic laws, and, secondly, in putting them into practice.

We call economic laws objective because man cannot abrogate them or replace them with new ones. As we have noted, man can only acquire knowledge of these laws and put them to use. Take, for example, the fundamental economic law of socialism, which determines the aim of socialist production (the ever fuller satisfaction of the people's needs) or the law of planned, proportionate development, which defines the ways and means for attaining that goal. They do not become manifest by themselevs, but as

a result of the deliberate, purposeful activity of men united by basic common interests.

The capitalist is consciously bent on ousting his rivals and securing maximum profit for himself. Socialist society deliberately plans economic development to promote the interests of its *every* member. And the crux of the matter is that however shrewd and far-seeing the capitalist may be, he is powerless against the blind economic forces arising objectively as a result of the capitalist ownership of the means of production. And, by contrast, socialist ownership in an equally objective way creates conditions for co-ordinating the purposeful economic activity of every member of society in pursuit of the common aim.

The more profound the knowledge of the economic laws operating in socialist society and the more they are put to use, the more efficient is the functioning of social production. Transition from studying and knowing the dictates of economic laws to practical activity proceeds on the basis of *scientifically determined principles of planned economic management.* With their aid, the dictates of economic laws are translated into the language of planning.

These principles were developed by Lenin, the founder of the Soviet State. They have stood the test of the practical economic endeavour in socialist countries, fully demonstrating their scientific validity and socio-economic efficacy. The more important principles may be formulated as follows: *the unity of politics and economics in planned economic management; the scientific character of planning; effective and proportionate economic growth; democratic centralism; concern for environmental protection; co-ordination of the national economic plans of the socialist countries which are members of the Council for Mutual Economic Assistance.*

2. Unity of Politics and Economics

The principle of the unity of politics and economics in planning is expressed in society's economic progress being guided politically.

The policy of the working people is shaped by the Marxist-Leninist Party–the Party of Communists –the vanguard of Soviet society. Marxism-Leninism equips the Party with the knowledge of the laws governing historical development, enabling it to build the material and technical base of communism. Having a scientific understanding of social phenomena, of their basic trends of development, makes it possible to foresee the course of social processes and map out a correct political line of action, avoiding subjectivist decisions. In essence, the Party's direction of the economy is all-embracing, comprising organisational, educational and ideological work.

National economic plans are drafted in line with the programme documents and the directives of the Party Congresses, in which the Party stipulates the socio-economic tasks and the direction of development of the productive forces and of science, and of the nation's cultural development for a specific period of time.

Being of the working people, the Party has no interests other than their interests. For that reason, it directs the development of the country's productive forces in such a way as will provide for fuller satisfaction of the growing requirements of the population. Accordingly, national economic plans not only set out the basic tasks and aims with relation to the maximum satisfaction of the material and cultural needs of the people, but also define in an increasingly specific manner *the ways and means* of achieving this. The planning process is so devised as to view any economic solution through the prism of the na-

tion's social needs and the ways of satisfying them, while its end effect is judged by the main criterion—the greater well-being of the people.

3. The Scientific Basis of Planning, and Efficiency of Economic Development

The scientific substantiation of economic plans is of great and ever-increasing importance. Indeed, the planning and deliberate regulation of social production necessarily involves a profound and objective substantiation of the decisions made.

The scientific merits of plans are determined, first and foremost, by the extent to which they accord with the dictates of economic laws and with the existing requirements and resources of social development, and the extent to which the balanced proportions of planned economic growth have been efficiently ensured.

What, then, is the meaning of the notion "a scientifically based, efficient plan"? Such a plan should envisage proportions of development that will result in fulfilment of the targets set in the shortest possible time and with the least possible outlays of economic resources, while at the same time satisfying qualitative as well as quantitative requirements.

To illustrate, let us assume that the plan sets proportions that will ensure that agriculture meets industry's requirements in full in respect of raw materials. It would seem that balanced economic development is thus assured. However, if the possibilities of intensifying production are lost sight of (e.g., the better equipment of agriculture with farm machinery and fertilizers, or the introduction of progressive equipment and technologies in industry, expansion of exports and imports, etc.) both sectors of the

economy will expand only slowly and spasmodically. It transpires, therefore, that in determining economic rates of growth of particular economic sectors account must be taken of such factors as their requirements (existing and future), scientific and technological progress, the future structural pattern of the national economy, external economic ties, and many other factors.

The main tool here is the system of balance-sheets which, as we have noted earlier, enable us to weigh and correlate society's requirements and potentialities.

But before speaking of balances and their use, let us consider the social side of the concepts, "efficient plan" and "efficient production".

Since socialism's main aim is to satisfy as fully as possible the material and cultural needs of the people, efficiency of production is measured primarily by the extent to which economic potentialities have been efficiently used to attain social goals.

Things are quite different in capitalist society, where the basic motivation, the basic aim of the owners of the means of production is to secure the greatest possible profit. What to produce is of little concern to the big monopolists—profit-worship takes precedence in the capitalist world.

This distorted, inhuman, anti-social aim of production leads to a distorted assessment of its efficiency. The capitalist's main yardstick of efficiency is how much he can get for himself, and he does all in his power to increase that sort of efficiency by intensifying his exploitation. When profit-making dictates it, the capitalist will introduce automation and new technologies, throwing out his employees who have become "redundant". But he never gives up the "good old methods" of profit-making—exhausting the worker's physical strength. Disregard of the dictates of economic laws and the striving to promote one's own interests at the expense of others bring in their wake economic ills such as inflation, unemployment and other evils that go with them—malnutrition, disease and crime.

The working people of developing countries which have

embarked on the capitalist road of development are the hardest hit here. The multinational monopolies—the product of modern capitalism—seek to locate their labour-intensive enterprises in economically underdeveloped countries, where labour is relatively cheap and monopoly profits are the highest.

In the socialist world, concern for greater production efficiency is a nation-wide concern, for, as masters of the economy, the people work for themselves.

Any Soviet planned programme designed to raise production efficiency always takes account of the priority requirements of society, providing the allocations necessary to meet the workers' needs. But we shall deal later with social programmes, and for the moment turn to another major principle of planning.

4. Democratic Centralism

Democratic centralism is the basic organisational principle of planned economic management.

Democracy in planning means that all social groups, virtually the entire people, broadly share in the activity of planning. This is ensured through inclusion in the national economic plans of proposals and projects initiated by production collectives and individual workers.

Centralism implies the acceptance by subordinate economic bodies of planning decisions of superior bodies, it also implies strict observance of discipline in planning, and state control and supervision over the plan-fulfilment process. Centralism is ensured by the leading part given to a single national economic plan, to which the development plans of individual Republics, economic sectors and enterprises are subordinated.

Centralism is also associated with the directive principle, and with the addressed nature of the plan, the exact pinpointing of those responsible for the fulfilment of particular plan targets. The directive nature of the plan means that national economic plans, far from being mere estimates or predictions, are strictly binding on all government and economic bodies, the plan directives having the force of law. The addressed nature of plans reveals itself in that the projects and the targets planned are addressed to their specific executors. In other words, the plan not only indicates *what* to produce, *when* to produce and *in what quantity*, but also the *ones* who are to execute the planned assignments.

In planning practice centralism and democratism are harmoniously combined. Having become equal masters of the national wealth Soviet workers in their millions have become actively involved in the management of the economy, they have become directly interested in speeding up economic progress. Because of this, initiative from the shop floor does not interfere with the centralised plan, but serves to help compile the state plans in a most effective way, making it possible to utilise to the fullest extent available production reserves.

The forms in which the people participate in the drafting of state economic programmes are very varied. First of all, workers share directly in evolving the plans of the particular enterprise or organisation where they are employed. Many workers are members of Standing Production Conferences, which are a major form of enlisting workers' co-operation in running the affairs of industrial enterprises. Workers account for 65 per cent of the membership of such conferences, the remaining 35 per cent comprising engineers, research personnel and office employees.

In 1977 the Production Conferences advanced more than one million proposals to increase production and improve working conditions, and these were effectively implemented.

Collectives at enterprises are keenly interested in drafting exacting and high-output plans for their work, since higher returns to the State result in a rise in their incomes. For instance, at the Urals Turbo-Motor Works located in the old industrial city of Sverdlovsk, the allocations to the bonus remuneration funds, which are a result of higher wholesale prices for top-quality output, amount yearly to one million roubles. Greater, and above-plan, output, and higher productivity and profitability are encouraged in the same way.

Workers also take part in the planned management of the national economy by proxy through the representatives they elect to all bodies of state power–from local Soviets of People's Deputies to the Supreme Soviet. Over two million people are vested with this state power. People's deputies sit on special committees which scrutinise, amend, supplement, and finally endorse assignments of state plans.

In addition to this, nearly 30 million Soviet citizens are actively engaged in the work carried out by the Soviets, helping in a voluntary capacity in the challenging job of running the affairs of the State. Another nine million people work in the elected bodies of people's control [1], watchfully supervising the observance of state discipline and Soviet laws and

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[1] The system of public and state control as represented by party control, state control and also the control functions of trade unions, co-operative, youth and other public organisations, comradely courts, etc. The members of control bodies are elected at general meetings of workers in industrial enterprises and offices.

the performance of the various links of administrative and economic management.

And, lastly, every Soviet citizen has ample opportunity to take a hand in determining the main trends of development of the country's economy, since before it is endorsed each national economic plan is discussed on a nation-wide scale. To cite a recent example: at the beginning of 1976 the main guidelines of the national economic development for 1976-80 were discussed in this way. Workers and shop assistants, engineers and academicians, teachers and physicians–all put forward proposals relating to their work which were duly studied, generalised and, where appropriate, taken account of in the practical economic planning.

The principle of democratic centralism is clearly manifest also in the structure of national economic management bodies and in their relationships.

In compliance with the new Constitution, adopted after a country-wide discussion in 1977, the USSR Supreme Soviet forms the Government–the Council of Ministers, whose duty it is to draft current and long-term plans of national economic development, social and cultural programmes and the state budgets; these are then submitted for approval to the Supreme Soviet.

The Soviet Union consists of 15 equal Union Republics voluntarily united in a single multinational State. The planned management of the economy in these Republics follows the same pattern as in the State as a whole.

At all rungs of the government ladder the planning agencies operate as working units of the executive bodies of state power. The highest of such working units is the State Planning Committee under the USSR Council of Ministers (in Russian it is abbre-

viated as Gosplan, which means the State Plan). Gosplan carries out general state planning and supervises the plan-fulfilment process on a nation-wide scale. The Councils of Ministers of Union and Autonomous Republics and the Executive Committees of local Soviets of People's Deputies also maintain planning commissions. Ministries, departments, factories and most organisations and offices also have planning departments or sections.

Acting on party directives and taking account of the proposals submitted by Republics, Ministries and departments, Gosplan prepares draft current and long-term plans of the USSR's economic development. Its main tasks consist in determining on a scientific basis the basic directions of the country's economic development in the near and distant future, in working out the best general economic proportions and relationships (e.g. as between industry and agriculture, the output of the means of production and that of consumer goods, etc.), and in evaluating economic ties with foreign states and drafting proposals to expand mutually beneficial foreign trade and economic co-operation with them. Gosplan co-ordinates the planning activities of the Republics and of major economic and geographical regions, and prepares proposals on how to secure the best production collaboration between them. Doing research into and generalising planning practices, it exercises guidance over the job of planning in the country and strives to improve the structure of plan indices and the methods of plan compilation.

Gosplan works in close collaboration with all Ministries, and also with the State Committees under the USSR Council of Ministers for Construction, for Material and Technical Supplies, for Science and Technology, and for External Economic Ties.

The Ministries heading particular economic sectors have great powers in the sphere of planning, their main task being to study the demand for the output of the given sector, to control the plan-fulfilment process, and to increase production in the interests of the national economy and the population.

Gosplans in the Union Republics carry out similar functions. The structure of their agencies takes into account the special features and scale of production in each particular republic. Thus, the Gosplan of the Russian Soviet Federative Socialist Republic (Russian Federation) has territorial-production departments which handle the affairs of the Republic's largest economic and geographical regions. Planning the development of the economy, the Republic Gosplans proceed from the proposals made by Republic Ministries and departments and by local planning bodies.

Local planning commissions act under the guidance of the Executive Committees of the Soviets of People's Deputies of the respective administrative units (Autonomous Republics, Territories, Regions, Cities, Towns and Districts). These commissions plan the development of enterprises directly under the control of particular Soviets of People's Deputies, and take a hand in organising the plan fulfilment process at Union or Union-Republic enterprises located in their respective areas.

The principle of democratic centralism presupposes *the combination of sectoral and territorial approaches to national economic management.* The proper allotment of functions and responsibilities amongst the nation-wide, sectoral and territorial planning agencies enables them to pursue a single economic and technological policy and to develop comprehensively the economy of the Union Republics and large economic regions bearing in mind

their production specialisation, natural conditions and historical features.

Practice shows that this approach contributes to the efficient tapping of natural and labour resources, making it possible to use to the full the advantages of the territorial division of labour and to closely co-ordinate the economies of the Republics and economic areas within the framework of the country's single national economic complex.

All enterprises and organisations located within the area of a particular region or territory, independently of what Union Ministry or department they belong to, report the basic parameters of their plans to local planning commissions, thus making it easier for them to calculate indicators of overall economic development and to calculate labour balances, ensuring full employment of the population.

The humanism of socialist society is expressed also in the fraternity and mutual aid of the different nationalities of which it is comprised, all of whom are equal. In tsarist Russia, industrial growth, science, and culture were concentrated in the central and Western regions of the empire. The vast border regions (especially Central Asia, Siberia and the Far East) had practically no manufacturing industry. The underprivileged peoples there eked out a miserable existence, being ruthlessly exploited by tsarist officials and local feudal lords. In the years of Soviet rule all the Republics have reached a high level of development, with democratic centralism playing a big and positive role as a fundamental principle governing their planned economic development.

5. The Plan and Environmental Protection

Statistics show that the volume of goods and services produced in the industrially developed countries of the world doubles every 15 years. A corres-

ponding increase is observed in the amount of waste products from industrial production, many of which pollute and poison the atmosphere, rivers and oceans, and the land.

It is common knowledge, for instance, that fish have long since disappeared from the River Mississippi, whose waters have become poisoned. Not infrequently, people in the large industrial centres of the capitalist countries have to receive treatment for poisoning by car exhaust fumes. The crew of the Kon-Tiki raft observed clots of congealed oil over vast areas of ocean. Sailors come across dead penguins, the victims of oily waters brought by ocean currents to the shores of the Antarctic Continent.

The Soviet Union, whose territory amounts to 22.4 million sq. km, possesses rich reserves of minerals and timber, and immense land and water resources. And since these natural resources and industry are in the hands of society, it is possible to plan their rational utilisation on a country-wide scale. We can now calculate precisely the natural resources to be used and replenished. Rational use of natural resources occupies a major place in the socialist approach to the planned management of the economy.

Vast state reservations have been created in various parts of the country, and forests and shelter belts, etc. are planted on a large scale. Limits have been set for the permissible concentration of harmful substances in the atmosphere. It is prohibited by law to put new industrial projects into operation before the construction of their purifying systems and installations have been completed. Some large factories and works have been moved out of the big cities, but much remains to be done and difficulties and problems are encountered at every step. To illustrate the magnitude of the task, the draining of non-purified waters from the cities and towns lying

in the basins of the rivers Volga and the Ural will be fully stopped only by 1980.

Environmental protection measures form part of the national economic plan, and they are carried out with funds specially allocated for the purpose. In the 1976-80 period spending on these needs will amount to 2.7 per cent of the country's national income. The plan for these years envisages a complex of scientific, technical, economic and organisational measures to protect the world we live in.

The socialist countries act in unison in solving the problem of protecting the biosphere of our planet. A common programme of co-operation of the CMEA countries up to 1980 has been adopted, and is being effectively implemented. But it is clear that no group of states, however powerful their economic, scientific and technological potential, can be fully successful in coping with such a formidable problem by themselves. The aerial, sea and ocean currents, and rivers which flow through a number of states, bring with them hazardous pollutants, damaging the environment perhaps many hundreds of miles away from the source of their discharge. The problem of environmental protection is therefore a global one. Effective practical results can only be achieved in this sphere by the joint and vigorous efforts of specialists from all countries and of the world public.

Next we shall deal with the co-ordination of state plans of socialist countries on an international scale.

6. Co-ordination of National Plans

One of major approaches used in socialist planning presupposes co-ordinated drafting and fulfilment of the state plans of the countries affiliated with the Council for Mutual Economic Assistance (CMEA). An especially big role in this great and

complex job is played by the Comprehensive Programme of Socialist Economic Integration, adopted by the CMEA in 1971.

The economic conditions which led to the extension of the operation of the law of planned, proportionate development to economic relations between states arose gradually, as the objective prerequisites for this took shape.

One major prerequisite is the common economic basis of the socialist countries–social ownership of the means of production. This provides a reliable foundation to combine harmoniously the national and international interests of the peoples of these countries. The abolition of private property and consolidation of social ownership of the means of production brought about a new type of international division of labour–the international socialist division of labour, based on the equality, respect for sovereignty, friendship and mutual benefit of the participating countries.

Each country supplies to the socialist world market part of its output in accordance with agreed plans.

Plan co-ordination proceeds on the principle of democratic centralism. Internationally, this is reflected in the setting up of the socialist countries' collective economic organisations: the CMEA, the International Bank of Economic Co-operation (IBEC), the International Investment Bank (IIB), and others.

A feature of democratic centralism as applying to the activity of the CMEA consists in the fact that the joint efforts of the member countries are co-ordinated from one centre on the basis of decisions made collectively. Moreover, each country is free, in line with its national interests, to decide in which joint ventures and projects it will participate.

Adoption of a long-term programme of socialist

economic integration gave a fresh impetus to the plan-co-ordination process, further interlocking and mutually complementing the national economies of the member states. Thanks to this, in the five years following the endorsement of the Comprehensive Programme more was done in the sphere of economic co-operation than in the preceding decade. This refers both to the scale of the mutual division of labour and to the organisational forms in which it is carried out.

Specialised or co-operative production in the leading lines of production of the CMEA countries is an increasing trend. High rates of growth are being registered in CMEA mutual trade (in 1971-75 it almost doubled, compared with the preceding five-year period, amounting in 1975 to 70,000 million roubles). This has resulted in stable and swift rates of development of the national economies of the CMEA members. For example, the national income of the CMEA countries taken as a whole rose between 1971 and 1975 by 36 per cent, whereas in the advanced capitalist countries it went up by only 14 per cent, and by 12 per cent in the case of the EEC countries. Labour productivity in the CMEA countries is growing apace—higher productivity currently accounts for 80 per cent of the total increment in industrial output. On this basis, the standard of living in all the fraternal nations is steadily rising. Per capita real incomes in the countries of the socialist community increased from 1971 to 1975 by nearly 30 per cent.

The CMEA is not a closed international organisation, and members co-operate on a broad scale with developing and other countries. The socialist community has put an end to the monopoly of capitalist countries not only as regards the selling of capital goods to developing countries, but also as regards

the purchase of their traditional exports. Co-operation carried out along these lines helps the young states to win genuine political and economic independence. Co-operation with the socialist world provides the developing countries with the possibility of building their national economies in a planned way, and accordingly of implementing social programmes for improving the living standards of the broad mass of the people.

Whereas in 1955 the USSR had concluded intergovernmental agreements on economic and technical assistance with only two developing countries, today it has such agreements with 56 developing countries in Asia, Africa and Latin America. What is most important here is the stable nature of the co-operation offered by the Soviet Union to Third-World countries. The USSR has concluded long-term agreements on economic and technical co-operation (for 10-15 years) with India, Afghanistan, Syria, Iraq and Iran.

Long-term agreements constitute a form of co-operation most suitable for economic planning, for it is possible to plan in advance the measures necessary for the fulfilment of mutual economic commitments.

The experience of the socialist countries vividly demonstrates that the attainment of economic independence demands the creation of a country's own industrial base, especially the heavy-industry sector.

Relying on the growing strength of their state-owned industry, newly independent states are able to implement large-scale planned programmes, and thereby forge ahead along the road of economic progress, solving their social and economic problems in a purposeful way. Figuratively speaking, the planned approach transcends the boundaries both of the socialist states, and of those states which have oriented themselves on the planned regulation of their economies.

The CMEA's international prestige is steadily growing. This was strikingly borne out by the Thirtieth CMEA Session (1976), which, besides the CMEA countries and the delegation from Yugoslavia was attended by delegations from Angola, Vietnam, Laos and the Korean People's Democratic Republic, in the capacity of observers. The session endorsed agreements concluded earlier on co-operation between the CMEA and Iraq, and between the CMEA and Mexico.

It is in place here to quote an excerpt from the speech given at the session by Aleksei Kosygin, Chairman of the USSR Council of Ministers:

"That the international contacts of the CMEA, especially those with the developing countries, should grow, is natural. Our experience in establishing economic relations of a new type between states within the framework of the CMEA acquires practical significance also in a broad international context. At a recent UNCTAD Session held last May in Nairobi, our countries, acting from the concerted position worked out in detail in advance within the CMEA framework, demonstrated in deed their readiness to support the legitimate strivings, the determination and resolve of the newly-freed states to rid themselves of imperialist exploitation and dispose of their national wealth themselves.

"The CMEA countries build their relations on a just, fully equal and mutually beneficial footing, displaying respect for the national interests of every country and combining these interests with the common interests. This practice provides a basis for the development of relations between the CMEA countries and developing states on a large scale, meeting the interests of both sides."

CHAPTER III

FROM THE GOELRO PLAN TO THE 10th FIVE-YEAR PLAN

The practice of economic development in the socialist countries and in young states that have freed themselves from colonialism and have embarked on the socialist transformation of social life has conclusively demonstrated that Soviet planning experience is of considerable assistance in solving socio-economic problems in line with the specific conditions and stages of social progress.

We therefore deem it useful to describe, if only in brief, the way the system of national economic planning took shape in the USSR, the forms of planning work used at the various stages of socialist construction, and how the methods of planned economic management were improved.

1. Laying Down the Groundwork

The machinery for the planned development of the economy began to take shape immediately after the establishment of people's power, gaining momentum as the means of production were gradually made the property of the people. In the early months of the Great October Socialist Revolution of 1917 the Soviet government nationalised a large number of big

industrial enterprises. At the end of 1917 the private banks and the financial system as a whole were transferred into the hands of the State; and by the spring of 1918 the basic industrial sectors, the railways, and shipping were nationalised. By mid-1918 the State was in possession of some 2,000 large industrial enterprises, employing over half the country's labour force.

One of the first decrees of the people's government was the decree on land, which declared that land was the property of the State and was given for perpetual use to those who tilled it. In addition to the land, mineral resources, forests and waters expropriated from the exploiting classes, farm implements and buildings were also confiscated.

The peasants were given the free use of the lands confiscated from the big landowners, capitalists and the Tsar's family, and state-owned land was also given for their use. Thus, land henceforth ceased to be a means of exploitation.

Of paramount political and economic significance was the nationalisation of foreign trade. The economic policy pursued by the Soviet government deprived the Russian bourgeoisie of its economic power and ensured, in a very short time, the predominance of social ownership in the key sectors of Russia's national economy.

Ever since, the country's national economy has been developed to promote the interests of the working people, with due account being taken of the objective laws of socialism, specifically the law of the planned and proportionate development of the national economy. A planning mechanism had to be devised, however, which meant that bodies of state regulation, control and management of the country's economic development had to be set up. As a

first step, workers' control was introduced at enterprises still privately owned immediately after the Revolution. Elected committees of workers controlled all the activities and the production side of these enterprises, primarily the disposal of the output and materials, working conditions, financial affairs, etc. Workers' control was introduced to perform a twofold task: to combat bourgeois subversion and to regulate national economic activity in a planned way. The system of workers' control served as an excellent practical school of training for rank-and-file workers to become economic managers.

To run the nationalised enterprises a Supreme Council of the National Economy (SCNE) was set up in December, 1917, the first state body of planned economic management. It gave direct guidance to all state-owned enterprises in industry, and regulated the activity of remaining private enterprises through the workers' control bodies.

At the same time SCNE was the first *central planning* agency, one of its main tasks being to work out the general standards to be used in regulating the economic life of the country, and in guiding and unifying the activities of central and local economic organisations. It co-ordinated the work of all the People's Commissariats (now Ministries) of the economy, especially with regard to transport and communications, agriculture, finances, and food supplies.

At about the same time, regional, provincial and uyezd [1] Councils of National Economy were set up, and given powers to manage all economic affairs in their respective areas in keeping with the national interest and local interests. Bodies of the state statis-

[1] Small administrative and territorial unit at the time.

tical system, which came into being in 1918, played a big role in introducing and strengthening planning of the economy.

In the conditions of economic dislocation then obtaining the Soviet State encountered a host of difficulties and problems. The most urgent need was to overcome the subversive activities of the big bourgeoisie and bring order into industrial establishments. The immediate task facing all economic and statistical bodies was to introduce a sound national *accounting system and control* over production and raw materials, and especially control over fuel and the foodstuffs.

The transfer of the leading sectors of the economy to social ownership and the setting up of state management bodies meant that drafting could proceed of the first plans of economic development of specific lines of production and the country's individual industrial areas. The Supreme Council fixed approximate targets for coal extraction, iron and steel output, manufacture of farm machinery and procurement of grain for 1918. The Committee for State Construction under SCNE compiled plans for capital construction and public works in particular economic sectors.

In the conditions of the Civil War and the imperialist foreign intervention, which began a few months after the victorious October Revolution, plans of this kind mapped out separate urgent assignments for meeting the needs of the country's defence. Production was controlled by the SCNE committees (for metals, fuels, etc.) and goods were distributed by them in a centralised way. Only a few economic indices were planned. This was dictated by the grim reality of that time, for the principal task of the first state plans was to help overcome

economic dislocation and secure the essential fuel and grain supplies for the army combatting the interventionists and for operating enterprises and the starving population in the country's largest industrial centres.

The imperialist war and the Civil War virtually devastated the country. In 1920, industrial output fell to one-seventh of what it had been in the pre-war year of 1913, and the country's industrial labour force was halved. There were especially big reductions in iron and steel output, the extraction of iron ore, coal and oil, and in power generation. In agriculture the sown acreages decreased by one-third as against 1913. Industrial crops occupied an acreage only 6-8 per cent of that of 1913. The gross harvest of agricultural crops fell to half the pre-war figure.

All this was reflected in the production of consumer goods, with a drastic fall in the output of light industry and the food industry. The output of cotton fabrics was slashed to only 5 per cent, that of wools to 17 per cent and of flax to 14 per cent of the pre-war level.

In these desperate conditions the mixed economy of the country had to be radically reconstructed and a socialist mode of production introduced. Long before the proletariat won state power, Lenin, the founder of the Soviet state, had pointed out the tremendous significance of large-scale heavy industry and electrical power generation for the building of socialism in Russia. Lenin saw that the industrialisation of the country was an indispensable condition for winning economic independence and building the economic base of the new society, and under his guidance the GOELRO plan, or the plan for the electrification of the country, was compiled in 1920

by the State Commission for the Electrification of Russia (GOELRO for short).

The GOELRO plan represented not only programme of power generation. It was the core, the backbone of an all-round expansion of the economy on the basis of mechanisation. Gradually, a new structure of the national economy evolved, with the emphasis on heavy industry as the foundation for the development of the economy as a whole and the strengthening of the country's defence capability (the latter was especially important in view of the hostile capitalist encirclement of the young Soviet Republic).

The magnitude of what was to be accomplished under the GOELRO plan was tremendous for that time. It was planned not only to restore the pre-war industrial output in one decade, but to double it. Output of the means of production was to increase by 120 per cent, and of consumer goods, by 50 per cent.

Understandably, the methods of drafting the GOELRO plan were far from perfect, there being no experience of nation-wide planning at that time. However, even in that first long-term plan the fundamentals of the balance method of planning were utilised as the basic means of ensuring balanced economic development. In drafting the plan balances were calculated for fuels, metals, basic kinds of machinery and plant, and building materials.

The GOELRO plan was fulfilled ahead of schedule. It was a plan indicating only the main trends of economic development, however. It was continually supplemented and made more specific by current, short-term plans. At first these were annual plans for particular economic sectors, but later (1925-28) annual control figures were compiled for the entire national economy. The latter plans grad-

ually turned into more detailed and comprehensive programmes of economic growth.

Mention should also be made of the fact that at that time the economic situation obtaining in the country prevented the working out of economic programmes that would be binding on all national economic units. The State did not yet control the entirety of production assets, and for that reason the government could influence a sizeable portion of the economy (represented by small private enterprises in industry, trade and services, and non-co-operated farms) only indirectly, through taxation, purchasing prices, etc., being unable to hand down planned assignments for them.

As the socialist sector of the economy expanded, so did the possibilities for developed centralised planning. Taking advantage of their large-scale and mass production, state-owned and co-operative enterprises steadily increased their share of output at the expense of small private enterprises. In 1928 the socialised economic sector accounted for 66 per cent of the country's basic production assets (production buildings, machine-tools and other machinery and equipment), and for over 80 per cent of the gross industrial output.

By that year, the restoration period was completed. Thanks to the dedicated labour of the people, freed from exploitation, the Soviet economy already in 1928 exceeded the pre-war level of development. The national income was 19 per cent higher than in 1913, gross industrial output was 32 per cent higher, and agricultural output, 24 per cent. As a result of the implementation of the GOELRO plan, there was a sharp increase in power production in the country, and former capacities in the machine-building industry were restored and expanded.

The State was now in a position to embark on a comprehensive and long-term planning of the national economy. A new stage began in developing the forms and methods of state economic management.

2. The First Five-Year Plans

The task of industrialising the country and modernising all national economic sectors required a new form of planning–planning for a five-year period. Compared with annual programming, this form of planning marked a qualitatively new step in national economic management. We have mentioned elsewhere that the choice of the five-year period was not accidental. The Five-Year Plans made it possible to take more thorough account of the country's needs and the trends of scientific and technological progress. They successfully combined current planning with the planning to attain longer-term objectives in the economic, social and cultural life of the nation.

This stage of development of economic planning in the Soviet Union (1928-41) comprised the first three Five-Year Plans, which made it possible to attain high rates of economic growth, permitting the country to pass from the stage of a mixed economy to a single socialist national economy. As regards organisational methods of planning, this period was marked by an enhancement of the role of the single state plan and its more extensive character, better methods used in its drafting, and the creation of a clear-cut system of economic indices for enterprises, economic sectors and areas, and a wider use of balance calculations in the shape of physical and value balances. In contradistinction to

the annual control figures employed earlier, the Five-Year Plans had more strictly defined aims of socio-economic development, specified by a greater number of indices.

In the *very first Five-Year Plan* (1928-32) two basic and closely related tasks were advanced: to accelerate the industrialisation of the country and to reorganise agriculture along socialist lines.

It should be mentioned here that a discussion ensued in defining the general line of the Five-Year Plan. Alongside the policy of industrialisation through the accelerated development of heavy industry, there was another school of thought which favoured intensive production growth through boosting light industry. The proponents of that policy put forward what at first glance seemed to be compelling arguments. At that time the country was in dire need of clothing, footwear and household goods. There was a great influx of former peasants into the big cities such as Moscow, Leningrad, Kiev and Kharkov. Not all new urban dwellers could find jobs, for the growth in the number of jobs available lagged behind the growth of the labour force. The number of unemployed in the first years of that Five-Year Plan period exceeded one million.

In this context, the proposals to concentrate resources on the development of light industry and put an end to the commodity hunger in the towns and provide more goods for the countryside, thus contributing to a bigger agricultural output, appeared to have great merit.

However, this path of industrialisation was turned down. The young State set itself a different major task—that of creating a strong heavy industry as the basis of the whole economy, including light industry and agriculture. Without such a basis, the country would remain a raw-materials appendage to the

developed capitalist countries, could not free itself from complete dependence on them and could not resolve its social, economic and defence problems.

Experience fully vindicated this policy of industrialisation of the economy on the basis of the utmost development of the production of the means of production. The industrial potential built up in the first Five-Year Plan period served as a springboard for vigorous economic growth and the reconstruction of society along socialist lines.

A programme of construction constituted the substance of the first Five-Year Plan. More than three-quarters of total industrial capital investment was channelled into heavy industry. The Five-Year Plan period saw the creation of new branches of industry: tractor-building, truck and car manufacturing, machine-tool building, an aircraft industry, instrument-making, farm-machinery industry, and aluminium and chemical industries. The oil and iron and steel industries underwent radical reconstruction.

The expansion of heavy industry was effected largely through the construction of huge plants. The setting up of new large-scale enterprises made it easier to apply technically more advanced projects and to make use of the latest methods consequent upon the scientific and technological progress of the day.

Industrial expansion entailed an ever growing demand for engineers and skilled workers. To meet that demand an extensive system of higher and specialised secondary schools was set up in accordance with the assignments stipulated in the plan. In the four years of the Five-Year Plan the total number of specialists doubled, reaching an appreciable figure for that time—one million qualified specialists. Skilled workers were trained in the course of industrial construction and the launching of new factories.

A total of 3.5 million new workers took up jobs in industry and construction.

The overall planned target for industrial output was reached in four years and three months.

The accelerated development of heavy industry, and especially machine-building, paved the way for the mechanisation of farming. The socialist sector in the countryside developed swiftly due to the all-round assistance provided by the State (which extended loans to agricultural co-operatives and state-owned farms on easy terms enabling them to purchase farm implements, seed, etc.).

Seeing for themselves the advantages of large-scale farming based on co-operative ownership of the means of production, the peasantry began to join the collective farms on a mass scale. In 1932 the socialist sector accounted for 78 per cent of the land under cultivation, and for 84 per cent of the marketed grain output. Collective farms and state-owned farms became the country's major suppliers of grain.

Industrial expansion and growing stocks of agricultural produce led to a greater output of consumer goods, which practically doubled. New light-industry and food-industry enterprises were set up, with new lines being put into production (knitted-goods and canned food). Many old enterprises were expanded or radically reconstructed.

The increased commodity stocks resulted in a considerable expansion of retail trade and better provision of the urban and agricultural population with consumer goods. State-owned and co-operative commercial enterprises gradually replaced the small private retail traders, who could not compete with the large-scale and well-organised system of trading run by the state-owned and co-operative organisations. The latter could place mass-quantity orders

with industrial enterprises, move stocks about the country as required, and cut down on costs by increasing the volume of trade turnover. In the first four years of the Five-Year Plan trade through the state-owned and co-operative trading network nearly doubled. People in both town and countryside began to dress and eat a great deal better than before, and their living conditions generally improved.

Thanks to the planned swift growth of social production unemployment was done away with for ever: since the end of the 'thirties the term "unemployed" has had no application in the Soviet Union. This is due to the fact, which we have mentioned before, that the plan secures a balanced growth of production commensurate with the available resources, including labour. In other words, unemployment is an impossibility in an economy developing according to a single plan which is binding on all national economic units.

To sum up, the fulfilment of the first Five-Year Plan resulted in the transformation of the Soviet Union from an agrarian into an industrial state with complete economic independence. The country's defence capability rose sharply. There was a substantial rise in the living standards of the working people and in the general cultural level. But there was still a considerable distance to go to meet the needs of the population. The tremendous headway made in just a few years in the realm of mechanisation could not but affect adversely the growth rates in the production of consumer goods, the latter being considerably below those for heavy industry. However, the Soviet people realized that they had to restrict their demands temporarily, knowing that by their efforts they were promoting their own cause—the winning of economic independence for their country.

Because of the scarcity of consumer goods at the disposal of the State, and with an eye to their just distribution, a system of rationing for foodstuffs and consumer goods was introduced at the close of the Five-Year Plan period (the people were issued special "coupons", each of which entitled the holder to buy a certain quantity of food or consumer goods). But as the output of foodstuffs and consumer goods grew, unlimited sale of some goods was introduced, and by 1935 the system of rationing was abolished altogether. In terms of industry's share in the national economy and the share of heavy industry in total industrial output, the Soviet Union had caught up with countries like Germany and the USA. There was now an opportunity to bring about a big improvement in the living standards of the population. Accordingly, the objective of the *second Five-Year Plan* (1933-37) was to complete the technical reconstruction of the national economy while at the same time securing a substantial rise in public consumption.

It should be stressed that by that time better conditions had been created to achieve the above objective in a planned way: the State was now in a position to control most economic processes directly, for socialist ownership of the means of production wholly dominated the national economy.

This, of course, made it possible to improve planning methods, to employ more clear-cut plan indices and to include in the plan new sectors of economic life.

As regards their content, the first and the second Five-Year Plans included the following:

– general overall plan indices (gross product, national income) and the major proportions for economic growth (as between industry and agriculture,

output of the means of production and of consumer goods, etc.);

– production and construction plans for individual branches of the economy;

– social programmes (improvement of living standards, growth of wages and salaries, housing construction and communal and cultural projects);

– the pattern of the location of the productive forces throughout the country.

The second Five-Year Plan was worked out more thoroughly than the first and in greater detail. Whereas the plan for 1928-32 contained specific assignments only for the biggest of the industrial enterprises, accounting for some 60 per cent of total industrial output, the Five-Year Plan for 1933-37 embraced industry as a whole.

The basic targets of the second Five-Year Plan were also reached ahead of schedule. Technical reconstruction of the economy was completed. By 1937 the output of enterprises built or reconstructed during the first and the second Five-Year Plan periods accounted for more than 80 per cent of total industrial output. The latter increased by 120 per cent, while agricultural output, by 1937, was 50 per cent above the 1932 figure. Labour productivity registered a considerable increase in all spheres of the national economy, making it possible, in the second Five-Year Plan period, to double the real wages and salaries of Soviet employees. Collective farmers' incomes increased by 170 per cent.

In the first years of the people's rule the favourite theme of Western propaganda was the predicted failure and imminent collapse of the Soviet system. For example, in the course of 1919 alone, the **New York Times** carried over 20 items predicting a crisis for the Soviet government in the forthcoming week, month, etc. The bourgeois world mocked the aims of the first Five-Year Plan. But before

long its sneering attitude gave way to consternation and anxiety.

And just as fifty years ago, capitalist propaganda repeatedly predicted the unavoidable and imminent collapse of the Soviets, dismissing the first Soviet Five-Year Plans as nothing but wishful thinking and fiction, so, today, it seeks to belittle and denigrate in every way the gains of those Third-World countries which have opted for the socialist path of development and are now proceeding successfully with the planned reconstruction of their economies and the winning of genuine economic independence. The imperialists stop at nothing in their attempts to bring pressure to bear on the young states: economic blockade, blackmail, intimidation, threat of military intervention—all are brought into play. Ideological subversion is also not forgotten. But the example of the many millions of people in the socialist world is living proof to the peoples of our planet that the future belongs to the new society.

The ruses and fabrications of capitalist propaganda notwithstanding, the overwhelming majority of the working people in the countries which have embarked on the non-capitalist road of development can see for themselves the advantages which stem from the socialist transformation of society.

The *third Five-Year Plan* (1938-42) continued the course of strengthening the country's industrial base. It was denoted as the plan of chemistry and special-grade steels. It was planned to increase total industrial output by 92 per cent, and the output of heavy industry by 107 per cent, and of chemicals by 137 per cent. The planned increase for agricultural output was 52 per cent, and the figure for public consumption was set at 50 per cent.

By and large, the national economy was to be restructured in such a way as to give priority to the economic sectors determining technical progress, thereby raising productivity and with it the living standards of the population.

Good progress was made with all planned assignments, but on June 22, 1941 Nazi Germany's unpro-

voked attack on the Soviet Union cut short the peaceful labours of the Soviet people.

Before dealing with planning practices under wartime conditions, it should be noted that the socialist mechanism of planned economic management had asserted itself as the predominant tool of management in all sectors of the national economy before the war broke out. It had been responsible for the fast and crisis-free growth of the national economy prior to 1941. The country had built up an independent economy and a highly developed industry equipped with the latest plant and technology of that period. Farming was based on large-scale state-owned and socialist co-operative production. The planned system of managing the economy had resulted in a tremendous advance in social terms. The cultural backwardness of the population had been overcome in a historically short space of time, and all the peoples inhabiting the Soviet Union had been given equal opportunities for social and economic development.

3. Economic Development During the Great Patriotic War

In the war period of 1941 to 1945 planning methods in the country underwent a substantial change. New, emergency planning patterns were introduced to modify national economic proportions and move industry to the rear. The plans were made more operative and for a shorter term.

Annual mobilisation plans, broken down to quarterly and monthly plans, played a major role in the war years. It was the function of the State Council for Defence–the supreme economic body in wartime–to fix the assignments for the main lines of

war output to be directly fulfilled by particular industrial enterprises. The system of centralised planned management enabled the swift changeover of the country's economy to the war needs.

The country's powerful economic potential, created thanks to the policy of industrialisation, was a major factor in defeating the enemy. It withstood the severest of all tests in the Soviet Union's history.

The Soviet people displayed mass heroism both on the fighting front and in the rear. The workers (mostly teen-agers and women who took the work places of their brothers, husbands and fathers fighting at the front) worked one-and-a-half or two shifts a day. They strained themselves to the utmost to help rout the fascist invader, overfulfilled the plan quotas, voluntarily donated part of their wages for the construction of tanks and planes, sent gift-parcels to the front, and gave blood to the war hospitals for transfusions.

As a result, the Soviet war industry, which had lesser production capacity and a curtailed base of strategic raw materials, produced greater output than the economy of Nazi Germany.

By the half-way point in the duration of the war, the Nazis had lost their military advantage in equipment, and towards the end of the war the Soviet Union had three times as many tanks and self-propelled guns as the enemy, 8 times the number of aircraft, and 9 times the artillery and mortars.

As the occupied areas were liberated, plans to reconstruct and develop them began to be worked out. After the break-through on the war fronts in 1943, planning and economic bodies started the preparation of tentative plans for the restoration and development of particular industrial branches in 1945-46. These applied to coal, iron and steel, non-

ferrous metals, oil and power generation, and they began to be realised already at the end of the war. Later they were incorporated in the fourth Five-Year Plan.

4. The Post-War Five-Year Plans

When the guns fell silent, the nation returned to its peaceful labours. In the first post-war years the Soviet economy developed in accordance with the *fourth Five-Year Plan* (1946-50). The strategic line of this five-year plan was to restore the economy of the war-ravaged areas and to reach, and then surpass, the pre-war level of industrial and agricultural production.

The tremendous scale of the tasks which had to be accomplished in these years may be gauged from the losses and damage suffered by the Soviet Union as a result of the war. The Nazi invaders wrecked, burned or razed to the ground 1,710 towns and townships and over 70,000 villages and hamlets, rendering 25 million people homeless. But the heaviest loss of all was in human lives—20 million people perished in the war unleashed by the Nazis. Direct material damage amounted to one-third of the total national wealth. History hardly knows of a nation which sustained such heavy damage and losses.

Supported by the advantages of the single planned economy, the Soviet people by their heroic labour in a short time healed the war-inflicted economic wounds. The five-year-plan targets for industry were reached ahead of schedule. Already by 1948 industrial output was 18 per cent above the pre-war level. The output of consumer goods, however, grew at a relatively slower pace due to inadequate growth

rates in agricultural production. The Nazi invaders had inflicted great damage on the material base of agriculture in the more fertile and productive farming areas of the country, and had deported cattle and seed from them. Time was needed to make good that loss.

This grave situation notwithstanding, the State did everything in its power to raise living standards. The total money incomes of the population grew by 62 per cent in 1950 as against the pre-war level. Rationing of basic foodstuffs, which had been introduced again at the beginning of the war, was lifted by the end of 1947. Between 1947 and 1950 prices of goods in mass demand were reduced on three occasions.

The expansion of the Soviet economy in subsequent five-year periods was marked by a steady improvement in its structure. This was expressed, first and foremost, in the priority development of the branches providing for technological progress—chemicals, electric power and machine-building. Together with this there was a narrowing of the gap between the growth rates of the production of the means of production, and the output of consumer goods, and between the growth rates in industry and agriculture. All this was accompanied by a steady rise in living standards.

5. The Five-Year Plans Under Developed Socialism

By the mid-60's the USSR had reached a level of economic development enabling it not only to secure high rates of economic growth, but also to steer a course towards the creation of the world's most advanced, economically efficient and technically well-equipped national economy, capable of satisfying in

an ever increasing measure the needs and requirements of the population. This was the premise underlying the drafting of the *eighth Five-Year Plan* for 1966-70. The principal objective of the plan was to make maximum use of the achievements of science and technology to secure a further growth of industry and high and stable growth rates in agriculture and, on this basis, a further substantial rise in living standards. With the fulfilment of this programme, one of the largest-scale in the country's history, the national income went up by 41 per cent, industrial output by 50 per cent, and agricultural output by 21 per cent. Per capita real incomes increased by 33 per cent, more than the target, which called for a rise of 30 per cent. There is hardly need to comment on the above figures–a one-third rise in living standards speaks for itself.

In fulfilling the eighth Five-Year Plan the Soviet people completed the building of a *developed socialist society.* In one decade (from 1960 to 1970) nearly three-quarters of the basic production assets were renewed. Industrial output was nearly 12 times the pre-war level.

As a result, a new economic stage emerged. The country now had a powerful economic potential which made it possible to abandon the practice of solving the more urgent problems at the expense of other problems. There was now an opportunity to develop the economy comprehensively and to channel ever greater means toward satisfying the material and cultural needs of the population.

The main objective of the *ninth Five-Year Plan* (1971-75) was to swing the economy toward a more direct satisfaction of the needs of the people, while at the same time constantly raising productivity.

In the early 1970's the Soviet economy developed primarily along the lines of intensifying production

and achieving greater efficiency. Between 1971 and 1975 higher labour productivity accounted for 84 per cent of the growth in industry, 78 per cent in the case of construction, and 100 per cent in agriculture. Put another way, the rise in productivity was equivalent to employing an additional 20-million-strong labour force. Growing economic efficiency resulted in constantly expanding production, with a 43 per cent rise in industrial output during the ninth five-year period.

What was behind such a marked rise in economic efficiency? Socialism admits of only one method of intensifying production–ever higher technical standards and mechanisation. Moreover, good organisational and material conditions are created in the process for improving working conditions and doing away with arduous manual jobs.

In the 1971-75 period plant renewed out of the country's total basic assets amounted to 23 per cent, while in agriculture the figure was 56 per cent. New machinery and technologies were introduced which not only raised labour productivity, but also made work easier. Emphasis was put on the introduction of machine systems covering an entire technological process. Priority was given to the mechanisation and automation of the more arduous jobs, specifically underground work and jobs presenting a health hazard.

Technological processes at Soviet enterprises are organised to avoid tiring, monotonous procedures and unreasonable physical loads. Visitors from abroad often express surprise at what appears to them to be the relatively slow pace of the modern assembly conveyors operating at some Soviet plants, specifically auto works. The reason is very simple however–the speed of the conveyor is established in

accordance with scientifically determined medical standards.

In the ninth five-year period the Soviet Union secured higher absolute increments in industrial output, capital investment and state allocations for welfare than in any preceding five-year period. There was a substantial rise in living standards due to the implementation of a broad social programme: state spending on social needs equalled that of the two preceding five-year periods taken together, and per capita real incomes grew appreciably. Housing conditions were improved for 56 million people (20 per cent of the population). The Soviet people are now tackling the job of fulfilling the *tenth Five-Year Plan* (1976-80), a far-reaching socio-economic programme which has as its watchwords efficiency and quality.

The main target of the plan is the consistent implementation of the Communist Party's policy aimed at promoting the material prosperity and cultural development of the people on the basis of a dynamic and balanced development of social production, higher efficiency, accelerated scientific and technological progress, greater labour productivity, and an all-round improvement of the quality of work in all branches of the national economy.

Compared with previous plans, the tenth Five-Year Plan reflects a number of distinctive features typical of the present stage of the country's economic development. The higher production potential makes it possible to pay still greater attention to socio-economic problems, primarily to a further raising of living standards and to cultural progress, and further improvement of working and living conditions.

Today, all sectors of the national economy are developing dynamically in accordance with the plan

indices, and the national, intersectoral and territorial patterns and proportions of production are being improved on the basis of the fast growth rates in heavy industry.

The Party's long-term agricultural policy is being consistently implemented. It aims at reliability in providing foodstuffs for the population and agricultural raw-materials for industry, and at a further narrowing of the differences between town and country in the material, cultural and living conditions of the working people.

Greater use is being made in the tenth five-year period of the advantages of the international socialist division of labour, primarily through the implementation of the Comprehensive Programme of Socialist Economic Integration. There is a steady increase in economic co-operation between the Soviet Union and the developing countries and the developed capitalist countries.

Accelerated scientific and technological progress is being made, as envisaged by the plan, and new production capacities are being launched, ensuring a high rate of growth of the national income, the main indicator of economic development. It is planned to increase by 26 per cent by 1980. Industrial output is to grow by 36 per cent, and the annual average growth of agricultural output is set at 16 per cent. Real incomes are to go up by 21 per cent during the plan period, resulting in a still higher standard of living. Social welfare provisions and the public health service will be further improved.

It should be stressed here that the plan-fulfilment process involves dedicated effort on the part of the Soviet people, who know that the labour contribution of each member of society is for the benefit of all. Of course, no plan, however detailed and painstaking, can provide for every possible deviation

from what is planned. In practice, there are cases where production programmes are not fulfilled, the time-limit set for launching new capacities is violated, and harvests fail due to unfavourable weather conditions. Mistakes occur in planning, production may be of low quality, there may be too many rejects, etc. But all this notwithstanding, the mechanism of socialist planning as a whole has stood the test of time. Sporadic hitches and failures cannot overshadow the main thing—the material and technical base of communism is being confidently created in a planned way. The Soviet people realise that when the tenth Five-Year Plan has been fulfilled, a new and big stride will have been made towards communism, whose crowning principle is "from each according to his abilities, to each according to his needs". Fulfilment of the plan will further strengthen the international position of the USSR, enabling it to make further gains in the economic competition with the developed capitalist countries.

All this, however, will take time, and, what is most important, requires that *world peace* be maintained. That is why the Communist Party and the Government of the Soviet Union invariably pursue a policy of peace, and international détente, of peaceful coexistence of states with differing social systems. For socialism and communism can only be built in a planned way provided conditions exist for peaceful and constructive labour.

CHAPTER IV

THE PROCESS OF PLANNING

Having given a general idea of Soviet five-year plans, we shall now trace the *stages* planning work in the Soviet Union has passed through, and the *forms* used in the drafting of national economic development plans. In other words, we shall now get down to the substance of planning procedures and practices. First to be considered are what are called "pre-plan substantiations".

1. Analysis of the Past and Scientific Forecasting

The stage of pre-plan substantiation can be divided into two more specific phases: analysis of past economic development, and scientific forecasting. We shall deal with each phase separately.

Analysis of the past. Before planning the future in line with what one wishes to accomplish, it is necessary to look back at past experience, to consider what it indicates, and to analyse it. In the Soviet context, such analysis gives a clearer idea of how the national economic proportions, the basic economic relationships, took shape to become what they are. It shows how the rates and levels of satisfying particular social needs changed, the extent of productivity and profitability of production, and the way the effective demand for particular goods and services was met.

The pre-plan analysis of the preceding phase of development is also important to reveal latent re-

serves which can be tapped to expand and raise the efficiency of production, and to generalise, and later incorporate advanced experience in planned economic management. Apt and effective practical solutions and steps introduced by individual enterprises in the sphere of capital construction, for improving the quality of output, making better use of production capacity, raw-materials and power, and raising labour productivity, can be incorporated in the drafting of new plans.

A study of past experience may also reveal shortcomings, pitfalls and gaps in planning work. Identification of these negative aspects is a major task of pre-plan economic analysis, for they signify the need for a more thorough scientific substantiation of these elements of future plans.

Analysis of past economic development is also important because it helps ensure continuity in planning, indicating how to combine in the plan the new projects to be built with those already under construction, with a view to obtaining the best results.

To sum up, the future plan is not created from nothing. It looks ahead from the level of development of the productive forces which has already been reached. Therefore, gaining an insight into the ways of past economic growth, the potentialities revealed and the difficulties which hold up economic progress is a major pre-requisite for drafting an effective plan.

Forecasting, a scientifically based view of the future. The purpose of pre-plan forecasting is to make a scientifically based prediction of the future, identifying those factors, phenomena, and processes which will affect the socio-economic life of society in the near and distant future, and, taking these factors into account, to choose the ways and means for making them work for the attainment of the so-

cial goals set. Thus, a forecast may be called a scientific estimate of what is in store for us.

Forecasting cannot do without research, without the co-ordinated activity of large teams of research workers and investigators in the various sectors of science. The task facing them is to draw a picture of the future or, to be more exact, different variants of that picture, in the greatest possible detail.

Incidentally, large-scale economic forecasting of this nature is also done on the order of government agencies and big corporations in Western Europe, the USA and Japan. But there is a fundamental difference between these forecasts and the forecasts made in the socialist countries. As we have sought to show, the capitalist economy cannot be purposefully regulated even within national boundaries, not to speak of the capitalist world's boundaries. Western governments and the authoritative bodies of their economic alliances can influence economic processes only indirectly. For that reason, full use cannot be made of these forecasts in economic decision-making, or for carrying out large-scale projects for the development of national production.

In the socialist economy, however, scientifically based forecasting plays a very active role. Proceeding from the data contained in the forecasts, planning bodies are in a position to choose the most effective solutions as regards the trends of development, content, priorities and time-limits governing the construction or development of country-wide, sectoral or territorial economic projects, solutions which will subsequently take the shape of plan indices and targets.

Forecasts are used in varying degree at all stages of the plan-drafting process and even at the stage of plan-fulfilment itself. Their main function, however, is to assist in the substantiation of the plan targets being worked out. It is always desirable that the forecast horizons should somewhat exceed the plan periods. It is then possible to take into consideration those probable consequences of the plan

solutions which will make themselves felt beyond the plan period. A forecast used in the compilation of the forthcoming five-year plan for the development of, say, the power industry, should necessarily embrace at least a ten-year period, for the proportions of the various sources of energy in the sum total of energy produced constantly change (nuclear power, for instance, is becoming increasingly important industrially). Therefore, in formulating recommendations for power development in the next five-year period, the forecasters have to consider the trends of technical progress in that branch of industry likely to apply beyond the immediate period ahead.

The forecast horizons also depend on the nature of the project being studied. For example, the forecast for the industrial application of energy released by nuclear fusion should clearly be a long-term prediction, while that for the grain harvest for the current year must be a short-term one.

Questions which might be asked are: what is the relationship between forecasting and planning? Do they not duplicate each other? Cannot a forecast take the place of a plan? What is the need for forecasting when there is national economic planning?

The answer to these questions is that forecasts and plans have different functions to fulfil, and because of this they do not contradict or replace each other. The forecast is a search for, and at the same time a substantiation of, possible plan solutions, a basis for working out a scientifically determined path of future development, and for preparing recommendations which will be taken into account in determining the targets of economic growth for a particular plan period. The plan, on the other hand, is a document having the force of law, which constitutes a sum-total of directives and interconnected

and balanced economic indices and assignments obligatory for fulfilment by certain economic units.

In a word, forecasting procedure and planning procedure are different but closely interconnected stages of the general process of planned management of the national economy.

Planning agencies prepare forecasts on different planes. There are forecasts relating to natural resources and their permissible utilisation, demographic (population growth) forecasts, and social, scientific and technological forecasts. These forecasts are co-ordinated and incorporated in comprehensive national economic forecasts which are then used by the planning agencies in drafting national economic plans.

2. Aims and Resources

Any purposeful activity begins with establishing an aim, and so it is with national economic planning. The aims of national economic planning stem from the aims of socialist production: the fullest possible satisfaction of the material and cultural needs of all members of society.

When national economic development is aimed primarily at creating the basic national economic sectors, consumption is planned so as to ensure the optimal growth of these sectors. This, as we have seen, was the case with the first Soviet Five-Year Plans. Now the position is different. Relying on its great economic potential, the State is in a better position to shape plans proceeding directly from social needs.

How, then, are the aims and targets of long-term plans formulated in the process of their drafting?

The plan for social development providing for continually rising living standards constitutes the

initial and the fundamental element of a long-term state plan. This plan is evolved on the basis of a study of social needs and substantiation of the means required to meet them. The more important socio-economic objectives to be attained in the long-term period are formulated in the process (e.g. improved social relations, changes in the social structure). Planning for these objectives is logically done in the context of the material welfare of the people (provision of larger incomes, further material benefits, services of better quality, better housing conditions, etc.), and of a fuller satisfaction of their cultural needs (cultural development and public education), further improvements in social security and the health service, entertainment activities, holiday homes and health resorts, physical culture and sports.

In projecting these requirements the planning agencies enlist the co-operation of research organisations. Together they identify the volumes and pattern of requirements and estimate the levels and time-limits for their satisfaction, the structure of production facilities needed for this, and the size of the necessary expenditure.

Building up necessary material, financial and other *reserves* is a major task of planning. Reserves provide for the dynamic development of the economy, making it possible to change production patterns smoothly and flexibly in line with new requirements and new scientific and technological possibilities. Planned reserves provide room for economic manoeuvring within the plan framework without major change or revision.

Specific methods are employed to determine the necessary quantitative ratio between plan targets and plan reserves, the balance method and the programme-target method deserving special mention. We

have dealt with the substance of plan balances in Chapter I, and here shall only repeat that the system of plan balances is used to co-ordinate requirements with the available resources, or physical magnitudes with the value magnitudes of the national economic indices. By virtue of this, the balance method constitutes the main tool for identifying the resources necessary for attaining the plan targets. Well-co-ordinated and balanced plan indices prevent economic imbalances, ensuring the dovetailing of the various plan decisions and, ultimately, the efficiency of the plan.

What, then, does programme-and-target-oriented planning imply? Under the impact of the scientific and technological revolution new power and raw-material sources are constantly being developed and put to use, and new and improved technologies and machinery devised, entailing the launching of new lines of production. All this makes for the greater complexity of economic ties, involving the co-operation of an ever greater number of enterprises in the solution of particular economic problems. In other words, economic processes are assuming wider scope and becoming more comprehensive, necessitating the application of more comprehensive methods and forms of planned economic management. This explains why, in drafting the state plan for 1976-80, the priority was for the compilation of comprehensive national economic programmes.

3. Comprehensive Programmes

It should be stressed here that comprehensive programmes form part of the national economic plan: they are a far cry from the programmes carried out by government agencies in some capitalist countries.

Although the latter may be relatively ambitious and costly (e.g. the joint Anglo-French programme for building the Concorde airliner), they do not and, in fact, cannot evolve into a single national economic plan, for the blind forces of the capitalist market still govern the economic life of the given country, with any special government programmes being made to fit somehow within this framework.

In the case of the socialist economy, comprehensive and target-oriented programmes blend harmoniously with the plan, with the material and financial means essential for their realisation being determined with the aid of plan balances. The end targets of these programmes are also formulated as indices in the state plan.

What are the distinctive features of these programmes? Primarily, such programmes are aimed at reaching a *particular* target indicated in the plan. Figuratively speaking, the programme is a sort of map with many routes, all of which lead to a common destination–the attainment of a particular result. Each economic sector or enterprise follows its own path and in the process makes its own strictly defined contribution. We may say, then, that the first distinctive feature of the comprehensive programme is that it pinpoints the common target to be reached, while the second consists in an integrated programming of the operation of the various branches of the economy.

The programme identifies clearly and precisely the tasks and commitments of the economic and other agencies sharing in its accomplishment. One central steering body is made responsible for the attainment of the ultimate objective, while the responsibility for intermediate results rests with subordinate agencies which work with it.

To illustrate, we may cite the example of how the

target-oriented method of planning is applied in the comprehensive programme for expanding the non-black earth zone of the Russian Federation, a programme which has a major role to play in the national economy of the country. A number of large cities and industrial centres are located in the zone, and it accounts for a quarter of the country's total population. The farm land in the zone amounts to 52 million hectares, with 32 million hectares under the plough. A comprehensive study of the potentialities of this huge area revealed that not all of them were being used to the full, and that greater investments in the technical side of the agriculture of the region could, in the long run, yield considerable returns. Proceeding from this, a long-term comprehensive programme of development was drawn up for this zone.

First, the main target of the programme was set–to increase the output of basic agricultural products by 100-150 per cent compared with the present-day level. More specific targets were also fixed–by 1980 the output of grain in the zone is to reach 31 million tons, that of potatoes, 35.3 million tons, and of flax fibre, 274,000 tons.

Second, with the help of computerised and multivariant calculations the sum total of investment was determined and its optimal distribution defined. In the 1976-80 period these will amount to 35,000 million roubles, with 23,000 million roubles being channelled into the planned construction of production, cultural and service facilities. The lists of new projects include various factories to produce agricultural machinery, hydraulic engineering projects and land-improvement works, livestock and vegetable-growing complexes, broiler factories, machine-servicing stations, roads, housing, hospitals, cultural centres, kindergartens and many other facilities.

Third, the government agencies sharing in the realisation of the programme were defined, together with their specific tasks and functions. The USSR Gosplan was made the responsible body for co-ordinating the fulfilment of all the programme undertakings by over forty co-operating Ministries and departments.

All this is why the programme was termed a target-oriented and comprehensive programme—it sets a strictly defined target, details the multiform means and ways of reaching them (the plan comprehensively covers a range of vital factors from industrial enterprises to kindergartens) and combines the economic effort of many branches of the economy and hundreds of enterprises, focusing them on one common point.

The programme for building the Baikal-Amur trunk railway, now well under way, has an equally comprehensive character. In addition to the construction of the railway track and facilities, it provides for the all-round economic development of a vast region of great natural wealth: non-ferrous metals, timber, and pulp and paper plants and coal mines will be established in the areas adjoining the newly-built railway.

The state plan for 1976-80 also includes programmes for the formation of a West-Siberian territorial and production complex based on the extraction of oil and gas, the development of an industrial and agricultural complex near the Kursk magnetic anomaly (in Central Russia), the expansion of the Orenburg industrial complex for gas extraction and processing (the Southern Urals) and several other projects.

There are a number of long-term national economic programmes which are designed to develop and

give a substantial boost to the leading industrial branches determining the pace of scientific and technological progress in the country. They include plans for the development of the fuel and power industries (i.e. all the energy-producing branches, and specifically the building up of capacities in the nuclear-power industry), for the technical re-equipment of mechanical engineering, the mechanisation of arduous manual jobs, environmental protection schemes, etc.

Specific long-term programmes for the joint solution of major economic problems are also being worked out in the sphere of foreign economic cooperation with the CMEA countries.

A characteristic feature of these programmes is that, in addition to their scientific, technological and production aims, they make provision in the social sphere to improve working and living conditions for the population.

In this latter connection, the implementation of the Soviet social programme for 1976-80 will demonstrate even more clearly the great advantages of socialism over capitalism. It lays special emphasis on the provision of better working conditions and improved labour protection schemes, employing the latest findings of research. Multi-million allocations are to be made in the five-year period for the expansion of the public health service: by 1980 there will be 357 doctors and 1,230 hospital beds per 100,000 of the population.

While envisaging considerable increases in wages and salaries, and in the social consumption funds [1], the programme also stipulates the continued stability of state retail prices for staple foodstuffs and consumer goods. Moreover, as the necessary condi-

[1] We shall deal with these funds in greater detail later.

tions are created it is planned to reduce prices further on certain kinds of goods. In the current five-year period 20 per cent of the entire population will enjoy improved housing conditions, and tens of millions of Soviet workers will receive increases in their wages and salaries.

Other projects are also stipulated in the social programme, which was aptly summed up by the General Secretary of the CPSU Central Committee, Leonid Brezhnev, at the Plenary Meeting of the CPSU Central Committee in October, 1976, in the following words: "Assessing the social programme of the tenth five-year plan, we have the right to say that its content fully accords with the principal task of the five-year plan and the Party's course of steadily raising the people's living standards."

4. Long-term and Short-term Plans

Plan periods of different duration are used in the Soviet economy, namely, long-term plans, five-year plans and annual plans. Each shorter plan forms part of a longer-term one (i.e. annual plans are combined to form five-year plans, and the latter make up long-term plans).

We shall now deal with the place, function, and role of each of these plans.

The *long-term plan* is intended to help attain the major strategic objectives of national economic development over a long-term period in accordance with the most urgent requirements of society. It determines ways and means for effectively carrying out fundamental socio-economic tasks, and sets out the more important structural changes to be made in the national economy on the basis of scientific and technological progress and higher efficiency of social production.

At present, a long-term plan is being prepared which embraces three five-year periods. What is the purpose of such a long term? Is it really necessary, bearing in mind the considerable and valuable experience gained in five-year planning?

The point is that the attainment of more far-reaching objectives in the social, economic, and scientific and technological spheres is usually a fairly lengthy process. To build new towns or reconstruct old ones, to create new industrial complexes (especially in thinly populated areas of Siberia and the Far East, which are rich in natural resources,) and to re-equip particular branches of the national economy requires a much longer period of time than five years.

Besides, in the age of scientific and technological revolution it is essential to have long-term pointers of economic development. The physical properties of materials, mechanical potentialities, and technology itself are undergoing constant change, and it is necessary to plan further ahead than the immediately foreseeable use of resources at the disposal of society. It is important to predict as closely as possible the predominant trends in engineering and technology beyond the immediate horizon, to determine the branches of industry that will be supplanted and those that will take their place. In other words, the principal trends of the growth of the productive forces have to be determined not only for a five-year, but also much longer period ahead.

A long-term plan provides us with an opportunity to foresee the social evolution of society, and specifically to take into account and give thought to the social implications of scientific and technological progress.

Let us consider, for example, the approach to nature. One may leave behind barren and lifeless

wasteland, piles of rock near exhausted mines, poisoned rivers devoid of fish, and tracts of land buried under industrial waste or covered with soot and oil. But one may also enrich nature, assisting its powerful rejuvenating and purifying forces. It is here that a long-term plan is needed to map out the main guidelines for the rational and responsible use of natural resources, so that the future generations will look back with gratitude to the labours of their fathers and forefathers in safeguarding nature and conserving its resources.

The long-term plan, of course, contains only general indices: the farther the end point of the planned movement, the harder it is to discern it with any precision.

On the other hand, the long-term plan is not merely guesswork or forecasting in the abstract: it is an obligatory plan which presents a general view of the economic development of a particular Republic or economic region and of the leading branches in the productive and non-productive spheres. Its indices reflect in general terms the rates, proportions, and relationships characterising the volume of production and consumption, it lays down guidelines for the development of particular areas and branches of industry, specifies the levels required for the satisfaction of social needs, and offers solutions to major problems of national economic significance. The central planning agencies take all the above points as their references in current planning activities.

To sum up, the purpose of long-term plans is to define in advance the substance and scale of the tasks that will be facing the country in the future and concentrate efforts on their accomplishment, and to foresee the problems and difficulties that may arise, thus facilitating the drafting and reali-

sation of specific programmes and projects that go beyond the framework of the five-year planning period.

Work on long-term plans is a continuous process, involving all central economic agencies and a large contingent of research workers. From economic estimates already made, the country's resources in the 1976-90 period should be twice as great as in the preceding fifteen years, due to the discovery and development of new mineral deposits. This creates new favourable opportunities for raising the standard of living and improving working conditions, and for making further headway in the spheres of public health, education and culture.

As programmes and instruments for the tactical direction of the national economy, *five-year plans* are formulated in the context of the long-term plan. Figuratively speaking, they represent rungs of an ascending ladder, specifying in more precise detail the Party's general socio-economic policy.

Practice has shown that a five-year period is the most suitable for medium-term planning, for carrying out such projects as the setting up of new economic capacities, the industrial application of new production technologies, the re-equipment of lines of production, and the training of large contingents of skilled personnel. A period of that duration is also the most suitable for the realisation of such important social objectives as the raising of incomes and the carrying out of housing-development schemes. A five-year period represents, so to say, a complete metabolic cycle in the national economic organism.

Making the targets of the long-term plan more specific, the five-year plan contains clear-cut obligatory assignments for particular enterprises and offices. It has more detailed indices characterising

the required volume of output of specified industrial and agricultural products, the extent to which basic social needs are to be satisfied, and the degree to which productivity is to be raised. As we have mentioned before, the single state five-year plan constitutes the bedrock and the framework for the formulation of the economic development plans of the Republics, economic regions, particular economic sectors, production and research and development associations, and factories and offices.

This is most important, for in the conditions of the swift development of science and technology all economic units–big and small alike–must have a clear knowledge of the basic trends of the country's economic development. The collectives of relatively small enterprises and of huge production associations employing tens of thousands of workers must have a definite idea of the way in which production generally is planned to progress. Only in that case will they be able to participate actively and competently in the process of running their enterprises, and developing them technologically and expanding their production facilities. For that reason, in contradistinction to the long-term plan, the targets of which are specified for industrial branches, vast industrial regions and Republics, the assignments of the five-year plan directly concern, and are handed down to each and every enterprise. In other words, each production collective has its own five-year plan, projected into a single national five-year programme.

The five-year plans also have the function of introducing necessary corrections into the long-term plans, corrections indicated by the dictates of economic life. The point is that man's creative faculties steadily widen the possibilities and the scale of his transforming action on the material world he lives

in. For instance, new scientific discoveries radically change our notions about the relative value of particular raw materials, of the technologies used, the types of machines made and the ways they can be employed, and new mineral deposits are constantly being discovered. The international political atmosphere is also undergoing change–people the world over are demanding the right to live in peace and to prosper on the fruits of their labour. The political climate generally is becoming warmer. A number of countries, including those that have thrown off the colonial yoke, are introducing progressive socio-economic changes. As a result there is an accelerated development of commercial and economic contacts and scientific and technical co-operation in the international community.

All of this makes it difficult to foresee in their entirety the many economic, scientific, technological, foreign-policy and external-economic factors that could affect in one way or another the course of a country's economic life. This explains why the five-year plan serves as a connecting link between long-term plans with their overall indices and current, yearly plans, which are the instruments for immediate direction of the national economy. Because of this "intermediate" position, five-year plans play the principal part in Soviet planning practice, being its basically accepted form.

Similarly to five-year plans, *annual plans* are also endorsed by the highest body of state authority–the Supreme Soviet. With their help, planning of the economy is made even more detailed. In drafting them account is taken of new resources revealed, the latest achievements of technological progress and recent creative initiatives put forward by the working people.

The role of production collectives is especially

great in working out these plans, as one could expect, for the specific content of a current plan depends in many ways on the contracts concluded between customer and producer enterprises. Annual plans, therefore, are thoroughly considered at factory level, with factory and office workers and engineers having ample opportunities to voice their opinion on them and put forward proposals at general meetings of the employees at a given enterprise for improving production efficiency.

Just as long-term plans are corrected as required through the medium of five-year plans, so the drafting of yearly plans helps to amend the assignments of five-year plans and introduce corrections made necessary by the operation of factors which are hard or altogether impossible to foresee in advance. This does not mean that the ultimate targets of the five-year plan are changed, however, (this would upset the balanced development of the different branches of the economy): the flexible readjustment of indices at the plan's annual stages is aimed at stabilising the plan as a whole, at ensuring the fulfilment of its main indices.

As we have mentioned before, in Soviet national planning practice the principle of continuity is strictly observed, so that a chain of plans is formed, one succeeding another. This means that on the expiration of each five-year period, the long-term plan is extended for another five years, medium-term plans are drafted continuously for each five-year period, and yearly plans, for the year ahead.

5. Sections of the Plan and Plan Indices

The state or nation-wide five-year plan is broken down into separate sections, the framework and content of which are described below.

The first section–*a master plan*–sets out the chief socio-economic targets to be reached in the plan period. Growth rates are fixed for the gross national product, national income, and industrial output. The latter is subdivided to show the growth rates for the output of the means of production (machine-tools, equipment and plant), and that of consumer goods. The first section also stipulates the overall targets for expanding agricultural output, capital construction, growth of real incomes, and the planned increase in trade turnover (the sum total of goods to be sold).

The second section relates to the *proposed development of science and technology* and contains a set of assignments for basic research and development projects, mechanisation and automation and the application of advanced technology, output of advanced industrial items, and the development of pilot samples and models of new basic machines, mechanisms, appliances, raw materials and other supplies, and fuels. It also lists outdated types of machinery, equipment and other items the production of which is to be discontinued. This section also contains the targets for the training of qualified specialists and skilled workers.

Production programmes for industry and agriculture form a major structural element of the plan, each set forth in a separate section. The *Industry* section indicates the level of industrial output to be reached and its division into output for production purposes and that for consumption; it lists indices for basic kinds of output (power generation, iron and steel, cement, extraction of oil, gas and coal, basic kinds of machinery, fabrics, footwear, etc.) and also indices for high-quality goods, defining their technical and performance specifications. This section stipulates the growth rates to be attained in

particular industrial branches and complexes of interrelated lines of production (e.g. the fuel and power complex comprising the oil, gas, coal, shale, hydro-power and other industries).

The *Agriculture* section sets out the planned volume of state purchases of staple farm products and raw materials, and the amounts of machinery, plant, electric power, and fertilizers to be supplied to agricultural enterprises. It also lists the main land-improvement schemes to be carried out. The assignments are fixed for the country as a whole and for each particular Republic. Collective farms, or agricultural co-operatives, which work on the land given them by the State in perpetuity, are set stable amounts of agricultural produce they are to sell to the State over the five-year period. The State sells them the necessary farm machinery, fertilizers and quality seed. Their orders for these items are included in the national economic plan in a special section "Supplies". But we shall deal with collective farms separately in the next chapter. State farms (or state-owned farms) are run along management lines similar to those used in running industrial enterprises.

The *Transport and Communications* section contains the planned volumes of haulage by particular means of conveyance, and the operational scales of communications, and stipulates the expansion of technical facilities in transport and communications.

The *Capital Construction* section defines the total volume and the main directions of capital investment in particular sectors of the national economy, listing the production capacities to be constructed and put into operation in the plan period, and provides for the expansion of facilities in the building industry.

Another section of the plan deals with the plan-

ned *location of the productive forces* (plants, factories, mines, etc.) for the further industrial development of all Union Republics.

A special section determines targets for *increasing labour productivity,* making better use of labour resources and for the training of personnel.

Another section fixes the planned *increases in profits and reductions in the costs of production and circulation.* These indices regulate and help evaluate the ratio between inputs and outputs of enterprises, determining to a great extent the overall amount of the State Budget and its expenditures and revenues. [1]

A comprehensive section dealing with measures for ensuring the *welfare* of the population holds pride of place in the plan. It contains targets for planned increases in personal cash incomes, and for the volume and nature of benefits to be made available to the population from the social consumption funds.

In addition to wages and salaries, the social consumption funds constitute a substantial means of meeting the material and cultural needs of the members of socialist society. Every person enjoys a variety of benefits which are paid for completely or partially out of these funds, i.e. irrespective of the amount or quality of work done.

The major part of these funds is derived from the State Budget. State-owned enterprises and organisations operate their own funds for social, cultural and housing schemes, the means coming out of their profits. Collective farms also maintain funds for cultural and welfare schemes, social maintenance and material aid for their members.

[1] We should mention in passing that income tax accounts for only 6-8 per cent of the budgetary funds, the source for the overwhelming part of these funds being the profits of enterprises and organisations.

A major proportion of social funds is paid out directly to the population in pensions, sickness benefits (these range from 50 to 100 per cent of a worker's monthly wage, depending on length of service), maternity benefits, benefits to large families and to non-married mothers, allowances for students and pupils of specialised secondary and higher schools, annual paid holidays, etc. Another proportion goes to satisfy social needs–free education, the free medical service (hospitals, out-patient clinics, doctors' visits etc.) the upkeep and upbringing of children in nurseries and kindergartens (parents pay only one-third of the cost), the maintenance of libraries, cultural centres and sports facilities, the building and maintenance of housing, the rent for which has been the lowest in the world since 1928 (4-6 per cent of the family budget), and the provision of accommodation, free or at a discount, at health resourts and in holiday homes.

But let us get back to our point. The comprehensive section of the plan devoted to raising living standards also sets targets for further developing welfare services, urban und rural public utilities, and the recreation industry. There are separate indices for the development of public education and culture, the public health service, for extending the range and improving the quality of goods sold to the population, and for expanding public catering. By and large, the section maps out ways and means for satisfying the constantly growing material and cultural requirements of the people.

A special section of the plan deals with *environmental protection and the rational use of natural resources.* It specifies the introduction of effective methods of developing mineral deposits and of advanced technologies to protect the environment. For instance, the spoil extracted in coal-mining and

other mining is either put back into the mines when they are worked out or is levelled up to provide future construction sites, or it is levelled up, covered with top-soil and planted with trees and shrubs or sown to crops. Special allocations for all this work are stipulated in the national economic plans.

This section also sets targets for the introduction of technologies reducing the amount of waste products accompanying production and for putting them to profitable use (for example, products of combustion are used in the chemical industry, slags in construction, closed systems are employed for the recycling of water needed for production processes, etc.).

A special section in the national economic five-year plan contains targets for the development of external economic ties and specifies how this shall be done.

All forms of economic relations with other states–imports and exports of various commodity groups, scientific and technical co-operation, joint ventures, transport and communications services, credits and other financial and currency relations–are reflected in this section. The plan determines these multiform economic contacts taking account to the greatest possible extent of the country's potentialities and needs. The main purpose of the foreign-trade section of the plan consists in defining the most expedient ratio between the country's output of specific commodities and foods and their possible imports or exports.

The best ratio is considered to be the one which is conducive to the satisfaction of the country's needs with the least outlays. A determining factor is that sometimes it is more profitable to import some goods than to produce them. On the other hand, a whole range of home-produced commodities

may be in great demand by other countries. It is then expedient to produce them in quantity sufficient to meet that demand.

The planning of external economic ties is based on the foreign-policy principles which underlie the policy of Soviet society. For example, the economic relations obtaining among the socialist countries strengthen their production potential as a whole, helping them to achieve success in the economic competition with capitalism and contributing to international stability and peace. Economic ties with the developing countries are being promoted in a way that is conducive to the accelerated economic growth of these countries, the raising of their living standards, the overcoming of backwardness, and the winning of economic independence. Economic relations with the capitalist countries are designed to develop mutual trade and strengthen trust between nations and promote the policy of friendship and good-neighbourliness for the benefit of all peoples.

The planning of external economic ties is based on relevant inter-state agreements.

The concluding section of the plan contains a *planned balance sheet of national economic development;* it consists of separate and more detailed balances, whose significance we have already dealt with. By and large, this section of the plan is intended to balance the country's economic potentialities with its needs and correlate the main indices of economic growth, thus determining the optimal way of meeting the needs of society.

In the next chapter we turn to the compilation of plans directly at factory or farm level.

CHAPTER V

PLANNING PRACTICES AT SOCIALIST ENTERPRISES

1. Plans of Industrial Establishments

The planning process directly at factory or office level comprises two stages: first, the personnel of an enterprise formulate their proposals for the functioning of the enterprise in the forthcoming five-year period. In so doing, the management, engineers, technicians and other employees are guided by past production experience and the information supplied by customer-enterprises about their requirements for the output turned out by the given enterprise. What is important here is that at this stage the workers' collective of the given enterprise has a fairly free hand–there is very little constraint in the way of directives handed down from higher-placed departments or Ministries. In this way, the workers are given full scope for the search for new economic, technological and organisational ways of developing production.

The branch agency which has jurisdiction over the given enterprise carefully considers the proposals put forward and, in turn, drafts its own proposals, which it submits to central agencies; the latter then use these to work out the main guidelines for the development of the national economy.

After the CPSU Congress endorses the main guidelines, a second stage begins–the draft five-year

plan is worked out, with specific targets set for each year of the five-year period. Acting on the assignments set for a particular branch of industry, the Ministry concerned hands down to the enterprises it runs "control figures" which represent general economic and production targets. These are used to fix overall volumes of output and resources required, other basic indices, the place of the given enterprise in the operation of the whole of the given branch of industry, and the pattern of intra- and inter-sectoral economic ties. In brief, the control figures, in the form of general indices, signal to enterprises the basic outline of their economic growth. On their own initiative the work collective of a given enterprise fill in the whole picture, specifying more exactly the range of output to be produced on the basis of contracts with supplier and customer enterprises, and may undertake still higher commitments, which are commonly known as a "counter plan". After a Session of the USSR Supreme Soviet approves the national economic five-year plan, Ministries fix the basic plan indices for the enterprises for which they are responsible, which then became state plan directives.

Production collectives draft their five-year plans in accordance with a standard model which is approved by the USSR Gosplan for production associations (combines) and individual enterprises. This document lists the sections of the plan and the indices (targets) to be included in it. This uniform methodological approach enables enterprises functioning in different branches of the economy to co-ordinate their production programmes, while higher economic bodies receive an opportunity to summarise the economic results and control the fulfilment of the state plan directives.

The five-year plan of an enterprise consists of

twelve sections. The first section is an *overall or consolidated* section, containing overall indices of the plan and providing an overall idea of the technical and economic tasks facing the employees of a given enterprise.

The second section is the most important one, for it specifies the *plan assignments for production and marketing.*

In drafting the plan, this section is formulated using the control figures in physical terms of output handed down by higher economic bodies. The control figures determine the general type of output, while specific items within this type of output are specified in contracts with customer and trading enterprises.

It should be noted that long-term economic contracts, concluded for the whole five-year period, are of great practical use, making it possible to calculate for five years ahead the actual quantities of the output to be turned out, and to co-ordinate more effectively production, supply and marketing programmes, and also programmes for the building of new capacities. So the factory plan, by reflecting the intra-sectoral and territorial economic ties, permits the factory management to co-ordinate its production, marketing technical and financial policies closely and harmoniously.

In order to know exactly to what extent production capacity can be expanded, enterprises make special capacity calculations, assuming as a measure of capacity the greatest possible output under the most favourable conditions: full-capacity operation, use of advanced technology, progressive systems of labour organisation, etc.

It is clear that a steady increase in output over the five-year period can be achieved through better use of the available equipment and plant or by

expansion. As a rule, both factors play a part in increasing production, and this is reflected in the planned balance of production capacity, which serves as the basis for the production programme and the determination of the total value of output, given by the quantities to be produced multiplied by the price fixed for each item. This at the same time makes it possible to determine the value of output to be marketed (i.e., the sum total of cash the enterprise gets for its output).

The third section of the plan, *the plan for technical development and improvement of production,* is of great importance.

Scientific and technological progress is a major factor in determining the course of modern economic life. Because of this, the indices for this section are closely connected with the content of the other sections: the use of new or modernised plant directly affects growth rates in production and marketing, and also changes in output structure and its quality. Improved technology, mechanisation and automation of production processes reduce material, fuel, power, and labour inputs, thus raising productivity.

First and foremost, the plan for technical development comprises targets for the launching of new lines of production and for improving quality. New lines of production are considered to be those launched in the country for the first time. As regards quality, three categories are specified–highest, or top grade, first grade, and second grade.

Quality assessment is done by special state commissions, which carry out sampling tests on each item in quantity production not less than once in one to three years.

The greater the proportion of goods of the highest quality in the total output of an enterprise, the

more the funds the enterprise can allocate for the additional remuneration of its personnel. This, of course, encourages the production personnel to provide in the enterprise's five-year plans for an ever growing range of new, high-quality items.

Besides, there are mark-ups or mark-downs on the wholesale prices of goods of top quality and second-grade quality respectively. These do not appear as such in the plan, but make themselves felt when the results of the plan fulfilment process are determined, because an enterprise which has increased the output of high-quality items over and above the planned amount, receives additional revenue, thus adding to its incentive funds, while an enterprise that continues to produce second-rate items after the term of their planned stoppage has expired, is considered to be not fulfilling its plan, with resultant cuts in the remuneration funds for its personnel.

This section also contains plan targets for:

– the introduction of advanced plant and technology (new machine-tools and other plant, progressive flow-sheets, etc.), mechanisation and automation of production;

– the scientific organisation of production (rational patterns of labour division, wider use of advanced methods of labour, improvement of working conditions, etc.);

– more efficient management and organisation of production (improved structural patterns of management, e.g. the expediency of merging, or, conversely, separating individual economic units, shops and services; rational location of plant on the production premises; improved operation of materials handling equipment, etc.);

– research and development (production associations often have their own research and design offi-

ces for improving technical facilities, and the quality and technical and economic standards of output, etc.);

– environmental protection and rational use of natural resources (steps to exploit mineral deposits and lands and forests in a more efficient way, control of air and water pollution, etc.).

Speaking of the plan for technological progress, we should like to note one of the features that distinguishes relations between socialist enterprises from those between capitalist firms.

It is common knowledge that economic spying has become an indispensable and fast-growing factor of production activity in the West. Corporations pay large sums of money both to the special agencies specialising in disclosing the industrial secrets of rivals, and to those employed by them to safeguard their own industrial secrets. The computerised data with regard to production processes are, as a rule, cyphered, for computers are no longer safe against the technically highly advanced appliances which are used to ferret out needed information.

In the socialist countries the position is quite the reverse. Production associations and Ministries take great pains, not to conceal their new technological advances, but to disseminate them as widely as possible. A Soviet factory director has no fears that the adoption by other factories of the technological innovations at the enterprise he is heading would adversely affect him personally or the employees of the enterprise, for the operation of all Soviet industrial enterprises conforms to a single plan, which precludes them from competing with each other for markets. Consequently, the transfer of advanced production experience poses no threat to the material interests of a work collective, which willingly shares its experience with other socialist enterprises, because the attainment of a higher level of production under conditions where the means of produc-

tion are socially owned, and the acceleration of technical progress, are the common task of all. From their own everyday experience the Soviet people know that the rapid and effective development of technology benefits the entire national economy, each production collective, and every worker.

By making its achievements available to others, an enterprise which has come up with a production innovation or launched a new line of production is the gainer, because its workers, engineers and managers receive considerable bonuses for inventions and the development and application of new technology, the amount of remuneration depending on the savings to the national economy. Besides, enterprises and workers who distinguish themselves by developing new methods or a new technology are held in great esteem and are awarded government orders and honoured titles, while the press, radio and television popularise their inventions. For this reason, every enterprise, and the workers in general are keenly interested in creating and broadly applying technical innovations.

Soviet enterprises do not have production secrets: their economic relations are such that they inform each other as widely and as promptly as possible about each other's scientific and technological achievements to disseminate their advanced experience. To this end, special information bulletins are published, courses of advanced technical experience are held, and workers in kindred enterprises exchange delegations and organise special conferences to share their production experience.

But let us return to our subject. The next section of the five-year plan comprises *indices for raising the efficiency of production.* These are primarily for production inputs and outputs, and assignments for

raising labour productivity and making better use of raw materials, machinery and other plant.

Still another section is entitled *Technical-Economic Norms and Rates.* We have already spoken about the norms used in national economic planning, and shall now deal with these economic "tools" in the context of factory planning. The norms used in factory planning comprise indices characterising the level of performance of machines, machine-tools and other equipment, and of the use of raw materials and labour resources. For example, a norm for the use of metal stipulates the amount of metal that will go into the new product after processing, and the amount that will be waste (scrap). Time norms for the performance of equipment set the number of hours the machines and mechanisms should operate during the shirt.

Rates reflect the rational spending of raw materials, other supplies, fuels, energy and labour per unit of output (or amount of work to be done). They are scientifically determined and take due account of the achievements of leading enterprises. They stipulate, for example, how much rubber should be used to produce a tyre, the time a certain production operation should take, etc.

Rate setting plays a major role in the functioning of an enterprise–it encourages the collective to exert themselves and to strive for the better organisation of production and a higher level of technical development.

The remaining sections of the plan concern:

– capital construction;

– provision of raw materials, other supplies and plant;

– enlistment and deployment of the labour force;

– wage increases;

– net profit per worker, the enterprise's cash income and expenditure;

– size of the incentive funds.

Each of these sections is intended to ensure the carrying out of the specific tasks planned for the long-term development of the enterprise. They embrace all aspects of its economic and public life. It goes without saying that all sections of the plan are interconnected: the capital-construction section, for example, specifies the sources of financing and the trends of development and expansion of a given enterprise, determining in many ways the effective fulfilment of its production programme and marketing of output, while the profit section proceeds from the output targets to be reached and the production costs to be covered.

We should like to lay special emphasis on *the plan for the social development of the work collective.* As we have mentioned before, the planned raising of living standards and the cultural development of society are primarily the concern of the State as a whole. Accordingly, a special section devoted to promoting the well-being of the people is compiled and included in the national economic plan. And enterprises have a corresponding section in their plans with reference to their personnel, in particular, for raising their qualifications, and for their cultural development generally. Many large Soviet enterprises have their own higher education establishments where the employees may study after working hours. Managements also provide leave on pay for workers studying at schools, institutes and various courses to enable them to prepare for examinations or write diploma theses, etc.

The section dealing with the social development of the collective stipulates the amount of deductions to be made from the profit of a given enterprise to

go into the incentive and benefit funds used for paying bonuses to the best workers and for meeting the cost of welfare services such as free or subsidised accommodation at health resorts and holiday homes, running summer camps for workers' children, and the provision of better working and living conditions.

In short, the main function of the social-development section is to harmonise to the fullest possible extent the needs of production and the needs of those engaged in it. The closer the harmonisation, the more effective is the labour effort of the collective.

Now we turn to *current planning* at factory level. The targets of the five-year plan broken down into years serve as the basis for drawing up an enterprise's annual plans. The five-year plan stipulates the main economic activity of a given enterprise in the way of improving the structure and expanding the technical facilities of production, raising the quality of output and changing the product, launching new capacities, etc. Yearly plans map out the stages and the ways and means for attaining these objectives. Their sections and indices largely correspond to those of the five-year plans. Economic targets in the yearly plan, however, are elaborated and substantiated more thoroughly and in much greater detail, with account being taken of new production potentialities identified in the course of the fulfilment of the longer-term plan.

The annual plans are made still more precise and specific in what are called *operative plans*, i.e., quarterly, monthly, ten-day and even daily plans, which are given to shops, teams and, finally, to individual workers. These plans are designed to ensure the coordinated activity of all subdivisions of the enter-

prise, to combine the efforts of the entire personnel in the job of fulfilling the yearly plan.

Computers are widely used in operative planning for controlling programmed time-tables of operations, feeding out assignments, regulating supplies, and assessing the production process at its various stages.

2. Planning in Farming: Its Distinctive Features

This type of planning differs somewhat from planning in industry because it involves a different form of property. Three forms of social property exist in the national economy: state or public property, collective-farm or co-operative property (i.e., the property of a group of members of a particular farm co-operative), and property owned by trade-union or other public organisations.

Correspondingly, there are two different types of enterprises in Soviet farming: state-owned farms and collective farms (or co-operatives).

The whole of the output of state farms belongs to the State, since the implements of labour and other means of production in these farms are state-owned. The part of the output to be marketed is sold through a state-run network of purchasing and procurement agencies, and the employees of the farms receive wages and salaries. The output of collective farms, however, belongs to the collective farmers, who derive their income from it. For that reason, there are differences in planning practice in the two types of Soviet farms.

While planning in state farms is based on the same principles as in industrial enterprises planning in collective farms is aimed basically at combining state guidance with the greatest possible development of autonomous self-management. The State

fixes the volume of state purchases to be made of collective-farm plant and animal produce for a set period, thus guaranteeing collective farmers the marketing of their produce at stable prices over a number of years. It is up to the collective farmers themselves to decide what crops and what kinds of livestock to raise, taking into account local conditions and any other special factors. Output produced over and above the plan the collective farms sell either to state agencies (at premium prices), or to sales co-operatives, or send to collective-farm markets where the price is determined by supply and demand up to a certain maximum level fixed by the State.

Many thousands of people—scientists, specialists, economists and collective farmers themselves—take part in drafting the planned orders placed centrally with the collective farms for the purchase of their produce. In so doing they are guided by the country's requirements for such produce, calculated on the basis of the consumption quotas which have been determined for foodstuffs and consumer goods (fabrics, footwear, etc.). The industrial consumption of agricultural raw materials is determined with the aid of quotas for agricultural inputs needed per unit of industrial output. Account is necessarily taken of the available facilities to process the agricultural raw materials (sugar-beet, milk, etc.).

The state of collective-farm production is reckoned with at all stages of the planning work, and feasibility studies are made of the needed material and technological facilities, the labour force, and other production potentialities. At the same time, collective farms calculate the volumes of output and sales over the plan period, and correlate them with the required amounts of capital investments and material and technical supplies.

The economic and production plans of collective farms are endorsed at general meetings of the collective farmers, after which they are summed up and consolidated by planning and agricultural agencies and submitted by them to the appropriate local and central government bodies. The Council of Ministers considers and adopts the plan of agricultural development on a country-wide scale and separately for the individual Republics. The endorsed plan is then handed down successively to the Republic Ministries, to agricultural departments in territories, regions and districts, and to collective farms themselves.

The State purchases collective farms' output on the basis of contracts in accordance with the plan for state purchases. The contracts stipulate the terms of sales (both planned and above plan). Having concluded such a contract, a collective farm is assured of the sale of its produce, while the procurer is able to prepare storage facilities in advance and organise the necessary machinery and refrigerating capacities to handle the agricultural products to be purchased.

Under the contract, a collective farm undertakes to sell to a procurement agency a certain quantity of agricultural produce, specifying its kind, range and quality, and the dates and places of delivery. The procurer undertakes to accept this produce in the time-limits specified and pay for it on the terms agreed by both sides. When necessary, procurement agencies assist collective farms in organising production and with transport for the delivery of their produce.

An important feature of these contracts is that they contain provisions on liability for non-fulfilment of the mutual commitments.

In the plan assignments handed down to collective farms account is taken of the specialised lines of output predominant in each farm, the level of output reached and the potential for expanding production, and also of the farm's own requirements (building up the necessary seed, fodder and food stocks, etc.).

The planned assignments for the sale of produce to the State are inseparably linked with specialisation of production: e.g., farms specialising in the raising of livestock are given bigger plan assignments for the sale of meat, but are exempted from producing grain for sale, while the reverse applies in the case of grain farms.

The Communist Party has worked out a long-term and comprehensive programme for the development of agriculture, which indicates what is required in the way of supplying the countryside with farm machinery and fertilizers, expanding capital construction, land improvement work, the training of specialists and improving the organisation of production.

Steering a course towards achieving a decisive advance in the country's farming, the State provides all-round assistance and support to agricultural enterprises. For instance, certain types of machinery, which determine technical progress in farming, are sold to collective farms at a greatly reduced price: for a *Kirovets-700* tractor of 220 h.p. the collective farm pays only approximately half its cost price. A similar state policy is pursued with regard to the sale to collective farms of fertilizers, pesticides, fuel, and electric power–for the latter collective farms pay only half the rate paid by industrial enterprises.

But it is society as a whole that stands to benefit from such "losses": the more extensive use of machinery and electricity, the application of the

latest technological achievements which serve to cut production costs, set apart additional funds to modernise farming and increase farm output—all answer the purpose pursued by the State in its agrarian policy.

The prices paid by the State to farmers have been raised in recent times on a number of agricultural products. But this has not affected the level of retail prices for foodstuffs, because the main aim of Soviet economic policy, as we have stressed, is to promote the well-being of the population. The prices of bread, cereals, milk and meat products and other foodstuffs remain unchanged, although wages and salaries are constantly being increased. When production costs of certain foodstuffs turned out by a collective farm exceed their retail prices, the State covers the difference from the State budget. Subsidies of this kind are a direct result of the agricultural policy of the State, which is aimed at expanding agricultural production to provide higher living standards for the population. On the one hand, they permit farms to accumulate the means for the mechanisation and industrialisation of production processes with the result that, in the future, production costs are lowered on those lines of output now run at a loss. And on the other hand, with subsidies it is possible to hold retail prices on foods to the same level, thus increasing the purchasing power of the population and enabling it to satisfy its requirements in foodstuffs more fully.

This brings us to the end of our account of how the intricate mechanism of planning operates in the Soviet economy which today is developing, as is pointed out in the new Constitution of the USSR, by combining centralised management with the economic self-sufficiency and initiative of enterprises, production associations and other organisations.

A. Karpenko, L. Pekarsky
Soviet Economy: The Mechanism of Planning

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СОВЕТСКАЯ ЭКОНОМИКА: МЕХАНИЗМ ПЛАНИРОВАНИЯ

на английском языке