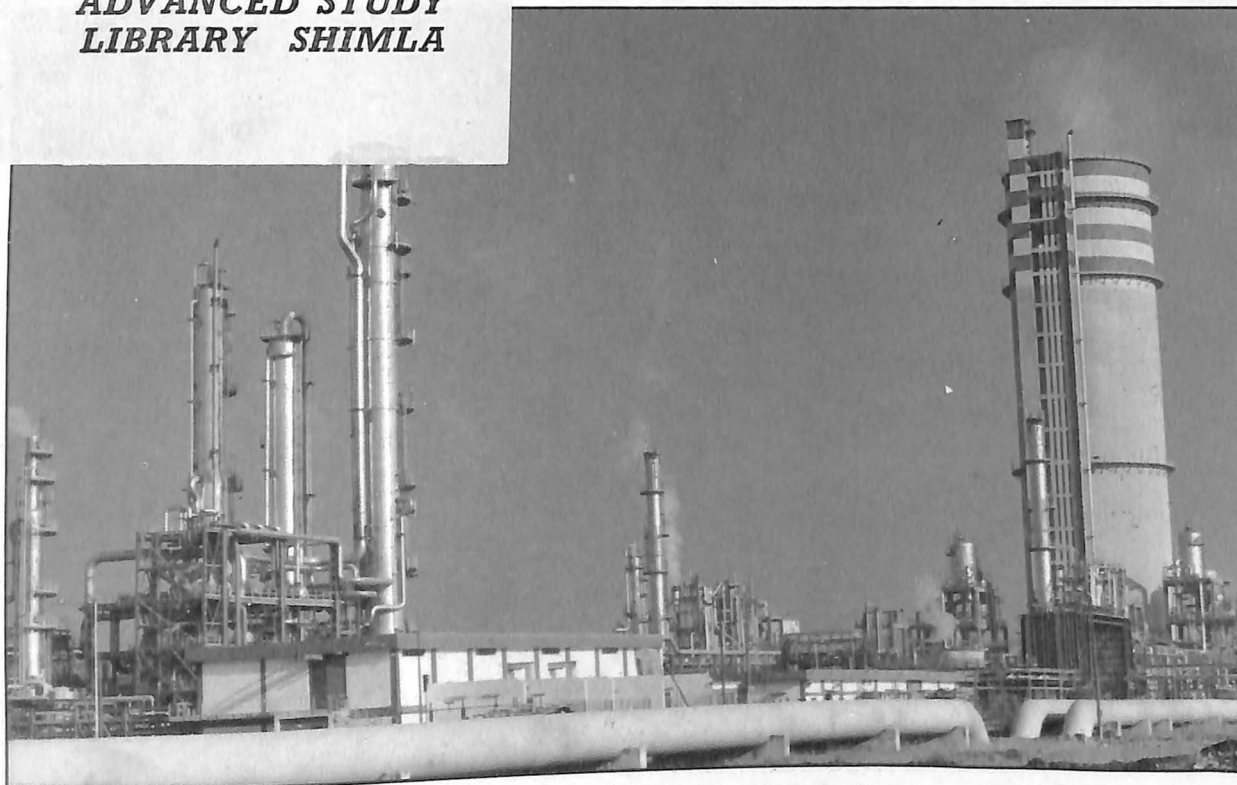




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A view of Urea plant of M/s Chambal Fertilizers and Chemicals Limited at Gadepan (Rajasthan)



**ANNUAL REPORT
1993-94**

**DEPARTMENT OF FERTILIZERS
MINISTRY OF CHEMICALS & FERTILIZERS
GOVERNMENT OF INDIA**

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CHAPTER-I

INTRODUCTION

INTRODUCTION

1.1 Fertilizer has an important role in Indian agriculture. Successive Five Year Plans have laid emphasis on self-sufficiency in production of foodgrains and efforts in this direction have resulted in phenomenal increase in agricultural production. Success in agriculture has been the result of a number of factors, major among them being the increased consumption of fertilizers over the years. Whereas the production of foodgrains was only 52 million tonnes during 1951-52, it is estimated to have attained an impressive level of 181 million tonnes during 1992-93. The food production level of 240 million tonnes has to be reached by the turn of the century. Since there is limited scope for increasing the land area under cultivation, further increases in agricultural production can be achieved largely through improvement in farming practices including the use of recommended inputs. Stepped up and balanced use of chemical fertilizers would play a central role in increasing agricultural productivity in the coming years.

1.2 Of the three main nutrients required for agriculture, nitrogen, phosphate and potash, indigenous raw materials are available mainly for nitrogen. The major requirement of phosphate, either in the form of raw materials or finished products, is imported; the indigenous phosphatic ores are comparatively poor in quality and hardly meet about 5% of the total demand. The entire requirement of potash is also met through imports as there are no known and exploitable reserves of potash in the country.

GROWTH

1.3 The Indian fertilizer industry has been supplying a substantial

portion of the growing demand of fertilizers. The beginning in the field of production of fertilizers was made way back in 1906 when a single superphosphate manufacturing unit was set up with 6400 tonnes production capacity per annum at Ranipet near Madras. Since then the Indian fertilizer industry has come a long way. The first chemical nitrogenous fertilizer plant was established in Karnataka in 1939 for the production of ammonia based on electrolysis of water. Subsequently, a large facility for production of nitrogenous fertilizer was built at Alwaye in Kerala in 1947 with a capacity of 150 tonnes per day of ammonium sulphate, followed by a large fertilizer plant at Sindri in Bihar in the public sector in 1951. Today, fertilizer is a major industry in the country. The installed capacity as on 31st December, 1993, stood at 113.53 lakh tonnes per annum of nutrients, comprising 85.31 lakh tonnes of nitrogen and 28.22 lakh tonnes of phosphate, thus making India one of the major fertilizer producing countries in the world. Today, the fertilizer industry is able to meet a substantial portion of the growing demand for fertilizers in the country. Apart from the heavy investment for installing production facilities in the public and cooperative sectors, a number of plants have also been set up in the private sector. The public and cooperative sectors account for 69.25% of the installed capacity of nitrogen and 39% of the installed capacity of phosphate. There are 57 large fertilizer plants manufacturing a wide range of nitrogenous, phosphatic and complex fertilizers. Besides, there are about 80 small and medium scale units which are producing single superphosphate (SSP).

SELF-SUFFICIENCY

1.3.1 Since the indigenous raw materials are available mainly for nitrogen, Government policy has been to achieve maximum degree of self-sufficiency in the production of nitrogenous fertilizers based on utilisation of indigenous raw materials, leaving only marginal quantities to be imported. In phosphates, however, domestic raw material constraints do not permit self-sufficiency in production. Recognising this, a deliberate policy mix involving domestic production based on indigenous rock phosphate and import of rock phosphate and sulphur as one option, production based on imported intermediates i.e. ammonia, phosphoric acid as another option, and import of DAP as the third option, has been adopted. Roughly, 70% of the requirement of phosphatic fertilizers is met through the first two options. However, since indigenous rock phosphate supplies only 5% of the total requirement of phosphate, phosphatic fertilizers produced in the country are substantially based on imported intermediates and raw materials. The entire requirement of potassic fertilizers is met through imports. Prior to 1980, nitrogenous fertilizer plants were built based on naphtha as feedstock. A number of ammonia plants were also set up during 1978 to 1982 based on fuel oil as feedstock. In 1980, two coal-based plants were set up. With associated and free gas being available from Bombay High off-shore and South Bassein, it was decided in 1980 that while gas would be a preferred feedstock in all future urea plants, naphtha would also be considered as feedstock if it was surplus after meeting the requirements of other sectors and if the location of the fertilizer plants did not readily

allow supply of gas by pipeline.

TECHNOLOGICAL SELF-RELIANCE

1.4 Self-reliance in technology, design engineering and project execution activities is very important for a vast country like India. Apart from setting up production facilities, Government has all along encouraged and supported research and development and design/engineering facilities in the fertilizer sector. As a result, Indian consultancy organisations have developed steadily along with the growth of the industry. The Indian consultancy organisations can undertake complete jobs starting with feasibility studies, basic engineering followed by detailed engineering, procurement, construction and project management etc. Gap in technology is being filled by import of modern technology wherever required. Indigenous capability has also been developed for production of a wide range of catalysts required in fertilizer plants. Capability has also been achieved to undertake detailed health survey of plant and equipment by modern and sophisticated and non-destructive testing methods which enables carrying out of timely repair and replacements to prevent unscheduled plant outage. Over the years, considerable manufacturing capability for fertilizer plant and equipment has been developed in the country. The engineering capability developed includes all essential fabrications.

FERTILIZER PRICES AND SUBSIDY

1.5.1 With a view to ensuring a reasonable return on investment and facilitating the healthy development and growth of the fertilizer industry,

the Government of India introduced the 'Retention Price Scheme' for indigenous fertilizers in 1977. Another objective was to insulate the farmers from the rising trend in fertilizer prices and to ensure that fertilizer consumption in the country did not suffer. In order to provide fertilizers to the farmers at an affordable price, the selling prices of controlled fertilizers, have been invariably fixed by Government at a level substantially lower than the actual cost of production. In order to compensate the manufacturers for lower realisation in the form of sale price as compared to the cost of production, the difference is paid as subsidy to the manufacturing units along with a fixed return on networth. The retention price scheme proved its worth in terms of stimulating greater production and use of fertilizers and thereby contributing to greater agricultural production. The cost of this scheme to the Government, in terms of subsidy payments, has been increasing steadily over the years, beginning from a modest level of Rs.25 crores in 1977-78 and going upto Rs.5800 crores during 1992-93.

1.5.2 Steady increase in fertilizer subsidy over the years has been mainly due to increase in consumption of fertilizers and non-adjustment of selling prices of fertilizers to reflect the increase in the input costs of indigenous fertilizers and the prices of imported fertilizers from time to time. With a view to containing fiscal deficit within manageable limits, the Government effected an increase of 30% in the selling price of fertilizers in August, 1991 after a gap of a decade. However, even this price hike did not materially alter the position in terms of the absolute amount of subsidy bill because, in spite of 30% price

increase, controlled fertilizers continued to be heavily subsidised.

1.5.3 Based on the recommendations of the Joint Parliamentary Committee (JPC) on Fertilizer Pricing, which presented its report to the Parliament on 20.8.1992, all phosphatic and potassic fertilizers were removed from price and movement control w.e.f. 25.8.1992. Simultaneously, the price of urea was reduced by 10% and low analysis nitrogenous fertilizers, namely, ammonium sulphate, ammonium chloride and calcium ammonium nitrate, which were decontrolled in July, 1991, were brought back under the price and distribution control in order to maintain relative price parity amongst all nitrogenous fertilizers.

1.5.4 To make the production and marketing of phosphatic and complex fertilizers more competitive vis-a-vis imports in the free market situation, a number of reliefs/concessions have been given by the Government to the indigenous industry. These include abolition of import duty on phosphoric acid, lowering of railway freight for phosphatic and potassic fertilizers and their raw materials, import substitution incentives to the producers of rock phosphate and iron pyrites, abolition of customs duty on capital goods both for new and revamping projects, interest concession on long term loans, etc. In order to cushion the impact of increase in the prices of decontrolled fertilizers, a special subsidy of Rs.1000 per tonne on purchase of indigenous DAP and imported Muriate of Potash (MOP) as also corresponding concession in the case of indigenous complex fertilizers and SSP has been given to the farmers through State Governments during the year 1993-94.



Captive Power Plant of Vijaipur Plant of NFL.

CHAPTER-II IMPORTANT DEVELOPMENTS - 1993-94

2.1.1 For the year 1993-94, a production target of 100.0 lakh tonnes of fertilizer nutrients has been fixed, comprising 78.0 lakh tonnes of nitrogen and 22.0 lakh tonnes of phosphate. The target of 78.0 lakh tonnes of nitrogen fixed for the year is about 5% higher compared to the actual production of nitrogen during the year 1992-93. At the current levels of indigenous production, the country is self-sufficient to the extent of about 85% in the case of nitrogen and 70% in the case of phosphate.

2.1.2 While some fertilizer units have set new records of production and capacity utilisation, the overall production of 53.2 lakh tonnes of nitrogen and 12.0 lakh tonnes of phosphates upto December, 1993, fell short of the target by 7% in the case of nitrogen and 25.5% in the case of phosphate.

2.1.3 Due to inadequate availability of gas supply, production in the gas-based nitrogenous plants located at Hazira and on the HBJ pipeline had to be curtailed during the year, affecting the production of urea. In spite of this, there was a positive growth of 2.8% in the production of straight nitrogenous fertilizers during the first nine months of the year. The main reason for the shortfall in the overall production of nitrogen was curtailed production of DAP and other complex fertilizers during this period.

2.1.4 During the first quarter of the year 1993-94, a number of DAP and complex fertilizer units suspended production in view of the availability of imported DAP at very low prices compared to the cost of production of indigenous units. Moreover, there was also a drop in the consumption of phosphatic fertilizers because of increase in the open market prices of phosphatic fertilizers after the

decontrol. This forced most of the units to curtail their production as they were saddled with huge inventories. With a view to making available phosphatic fertilizers at reasonable prices to the farmers and to improve the competitiveness of the industry vis-a-vis cheaper imports, Government introduced a scheme of special concession on the sale of indigenous phosphatic fertilizers to the farmers. This concession in the case of DAP has been given at the rate of Rs.1000 per tonne. Similar concession proportionate to phosphatic and potassic nutrient contents has also been made available to the farmers on complex fertilizers. A concession of Rs.340 per tonne has also been given on the sale of indigenous single superphosphate (SSP). With a view to boosting the consumption of potash, which is wholly imported, a concession of Rs.1000 per tonne on the sale of Muriate of Potash (MOP) has also been made available to the farmers. An amount of Rs.756 crores has been earmarked by the Ministry of Agriculture for implementing this scheme through the State Governments during the current year.

2.1.5 Financial constraints, coupled with price and demand uncertainties, adversely affected the production of SSP. To take care of the problems of SSP units, their old subsidy claims are being settled on priority.

2.1.6 A new gas-based urea plant at Gadepan (Distt.Kota., Rajasthan) in the private sector, owned by M/s.Chambal Fertilizers & Chemicals Limited, started trial production in December, 1993. This plant has a capacity to produce 7.26 lakh tonnes of urea per annum, equivalent to 3.34 lakh tonnes of nitrogen. Another gas-based urea plant in the private sector

at Babrala (Uttar Pradesh) is expected to start trial production in the second quarter of 1994-95. This plant will also produce 7.26 lakh tonnes of urea per annum. Another gas-based urea plant of similar capacity being set up at Shahjahanpur (Uttar Pradesh) in the private sector, is under construction.

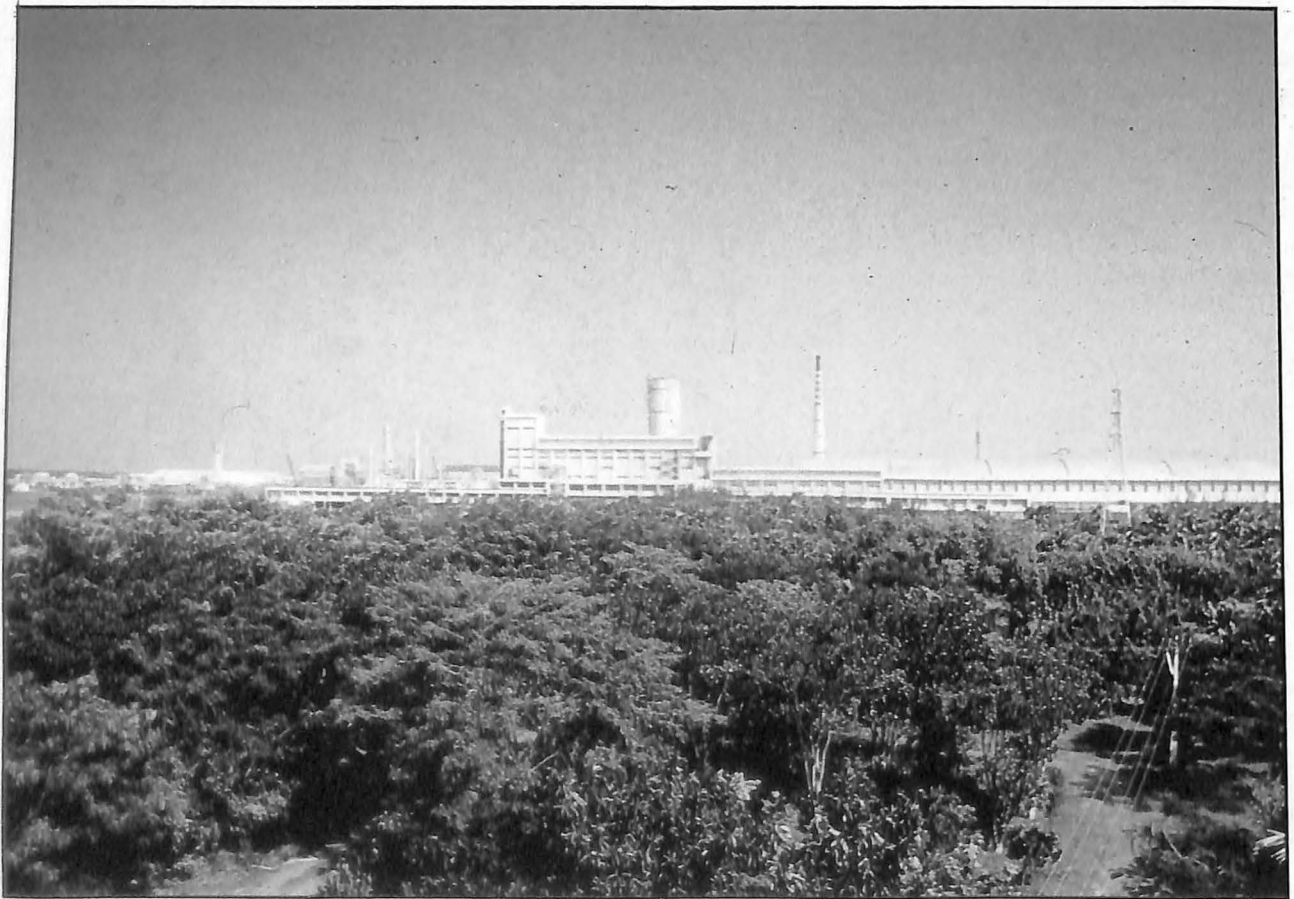
2.1.7 As a part of the strategy for increasing the production of nitrogenous fertilizers, Government has approved a project in September, 1993, for the doubling of the capacity of IFFCO's existing gas-based urea plant at Aonla (Uttar Pradesh). Doubling of the capacity of the plant at the existing location will result in considerable savings in the project cost and consequently lesser subsidy outgo, as compared to a new grass root plant. This expansion project is

likely to be commissioned in October, 1996 and will result in creation of additional capacity of 7.26 lakh tonnes per annum of urea in the country. The estimated cost of this project is Rs.960 crores with a foreign exchange component of Rs.330 crores.

2.1.8 Government has also approved a proposal in September, 1993, for doubling of the production capacity of the gas-based urea plant of M/s.National Fertilizers Limited at Vijaipur (Distt.Guna, Madhya Pradesh), at an estimated cost of Rs.987 crores with a foreign exchange component of Rs.349 crores. This project is also expected to be commissioned in October, 1996 and will result in additional capacity of 7.26 lakh tonnes per annum of urea.

2.1.9 During the year, Government also cleared a proposal of M/s.Fertilisers and Chemicals Travancore (FACT) Ltd. to set up a new ammonia plant of 900 tonnes per day capacity at a cost of Rs.618 crores with a foreign exchange component of Rs.172 crores. This project would be executed in 42 months starting from May, 1993.

2.1.10 In June 1993, Government of India acquired the 49% share of Government of Nauru in the equity of M/s.Paradeep Phosphate Limited, a public sector undertaking, at a cost of Australian Dollars 63.8 million to be paid in ten six-monthly instalments starting from June, 1993. PPL is now a wholly owned Government of India undertaking with a capacity to produce 7.20 lakh tonnes of DAP per annum.



A view of fertilizer plant of Nagarjuna Fertilizers and Chemicals Limited.

CHAPTER-III ORGANISATIONAL SET UP AND FUNCTIONS

3.1 The main activities of the Department of Fertilizers include sectoral planning, promotion and development of the fertilizer industry, planning and monitoring of production, import and distribution of fertilizers and management of subsidy for indigenous and imported fertilizers. List of subjects allocated to the Department of Fertilizers is given in Annexure-I.

3.2.1 The work of the Department is broadly divided into four Divisions dealing with (i) Fertilizer Projects and Planning; (ii) Fertilizer Import, Movement and Distribution; (iii) Administration, and (iv) Finance & Accounts. Each of these divisions is headed by an officer of the level of Joint Secretary. For advice on technical matters relating to the fertilizer industry, there is a post of Adviser of the rank of Joint Secretary.

3.2.2 To attend to public grievances, an officer has been nominated as Director of Grievances in the Department. An officer has also been nominated as Staff Grievances Officer to look into the

grievances of the employees.

FERTILIZER INDUSTRY COORDINATION COMMITTEE

3.3 There is one attached office under the Department of Fertilizers, viz. the office of the Fertilizer Industry Coordination Committee (FICC), headed by an Executive Director of the rank of Joint Secretary, dealing mainly with unit-wise fixation and revision of retention prices of fertilizers, fixation of equated freight, cost studies of fertilizer units and payment of subsidy, wherever applicable, to fertilizer units.

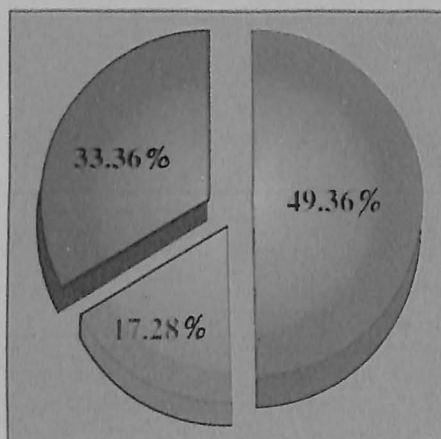
PUBLIC SECTOR UNDERTAKINGS AND COOPERATIVE SOCIETIES

3.4 The Department has under its administrative control nine public sector undertakings and two cooperative societies. List of these undertakings is given in Annexure-II.



Night view of ammonia-urea plant of KRIBHCO at Hazira (Gujarat)

SECTOR-WISE SHARE OF CAPACITY IN NITROGEN FOR 1993-94

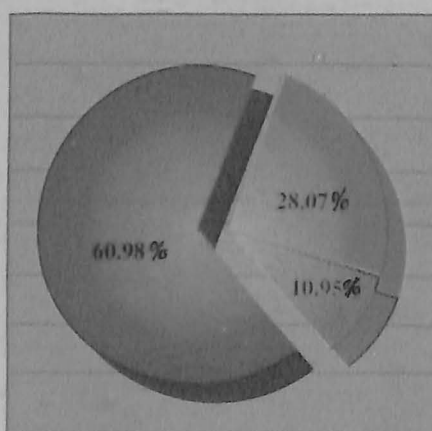


PRIVATE

PUBLIC

COOP.

SECTOR-WISE SHARE OF CAPACITY IN PHOSPHATES FOR 1993-94



PRIVATE

PUBLIC

COOP.

CHAPTER-IV GROWTH OF FERTILIZER INDUSTRY

CAPACITY

4.1.1 There are, at present, 57 fertilizer units manufacturing a wide range of nitrogenous and phosphatic/complex fertilizers, including 9 units producing ammonium sulphate as a by-product. Besides, there are about 80 small and medium scale units producing single superphosphate. Total installed capacity as on 31st December, 1993 was 85.31 lakh tonnes of nitrogen and 28.22 lakh tonnes of phosphate.

4.1.2 Four fertilizer projects, one in the public sector and three in the private sector, were under implementation as on 1st April, 1993. The public sector project of HFC at Haldia, though mechanically completed in November, 1979, continued to remain suspended due to a variety of technical problems. The three projects in the private sector are gas-based nitrogenous fertilizer projects on the HBJ pipeline, one each at Babrala and Shahjahanpur in Uttar Pradesh and Gadepan in Rajasthan, with a capacity of 7.2 lakh tonnes of urea each. The Gadepan based project of M/s. Chambal Fertilizers & Chemicals Ltd. started trial production in December, 1993. Since commercial production in the Gadepan unit had not started till 31st December, 1993, its capacity has not been taken into account. The other two projects are still under implementation and are likely to go on stream during 1994-95. The details of these projects are given in Annexure-III.

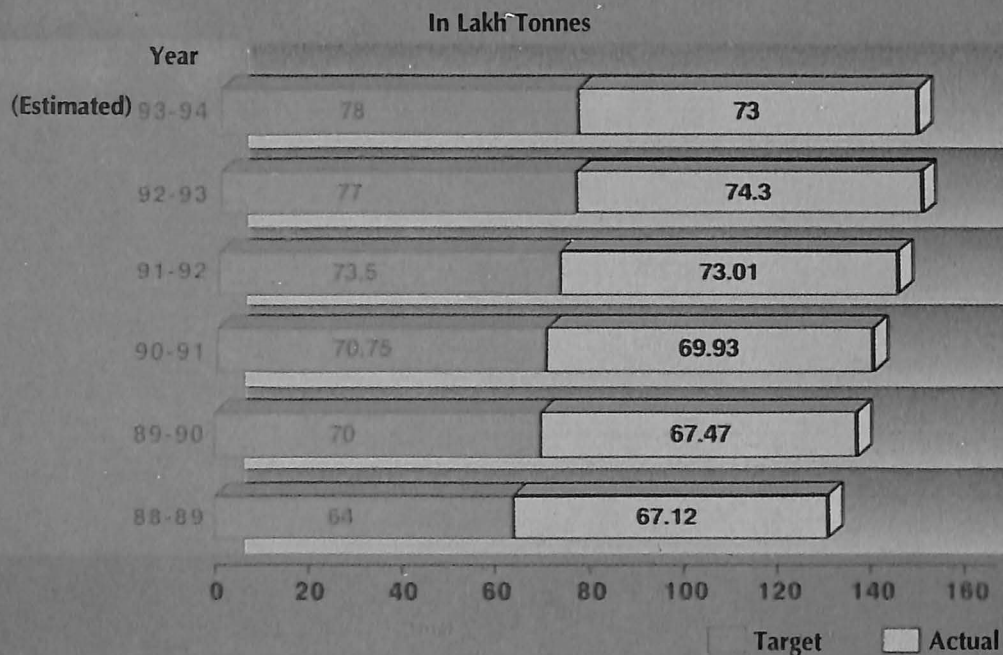
STRATEGY

4.2.1 The fertilizer industry has registered an impressive growth especially after the advent of the green revolution in the country. There has, however, been a

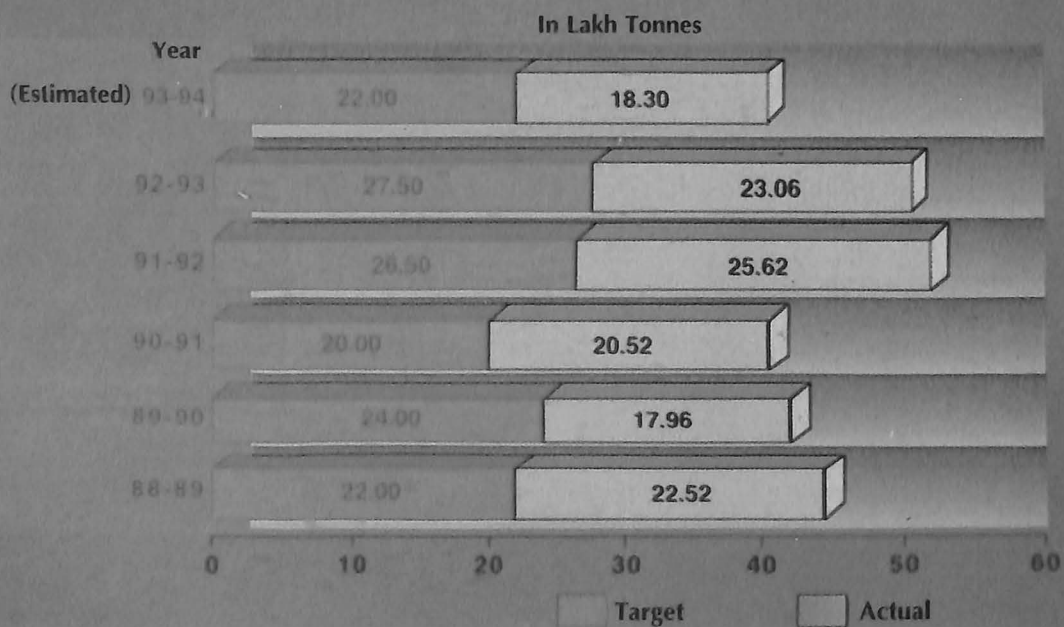
slowdown in capacity additions in the recent years. Keeping in view the foodgrain production target of 240 million tonnes by the turn of the century, ever growing demand for fertilizer and the hazards of overdependence on imports have to be kept in view while planning for capacity build-up in this industry in the coming years. It has been estimated that the fertilizer consumption during the terminal year of the Eighth Plan will be around 18.3 million tonnes in terms of nutrients. In order to keep the fertilizer demand-supply gap within reasonable limits, additional production capacities have to be created during the Eighth Plan period.

4.2.2 Besides the two gas-based nitrogenous fertilizer plants already under implementation, the other projects/schemes which are expected to be completed during the Eighth Plan period include doubling of the capacity of fertilizer plants at Aonla and Vijaipur, setting up of a grass-root medium sized nitrogenous fertilizer plant in the Krishna-Godavari Basin (Andhra Pradesh) and revamp of the fertilizer complex of Madras Fertilizers Limited. With the commissioning of these projects, as also stabilisation of production in the Gadepan based ammonia-urea plant of M/s. Chambal Fertilizers and Chemicals Ltd., the indigenous capacity of nitrogenous fertilizers would reach a level of 103.85 lakh tonnes by the end of the terminal year of the Eighth Plan as compared to the present installed capacity of 85.31 lakh tonnes. Much, however, would depend on allocation of natural gas for the fertilizer sector. Due to the prevailing demand and price uncertainties, no major phosphatic fertilizer capacities are expected to be created upto the end of the Eighth Plan period.

YEAR-WISE TARGETS AND PRODUCTION OF NITROGEN



YEAR-WISE TARGETS AND PRODUCTION OF PHOSPHATES



PRODUCTION

4.3.1 Actual production of nitrogenous fertilizers during 1992-93 was 74.30 lakh tonnes and that of phosphatic fertilizers 23.06 lakh tonnes.

4.3.2 The production target for the year 1993-94 was set at 100.0 lakh tonnes of fertilizer nutrients, comprising 78.00 lakh tonnes of nitrogen and 22.00 lakh tonnes of phosphates. This represented an increase of 2.7% over the level of production achieved in the previous year. Actual production during the first nine months of the year (April - December, 1993) has been 65.09 lakh tonnes in terms of nutrients as against the target of 73.11 lakh tonnes for this period. Besides falling short of the target by 11.0%, the production showed a decline of 10.6% over the corresponding period of the previous year, with production of nitrogen declining by 2.7% and that of phosphate declining by 34.3%.

4.3.3 Production of phosphate suffered mainly due to substantial drop in the consumption of phosphatic and complex fertilizers consequent upon increase in the prices of these fertilizers following their decontrol in August, 1992. Shortage of ammonia also affected production of units dependent on external/imported ammonia. Besides, financial constraints coupled with price and demand uncertainties adversely affected production of units producing single superphosphate. Shortfall in the production of nitrogenous fertilizers compared to the target has been mainly on account of production losses suffered by the units of FCI and HFC as a result of frequent equipment breakdowns and funds constraints and restriction of gas supply to some of the fertilizer plants

which resulted in their reduced operations. Considering the trend of production as witnessed upto January, 1994 and taking into account the demand and price uncertainties prevailing in the wake of decontrol of phosphatic and potassic fertilizers, the production of both nitrogen and phosphate is expected to fall short of the respective targets set for the year. The overall production of fertilizer nutrients during 1993-94 is expected to be around 91.30 lakh tonnes (73.00 lakh tonnes of 'N' and 18.30 lakh tonnes of 'P') as against 97.36 lakh tonnes in 1992-93.

CAPACITY UTILISATION

4.4.1 There has been significant improvement in the levels of capacity utilisation over the years. The capacity utilisation of nitrogenous and phosphatic fertilizer plants during 1992-93 was 88.0% and 82.1%, respectively. However, for the period April - December, 1993, the capacity utilisation worked out to about 83.0% in the case of nitrogenous plants and 56.5% in the case of phosphatic fertilizers.

4.4.2 In the case of nitrogenous plants, the problem of low production and capacity utilisation is confined mainly to the old and sick units under the Fertilizer Corporation of India (FCI) and the Hindustan Fertilizer Corporation (HFC). The Board for Financial and Industrial Reconstruction (BIFR) has declared both FCI and HFC as sick companies and has advised the Government to come up with unit-wise revival packages for these companies. A detailed unit by unit assessment of the viability of the various units of FCI and HFC is being carried out as part of an overall package for restructuring and rehabilitation of these two

companies. Discussions are also being held with workers, banks etc. in an effort to arrive at an agreed and viable revival package in respect of these companies for submission to the BIFR.

4.4.3 Capacity utilisation of the fertilizer industry is expected to improve as more modern plants based on proven technology and equipment go on stream in future. The existing plants in the private, public and cooperative sectors are also being encouraged to improve capacity utilisation by providing captive power plants and dual fuel facilities, wherever necessary. Retrofit and revamp of the existing plants is also being considered to increase capacity and improve energy consumption in some of these plants.

FEEDSTOCK POLICY FOR FERTILIZERS

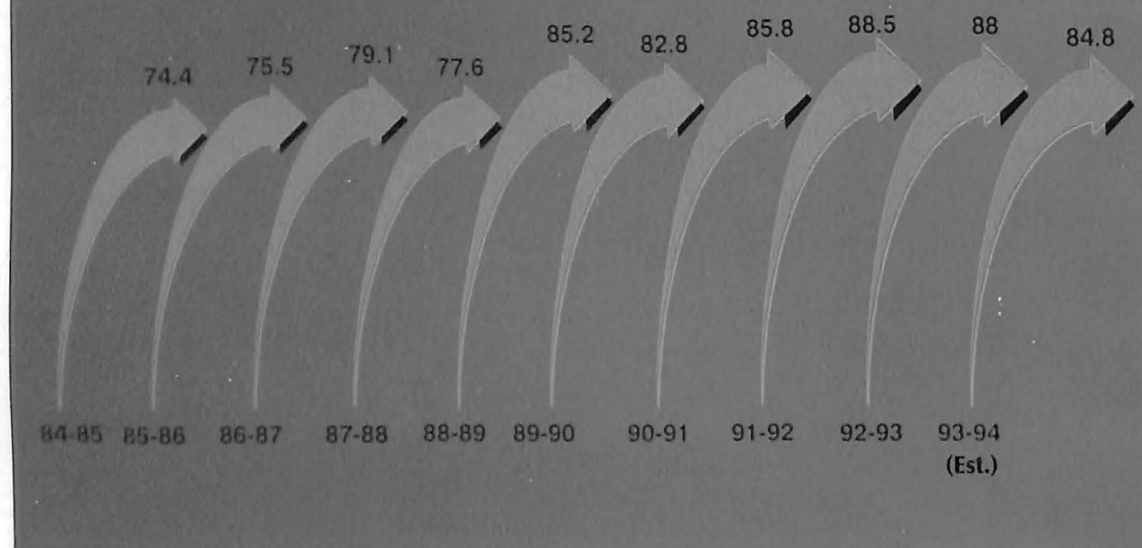
4.5 The present feedstock policy for nitrogenous fertilizers envisages setting up of additional capacity based mainly on gas. Thus, gas would continue to be the preferred feedstock and it is only in the case of non-availability of gas that other feedstocks like naphtha would be considered for setting up new units. As the coal-based technology has not proved successful, no new coal-based plants are being considered for the time being.

INDIGENOUS TECHNOLOGY & DEVELOPMENT OF KNOW-HOW

4.6.1 There are two engineering consultancy organisations under the Department of Fertilizers, viz. Projects & Development India Ltd (PDIL) and FACT Engineering and Design Organisation (FEDO), which render

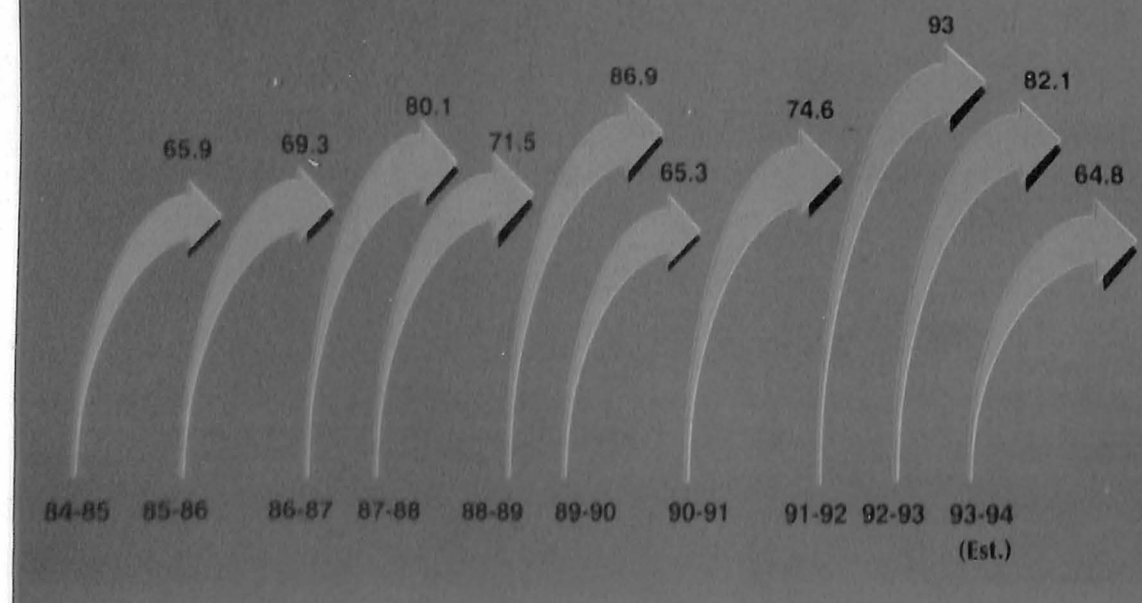
YEAR-WISE CAPACITY UTILIZATION OF NITROGEN

(In Percentage)



YEAR-WISE CAPACITY UTILIZATION OF PHOSPHATES

(In Percentage)



consultancy services to fertilizer and allied industries and also carry out R&D activities.

- i) **PDIL** PDIL has been a premier organisation in engineering and construction of fertilizer and allied chemical plants since its inception in 1961 under the name of P&D Division of FCI. PDIL has been instrumental in establishment of numerous nitrogenous and phosphatic fertilizer plants in the country. Besides design, engineering consultancy and R&D activities, it is also engaged in the production of catalysts. PDIL has to its credit the development of knowhow for ammonia and urea technology in substantial measure and its application in the design and construction of the 600 tpd/1167 tpd ammonia/urea project as part of Namrup-III plant of HFC. It was associated as Indian Contractor for the gas-based plants at Thal, Vijaipur, Aonla, Jagdishpur and Gadepan which are in production and has been assigned the same role in the projects under implementation at Babrala. For the gas-based ammonia-urea project being set up at Shahjahanpur, PDIL is the prime consultant. Of late, however, PDIL has been facing financial problems because of tapering of new projects in the fertilizer sector.

- ii) **FEDO** - FEDO is also a design and engineering consultancy organisation. FEDO handled the design, construction etc. of the 2 x 1000 tpd sulphuric acid plant for Paradeep Phosphates Ltd. FEDO was the Indian Contractor for the ammonia

plant of Hazira project of KRIBHCO. FEDO is the prime consultant for the 900 TPD ammonia project of FACT at Udyogamandal, which has been approved by the Government during the year under review. It is also involved in the R&D work on pollution control, recovery of chemicals from effluents, etc.

4.6.2 Alongwith engineering capability, the country has also developed a wide and diversified manufacturing capability for equipment. Today, about 70 per cent of the equipment required for a major fertilizer plant can be manufactured in the country.

JOINT VENTURES

4.7.1 With constraints in availability of gas, which is the most preferred feedstock for the production of nitrogenous fertilizers, and the overwhelming dependence of the country on imported raw materials for production of phosphatic fertilizers, Government is encouraging Indian companies to have joint venture production facilities in other countries which have rich reserves of natural gas and phosphatic ores.

4.7.2 The Govt. of India, alongwith IFFCO and SPIC, are partners to the extent of 18.2% of the shareholding in a joint venture project in Senegal named 'Industries Chimiques du Senegal' (ICS Senegal). The company, with its plants based in Senegal, produces phosphoric acid and finished phosphatic fertilizers. The company started production in 1984 and after debottlenecking has an installed capacity of 3,34,950 MT of phosphoric acid per annum. During the year 1993, the company produced 2.74 lakh tonnes of phosphoric acid

in terms of P_2O_5 and achieved 82% capacity utilisation. The supplies of phosphoric acid to India from this venture in 1993 totalled 2.33 lakh tonnes.

4.7.3 Government has approved a joint venture project in Jordan to produce 2.0 lakh tonnes of phosphoric acid. This project is being jointly implemented by M/s.SPIC and Jordan Phosphate Mines Company Limited and is expected to be commissioned by the end of 1995.. Jordan has abundant deposits of good quality rock phosphate.

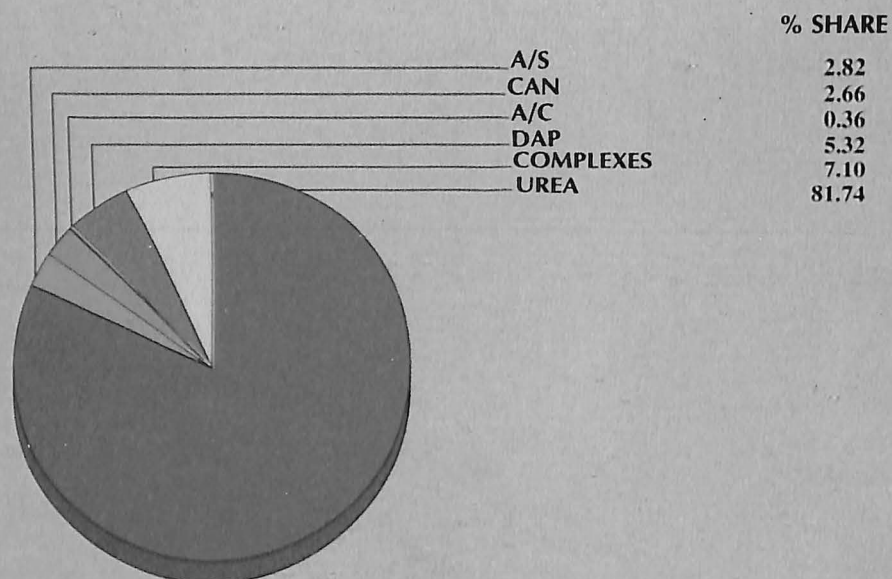
4.7.4 Efforts are also being made to set up gas-based ammonia- urea plants in Oman, Qeshm Island (Iran), Qatar and Brunei. M/s.SPIC is also exploring the possibility of setting up a gas- based nitrogenous plant in Bahrain.

ROLE OF PRIVATE SECTOR

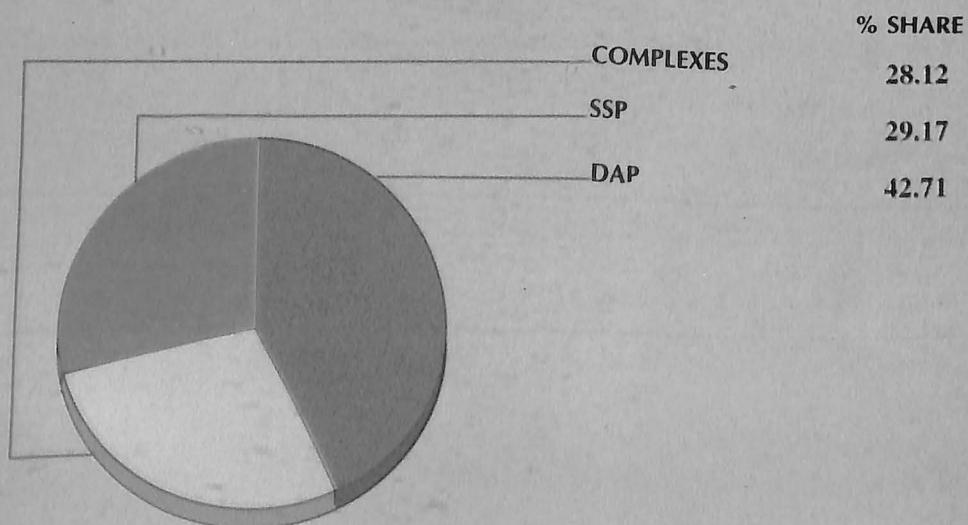
4.8.1 The private sector has played a significant role in the development of fertilizer industry in the country. In fact, the first fertilizer plant (SSP) in the country was set up by a private sector company (EID Parry) in 1906. With this modest beginning, today the private sector has come to occupy a significant place in the fertilizer industry. At present, the private sector accounts for 30.7% of the total installed capacity in nitrogen and about 61% in phosphate. The share of private sector in nitrogen capacity will substantially go up after the commissioning of the three gas based nitrogenous plants on the HBJ pipeline in the next two years; infact, one of these plants has already started trial production in December, 1993.

4.8.2 Coordination between the public and private sectors, whenever required, is ensured by the

SHARE OF DIFFERENT FERTILIZERS IN NITROGEN CAPACITY



SHARE OF DIFFERENT FERTILIZERS IN PHOSPHATE CAPACITY



Department of Fertilizers. Production targets are fixed by the Government at the beginning of the year after discussions with all the companies in the various sectors. Marketing activities are coordinated in zonal conferences and state-wise and plant-wise allocations in respect of controlled fertilizers are made under the Essential Commodities Act, 1955, at the beginning of each crop season.

SINGLE SUPERPHOSPHATE (SSP)

4.9 Single superphosphate (SSP) is a straight phosphatic fertilizer. At present, about 80 units in the medium and small scale sector, including 4 in the public sector, having total annual installed capacity of 8.23 lakh tonnes of P_2O_5 , are engaged in manufacturing this fertilizer. Alongwith other phosphatic fertilizers, single superphosphate has also been decontrolled w.e.f. 25.8.1992. The production of SSP during the current year is expected to

be around 3.00 lakh tonnes in terms of phosphate (P_2O_5) nutrient.

PRODUCT MIX

4.10 Among the straight nitrogenous fertilizers, the country is currently producing urea, ammonium sulphate, calcium ammonium nitrate and ammonium chloride. Likewise, single superphosphate is being produced as straight phosphatic fertilizer. In addition, di-ammonium phosphate (DAP), a number of grades of nitrophosphates and NPK complexes are also being produced in the country. Urea and DAP are the main fertilizers produced indigenously which account for 82% and 43% of the overall capacity of nitrogen and phosphates, respectively, in the country.

BACKWARD AREA DEVELOPMENT

4.11 Subject to the techno-economic considerations relating to availability of raw materials and other

basic infrastructure, such as power and water, as also the geographical pattern of demand, conscious effort is made to locate fertilizer plants in backward areas, to the extent possible. Of the three gas based fertilizer projects recently set up at Vijaipur, Aonla and Jagdishpur, two projects - Vijaipur (Madhya Pradesh) and Jagdishpur (Uttar Pradesh) - are located in industrially backward districts. Besides providing employment to local people, these projects significantly contribute to the economic development of the region. The three gas-based projects under implementation or trial production at Gadepan, Babrala and Shahjahanpur are also being set up in hitherto industrially underdeveloped areas. However, with the delicensing of the fertilizer industry, planning of location, except clearance from the environmental angle, is no longer feasible. Even in the case of public sector, the location of the future projects will mainly be on the basis of source of raw material and availability of infrastructural facilities.

CHAPTER-V PLAN PERFORMANCE

CAPACITY BUILD-UP

5.1.1 The installed capacity and production of fertilizers in the country at the end of Seventh Five Year Plan, the first and second years of the Eighth Five Year Plan, and the likely capacity and production at the end of

to be commissioned during the Eighth Plan period. The production of fertilizers is likely to be around 93.5 lakh tonnes of nitrogen and 30.0 lakh tonnes of phosphate during the terminal year of the Eighth Plan. Sector-wise targets and achievements

(In Lakh Tonnes)

Particulars	At the end of Seventh Five Year Plan (1989-90)	During the first year of Eighth Five Year Plan (1992-93)	Estimated during the second year of Eighth Five Year Plan (1993-94)	Anticipated at the end of Eighth Five Year Plan (1996-97)
FERTILIZERS				
1. Capacity				
i) Nitrogen	81.48	85.31	88.65	103.85
ii) Phosphates	27.50	28.22	28.22	28.22
2. Production				
i) Nitrogen	67.47	74.30	73.00	93.50
ii) Phosphates	17.96	23.06	18.30	30.00

the Eighth Plan are indicated below:

5.1.2 The installed capacity in the case of nitrogenous fertilizers is likely to reach about 103.85 lakh tonnes in terms of nitrogen nutrient by the end of the Eighth Plan period. As has been stated earlier, the gas-based urea plant of M/s.Chambal Fertilizers & Chemicals Limited, located at Gadepan (Distt. Kota, Rajasthan), with an annual installed capacity of 3.34 lakh tonnes of nitrogen, started trial production in December, 1993. Production in this plant is expected to stabilise by the end of the year under review. With this, the installed capacity of nitrogen would reach 88.65 lakh tonnes by the end of the year. On the other hand, due to uncertainty in the wake of decontrol of phosphatic fertilizers, no major phosphatic fertilizer plant is expected

in respect of production and capacity utilisation from 1988-89 onwards are given in Annexure-V & VI.

PLAN OUTLAYS - A REVIEW

5.2.1 An outlay of Rs.5484 crores has been provided for various schemes to be undertaken during the Eighth Plan period (1992-97) by the Department and the public and cooperative sector undertakings under its administrative control. Out of this, Rs.4466 crores are envisaged to be met out of internal and extra budgetary resources; the balance amount of Rs.1018 crores would be provided through budgetary support. The actual expenditure during 1992-93, that is, in the first year of the Eighth Plan, was Rs.225.81 crores.

5.2.2 For the year 1993-94, a

Plan outlay of Rs.935 crores was approved by the Planning Commission, with Rs.775 crores to be met out of internal and extra budgetary resources and the balance amount of Rs.160 crores to be provided through budgetary support. As against this, the revised outlay for 1993-94 is Rs.755.65 crores with a budgetary support of Rs.168 crores.

5.2.3 For the year 1994-95, a Plan outlay of Rs.1041.50 crores has been approved, of which Rs.857.50 crores would be met out of internal and extra budgetary resources and the balance amount of Rs.184.00 crores would be provided through budgetary support. The details of Annual Plan Outlays are given in Annexure-VII.

BUDGETARY SUPPORT FOR 1993-94

5.3.1 In the Budget for the year 1993-94, there was a net provision of Rs.3738.95 crores - Rs.160.00 crores under Plan and Rs.3578.95 crores under non-Plan. In the revised estimates for 1993-94, the net provision is Rs. 4660.65 crores, of which Rs.168.00 crores is under Plan and Rs. 4492.65 crores under non-Plan.

5.3.2. In the Budget estimates for 1994-95, there is a net provision of

Rs. 4451.73 crores. Out of this, Rs.184.00 crores are envisaged under Plan and Rs. 4267.73 crores under non-Plan. The details of non-Plan and Plan provisions in 1993-94 and 1994-95 are given in Annexure-VIII.

FINANCIAL PERFORMANCE OF PUBLIC SECTOR UNDERTAKINGS AND COOPERATIVE SOCIETIES

5.4.1 The Department has, under its administrative control, nine public sector undertakings and two cooperative societies producing fertilizers. Of this, one undertaking is engaged in consultancy services in design, engineering and implementation of fertilizer projects and another is engaged in mining operations of rock phosphate and pyrites and manufacture of SSP.

5.4.2 While four of the public sector companies (RCF, FACT, MFL and NFL) and the two cooperative societies (IFFCO and KRIBHCO) have been making profits consistently, two public sector companies (HFC and FCI) have been incurring losses right from their inception, mainly due to design and equipment deficiencies and excess manpower. However, RCF, which had been showing profits consistently during the past years,

incurred losses for the first time during 1992-93 due to various external factors like adverse exchange rate fluctuation resulting in increase of Kuwaiti Dinar loan liability, decontrol and decanalisation of phosphatic fertilizers, full convertibility of Indian Rupee etc. The mining company (PPCL), which had been making marginal profits upto 1991-92, also showed a loss during 1992-93 due to problems arising out of decontrol of phosphatic fertilizers. PDIL, which depends mainly on the establishment of new plants for its work, has been incurring losses for the past six years. PPL, which is comparatively a new company, had been incurring losses in the previous years mainly due to raw material constraints. However, it made a profit of Rs.13.12 crores during the year 1991-92, but again incurred a loss of Rs.80.91 crores during 1992-93 mainly due to heavy interest burden which pushed up its production costs and marketing problems consequent upon decontrol of phosphatic fertilizers. The companywise details of profitability from 1986-87 onwards, including provisional estimates for the current year (upto December, 1993), are given in Annexure-IX.

CHAPTER-VI PUBLIC SECTOR UNDERTAKINGS AND COOPERATIVE SOCIETIES

In all, there are nine public sector undertakings and two cooperative societies under the administrative control of Department of Fertilizers. The present status and performance of these public sector undertakings/cooperative societies has been described in the succeeding paragraphs.

PUBLIC SECTOR UNDERTAKINGS

NATIONAL FERTILIZERS LIMITED (NFL)

6.1.1. The National Fertilizers Limited (NFL) was incorporated on 23rd August, 1974 for setting up two fertilizer plants, one at Bhatinda (Punjab) and another at Panipat (Haryana). On re-organisation of the Fertilizer Corporation of India (FCI), the Nangal unit (including Nangal Expansion Project) of FCI was assigned to NFL with effect from 1.4.1978. In June 1984, NFL took up implementation of the gas based ammonia-urea fertilizer project on the HBJ pipeline at Vijaipur in Guna Distt. of Madhya Pradesh. The Vijaipur plant was commissioned in December, 1987 and its commercial production was declared on 1.7.1988.

6.1.2 The total installed capacity of NFL is 10,35,880 MT of nitrogen. With this capacity, NFL has come to be the largest producer of nitrogenous fertilizers in the country. Apart from fertilizers, the company also produces methanol at its Nangal unit, besides sulphur as a by-product at Bhatinda, Panipat and Nangal units. Industrial products like nitric acid, ammonium nitrate, sodium nitrate/sodium nitrite, liquid nitrogen, liquid oxygen etc. are also produced by NFL.

6.1.3 The authorised capital of the

company as on 31st March, 1993 was Rs.500 crores and the paid-up capital was Rs.490.58 crores.

6.1.4 NFL disinvested 1,11,625 shares in 1991-92 and 3 lakh shares in 1992-93 in favour of Financial Institutions. The total disinvestment constituted about 2.89% of the paid-up capital.

PRODUCTION PERFORMANCE

6.1.5 During the year 1992-93, the company produced 10.34 lakh tonnes of fertilizer nutrients at an aggregate capacity utilisation of nearly 100% which included a record performance of 107.3% from Nangal-II plant compared to the previous best of 96.0%. The company also achieved a record production of 11,788 tonnes of sulphur during the year, an increase of 5% over the previous best performance.

6.1.6 During April-December, 1993, the company produced 8.04 lakh tonnes of nitrogen as against 7.79 lakh tonnes during the corresponding period of last year. The aggregate capacity utilisation achieved by the company for this period worked out to 103.4% which is the best performance for any corresponding period so far.

6.1.7 Panipat unit produced 1.77 lakh tonnes of nitrogen at 100.6% capacity utilisation during April-December, 1993 which is a record performance for the corresponding period in any previous year.

6.1.8 During the same period, Vijaipur plant produced 2.99 lakh tonnes of nitrogen, achieving a capacity utilisation of 119.3% compared to 111.1% during April-December, 1992. This was also a record performance.

6.1.9 During April-December, 1993, Nangal unit produced 1.63 lakh tonnes of nitrogen (excluding industrial nitrogen) and achieved a capacity utilisation of 90.1% as compared to 93.7% for the corresponding period of last year. Besides fertilizers, the unit also produced 13,962 tonnes of industrial products as nitrogen and 9877 tonnes of methanol at a capacity utilisation of 102.6%.

6.1.10 Bhatinda unit produced 1.65 lakh tonnes of nitrogen at 93.3% capacity utilisation during April-December, 1993, compared to 97.0% during the corresponding period of last year.

SALES PERFORMANCE

6.1.11 The company sold 4.53 lakh tonnes of nitrogen during April-September, 1993 i.e. 100% of its EC allocation. During the quarter ending December, 1993, the company sold 3.26 lakh tonnes of nitrogen amounting to 55% of EC allocation for Rabi 1993-94.

FINANCIAL PERFORMANCE

6.1.12 During the year 1992-93, the company made a gross profit of Rs.231.75 crores and a net profit of Rs.111.47 crores after providing for interest and depreciation. This is the highest profit made by the company for any year so far. The company also generated highest internal resources amounting to Rs.184.81 crores. Total turnover of the company during 1992-93 was Rs.1214.29 crores compared to Rs.1137.71 crores during the previous year. During the year 1993-94 (upto December, 1993), the company made a net profit of Rs.52.28 crores against the budgeted profit of Rs.27.88 crores. Sales

turnover during this period has been Rs.921.54 crores.

VIJAIPUR EXPANSION

6.1.13 The proposal of the company for doubling the capacity of Vijaipur plant from 3.34 lakh tonnes of nitrogen to 6.68 lakh tonnes per annum at an estimated cost of Rs.987.3 crores was approved by the Government in September, 1993. The project is envisaged to be completed within 36 months from the zero date, subject to availability of gas.

AWARDS

6.1.14 Under the Memorandum of Understanding (MOU) between the Government and NFL, the company was given the rating 'excellent' by the Department of Public Enterprises (DPE) on the basis of the performance for the year 1992-93. This is the second consecutive year in which the company has been given such high rating by the DPE.

6.1.15 In October, 1993, Bhatinda unit received the National Productivity Award for the year 1991-92 on the basis of its performance during the last three years. The Bhatinda unit also received the 'Best Technical Innovation Award' from the Fertilizer Association of India. Vijaipur unit received the 'Environmental Protection Award' from FAI in December, 1992.

THE FERTILISERS AND CHEMICALS TRAVANCORE LIMITED (FACT)

6.2.1 The Fertilisers and Chemicals Travancore Limited (FACT), India's first large scale fertilizer unit, was set up in 1943, in the private sector at Udyogamandal, Cochin. In

1960, FACT became a public sector company and towards the end of 1962, Government of India became its major shareholder.

6.2.2 From a modest beginning in 1943, FACT has grown rapidly and diversified into a multi-divisional enterprise. The Udyogamandal Division has undergone four stages of expansion between 1943 and 1972. The Cochin Division was set up in two phases at Ambalamedu. Phase-I of Cochin Division for the manufacture of ammonia and urea was commissioned in 1973. Phase-II, consisting of the sulphuric acid, phosphoric acid and NPK plants, was completed and commissioned in 1977.

6.2.3 FACT Engineering and Design Organisation (FEDO), which is a consultancy division, and the FACT Engineering Works (FEW), which is a fabrication division of the company, were started in the mid-sixties.

6.2.4 With the commissioning of caprolactam plant in October, 1990, the company has entered the field of petrochemicals. FACT entered the global market for caprolactam by exporting a quantity of 2800 MTs of the product since April, 1993.

6.2.5 FACT has a total annual installed capacity of 346 thousand tonnes of nitrogen, 143.44 thousand tonnes of P2O5 and 50 thousand tonnes of caprolactam.

6.2.6 As on 31st March, 1993, the paid-up capital of the company was Rs.342.77 crores against an authorised capital of Rs.500 crores.

6.2.7 During 1991-92, the Government of India disinvested a total of 52,32,400 equity shares of FACT in favour of the General Insurance Corporation of India and its subsidiaries. During 1992-93, the

Government of India further disinvested 5,00,000 equity shares of the company in favour of the PNB Mutual Fund. With this, the percentage of disinvested shares to the total paid-up capital increased to 1.67.

6.2.8 The following products are at present manufactured by the company:

Fertilizer Divisions:

- i) Ammonia
- ii) Sulphuric Acid
- iii) Phosphoric Acid
- iv) NP 20:20 (Factamfos)
- v) Urea
- vi) Diammonium Phosphate (DAP)
- vii) Fertilizer Mixtures

Petrochemical Division:

- i) Caprolactam
- ii) Nitric Acid (By-product)
- iii) Soda Ash (By-product)
- iv) Fertilizer Grade Ammonium Sulphate (By-product)

FINANCIAL RESULTS

6.2.9 During the year 1992-93, FACT's operations resulted in a pre-tax profit of Rs.2.85 crores. The low level of profitability was due to reduced off-take of phosphatic and complex fertilizers after decontrol and stiff competition from imported caprolactam.

6.2.10 During the financial year 1993-94, upto December, 1993, the company has registered a profit of Rs.7.77 crores against a loss of Rs.11.79 crores during the

corresponding period of last year. The profitability position would have been better but for the sharp erosion in the contribution from the company's premium fertilizer product, Factamfos, which is facing tough competition in the open market, and on account of the steep reduction in the selling price of caprolactam.

PRODUCTION

6.2.11 During the year 1992-93, the production of nutrient nitrogen and phosphate stood at 2.38 lakh tonnes and 1.44 lakh tonnes, respectively.

6.2.12 During the current financial year, upto December, 1993, the production of nitrogen stood at 1.89 lakh MT against 1.87 lakh MT during the corresponding period of last year. Production of phosphate was 0.77 lakh MT as against 1.08 lakh MT in the corresponding period of last year. During April-December, 1993, the production of caprolactam was 27.6 thousand MT as against 24.87 MT in the corresponding period of last year.

6.2.13 The expected year-end production of nitrogen and phosphate are 2.49 lakhs tonnes and 1.10 lakh tonnes, respectively. Production of caprolactam is expected to be 39,717 MT during the current year.

UDYOGAMANDAL DIVISION

6.2.14 During the year 1992-93, the Udyogamandal Division produced 307 thousand MT of fertilizers. The total fertilizer production in terms of nutrient was 63 thousand MT of nitrogen and 30.2 thousand MT of phosphate. In April-December, 1993, 42.5 thousand MT of nitrogen and 15.7 thousand MT of phosphate were produced compared to 54780 MT of

N and 29140 MT of P_2O_5 in the previous year.

COCHIN DIVISION

6.2.15 During the year 1992-93, the Cochin Division produced 1.75 lakh tonnes of nutrient nitrogen and 1.13 lakh tonnes of nutrient phosphate. Total production of fertilizers in 1992-93 was 686,199 tonnes. In April-December, 1993, 146.6 thousand MT of nitrogen and 60.8 thousand tonnes of phosphate were produced.

PETROCHEMICAL DIVISION

6.2.16 1992-93 was the second full year of operation of the Division. During the year, a quantity of 36569 MT of caprolactam was produced compared to 26275 MT in the previous year. 4369 MT of soda ash (previous year 3103 MT) and 4033 MT of nitric acid (3541 MT) were also produced during the year. During the period April-December, 1993, production of caprolactam, soda ash and nitric acid was 27602 MT, 3332 MT and 1359 MT, respectively.

MARKETING

a) Fertilizers

6.2.17 During the year 1992-93, the sales volume of Marketing Division was 10.72 lakh tonnes. The sales value of Rs.566 crores for fertilizers was the highest ever achieved. During April-December, 1993, sales of 8.04 lakh tonnes valued at Rs.354.84 crores of fertilizers had been achieved compared to Rs.313.79 crores achieved for corresponding period last year.

b) Caprolactam

6.2.18 A quantity of 27241 MTs

of caprolactam was sold during the year 1992-93 as compared to 25788 MTs in the previous year.

6.2.19 During the year 1993-94, upto December, 1993, a quantity of 36320 MT of caprolactam was sold as against 18,020 MT in the corresponding period last year.

CONSULTANCY DIVISION

6.2.20. FACT Engineering and Design Organisation (FEDO), the Consultancy Division of the company, diversified its activities into the field of manpower exports by providing O & M services in the Middle-East. The division attained a turnover of Rs.572 lakhs during 1992-93.

6.2.21 During the current year, upto December, 1993, the division has secured orders worth Rs.252.39 lakhs.

FABRICATION DIVISION

6.2.22 During the year 1992-93, the division's fabrication shop achieved a turnover of Rs.229.27 lakhs against Rs.228.94 lakhs in the previous year.

EXPANSION PROGRAMME

6.2.23 The 900 tpd ammonia replacement project of the company has started taking shape. The foundation-stone was laid by the Chief Minister of Kerala on September 25, 1993. The new plant is expected to be on stream in 46 months starting from May, 1993.

RASHTRIYA CHEMICALS & FERTILIZERS LIMITED (RCF)

6.3.1 Rashtriya Chemicals and Fertilizers Limited (RCF) came into being as a separate company on 6th

March, 1978 as a result of reorganisation of the erstwhile Fertilizer Corporation of India Limited. At the time of its formation, the company had only one operating unit at Trombay (near Bombay) and two major projects under implementation viz. Trombay-IV and Trombay-V Expansion. The gas-based Thal-Vaishet fertilizer complex, about 120 kms from Trombay, was also later implemented by RCF and it commenced commercial production on June 1, 1985. As on 31st March, 1993, the company had an authorised share capital of Rs.800 crores and a subscribed and paid-up capital of Rs.551.69 crores.

PRODUCTION PERFORMANCE

6.3.2 The annual installed capacity of all the units of RCF is 10 lakh tonnes of nitrogen and 1.20 lakh tonnes of phosphate. The production of the company during 1992-93 was

9.23 lakh tonnes of nitrogen and 1.14 lakh tonnes of phosphate. Besides fertilizers, the company produces a number of industrial products, such as methanol, concentrated nitric acid, methylamine, ammonium bicarbonate, sodium nitrate, sodium nitrite, dimethyl formamide etc.

6.3.3 During April-December, 1993, the company produced 6.85 lakh tonnes of nitrogen compared to 6.82 lakh tonnes in the corresponding period of the previous year and 0.78 lakh tonnes of phosphate as against the production of 0.90 lakh tonnes in the corresponding period of the previous year. The production would have been much higher but for some losses suffered due to ONGC gas pipeline rupture, transport strike and market constraints following decontrol of phosphatic fertilizers. The company continued with its fertilizer promotion programmes to educate the farmers in the scientific and balanced use of fertilizers.



A view of ammonia-urea plant of RCF at Thal (Maharashtra)

SALES PERFORMANCE

6.3.4 The sale of fertilizers during the year 1992-93 was 8.80 lakh tonnes of nitrogen and 0.92 lakh tonnes of phosphate. During the period April-December, 1993, the company sold 6.54 lakh tonnes of nitrogen and 0.50 lakh tonnes of phosphate. Sales of phosphatic fertilizers have been affected due to sharp increase in the prices of these fertilizers following their decontrol in August, 1992.

OPERATING RESULTS

6.3.5 During the year 1992-93, the company made a loss of Rs.26.58 crores after tax for the first time since its incorporation mainly on account of adverse exchange rate fluctuation on Kuwaiti Dinar loan liability, decontrol of phosphatic fertilizers and increase in the cost of inputs such as rock phosphate, DAP, MOP etc. The company has earned a profit of Rs.63.37 crores during April-December, 1993. This level of profit is, however, without considering the impact of exchange rate fluctuations on both principal and interest in respect of Kuwaiti Dinar loan taken by RCF. If the impact of these loan liabilities is recognised, the profit for the period April- December, 1993 would have been Rs.28.24 crores. After tax provision of Rs.28.00 crores, the profit after tax is Rs.0.24 crores.

6.3.6 The proposal of the company to provide compensation for the loss arising out of the Kuwaiti Dinar loan, has been considered by the Government of India and it has been decided that the company would be paid a compensation of Rs.150.88 crores.

6.3.7 The company paid a dividend of Rs.11.03 crores for the

financial year 1992-93 at the rate of 2% of its paid-up capital as on 31.3.93.

DISINVESTMENT

6.3.8 Government of India has disinvested about 5.64 per cent of the equity share capital of the company during 1991-92. Further disinvestment of about 1.57 per cent and about 0.27 per cent was effected during October, 1992 and December, 1992, respectively. Thus, the total disinvestment has been of the order of about 7.48 per cent.

DIVERSIFICATION AND EXPANSION PLANS

6.3.9 The following projects form a part of the diversification and expansion plans of RCF:

- i) A project to enhance capacity to produce ammonia from 1350 MTPD to 1700 MTPD per stream in each of the existing two ammonia streams at Thal in two phases is under consideration of the Government of India.
- ii) The company is planning to set up a 15,000 MT per annum Melamine Plant at Thal.
- iii) RCF, alongwith KRIBHCO, is negotiating with Oman Oil Company to set up an ammonia-urea complex in the Sultanate of Oman based on the natural gas available there. The company is also exploring the possibility of setting up a joint venture phosphatic project in Jordan.

MADRAS FERTILIZERS LIMITED (MFL)

6.4.1 Madras Fertilizers Limited

(MFL) was incorporated in December, 1966, initially as a joint venture between the Government of India and AMOCO India Incorporation of USA, with equity share capital contribution of 51% and 49%, respectively.

6.4.2 In accordance with the participation agreement between the Govt. of India (GOI), AMOCO India (AMOCO) and the National Iranian Oil Company (NIOC), the NIOC acquired 50% of the shareholding of AMOCO in MFL on 22nd November, 1972. With this acquisition, the share-holdings of the Government and the other two parties upto 21st July, 1985 were as under:

Government of India	51.0%
Amoco India Incorporation	24.5%
National Iranian Oil Company (NIOC)	24.5%

6.4.3 The share-holding of AMOCO was purchased by the Government of India and NIOC in their respective proportion on July 22, 1985. As a result, the present position of share- holding of MFL is as under:

Government of India	67.55%
N I O C	32.45%

As on 31st March, 1993, the authorised share capital of the company was Rs.135 crores and the subscribed and paid-up capital was Rs.106.37 crores.

PRODUCTION PERFORMANCE

6.4.4 The annual installed capacity of MFL is 1.76 lakh tonnes of nitrogen and 1.12 lakh tonnes of phosphate. The plants started production in November, 1971. The production of fertilizers during 1992-93 was 1.46 lakh tonnes of nitrogen and 1.17 lakh tonnes of phosphate.

6.4.5 The production target for 1993-94 is 1.35 lakh tonnes of nitrogen and 1.03 lakh tonnes of phosphates. As against this, the anticipated production for 1993-94 is 1.08 lakh tonnes of nitrogen and 0.89 lakh tonnes of phosphates with a capacity utilization of 61% and 79%, respectively.

6.4.6 The budgeted target for the first nine months' period ending December, 1993 was 0.93 lakh tonnes of nitrogen and 0.70 lakh tonnes of phosphates. Against this, the actual production during this period was 0.82 lakh tonnes of nitrogen and 0.53 lakh tonnes of phosphates.

6.4.7 The main reason for the shortfall in the production of nitrogen has been the low load operation of ammonia plant on account of raw water limitation. The shortfall in production of phosphate has been due to curtailment of production as a result of high product inventory and uncertain market conditions prevailing in the wake of decontrol of phosphatic fertilizers.

FINANCIAL RESULTS

MANUFACTURING OPERATIONS

6.4.8 Provisional results of the company's operations for the period April-December, 1993 show a loss of about Rs. 59.11 crores in manufacturing operations against a budgeted loss of Rs.28.85 crores for the same period.

BIO-FERTILIZERS

6.4.9 The Bio-fertilizer production for the period April- December, 1993 was 57.87 MT with a turnover of Rs.7.89 lakhs and a provisional profit

of Rs.3.43 lakhs.

6.4.10 The estimated profit from this activity for the year 1993-94 is expected to be Rs.4.43 lakhs.

TRADING ACTIVITY/ IMPORTED DAP

6.4.11 MFL has, during the period April-December, 1993, purchased 0.96 lakh tonnes of imported DAP of which 0.83 lakh tonnes was sold during the period April-December, 1993 resulting in a profit of Rs.1.11 crores as against the budgeted profit of Rs.2.33 crores. The estimated profit from this activity for the year 1993-94 is expected to be Rs.0.84 crore.

AGROCHEMICALS

6.4.12 MFL sold through its normal distribution channels Rs.11.06 crores worth of agrochemicals during the period April- December, 1993. The provisional profit in agrochemicals operations for this period is Rs.0.42 crores. The estimated profit from this activity for the year 1993-94 is expected to be Rs.0.68 crores.

6.4.13 MFL's overall operations resulted in a profit after tax of Rs.12.13 crores during 1992-93 as compared to Rs.16.36 during 1991-92. The estimated loss for the year 1993-94 is Rs.35.37 crores as against the budgeted loss of Rs.33.91 crores.

REVAMP OF MFL PLANTS

6.4.14 A project to revamp the ammonia, urea and NPK plants of MFL at an approved cost of Rs.487.42 crores is under implementation since January, 1993. The revamp aims at extending the economic life of these plants by 15 years, besides reducing

energy costs in ammonia production by 41%, increasing urea production capacity by 58% and providing flexibility to produce an additional quantity of 75 tpd of urea instead of NPK in case phosphoric acid is not available. Government of India and NIOC have fully subscribed to their respective shares of revamp equity of Rs.61.63 crores. The benefits from the revamp are expected to flow from the last quarter of 1995.

THE FERTILIZER CORPORATION OF INDIA LTD. (FCI)

6.5.1 The Fertilizer Corporation of India Ltd.(FCI), which came into existence on 1st January, 1961, was reorganised with effect from 1.4.1978. It has four operating units, at Sindri (Bihar), Gorakhpur (Uttar Pradesh), Ramagundam (Andhra Pradesh) and Talcher (Orissa), with a total annual capacity of 8.06 lakh tonnes of nitrogen. Besides, it has an organisation, known as the Jodhpur Mining Organisation which is engaged in the mining and selling of gypsum. The authorised share capital of the company as on 31st March, 1993 was Rs.800 crores and the paid-up capital Rs.623.39 crores.

PRODUCTION PERFORMANCE

6.5.2 During the year 1992-93, the company produced 2.35 lakh tonnes of nitrogen with an average capacity utilisation of 29.2%. During the year, Sindri unit registered a record production of urea, ammonium nitrate, nitric acid and ammonium bicarbonate. The overall production of the company during the current financial year (upto December, 1993) has been 1.87 lakh tonnes of nitrogen

(at 30.9% capacity utilisation) as compared to 1.54 lakh tonnes during the corresponding period of last year. Severe liquidity problem resulting in non-availability of inputs, power supply disturbances in APSEB and OSEB grids and frequent equipment problems have mainly been responsible for low production and capacity utilisation.

SINDRI

6.5.3 Production in Sindri unit during 1993-94 (upto December, 1993) was 89.2 thousand tonnes of nitrogen (at 54.3% capacity utilisation) as compared to 92.7 thousand tonnes during the corresponding period of last year. The production would have been still higher but for various equipment problems like Revex leakage in Air Separation unit, etc.

6.5.4 The Sindri Plant is meeting all the statutory pollution control standards. A number of pollution control schemes such as urea hydrolyser stripper and NOx abatement scheme are being implemented at Sindri unit at a total cost of Rs.13.20 crores.

GORAKHPUR

6.5.5 The plant has been lying shutdown since June 10, 1990 following an accident.

RAMAGUNDAM

6.5.6 The coal-based plant at Ramagundam produced only 61.5 thousand tonnes of nitrogen (at 36.0% capacity utilisation) during April-December, 1993 as against the production of 35.4 thousand tonnes during the corresponding period of last year. The production would have been still higher but for frequent

equipment problems, power supply disturbances and problems in supply of coal.

TALCHER

6.5.7 The coal-based plant at Talcher produced 36.0 thousand tonnes of nitrogen during April-December, 1993 at about 21.1% capacity utilisation, as compared to the production of 25.8 thousand tonnes in the corresponding period of last year. Low capacity utilisation was mainly the result of frequent equipment breakdowns, shutdown of plant for about 12 days in October, 1993 due to disconnection of power supply for non-payment of dues and power supply disturbances from M/s.OSEB.

SALES PERFORMANCE

6.5.8 During April-December, 1993, FCI sold 1.97 lakh tonnes of nitrogen as against 1.69 lakh tonnes during the corresponding period of last year.

FINANCIAL RESULTS

6.5.9 During the period April-December, 1993, the company incurred a net loss of Rs.237.02 crores as against Rs.193.53 crores for the corresponding period of last year.

REFERENCE TO BIFR

6.5.10 On a reference made to BIFR under the Sick Industrial Companies (Special Provisions) Act, 1985; in April, 1992, FCI has been declared a sick company. A unit by unit exercise has been taken up to prepare a revival package. As per the latest directions of the BIFR, discussions are being held with the workers for exploring the possibility of

an agreed revival package for the company for submission to the BIFR.

PARADEEP PHOSPHATES LIMITED (PPL)

6.6.1 Paradeep Phosphates Limited (PPL) was incorporated on 24.12.1981 as a 100% Govt. of India enterprise with an authorised capital of Rs.120 crores. A participation agreement between the Govt. of India and the Govt. of Nauru was signed on May 26, 1982 envisaging 40% equity participation by the Govt. of Nauru and 60% by the Govt. of India. In November, 1985, it was decided to increase the participation of the Govt. of Nauru in the share capital from 40% to 49% with the Govt. of India holding balance 51%. PPL has, however, again become a 100% Govt. of India enterprise with effect from June 10, 1993 as the 49% equity shares held by the Govt. of Nauru have been acquired by the Govt. of India.

6.6.2 PPL is operating a phosphatic fertilizer plant at Paradeep in Orissa set up at a cost of Rs.630.82 crores. The project, which has been implemented in two phases, has the following installed capacity:

Installed Capacity
(lakh tonnes per annum)

i) Di-Ammonium Phosphate(DAP)	7.25
ii) Phosphoric Acid	2.25
iii) Sulphuric Acid	6.60

6.6.3 Construction of Phase-I of the Paradeep Fertilizer Project, comprising the DAP plant, bagging plant, bulk silo, acid and ammonia storage, railway siding, township etc., was started in February, 1983 and the plant was commissioned in February, 1986. Commercial

production of DAP started on 1.8.1986 and PPL produced in all 32,12,995 MT of DAP till the end of March, 1993.

6.6.4 Construction of Phase-II, comprising the sulphuric acid plant, phosphoric acid plant, captive power plant, material handling system and utilities, started in January, 1985 and was mechanically completed by May, 1990. Trial run of sulphuric acid plant and phosphoric acid plant was completed in May, 1992 and commercial production was started in June, 1992. However, the sulphuric acid plant developed equipment problems and has not been operated at all during the current year. The problems are being attended to and it is expected to resume production by April, 1994.

PRODUCTION PERFORMANCE

6.6.5 During the year 1992-93, the company produced 5.23 lakh tonnes of DAP with 72.4% capacity utilisation. During April- December, 1993, the company has produced 2.05 lakh tonnes of DAP and achieved about 38% capacity utilisation. Production of DAP was suspended from April, 1993 to July, 1993 due to non- remunerative prices of DAP. Production was restarted in end July, 1993 after Govt. of India announced a special concession of Rs.1000/- per MT on indigenous DAP. It is estimated that the total production of DAP during 1993-94 would be about 4.0 lakh tonnes.

SALES PERFORMANCE

6.6.6 During the year 1992-93, the company sold 7.69 lakh tonnes of fertilizers comprising 4.79 lakh MT of DAP produced at Paradeep, 2.34 lakh

MT of imported DAP, 0.18 lakh MT of imported NPK and 0.38 lakh MT of Urea. The turnover of the company during 1992-93 was Rs.504.47 crores including Rs.55.58 crores of subsidy.

6.6.7 During the period April to December, 1993, total volume of sales of the company was 5.23 lakh MT, consisting of 3.06 lakh tonnes of own DAP, 0.69 lakh tonnes of imported DAP, 0.19 lakh MT of imported NPK, 0.48 lakh MT of urea and 0.81 lakh MT of imported MOP.

FINANCIAL PERFORMANCE

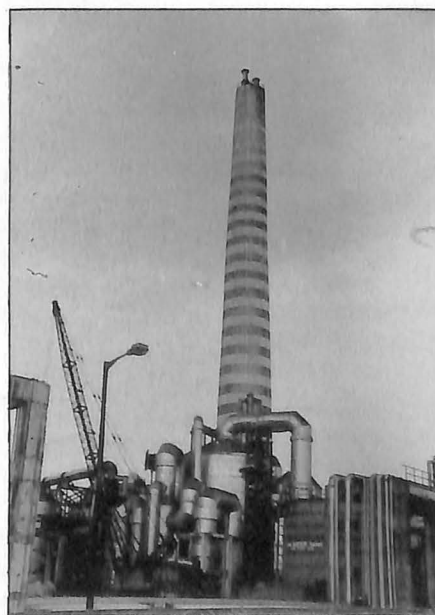
6.6.8 The company suffered a net loss of Rs.80.91 crores and a cash loss of Rs.48.34 crores during the year 1992-93. The reasons for the loss were the poor performance of Phase-II plants and marketing problems in the

wake of decontrol of phosphatic fertilizers, as also the very heavy interest burden. During the current year, the company has suffered a net loss of Rs.71.09 crores upto December, 1993, for the same reasons.

CAPITAL RESTRUCTURING

6.6.9 Government of India has already agreed in principle to undertake capital restructuring of PPL to ease the burden of interest on Government of India loans. Details in this regard are being worked out.

6.6.10 The company is also planning to diversify its product line to include production of NPK fertilizers of 12:32:16 and 10:26:26 grades.



Sulphuric Acid Plant of PPL at Paradeep.

HINDUSTAN FERTILIZER CORPORATION LIMITED (HFC)

6.7.1 The Hindustan Fertilizer Corporation Limited (HFC) units at Namrup (Assam), Barauni (Bihar), Durgapur (West Bengal), the Haldia Project (West Bengal), the Eastern Marketing Zone, the Fertilizer Promotion and Agricultural Research Centre, Purchase and Liaison office, Calcutta and Agronomy Wing at Sindri. HFC was incorporated on 14th March, 1978 consequent upon the re-organisation of the erstwhile Fertilizer Corporation of India (FCI). As on 31st March, 1993, the company had an authorised share capital of Rs.750 crores and the subscribed and paid-up share capital of Rs.686.02 crores.

PRODUCTION PERFORMANCE

6.7.2 HFC has five operating units, viz. Barauni, Durgapur, Namrup-I, Namrup-II and Namrup-III. The total annual installed capacity of these units is 6.54 lakh tonnes of nitrogen. The total production of the company during 1992-93 was 2.19 lakh tonnes of nitrogen at an overall average capacity utilisation of 33.5%.

6.7.3 The company has produced 0.98 lakh tonnes of nitrogen during the period April-December 1993 and is expected to achieve a production level of 1.42 lakh tonnes of nitrogen during 1993-94 as against the target of 2.99 lakh tonnes.

6.7.4 The performance of Namrup-I, Namrup-II, Barauni and Durgapur units has not been satisfactory for quite a long time, mainly due to ageing of the plants and equipment/design deficiencies. Foreign consultants were engaged to



Mechanical ship unloader of Paradeep Phosphates Ltd.

undertake an end-to-end survey of the units. The consultants recommended a rehabilitation scheme involving an investment of Rs.486.3 crores at 1988 price level. Such a high order of investment was not considered viable. In terms of Section 3(1) (i) of the Sick Industrial Companies (Special Provisions) Act, 1985, the case of the company was referred to the BIFR. In its first hearing held on 12.11.1992, BIFR declared HFC a sick company. In view of the orders of the BIFR, an assessment of the viability of each of the units of HFC is being carried out as a part of the overall package for restructuring and rehabilitation of the company. Consultations with the workers are being held to see if an agreed revival package in respect of the company could be submitted before the BIFR.

6.7.5 Due to acute fund constraints, the operation of Durgapur and Barauni units was suspended in

September, 1993. Government has decided to release about Rs.30 crores in stages to the company to resume production in these units. Both these units are expected to resume production in March, 1994.

PROJECT UNDER IMPLEMENTATION (HALDIA PROJECT)

6.7.6 Though the Haldia Fertilizer Project was mechanically completed in November, 1979, it could not be commissioned initially due to non-availability of power from the West Bengal State Electricity Board. Government, therefore, sanctioned installation of a 20 MW gas turbine which was commissioned in January, 1982. However, when the commissioning activities of the plant started, it faced a number of equipment problems, including defects in oxygen compressor. As

these problems were very frequent, Govt. had to suspend the commissioning activities in October, 1986. Foreign consultants were engaged to undertake an end-to-end survey of the project. The consultants recommended a rehabilitation scheme involving an investment of Rs.500 crores at 1988 prices. Such a high order of investment was considered unviable. An assessment of the viability of Haldia project is being carried out as a part of the overall package for restructuring and rehabilitation of the company as per the directions of the BIFR.

FARMERS' EDUCATION

6.7.7 The company continued to organise extension activities in its marketing areas to educate the farmers in the correct choice and balanced use of fertilizers.

6.7.8 The Rainfed Farming Project, funded by the Government of U.K., which has already completed 5 years, continued to be implemented in the States of Orissa, West Bengal and Bihar. The sanction for implementation of this project is valid upto 1993-94.

SALES PERFORMANCE

6.7.9 HFC sells its products mainly in Assam, North Eastern States, West Bengal, Bihar, Orissa and U.P. The company has undertaken selling of imported DAP and Urea by extending its marketing activities to Rajasthan, Punjab, Haryana and Maharashtra. The company sold 2.60 lakh tonnes of urea and DAP (1.43 lakh tonnes of nitrogen and 0.82 lakh tonnes of P_2O_5) during the period April-December, 1993.

OPERATING RESULTS

6.7.10 The company incurred a loss of Rs.349.44 crores (including penal interest on GOI loan of Rs.108.47 crores) during 1992-93. Loss during 1993-94 (April-December, 1993) was Rs. 292.03 crores.

6.7.11 The accumulated loss of the company as on 31.3.1994 is expected to be of the order of Rs.2255.20 crores (provisional) including penal interest of Rs.327.31 crores on Government loans.

PYRITES, PHOSPHATES & CHEMICALS LTD. (PPCL)

6.8.1 Pyrites, Phosphates & Chemicals Limited (PPCL) was set up in March, 1960 to exploit the pyrites deposits in the country. The company is, at present, engaged in the mining of pyrites deposits as well as production of single superphosphate at Amjhore in Bihar, exploratory-cum-production mining of pyrites deposits at Saladipura in Rajasthan, and mining of rock phosphate ore from the Mussoorie Phosphorite deposits in U.P. Pyrites is used as a substitute for sulphur in the manufacture of sulphuric acid and is also supplied in powdered form for reclamation of alkaline soils. The company is also engaged in trading of imported fertilizers like DAP, Urea, NPK and MOP.

6.8.2 The authorised capital of the company as on 31st March, 1993 was Rs.80.00 crores and the paid-up capital was Rs.70.67 crores.

PHOSPHATIC FERTILIZER PLANT, AMJHORE, BIHAR (SINGLE SUPERPHOSPHATE)

6.8.3 The Amjhore phosphatic

fertilizer plant consists of a pyrites based sulphuric acid plant and a single superphosphate plant. The SSP plant was commissioned in November, 1988 with bought out acid, while the pyrites based sulphuric acid plant was commissioned in November, 1989 and commercial production commenced from 1st January, 1990. The installed capacity of SSP in this plant is 2.64 lakh tonnes per annum (42.2 thousand tonnes of P_2O_5).

6.8.4 During the year 1992-93, the Amjhore unit produced 28.35 thousand tonnes of phosphate nutrient at 67% capacity utilisation. During the period April-December, 1993, the unit produced 92.5 thousand tonnes of phosphate materials utilizing 46.7% of capacity.

6.8.5 For the year 1993-94, the unit is expected to produce 24 thousand tonnes of phosphate nutrients at 57% of capacity utilisation. The low capacity utilisation has been due to forced reduction of production to reduce accumulated stocks.

AGRICULTURE GRADE PYRITES

6.8.6 During the year 1992-93, PPCL produced 30.05 thousand tonnes of agriculture grade pyrites (AGP). Production during April-December, 1993 was 12.68 thousand tonnes and sales 15.5 thousand tonnes amounting to Rs.53 lakhs. The production of agriculture grade pyrites is matched to make regular supplies to the States of U.P. and Bihar which are the main purchasers of pyrites. During the year 1993-94, the company expects to produce 23 thousand tonnes of AGP.

PYRITES BASED PHOSPHATIC FERTILIZER PROJECT AT SALADIPURA (RAJASTHAN)

6.8.7 Saladipura in Rajasthan has deposits of about 120 million tonnes of medium grade pyrites, equivalent to 25 million tonnes of sulphur. For exploiting these deposits for the production of sulphuric acid to be utilised mainly for producing single superphosphate, PPCL has submitted a proposal for setting up an integrated project at Saladipura consisting of a 600 TPD SSP Plant and a 240 TPD pyrites based sulphuric acid plant. However, with the decontrol of phosphatic fertilizers and consequent withdrawal of subsidy support, there is a doubt about the viability of the project because of its higher cost of production of SSP compared to the conventional SSP producing units. In view of this, the company is exploring the possibility of setting up a 300 TPD SSP plant based on bought out acid at a cost of about Rs.7.50 crores.

MUSSOORIE PHOSPHORITE PROJECT, DEHRADUN

6.8.8 The company produced 98 thousand tonnes of Mussoorie Phos. during 1992-93. The production during April-December, 1993 has been 85.77 thousand tonnes. Sales upto December, 1993 is 63 thousand tonnes against 103.46 thousand tonnes during 1992-93. During 1993-94, the company expects to produce 120 thousand tonnes.

TRADING ACTIVITIES

6.8.9 The company handled about 5.72 lakh tonnes of imported DAP, Urea and NPK at 8 ports in 1992-93 and marketed them in the areas allocated by the Government. During 1993-94, PPCL is handling

imported DAP, NPK and Urea at 7 different ports, viz., Vizag, Paradeep, Haldia, Sagour, Karwar, Porbandar, Machilipatnam, and marketing the same in almost all the States.

VILLAGE LEVEL DEVELOPMENT PROGRAMME - INDO-EEC FERTILIZER EDUCATION PROGRAMME

6.8.10 PPCL has successfully concluded the Indo-EEC Fertilizer Education project Phase-II and is likely to get further extension of the project under the programme. With the assistance from the European Economic Community (EEC), PPCL has demonstrated scientific package of agricultural practices at the grassroot level in the States of U.P. and Bihar.

FINANCIAL PERFORMANCE

6.8.11 PPCL incurred a loss of Rs.8.29 crores during 1992-93. The loss was mainly due to marketing problems arising out of decontrol of phosphatic fertilizers. The company is making extensive efforts towards cost reduction and efficiency improvement but despite all the economy measures, it is unlikely to eliminate the losses in the year 1993-94. During April- December, 1993 the company suffered a loss of Rs. 11.36 crores.

PROJECTS & DEVELOPMENT INDIA LIMITED (PDIL)

6.9.1 Projects & Development India Limited (PDIL) was formed as a separate company on 7th March, 1978 with its registered office at Sindri, Dhanbad, Bihar, consequent upon the reorganisation of erstwhile Fertilizer Corporation of India Limited. The authorised share capital of the

company as on 31st March, 1993 stood at Rs.40 crores and the paid-up equity capital at Rs.35.52 crores.

6.9.2 PDIL is a design, engineering, research and development organisation with the following three major areas of activities:

- 1) Design, engineering and consultancy services;
- 2) Research and development; and
- 3) Production of catalysts, chemicals and fabrication of equipments.

OPERATING RESULTS

6.9.3 The company incurred a net loss of Rs.13.66 crores during 1992-93 as against a loss of Rs.16.48 crores during 1991-92.

6.9.4 During the year 1993-94 (April-December, 1993), the company incurred a loss of Rs. 18.61 crores. The loss is attributable mainly to delays in placement of orders from a gas-based fertilizer project at Shahjahanpur and delayed start of work on expansion of the Vijaipur plant of NFL and Aonla plant of IFFCO. The work force is also disproportionately large to the jobs being handled by the company.

ENGINEERING DIVISION

6.9.5 The Engineering Division is engaged in design, engineering and consultancy services in the field of technical procurement, inspection, stores management, construction supervision, erection and commissioning of fertilizer and chemical plants.

6.9.6 During the year, the Engineering Division executed DM Water Plant of IOC, NOx Abatement

plant of M/s NFL and a number of other minor projects for M/s.IOC, ONGC, KRIBHCO, RCF etc.

6.9.7 During the year under report, the company was associated with the following major fertilizer projects:

1. Gadepan Project of M/s.Chambal Fertilizers & Chemicals Ltd.
2. Babrala Project of M/s.Tata Chemicals Ltd.
3. Shahjahanpur Project of M/s.Bindal Agro Chem. Ltd.

6.9.8 The Gadepan project started total production in December, 1993, whereas the Babrala project and Shahjahanpur project are likely to be completed during 1994 and 1995, respectively.

6.9.9 The overall progress achieved on these three gas-based projects as on 31.12.1993 has been as below:-

- | | |
|-------------------------|---------|
| 1. Gadepan Project | 100.00% |
| 2. Babrala Project | 100.00% |
| 3. Shahjahanpur Project | 71.71% |

6.9.10 JOBS SECURED DURING 1993

- i) Imported LPG terminal facilities at Kandla for M/s.Indian Oil Corporation.
- ii) Gas cleaning revamp for Steel Authority of India Ltd., Rourkela.
- iii) Effluent treatment and Urea Hydrolyser-cum-Stripper systems for Neyveli Lignite Corporation, Neyveli.
- iv) Spray Type Saturator Project, RSP, Rourkela.
- v) Aonla expansion project of

IFFCO and Vijaipur Expansion project of NFL.

TRENDS TOWARDS DIVERSIFICATION EFFORTS

6.9.11 As the opportunities of business in fertilizer sector are on the decline, PDIL has made sustained efforts to obtain jobs in other sectors like oil and gas. Following are the major achievements due to these efforts:

1. Revamp scheme for Atmospheric Unit-IV of IOC Gujarat Refinery, Baroda.
2. Effluent treatment plants, gas lift compressor stations, gas grid compressor stations at different ONGC locations at Nazira, Geleki, Rudrasagar and Lakwa.
3. Gas Authority of India Ltd. (GAIL) engaged PDIL for various projects for detailed engineering, construction supervision, review of contractors' designs, inspection, NDT testing, quality control & quality assurance service at site etc. in respect of the following projects:
 - Grasim Gas Pipeline Project
 - Bombay City Gas Distribution Project
 - Various Spurline Projects
 - Gandhar Zenor Pipeline Project
4. GAIL has also engaged PDIL for design and engineering of interconnections of compressed natural gas stations at different locations namely, Delhi, Bombay etc.

6.9.12 On the export front also, recently PDIL has been able to despatch a small quantity of Vanadium Pentoxide Catalyst to the Islamic Republic of Iran.

MARKET RESEARCH

6.9.13 The Engineering Division provides a wide spectrum of services in the field of project formulation, market identification and development of marketing strategy in the field of fertilizers and industrial chemicals. The reports completed during the year were market study of fertilizers for the Vijaipur expansion project of M/s.NFL, methanol for M/s.Peerless and nitrophosphate for M/s.Apollo Tyres, etc.

INSPECTION

6.9.14 Income from third party inspection jobs during 1992-93 was Rs.87.50 lakhs as compared to Rs.79.25 lakhs in 1991-92. Project equipment valued at Rs.166.85 crores were also inspected during 1992-93, as against equipment worth Rs.43.34 crores inspected in 1991-92. Income from inspection services during 1993-94 upto 31.12.1993 was Rs.49 lakhs.

NON-DESTRUCTIVE TESTING

6.9.15 During the year, the company got various orders like end-to-end survey, health study of equipments/piping system, non-destructive evaluation and certification of Horton Spheres and Bullets, storing hazardous chemicals under statutory requirements from M/s.IOC, BPCL, NTPC, GAIL etc. The turnover from this activity during 1992-93 was Rs.83.48 lakhs. During 1993-94, the turnover upto 31.12.1993 was Rs.86 lakhs.

FEASIBILITY STUDIES & DETAILED PROJECT REPORTS

6.9.16 The Planning Department under the Engineering Division has completed detailed project reports for HMX Explosive Project of DGOF, Steam & Power Study for IOC Barauni Refinery, Performance Evaluation & Optimisation of Indo-Gulf Fertilizer & Chemicals Limited and Revamping Studies for Thal ammonia-urea plants of M/s.RCF.

CATALYST DIVISION INCLUDING FABRICATION SHOP

6.9.17 After two decades of continuous efforts, the company is now in a position to supply almost a complete range of catalysts required for the production of ammonia. The production of catalysts during 1992-93 was 560 tonnes and the sales turnover 636 tonnes. Production and sale of catalysts during the period April-December, 1993 was 342 and 200 tonnes, respectively. The constraints for in higher production of catalysts were lack of orders, paucity of funds for purchase of raw material and other utilities.

RESEARCH & DEVELOPMENT DIVISION

6.9.18 The Research & Development Division of the company undertakes sponsored and other research projects, including client oriented schemes in the field of fertilizer technology. The Govt. of India gives a grant-in-aid of Rs.4.0 crores per annum for the R&D activities of the company.

6.9.19 The main highlights of R&D work during the year are as:

- i) A Catalyst was developed by Urea Hydrolysis which is suitable for catalytic control of automobile exhaust to combat air pollution.
- ii) Improvement was made in the Primary Gas Reformation Catalyst in the form of Multihole Tablets to impart higher activity.
- iii) A better formulation of Hydro De-sulphurisation Catalyst (Comox) was developed which is suitable for processing of light hydrocarbon distillates.
- iv) The modified granular urea product "UREA-G" is now ready for use on commercial scale.

RESTRUCTURING AND REHABILITATION

6.9.20 PDIL has been declared a sick company by the BIFR. Various options are being evaluated for

preparing a viable revival package for the company for submission to the BIFR.

INDIAN FARMERS FERTILISER COOPERATIVE LIMITED (IFFCO)

6.10.1 Indian Farmers Fertiliser Cooperative Limited (IFFCO) is a multi-state cooperative society engaged in the production and distribution of chemical fertilizers. It was registered on November 3, 1967. The Society commissioned its first two plants at Kalol and Kandla in Gujarat in 1975.

6.10.2 IFFCO expanded its production facilities in 1981 by commissioning two additional streams of phosphatic fertilizers at Kandla plant and a new urea plant at Phulpur. One gas-based urea plant was commissioned by IFFCO in 1988-89 at Aonla, U.P., in record time with considerable savings in cost. IFFCO



Night view of Ammonia-Urea Plant of IFFCO at Phulpur

has also set up one dry ice plant and a malathion technical grade pesticide plant at Kalol. At present, IFFCO's installed capacity of nitrogen is 8,63,660 tonnes and that of phosphates is 3,09,130 tonnes. The authorised share capital of the society as on 31st March, 1993 stood at Rs.1000 crores and the paid-up capital at Rs.362.07 crores.

PRODUCTION PERFORMANCE

6.10.3 During the year 1992-93, IFFCO produced 9.30 lakh tonnes of nitrogen and 3.08 lakh tonnes of phosphates. The average capacity utilisation of its urea and phosphatic plants during the year was 107.6% and 99.7%, respectively.

6.10.4 During the period April-December, 1993, IFFCO produced 7.07 lakh tonnes of nitrogen with 109.1% capacity utilisation. During the same period, the Kandla plant produced 2.55 lakh tonnes of phosphates with 110.1% capacity utilisation.

MARKETING

6.10.5 IFFCO sells its fertilizers exclusively through a network of roughly 30,000 cooperative societies spread over 18 States and three Union Territories. During the year 1992-93, IFFCO sold 26.59 lakh tonnes of fertilizers and achieved a sales turnover of Rs.1014 crores excluding subsidy. The Society has sold 22.60 lakh tonnes of fertilizers during April-December, 1993.

6.10.6 IFFCO continued to implement various programmes aimed at transfer of improved agriculture technology to the farmers. Its 175 Farmers Service Centres provide all necessary inputs and know-how to the

farmers under one roof. It has also been attempting to bring in overall socio-economic development of villages through its village adoption programme. Some of the major extension services of IFFCO are in tribal areas and in dry land areas. Farmers Integration Programme, farm forestry, establishing farmers community centres in remote and backward areas and soiltesting are some of the important extension activities of IFFCO.

FINANCIAL PERFORMANCE

6.10.7 IFFCO earned a profit of Rs.155.38 crores before tax during 1992-93. The net worth of the Society as on 31st March, 1993 was Rs.947 crores. After paying a tax of Rs.39.61 crores, the net profit stood at Rs.115.77 crores.

6.10.8 During the period April-

December, 1993, the Society's pre-tax profit is estimated at Rs.101.28 crores, with a net profit after tax of Rs. 59.51 crores.

INVESTMENTS OUTSIDE IFFCO

6.10.9 IFFCO has invested Rs.97 crores in the equity of Krishak Bharati Co-operative Limited (KRIBHCO), Rs.7.97 crores in Godavari Fertilisers and Chemicals Limited (GFCL) and Rs.7.04 crores in ICS, Senegal which is a joint venture with Government of India and M/s.SPIC.

EXPANSION AND DIVERSIFICATION PLANS OF IFFCO

6.10.10 The various schemes for rehabilitation of existing units at Kalol, Kandla and Phulpur have been



Field Demonstration by IFFCO.

completed. The project for doubling of the capacity of Aonla unit at an estimated cost of Rs.960 crores is in progress. This project is likely to be commissioned by the end of 1996 and would result in an additional production of 7.26 lakh tonnes of urea per annum. The Society is exploring the possibility of setting up joint venture ammonia- urea projects in Iran and Qatar. A proposal to set up an agro- chemical unit is being considered. The Society is also planning to associate itself with the revival of a sick cooperative sugar mill in Andhra Pradesh.

KRISHAK BHARATI COOPERATIVE LIMITED (KRIBHCO)

6.11.1 Krishak Bharati Cooperative Limited (KRIBHCO), a multi- state cooperative society, was incorporated on April 17, 1980 to implement the ammonia-urea fertilizer project at Hazira in Gujarat, based on natural gas from Bombay High/South Bassein. The authorised capital of the society is Rs.500 crores and the total share capital paid-up by the members including Govt. of India, IFFCO, NCDC, as on 31st March, 1993, was Rs.451.7 crores.

6.11.2 The Hazira complex has two ammonia plants with 1350 MT per day capacity each and two urea plants of 2200 MT per day capacity each. Each urea plant consists of 2 streams of 1100 MT per day capacity. The annual installed capacity of urea plants is 14.52 lakh tonnes of urea product (6.68 lakh tonnes in terms of nitrogen). Regarding off-site facilities, the Society has got a steam generation plant consisting of 3 boilers as also a 30 MW capacity captive power plant.



Farm women training camp organised by KRIBHCO.

PRODUCTION

6.11.3 During the year 1992-93, KRIBHCO produced 7.76 lakh tonnes of nitrogen at 116.1% capacity utilisation.

6.11.4 During the period April-December, 1993, the Society produced 5.08 lakh tonnes of nitrogen at 101.4% capacity utilisation as compared to 5.90 lakh tonnes for the corresponding period of the previous year. The fall in production was due to reduced availability of gas.

MARKETING

6.11.5 During the year 1992-93, the Society sold 16.72 lakh tonnes of own urea. Besides own urea, the Society also sold 40 thousand tonnes of imported as well as indigenous DAP and 43 thousand tonnes of surplus anhydrous ammonia to other

fertilizer manufacturers and for industrial use.

6.11.6 The Society achieved almost hundred per cent of ECA sales in all the States in both the crop seasons during 1992-93 and maintained this record in the Kharif 1993 season also. The Society continued its efforts to streamline its marketing operations and achieved significant economy, especially in transportation, warehousing etc., with advanced planning and continuous monitoring.

6.11.7 During the year 1992-93, seed multiplication was taken up on 1300 hectares of land with a seed production of 2,300 tonnes. During 1993-94, the Society has planned seed multiplication programme with an estimated production of 6,500 tonnes of certified seeds of major cereals, pulses and oilseeds.

6.11.8 KRIBHCO continued to

make vigorous efforts through a large number of field demonstrations, crop seminars, farmers meetings and field days, etc. to improve fertilizer consumption and its utilisation efficiency. KRIBHCO's seven mobile soil testing vans are providing facilities for soil and water analysis at the farmer's door-step.

6.11.9 Krishak Parivar Sangam Programme, Krishak Bharati Sewa Kendras, etc. are the other major activities of the Society aimed at bringing about a positive change in the rural scenario.

6.11.10 The project on "Dryland Development" in collaboration with the Overseas Development Administration, U.K., has been undertaken by KRIBHCO in the western parts of the country, covering contiguous areas of Gujarat, Rajasthan

and Madhya Pradesh. The main focus of the project is on poverty alleviation of the farming community in the selected areas inhabited by tribal farming families.

FINANCIAL RESULTS

6.11.11 During 1992-93, KRIBHCO made a net profit before tax and after tax of Rs.227.78 crores and Rs.145.58 crores, respectively, as compared to the previous year's Rs.158.04 crores and Rs.98.04 crores, respectively.

6.11.12 During the period April-December, 1993, the Society has earned a profit before tax of Rs.128.96 crores, with a net profit after tax of Rs. 78.41 crores.

EXPANSION AND DIVERSIFICATION PLANS OF KRIBHCO

6.11.13 KRIBHCO has proposed setting up of a nitrophosphate project at Hazira. The Society has been given site clearance from the environmental angle for this project.

6.11.14 A MOU between Government of India and Government of Sultanate of Oman was signed in Muscat on 15th June, 1993 for setting up a joint venture ammonia-urea fertilizer plant in Oman. KRIBHCO and RCF are proposed to be the Indian partners with Oman Oil Company in this joint venture project. KRIBHCO is also exploring the possibility of setting up a joint venture ammonia- urea project based on natural gas in Qeshm Island of Iran, alongwith IFFCO.

CHAPTER-VII SUBSIDY ON FERTILIZERS

7.1 The retention price-cum-subsidy scheme for indigenous nitrogenous fertilizer units was introduced by the Government of India with effect from 1.11.1977. The objective behind this scheme was to ensure reasonable return on investment, facilitate healthy development and growth of the fertilizer industry and to provide fertilizers to farmers at reasonable prices in order to boost fertilizer use for increased agricultural production. The scheme is administered by the Fertilizer Industry Coordination Committee (FICC) within the policy parameters laid down by the Government from time to time.

7.2 The Fertilizer Industry Coordination Committee (FICC), constituted on 1.12.1977, consists of the Secretary (Fertilizers) as the Chairman and has as its members the Secretaries in the Department of Agriculture and Cooperation, Department of Expenditure and Department of Industrial Development, Chairman of Bureau of Industrial Costs and Prices, and two representatives of the Industry. The FICC office is an attached office of the Department of Fertilizers and is headed by an Executive Director who is also Member-Secretary of the FICC. It maintains accounts, makes payment to and recovers amounts from fertilizer companies and undertakes costing, collects and analyses production data, costs and other information, reviews the retention prices and makes adjustments wherever necessary.

7.3 The consumer prices of fertilizers under price and distribution controls are fixed statutorily by the Department of Agriculture & Cooperation under the provisions of the Fertilizer (Control) Order, 1985 framed under the Essential

Commodities Act, 1955. These prices are uniform throughout the country for any particular variety of fertilizer. Central sales tax, state sales tax and other local taxes, wherever levied on fertilizers, are in addition and have to be borne by the consumers. The distribution margins for various fertilizers are also fixed by the Department of Agriculture & Cooperation.

7.4 Since the consumer prices of controlled fertilizers have been, by and large, kept low with a view to encourage their greater use, these prices are not related to the actual cost of production and transportation. Moreover, the cost of production varies from unit to unit depending upon vintage, feedstock, process, location, financing pattern etc. The cost of production of the new plants is higher than that of the older plants on account of higher investment. Besides, a reasonable return on investment has also to be provided to the manufacturers under the retention price-cum-subsidy scheme.

RETENTION PRICE-CUM-SUBSIDY SCHEME

7.5.1 The retention price-cum-subsidy scheme, in operation since 1.11.1977, was first introduced to cover indigenous nitrogenous fertilizer units. Later, phosphatic and complex fertilizers were also covered under the scheme. However, following the recommendations of the Joint Parliamentary Committee on Fertilizer Pricing, all phosphatic and potassic fertilizers have been decontrolled w.e.f. 25.8.1992. At present, only the following fertilizers are covered under this scheme:

- i) Urea;
- ii) Ammonium Chloride;

iii) Calcium Ammonium Nitrate; and

iv) Ammonium Sulphate.

7.5.2 Under the scheme, retention prices are fixed, on per tonne basis, product-wise and plant-wise in respect of controlled fertilizers. Pre-tax return on net worth corresponding to post-tax return of 12% is given as part of the retention price after covering various elements of cost on the basis of a combination of actuals and norms. The difference between the retention price and consumer price (minus the distribution margin) is paid as subsidy to the manufacturing units.

7.5.3 The Retention Price-cum-Subsidy scheme has in-built-incentives and disincentives in as much as profitability of a unit will increase if its performance is higher than the normative capacity utilisation, input consumption norms and production levels assumed in the calculation of retention prices. On the other hand, if the production levels are lower and consumption of inputs is higher, the unit will either have lower profitability or, in extreme cases, will incur loss.

7.5.4 Since the consumer prices of both indigenous and imported fertilizers are fixed uniformly, subsidy is also paid on imported fertilizers, to bridge the difference between the cost of imports and the statutorily fixed consumer price.

7.5.5 In addition to the retention price subsidy, equated freight subsidy is paid to fertilizer manufacturers to cover the cost of transportation from production points to consumption centres. Under the equated freight scheme, the freight subsidy covers transportation cost upto block headquarters in respect of urea, while in respect of other fertilizers it covers

transportation cost upto railhead/field godowns only.

7.5.6 Subsidy paid under this scheme has been increasing steadily over the years. On indigenously produced fertilizers, it went up from the level of about Rs.25 crores in 1977-78 to Rs.4800 crores in 1992-93.

7.5.7 The subsidy paid on indigenously produced and imported fertilizers from the year 1984-85 onwards is indicated below:

transportation went up significantly during the eighties and the gas-based fertilizer units commissioned during this period also involved higher capital investment per tonne of installed capacity necessitating constant upward revisions in the retention prices, the selling prices of fertilizers to farmers remained almost at the same level between July, 1981 and July, 1991. Government effected an increase of 30% in the selling prices of fertilizers in August, 1991

(RS. CRORES)

Year	Subsidy on indigenous fertilizers	Subsidy on imported fertilizers	Total Subsidy
1984-85	1200.00	727.31	1927.31
1985-86	1600.00	323.71	1923.71
1986-87	1700.00	197.12	1897.12
1987-88	2050.00	113.94	2163.94
1988-89	3000.00	200.70	3200.70
1989-90	3771.00	771.10	4542.10
1990-91	3729.73	659.33	4389.06
1991-92	3500.00	1299.60	4799.60
1992-93	4800.00	996.11	5796.11
1993-94 (Revised Estimate)	3800.00	600.00	4400.00
1994-95 (Budget Estimate)	3500.00	500.00	4000.00

7.5.8 Steady increase in fertilizer subsidies over the years has been mainly the result of increasing consumption and increases in the input costs of indigenous fertilizers and prices of imported fertilizers from time to time. While the cost of various inputs/utilities, such as coal, gas, naphtha, rock phosphate, sulphur, ammonia, phosphoric acid, electricity, etc. as also cost of

after a gap of a decade. However, even this price hike did not materially alter the position in terms of the absolute amount of annual subsidy bill, because of the steady growth in production to meet consumption requirements.

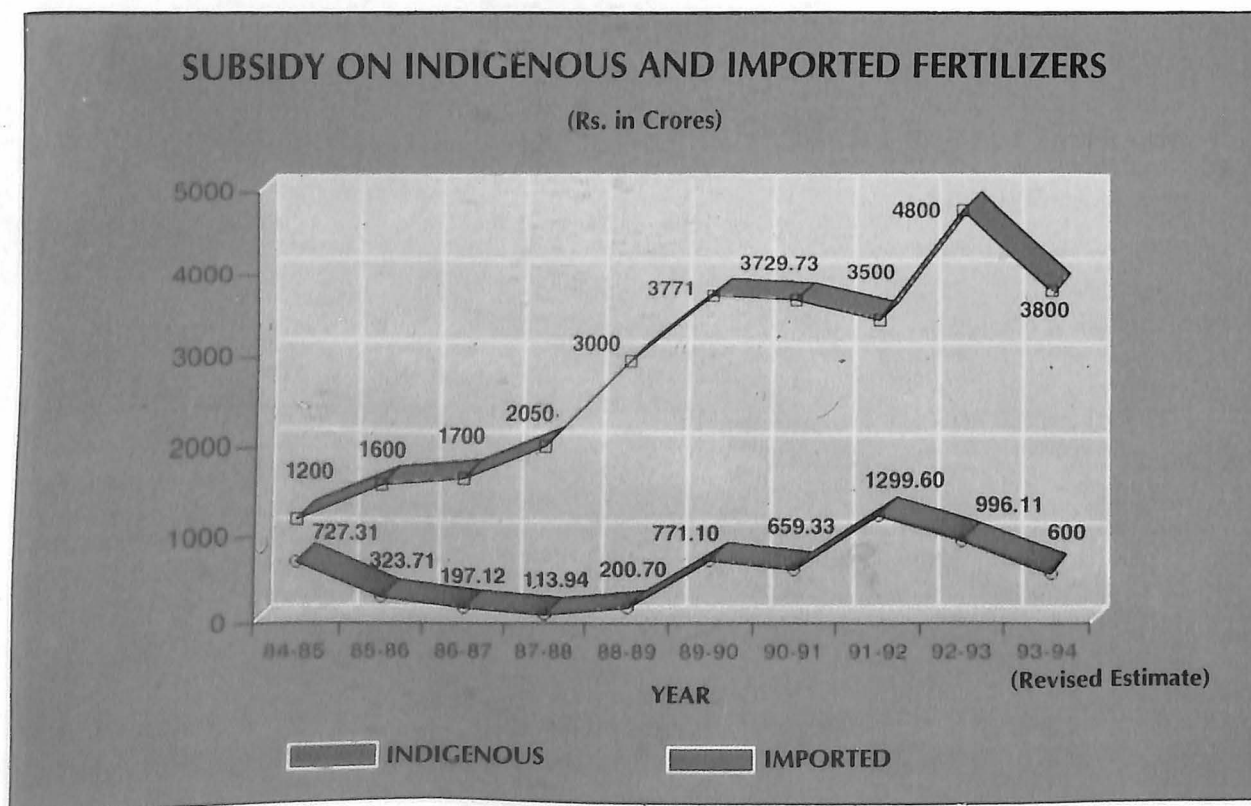
7.5.9 A Joint Parliamentary Committee (JPC) was set up in December, 1991 to go into the various aspects of fertilizer pricing

and subsidy and make recommendations on the future course of action. The JPC recommended that fertilizers for whose supply the country was primarily dependent on imports may be decontrolled. It further recommended that the prices of urea be rolled back by 10% and that the low analysis nitrogenous fertilizers, which were decontrolled in July, 1991, may be brought back under the subsidy scheme. Based on these recommendations, all price and distribution controls on phosphatic and potassic fertilizers were removed and the selling price of urea was reduced by 10% w.e.f. 25.8.1992. Simultaneously, to maintain relative price parity among all nitrogenous fertilizers, low analysis fertilizers were

brought back under price and distribution control. Thus, as has been stated earlier in para 6.5.1, at present only straight nitrogenous fertilizers, namely, urea, ammonium chloride, calcium ammonium nitrate and ammonium sulphate are covered under the price control and subsidy scheme.

7.5.10 Although all phosphatic and potassic fertilizers were removed from the price and movement control w.e.f. 25.8.1992 and thus are no longer covered under the subsidy scheme, special concessions have been extended on these fertilizers in order to cushion the impact of rise in their prices in the open market. During Rabi 1992-93, a concession of

Rs.1000 per tonne on DAP and Muriate of Potash (MOP) was given to the farmers, alongwith proportionate concession on various grades of complex fertilizers. During the year under review, some modifications have been made in this scheme. In the case of DAP and complex fertilizers, the special concession at the above scale has been restricted to indigenous production only because the imported DAP was available in the market at much cheaper rates. However, the concession of Rs.1000 per tonne on MOP, which is wholly imported, has been retained. In addition, a concession of Rs.340 per tonne has been extended to indigenous SSP during the current year.



CHAPTER-VIII FERTILIZER AVAILABILITY, IMPORTS AND MOVEMENT

CONSUMPTION AND AVAILABILITY OF FERTILIZERS

8.1.1 Following the decontrol of phosphatic and potassic fertilizers with effect from 25.8.1992, the sales of these fertilizers were adversely affected due to increase in their prices in the open market. The increase in the prices was not unusual as these fertilizers were heavily subsidised till their decontrol on 25.8.1992. Even the JPC on Fertilizers Pricing had visualised that the prices of phosphatic and potassic fertilizers will go up in the open market. On the other hand, the sales of urea, which continues to be under control and whose price was reduced by 10% from 25.8.1992, have increased. The increase in the sales of urea during Kharif, 1993 was 12% while the drop in the sales of Di-ammonium phosphate (DAP) and Muriate of Potash (MOP) has been to the extent of 28% and 32%, respectively, as compared to the sales during the corresponding period of last year.

The sales of decontrolled fertilizers have, however, marginally picked up during Rabi 1993-94. The sales of DAP have gone up by about 2% in the Rabi 1993-94 during the period of October to December as compared to the same period of last year. During this period, the direct sales of MOP have also been marginally higher by 1% as compared to the same period of previous Rabi season. The special concession scheme, which was announced on the sales of decontrolled fertilizers during Rabi 1992-93, was introduced again during 1993-94 on 12th June, 1993 with some modifications. Under this scheme, concession of Rs.1000 per tonne has been provided on sales of MOP and indigenous DAP. The concession on sales of indigenous complex fertilizers is proportionate to the phosphate and potash content. Under the current scheme, a concession of Rs.340 per tonne has also been provided on sales of SSP. The scheme is being administered by the Department of Agriculture &



Inside view of bagging section of Nagarjuna Plant.

Cooperation in the Government of India and is being implemented through the State Governments.

8.1.2 The availability of decontrolled fertilizers remained comfortable in the 1993 Kharif season. Although the availability of urea, which is still under price and movement control, has been somewhat tight, because of the spurt in demand, the supply was maintained by arranging timely imports and expeditious despatches from the plants/ports.

8.1.3 The availability of decontrolled fertilizers during Rabi 1993-94 season has, by and large, been satisfactory although a few pockets of temporary shortage had developed during the early part of the season in some of the Northern States. The shortages were overcome by augmenting movement of rakes from the plants/ports to the areas of deficit. Of late, the availability of urea in the eastern region and parts of Rajasthan has been under some strain on account of production cutbacks in the fertilizer units catering to these areas. This deficit is being met by appropriate provisions of imported urea and priority movement by rail and road.

8.1.4 The availability of major fertilizers like Urea, DAP and MOP as well as their sales vis-a-vis estimated demand during the crop seasons of the current year as compared to the previous year is given in table:

(In Lakh Tonnes)				
Crop Season	Estimated Demand	Availability	Sales	% age of Availability to estimated demand
Kharif 1992				
Urea	69.37	75.25	65.19	108.5
DAP	19.55	29.82	18.56	152.5
MOP	8.91	8.73	6.51	97.9
Rabi 1992-93				
Urea	80.01	93.50	83.40	112.0
DAP	29.17	27.91	20.49	96.0
MOP	9.60	8.65	5.16	90.0
Kharif 1993				
Urea	77.06	86.16	72.96	112.0
DAP	17.99	21.76	13.30	121.0
MOP	6.98	6.98	6.68	100.0
Rabi 1993-94				
		(Upto Dec.'93)		% of availability to sales (Upto Dec.'93)
Urea	86.66	54.33	43.39	125.2
DAP	19.70	19.87	14.86	133.7
MOP	6.70	3.34	2.37 \$	141.0

\$ Including sales to complex manufacturers

NB: Import of DAP and MOP has been decanalised w.e.f. 17.9.1992 and 17.6.1993, respectively. Hence, the figures of their availability and sales are approximate.

IMPORT OF FERTILIZERS

8.2.1 The demand-supply gap of fertilizers in the country is met through imports. So far as the potassic fertilizers are concerned, the entire domestic requirement is met through imports as there is no

commercially viable known source of potash in the country. The availability of phosphatic fertilizers also largely depends upon imports, either in the form of finished fertilizers or raw materials and intermediates. In respect of nitrogenous fertilizers, the present indigenous capacity is

adequate to meet approximately 85% of the country's requirement.

8.2.2 DAP and MOP are the major phosphatic and potassic fertilizers which are imported. Imports of DAP were decanalised w.e.f. 17.9.1992 and those of MOP from 17.6.1993.

During the current year, the entire import of DAP (15.76 lakh tonnes approximately) and part of MOP (5.30 lakh tonnes approximately) have been on private trade account. The import on Government account during the period April-December, 1993 consisted of 20.90 lakh tonnes of urea which is under price and movement control and 4.32 tonnes of MOP against the spill-over contracts of 1992-93 as well as under a bilateral agreement.

8.2.3 The figures relating to indigenous production, imports and consumption of fertilizers (in terms of nutrients) during the last four years as well as the current year are given below:-



Inside view of mobile soil testing laboratory of IFFCO.

Year	Consumption (N+P+K)	Production (N+P)	N+P+K (Lakh Tonnes)	
			Imports (N+P+K)	
1989-90	115.68	85.43	31.14	
1990-91	125.46	90.45	27.58	
1991-92	127.28	98.63	27.69	
1992-93	121.53 (Prov.)	97.36	29.08	
1993-94	131.63 (Estimate)	100.00 (Target)	30.00 (Estimate)	

8.2.4 The figures relating to C&F cost and subsidy borne by the Government on imported fertilizers during the last four years and the current year are as under:

PORT HANDLING

8.3.1 The demand for Urea since Rabi 1992-93 has been substantially higher than the corresponding seasons of the previous year. This has necessitated higher level of imports of

(Rs.in crores)

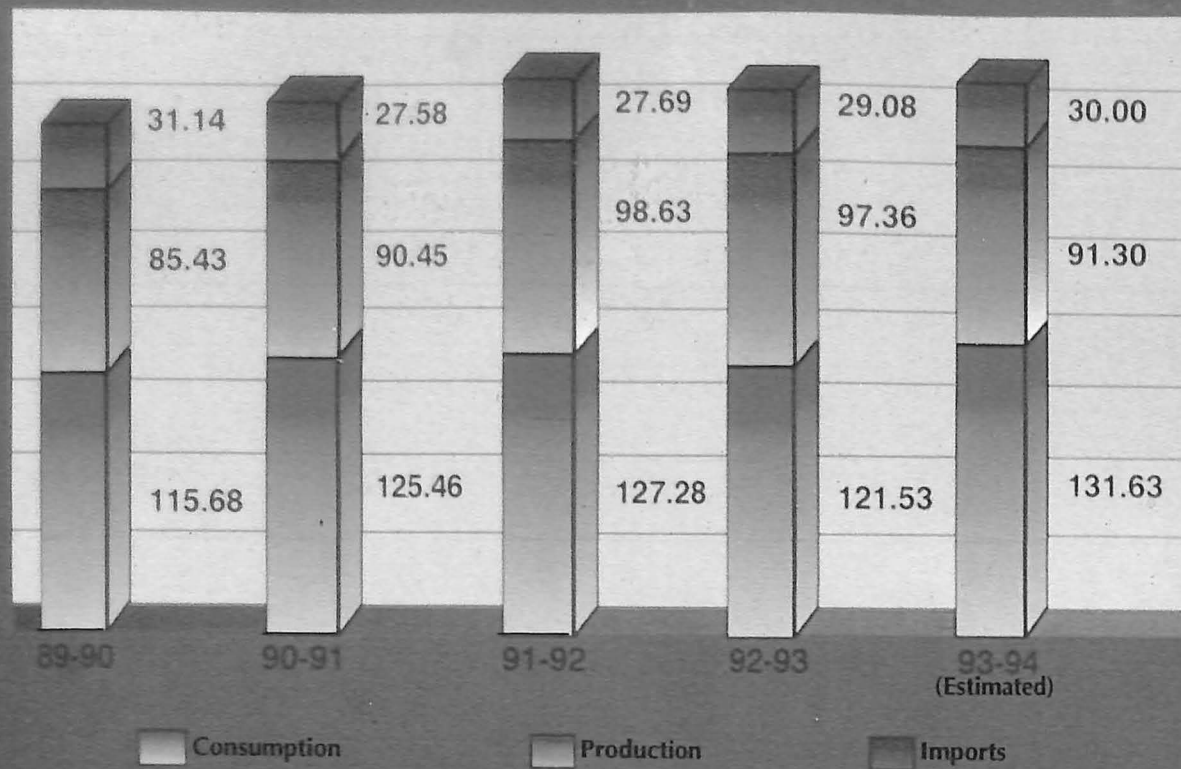
Year	Total Cost & Freight Value	Subsidy on Imported Fertilizers
1989-90	1538.77	771.10
1990-91	1335.82	659.33
1991-92	1934.19	1299.60
1992-93	2216.00	996.11
1993-94	908.27	600.00
	(Upto December, 1993)	(Revised Estimates)

Urea during the current year. During 1992-93, Urea imports was at a level of 18.58 lakh tonnes. In the current year, till the month of December, 1993, 20.90 lakh tonnes of imported Urea has already arrived. During the remaining months of the year, a further quantity of 6.5 lakh tonnes of imports are programmed. These imports have been handled at 14 ports on the west coast and 12 ports on the east coast. The entire quantity of imported Urea has so far been efficiently handled at the ports in spite of bunched arrivals of DAP & MOP vessels on private trade account.

8.3.2 During the current year, a number of measures have been taken to streamline the system of

CONSUMPTION, INDIGENOUS PRODUCTION AND IMPORTS OF FERTILIZERS DURING 1989-90 TO 1993-94

In Lakh Tonnes



nomination of vessels. The communication between the Department and the ports has also been improved. An Inter-Ministerial Group comprising the Department of Fertilizers, Department of Agriculture & Co-operation, Ministry of Surface Transport and MMTC has been constituted to sort out various operational problems encountered in the handling of vessels carrying fertilizers imported on Government account. This institution has proved very useful in ensuring effective inter-Ministerial coordination required for smooth and quick handling of Government cargo.

8.3.3 During the current year the minor port of Krishnapatnam has been effectively utilised for the first time. Similarly, infrastructure has been augmented at the minor port of Gopalpur which is expected to facilitate the movement of Urea to the deficit areas of West Bengal and Bihar.

MOVEMENT OF FERTILIZERS

8.4.1 Under the Fertilizer (Movement Control) Order, 1960, the Department of Fertilizers has the primary responsibility of moving controlled fertilizers from various plants/ports to ensure adequate availability of these fertilizers in all the States. This movement is programmed in accordance with a supply plan formulated by the Department of Agriculture & Cooperation. The Department of Fertilizers makes ship-wise distribution of imported controlled fertilizers keeping in view the relative urgency of meeting the deficit in different regions on account of the shortfall in the availability of indigenously produced fertilizers.

8.4.2 The bulk of fertilizer

movement is by the Railways which carry roughly 70% of the fertilizer cargo in the country. The remaining 30% is moved by road. During the period April to December, 1993, the volume of fertilizer traffic on the Railways has been estimated at 9.33 million tonnes as against 11 million tonnes during the corresponding period of last year. It is expected that 18.5 million tonnes of fertilizers will be moved by rail during 1993-94 as against 18.82 million tonnes during 1992-93. The marginal drop in rail movement during the current year is attributed to the reduction in the demand for decontrolled fertilizers and the consequent reduction in the level of indigenous production and imports of these fertilizers.

8.4.3 The Department of Fertilizers has been continuously making efforts to rationalise the movement of controlled fertilizers. As a result, there has been a sizeable reduction in the average lead of movement by rail. The trend of average lead in recent years can be

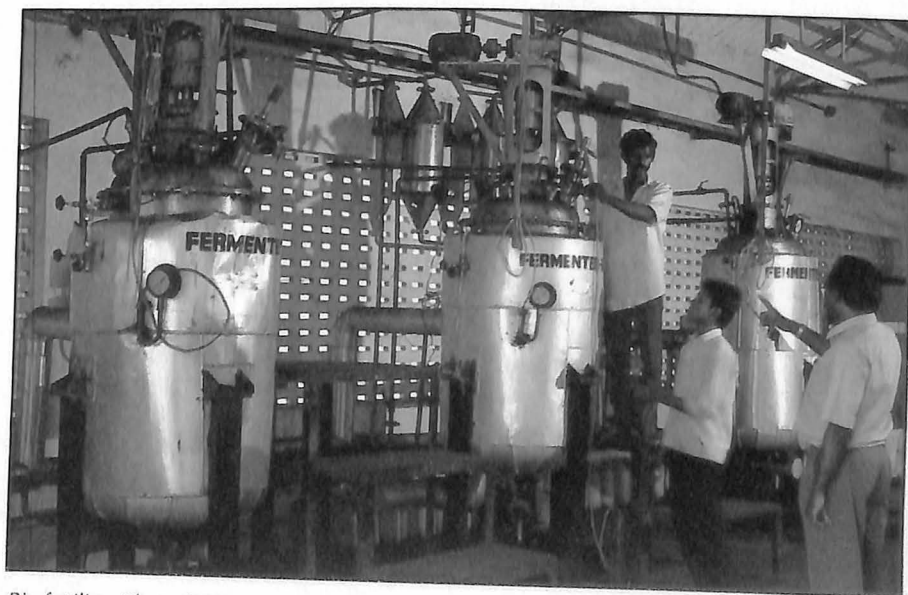
seen from the following figures:

(In K.M.)	
Year	Average
1989-90	975
1990-91	940
1991-92	935
1992-93	908
1993-94 (Upto November, 1993)	909

8.5 A 'Total System Rationalisation Study' on fertilizer transportation in India from various ports/plants to the hinterland has been entrusted to RITES. The final report is expected to be made available soon by RITES after incorporation of the suggestions/comments made by this Department on the draft report.

FERTILIZER EDUCATION PROJECTS

8.6.1 Almost all the fertilizer producing companies are carrying out agricultural extension work



Bio-fertilizer Plant of MFL.

with emphasis on education of farmers in the scientific application of fertilizers. Some fertilizer companies in the public and cooperative sectors are also implementing fertilizer education projects with assistance from foreign countries. These projects are:

i) RAINFED FARMING PROJECTS (RFP):

KRIBHCO and HFC are separately implementing a Rainfed Farming Project in western and eastern India, respectively. These are poverty focussed rainfed farming projects aimed at improving the livelihood of the poor families in the project area through farming systems development and research, institution building and beneficiary participation for ensuring sustainability and replicability. Both these projects are being implemented in technical and financial collaboration with Overseas Development Administration (ODA) of the British Government.

KRIBHCO's project is for 5 years duration beginning 1.1.1993. The total project cost is estimated to be Rs.16.39 crores, out of which Rs.15.24 crores would be funded by ODA and Rs.1.14 crores by KRIBHCO. The project is being implemented in the districts of Panch Mahal (Gujarat), Jhabua (Madhya Pradesh) and Banswara (Rajasthan). During 1993-94, a budget provision of Rs.2.32 crores has been made for this project.

HFC is implementing the RFP in eight districts of Bihar, Orissa and West Bengal under an ODA funded five year project (April, 1989 to March, 1994). The budget provision for the year



Wagons being loaded at Hazira Plant of KRIBHCO.

1993-94 for this project is Rs.1.40 crores.

ii) INDO-CANADIAN AGRICULTURE EXTENSION PROJECT:

This Canadian International Development Agency (CIDA) assisted agricultural extension project is being implemented by M/s.Indian Potash Ltd. with the objective of improving agricultural production and general development of rural areas through extension and research services spread over 1000 villages in the districts of Meerut, Barabanki and Sultanpur in Uttar Pradesh. The Canadian Government has contributed commodity aid worth CDN \$ 30 million for the project activities which were to be operative over a five year period ending December, 1993, but now extended till December, 1994. The expenditure for 1993-94 has been estimated at Rs.2.60 crores.

iii) INDO-BRITISH FERTILIZER EDUCATION PROJECT (IBFEP):

This project was implemented by HFC in two phases in selected districts of the States of Assam, Bihar, Madhya Pradesh, Orissa, Uttar Pradesh and West Bengal with ODA assistance.

In Phase-I, 26 districts were covered during the period 1981-82 (Rabi) and 31.3.1987 at an expenditure of Rs.22.01 crores.

Phase-II of the project was initially for a period of 5 years (1987-1992) but was later extended upto 31.3.1993. Phase-II covered 30 districts at an expenditure of Rs.38.44 crores. ODA has agreed to fund only the monitoring and evaluation activities under the IBFEP Phase-II at an estimated cost of Rs.13 lakhs during 1993-94.

In order to employ gainfully the qualified and trained manpower, HFC has deployed them to carry out extension activities in 1360

villages spread over 60 rainfed districts of five States. HFC is incurring an expenditure of Rs.9.60 crores during 1993-94 on this activity.

iv) INDO-EEC FERTILIZER EDUCATION PROJECT:

Phase-I of this project was implemented by NFL, RCF and FACT. Each of these three companies was given a budget of Rs.2 crores to be spent within a period of three years starting from April, 1985. Phase-I of the project ended in September, 1988.

After evaluating the benefits which accrued to the farmers through the extension programmes, Phase-II of the project was sanctioned for another term of three years with main thrust on increasing fertilizer use and its efficiency through increasing irrigation potential of

the area and advocating dryland technology. PPCL was included as the fourth company for implementing this project in Bihar and Uttar Pradesh. They started implementing the project w.e.f. October, 1988 with a total project cost of Rs.87.81 lakhs over a period of four years. FACT, RCF and NFL implemented the project for a four year period between 1989 and 1993. Their areas of operation and the expenditure incurred by them is given in the table below:

(Rs.in Lakhs)		
Name of the Company	Area of Operation	Expenditure incurred
FACT	Kerala, Tamil Nadu, Karnataka and Andhra Pradesh	153.35
RCF	Maharashtra, Andhra Pradesh and Karnataka	172.08
NFL	Madhya Pradesh	169.65

The Department of Fertilizers has now posed a three year project for funding by the EEC, which, if accepted, will be Phase-III of this project. The salient features of this proposed project are as follows:

(Rs.in Crores)			
Name of the Company	Project Area No. of Districts	No. of Villages	Proposed Outlay for the project period
NFL	6	144	4.00
RCF	6	144	4.00
FACT	6	144	4.00
PPCL	6	144	4.00

CHAPTER-IX GENERAL

USE OF HINDI AS OFFICIAL LANGUAGE

9.1.1 There is a separate Hindi Section in the Department which oversees implementation of the Official Language Policy of Government of India in the Department and its attached offices as well as in the public sector undertakings and cooperative societies under its control. In order to undertake the official language implementation work effectively, an Official Language Implementation Committee is functioning in the Department. This Committee, headed by Joint Secretary (Administration), reviews the overall progress of Hindi in the Department and public/cooperative sector undertakings. It gives appropriate suggestions and recommends action to be taken for the effective implementation of the Official Language Policy.

9.1.2 As envisaged under Section 3(3) of the Official Language Act, most of the documents relating to general orders, notifications, resolutions, agreements, rules, administrative and other reports, press communiques etc. were issued bilingually during the year under report.

9.1.3 For imparting training to the officers and employees, who do not possess working knowledge of Hindi, the Department nominates members of staff to the Hindi classes conducted under the Hindi Teaching Scheme of the Ministry of Home Affairs. During the year under report, 5 employees were nominated to such classes.

9.1.4 Similarly, stenographers and typists in this Department are nominated for Hindi Stenography/ Typing training as per the programme

of the Ministry of Home Affairs. During the year under review, 10 stenographers and 10 typists were nominated for such training. In all, 7 stenographers and 11 typists have been trained in Hindi stenography and Hindi typing. The total number of Hindi typewriters in the Department is 17. In addition, there are 14 bilingual electronic typewriters.

9.1.5 In order to encourage the use of Hindi in the Department, Hindi Week is celebrated every year during the month of September. This year also Hindi week was celebrated during the period 14.9.1993 to 21.9.1993. Hindi competitions were organised during this week, in which 10 officers and 19 staff members participated. Successful competitors were awarded cash prizes worth Rs.3700/-.

9.1.6 The Committee of Parliament on Official Language inspected the offices of some of the undertakings under the administrative control of this Department during the year under report and suggested several measures to increase the use of Hindi in these offices.

9.1.7 A quarterly progress report on the use of Hindi in the Department is sent to the Department of Official Language. The quarterly progress reports received from the public/cooperative sector undertakings are reviewed and discussed in the meetings of the Official Language Implementation Committee of the Department and suitable measures are taken to increase the use of Hindi in these undertakings.

EMPLOYMENT OF EX-SERVICEMEN/PHYSICALLY HANDICAPPED PERSONS

9.2.1 Guidelines have been

issued to public sector undertakings under the administrative control of the Department for reservation of vacancies for ex-servicemen and physically handicapped persons. They have also been advised to identify Group 'C' and 'D' posts in their organisations which can be manned by the physically handicapped persons.

9.2.2 The representation of ex-servicemen and physically handicapped persons in public sector undertakings as on 1.1.1994 is given in Annexure-XI.

MIS/COMPUTERISATION

9.3.1 Management Information System has been working satisfactorily in the Department analysing and monitoring the performance of the various units under the administrative control of the Department. Steps have also been taken to computerise the management information system with the help of National Informatics Centre for speeding up the decision-making in the Department.

9.3.2 The National Informatics Centre (NIC) conducted a feasibility study in 1986 for computerization of various activities of the Department. To facilitate this work, a NIC computer centre was set up and an interactive facility of Super AT, connected to NICNET through Packet Assembler and Deassembler (for direct access with all district headquarters) to NEC-1000 (Super computer) installed at NIC Headquarters, has been provided. In addition, three Super ATs, five PC/ATs and two PC/XTs have also been installed at various locations spread over different buildings. Interactive terminals have also been provided to the senior officers of the Department for information retrieval. NIC has also extended NICNET facilities for transfer of data from IFFCO's plants to their corporate office and the Department of Fertilizers. A group of computer professionals has been deployed for promotion, planning, design, development and implementation of computerised systems. Action has also been taken for computerisation of most of the aspects related to day-to-

day monitoring of information in the areas of fertilizer production, availability, sales, distribution, consumption, imports, project monitoring, office automation etc. A sector optimisation model has also been developed to cover demand projections and import plan which play an important role in the planning process.

9.3.3 The computerisation of information system in the Department and its undertakings is intended to evolve a uniform information system with the signalling mechanism. Phase-I of the project involving requirement analysis has been finalised. The study was carried out under close coordination and guidance of NIC so as to have proper understanding of the project for further development of software and system implementation on NIC hardware with the ultimate goal of on-line information exchange through NICNET. Phase-II of the project will be taken up by NIC for system design, software development and implementation.

CHAPTER-X PROGRAMMES FOR THE WELFARE OF SCHEDULED CASTES & SCHEDULED TRIBES

REPRESENTATION OF SC/ST IN THE DEPARTMENT

10.1 Vigorous efforts have been made to implement the Government orders regarding recruitment and promotion of candidates belonging to the scheduled castes and scheduled tribes. The representation of scheduled castes/scheduled tribes in the main Secretariat of the Department as on 01.01.1994 was as under:

Group	Total No. of Posts	S.C.	S.T.
A	35	3	1
B	102	9	3
C	113	21	5
D	60	26	—
	—	—	—
Total:	310	59	9

REPRESENTATION OF SC/ST IN PUBLIC SECTOR UNDERTAKINGS

10.2.1 The Presidential directives on reservation for the candidates belonging to the scheduled castes and scheduled tribes issued from time to time by the Department of Public Enterprises are being implemented in all the public sector undertakings under the administrative control of this Department.

10.2.2 The public sector undertakings under the Department have been advised to draw up programmes for education of tribals in scientific use of fertilizers, building up of dealer/retailer network in the tribal areas, and making available fertilizers in small packs in the tribal areas.

WELFARE OF MINORITIES

10.3 The public sector undertakings under the Department

have been advised to provide pre-examination coaching to minority community candidates, wherever feasible, to take steps to increase the awareness of the candidates belonging to minority communities about employment opportunities and also to have a representative belonging to minorities in the recruitment/ selection boards to ensure that the minorities get adequate share in the services and benefit from development schemes.

RESERVATION IN FERTILIZER DEALERSHIPS

10.4.1 In 1978, instructions were issued by the Department to all the public sector undertakings under its administrative control to reserve at least 25 per cent of future dealerships of fertilizers for the members of SC/ST. In order to get enough number of suitable SC/ST candidates, the following concessions are generally given by the undertakings:

- exemption/relaxation from security deposits;
- preference in supply of fast moving material;
- higher rate of dealership margin as compared to that allowed to general dealers; and
- free training in handling of fertilizers.

10.4.2 The public sector fertilizer undertakings have also been advised to expand their existing network of dealership by 15 per cent to give a thrust to the programme of providing employment to the educated unemployed persons.

10.4.3 The public sector undertakings under the Department have also been advised to reserve 10 per cent of fertilizer dealerships for ex-servicemen.

ANNEXURES

ABBREVIATIONS

NFL	National Fertilizers Limited
FACT	The Fertilisers and Chemicals Travancore Limited
RCF	Rashtriya Chemicals & Fertilizers Limited
FCI	The Fertilizer Corporation of India Limited
HFC	Hindustan Fertilizer Corporation Limited
PPCL	Pyrites, Phosphates & Chemicals Limited
PDIL	Projects & Development India Limited
MFL	Madras Fertilizers Limited
NLC	Neyveli Lignite Corporation Limited
SAIL	Steel Authority of India Limited
PPL	Paradeep Phosphates Limited
IFFCO	Indian Farmers Fertiliser Cooperative Limited
KRIBHCO	Krishak Bharati Cooperative Limited
GSFC	Gujarat State Fertilizers Company Limited
GNFC	Gujarat Narmada Valley Fertilisers Company Limited
DFPCL	Deepak Fertilisers & Petrochemicals Corporation Limited
SPIC	Southern Petrochemical Industries Corporation Limited
IGFCC	Indo-Gulf Fertilizers & Chemicals Corporation Limited
NFCL	Nagarjuna Fertilizers & Chemicals Limited
CFCL	Chambal Fertilisers & Chemicals Limited
ZAC	Zuari Agro Chemicals Limited
CFL	Coromandel Fertilisers Limited
MCF	Mangalore Chemicals & Fertilizers Limited
HLL	Hindustan Lever Limited
GFC	Godavari Fertilisers and Chemicals Limited
SFC	Shriram Fertilisers & Chemicals
ICI	Imperial Chemical Industries India Limited
A/S	Ammonium Sulphate
A/C	Ammonium Chloride
CAN	Calcium Ammonium Nitrate
DAP	Di-ammonium Phosphate
SSP	Single Superphosphate

**LIST OF SUBJECTS ALLOCATED TO THE DEPARTMENT OF
FERTILIZERS AS PER GOVERNMENT OF INDIA (ALLOCATION
OF BUSINESS) RULES, 1961**

- 1) Planning for fertilizer production including import of fertilizer through a designated canalising agency.
- 2) Arrangements for movement and distribution of fertilizers in terms of allocations made by the Department of Agriculture and Cooperation.
- 3) Management of subsidy for indigenous and imported fertilizers including determination of retention price and costing of imported fertilizers.
- 4) Administration of the Fertilizers (Movement Control) Order, 1973.
- 5) Administrative responsibility for public enterprises under the control of the Department.
- 6) Public sector projects concerned with subjects included under this Department except such projects as are specifically allotted to any other Ministry or Department.
- 7) Administrative responsibility for fertilizer production units in the cooperative sector namely, Indian Farmers Fertiliser Cooperative Limited (IFFCO) and Krishak Bharati Cooperative Limited (KRIBHCO).
- 8) Administrative responsibility for the Indian Potash Limited (IPL).
- 9) All attached or subordinate offices or other organisations concerned with any of the subjects specified under this Department.

ANNEXURE-II**LIST OF PUBLIC AND COOPERATIVE SECTOR UNDERTAKINGS UNDER THE ADMINISTRATIVE CONTROL OF DEPARTMENT OF FERTILIZERS**

Name of Company	Hqrs.	Incorporated in
Public Sector Undertakings		
1. The Fertilisers And Chemicals Travancore Limited.	Udyogamandal	September, 1943
2. The Fertilizer Corporation of India Limited.	New Delhi	January, 1961 (reorganised in April, 1978)
3. National Fertilizers Limited.	New Delhi	August, 1974
4. Rashtriya Chemicals & Fertilizers Limited.	Bombay	March, 1978
5. Pyrites, Phosphates & Chemicals Limited.	New Delhi	March, 1960
6. Madras Fertilizers Limited.	Madras	December, 1966
7. Projects & Development India Limited.	Sindri	March, 1978
8. Hindustan Fertilizer Corporation Limited.	New Delhi	March, 1978
9. Paradeep Phosphates Limited.	Bhubaneshwar	December, 1981
Co-operative Sector Undertakings		
10. Indian Farmers Fertiliser Cooperative Limited.	New Delhi	November, 1967
11. Krishak Bharati Cooperative Limited.	New Delhi	April, 1980

ANNEXURE-III

FERTILIZER PROJECTS UNDER IMPLEMENTATION

Sl No.	Project (State)	Capacity (in lakh tonnes)		Date of Govt. Approval/ Issue of LI/IL	Project Cost (Rs. in Crores)	Expected Date of Commissioning
		Nitrogen	Phosphate			
(1)	(2)	(3)	(4)	(5)	(6)	(7)
(A) Public Sector:						
1.	HFC-Haldia Fert Project, Midnapur, (West Bengal)	1.51	—	71/11 (Orgnl.) 81/07 (Rvsd.)	88.03 (Orgnl.) 281.96 (Rvsd.)	Uncertain
(B) Private Sector:						
1.	CFCL, Gadepan (Rajasthan)	3.34	—	16.10.84	764.00 (Orgnl.) 1200.00 (Revised)	Went into production in December, 1993
2.	Tata Chemicals Ltd., Babrala (U.P)	3.34	—	28.06.85	980.00 (Orgnl.) 1250.00 (Revised)	August, 1994
3.	Bindal Agro Chem. Ltd., Shahjahanpur (U.P)	3.34	—	12.07.89	695.00 (Orgnl.) 1250.00 (Revised)	August, 1994
4.	Expansion of Vijaipur Fertilizer Project	3.34	—	30.09.93	987.30 (Orgnl.)	October, 1996
5.	Expansion of Aonla Fertilizer Project	3.34	—	30.09.93	960.00 (Orgnl.)	October, 1996

ANNEXURE-IV

UNIT-WISE CAPACITY AND PRODUCTION DURING 1992-93 & 1993-94

NITROGEN

(Excluding Industrial Nitrogen)

Name of the plant	Installed Capacity as on 1.12.1993 (‘000’MT)	Production (‘000’MT)		% Cap. Utilin.	
		1992-93	1993-94 (Anti.)	1992-93	1993-94 (Anti.)
I) Public Sector :					
F.C.I.:—					
Sindri	219.0	135.8	114.6	62.0	52.3
Gorakhpur	131.0	0.0	0.0	0.0	0.0
Ramagundam	228.0	58.0	89.7	25.4	39.3
Talcher	228.0	41.4	57.0	18.2	25.0
Total F.C.I.	806.0	235.2	261.3	29.2	32.4
H.F.C.:—					
Namrup-I	21.0	0.2	0.0	1.0	0.0
Namrup-II	152.0	23.2	3.3	15.3	2.2
Namrup-III	177.0	113.4	95.3	64.1	53.8
Durgapur	152.0	34.2	25.9	22.5	17.0
Barauni	152.0	48.4	17.5	31.8	11.5
Total H.F.C.	654.0	219.4	142.0	33.5	21.7
N.F.L.:—					
Nangal-I	80.0	58.1	63.3	72.6	79.1
Nangal-II	152.0	163.1	159.6	107.3	105.0
Bhatinda	235.0	225.4	223.6	95.9	95.1
Panipat	235.0	200.0	234.6	85.1	99.8
Vijaipur	334.0	387.4	391.0	116.0	117.1
Total N.F.L	1036.0	1034.0	1072.1	99.8	103.5
FACT :—					
Udyogmandal	98.0	62.9	55.1	64.2	56.2
Cochin-I	152.0	67.5	103.5	44.4	68.1
Cochin-II	96.0	107.4	90.0	111.9	93.8
Total FACT.	346.0	237.8	248.6	68.7	71.8

(Contd.)

ANNEXURE-IV (Contd.)

NITROGEN (Excluding Industrial Nitrogen)

Name of the plant	Installed Capacity as on 1.12.1993 ('000'MT)	Production ('000'MT)		% Cap. Utilin.	
		1992-93	1993-94 (Anti.)	1992-93	1993-94 (Anti.)
R.C.F.:					
Trombay	90.0	81.6	89.7	90.7	99.7
Trombay-IV	75.0	60.1	60.0	80.1	80.0
Trombay-V	152.0	128.9	149.3	84.8	98.2
Thal	683.0	652.5	647.7	95.5	94.8
Total R.C.F.	1000.0	923.1	946.7	92.3	94.7
MFL: Madras	176.0	145.8	107.6	82.8	61.1
SAIL: Rourkela	120.0	54.8	60.0	45.7	50.0
NLC: Neyveli	70.0	50.0	52.9	71.4	75.6
PPL: Paradeep	130.0	94.1	72.0	72.4	55.4
By-product	38.0	27.6	25.2	72.6	66.3
Total Pub. Sector	4376.0	3021.8	2988.4	69.1	68.3
II) Coop. Sector :					
IFFCO:					
Kalol	182.0	155.9	133.9	85.7	73.6
Kandla	120.0	118.6	170.2	98.8	141.8
Phulpur	228.0	279.2	248.4	122.5	108.9
Aonla	334.0	375.8	400.2	112.5	119.8
Total IFFCO	864.0	929.5	952.7	107.6	110.3
KRIBHCO: Hazira	668.0	775.8	680.8	116.1	101.9
Total Coop. Sector	1532.0	1705.3	1633.5	111.3	106.6

(Contd.)

ANNEXURE-IV (Contd.)

NITROGEN (Excluding Industrial Nitrogen)

Name of the plant	Installed Capacity as on 1.12.1993 ('000'MT)	Production ('000'MT)		% Cap. Utilin.	
		1992-93	1993-94 (Anti.)	1992-93	1993-94 (Anti.)
III) Private Sector:					
GSFC: Baroda	236.0	311.5	265.4	132.0	112.5
CFL: Vizag	84.0	99.9	82.4	118.9	98.1
SFC: Kota	152.0	164.9	185.6	108.5	122.1
ICI: Kanpur	310.0	285.7	276.0	92.2	89.0
ZAC: Goa	198.0	235.8	219.8	119.1	111.0
SPIC: Tuticorin	312.0	369.8	278.2	118.5	89.2
MCF: Mangalore	181.0	112.2	116.0	62.0	64.1
EID Parry: Ennore	15.0	16.8	12.2	112.0	81.3
GNFC: Bharuch	340.0	357.6	388.8	105.2	114.4
DFCL: Taloja	53.0	23.5	—	59.1	—
TAC: Tuticorin Alk.	16.0	17.0	17.5	106.3	109.4
PNF: Nangal	16.0	13.6	11.5	85.0	71.9
HLL: Haldia	29.0	31.0	12.9	106.9	44.5
IGFCC: Jagdishpur	334.0	382.4	363.9	114.5	109.0
GSFC: Sikka	59.0	72.5	73.8	123.0	125.1
NFL: Kakinada	228.0	142.3	264.5	93.6	116.0
GFC: Kakinada	54.0	62.2	42.6	115.2	78.9
Chambal Ferts.	—	—	62.6 *	—	—
By-product	6.0	4.4	4.4	73.3	73.3
Total Pvt. Sector	2623.0	2703.2	2678.1	106.7	99.7
Total(I+II+III)	8531.0	7430.3	7300.0	88.0	84.8

* Installed Capacity of 3.34 lakh tonnes of "N" not reckoned, as commercial production is yet to be declared. Trial run production from December, 1993.

(Contd.)

ANNEXURE-VI

SECTOR-WISE PERCENTAGE CAPACITY UTILIZATION

	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94 (Anti.)
(% age)						
Nitrogen(N)						
Public	71.1	66.7	66.3	69.0	69.1	68.3
Coop.	110.6	107.7	112.4	112.8	111.3	106.6
Private	98.1	96.8	105.0	108.8	106.7	99.7
Total	85.2	82.8	85.8	88.5	88.0	84.8
Phosphate (P)						
Public	86.3	53.7	62.4	92.4	82.9	66.3
Coop.	95.9	72.4	75.4	113.2	99.7	112.0
Private	85.3	69.8	80.3	89.5	78.6	55.7
Total	86.9	65.3	74.6	93.0	82.1	64.8

ANNEXURE-VII

DETAILS OF ACTUAL EXPENDITURE AND PLAN OUTLAYS

(Rs. in Crores)

Sl No	Name of the Undertaking/ Item	7th Plan Outlay (1985-90)	Actual Expenditure 7th Plan	Actual Expenditure 1991-92	8th Plan Outlay (1992-97)	Actual Expenditure 1992-93	BE 1993-94 (Outlay)	RE 1993-94 (Outlay)	BUDGET:1994-95		
									Plan (Outlay)	Budgetary Support	IEBR
1	2	3	4	5	6	7	8	9	10	11	12
1.	FCI	176.00	112.77	12.05	430.00	8.14	30.00	30.00	23.00	23.00	—
2.	FACT	225.00	380.40	19.24	700.00	17.00	104.00	67.85	120.00	68.50	51.50
3.	HFC	217.00	349.89	73.10	227.00	31.00	35.00	35.00	17.00	17.00	—
4.	NFL	739.00	726.74	16.92	1027.00	24.88	162.00	86.56	200.00	—	200.00
5.	RCF	213.00	187.85	38.48	638.00	48.51	135.00	145.40	130.00	—	130.00
6.	PDIL	35.00	31.05	0.91	9.00	1.00	4.00	4.00	1.50	1.50	—
7.	PPL	306.00	345.82	45.29	300.00	3.17	44.00	28.00	34.00	34.00	—
8.	PPCL	47.00	71.25	4.81	89.00	3.44	5.00	5.00	4.00	4.00	—
9.	MFL	25.00	35.43	14.56	448.00	17.44	90.00	137.93	246.00	24.00	222.00
10.	KRIBHCO	132.71	237.24	14.26	384.00	21.45	164.00	102.91	100.00	—	100.00
11.	IFFCO	502.29	640.44	22.62	1100.00	33.70	141.00	92.00	154.00	—	154.00
12.	National Project for strengthening of fertilizer handling and transport	48.00	0.93	0.06	—	—	0.10	0.10	0.10	0.10	—
13.	Misc.Schemes under the Deptt.	42.75	66.31	15.73	132.00	16.08	20.90	20.90	11.90	11.90	—
TOTAL		2708.75	3186.12	278.03	5484.00	225.81	935.00	755.65	1041.50	184.00	857.50

ANNEXURE-IV (Contd.)

PHOSPHATE

Name of the plant	Installed Capacity as on 1.12.1993 ('000'MT)	Production ('000'MT)		% Cap. Utilin.	
		1992-93	1993-94 (Anti.)	1992-93	1993-94 (Anti.)
I. Public Sector:					
FACT :					
Udyogmandal	30.0	30.2	20.0	100.7	66.7
Cochin-II	114.0	113.4	90.0	99.5	78.9
Total FACT.	144.0	143.6	110.0	99.7	76.4
R.C.F.:					
Trombay	45.0	52.7	48.0	117.1	106.7
Trombay-IV	75.0	60.1	60.0	80.1	80.0
Total R.C.F.	120.0	112.8	108.0	94.0	90.0
MFL: Madras	112.0	117.4	88.7	104.8	79.2
PPL: Paradeep	331.0	240.4	184.0	72.6	55.6
HCL: Khetri	30.0	8.6	2.1	28.7	7.0
PPCL: Amjhore	42.0	28.4	24.0	67.6	57.1
SSP Units	13.0	5.2	8.0	40.0	61.5
Total Pub. Sector	792.0	656.4	524.8	82.9	66.3
II. Coop. Sector:					
IFFCO:Kandla	309.0	308.1	346.2	99.7	112.0
III. Private Sector					
GSFC: Baroda	50.0	74.5	64.6	149.0	129.2
CFL: Vizag	104.0	106.1	84.7	102.0	81.4
ZAC: Goa	111.0	94.4	52.4	85.0	47.2
SPIC: Tuticorin	191.0	208.5	64.4	109.2	33.7
MCF: Mangalore	63.0	41.9	46.5	66.5	73.8
EID Parry: Ennore	19.0	20.9	15.2	110.0	80.0
GNFC: Bharuch	33.0	30.2	32.3	91.5	97.9
DFCL: Taloja	53.0	23.5	—	59.1	—
HLL : Haldia	71.0	79.3	33.1	111.7	46.6
GSFC: Sikka	150.0	185.6	188.6	123.7	125.7
GFC: Kakinada	138.0	158.8	108.9	115.1	78.9
SSP Units	738.0	318.0	268.3	43.1	36.4
Total Pvt. Sector	1721.0	1341.7	959.0	78.6	55.7
Total(I+II+III)	2822.0	2306.2	1830.0	82.1	64.8

ANNEXURE-V

SECTOR-WISE PRODUCTION OF NITROGENOUS AND PHOSPHATIC FERTILIZERS

('000' MT)												
	1988-89		1989-90		1990-91		1991-92		1992-93		1993-94	
	Target	Actual	Target	Actual	Target	Actual	Target	Actual	Target	Actual	Target	Anti. Prodn.
Nitrogen(N)												
Public	3037.0	3081.0	3246.0	2887.5	3252.0	2873.0	3238.8	3020.4	3231.2	3021.7	3219.7	2988.4
Coop. . . .	1327.0	1590.0	1473.0	1650.0	1530.0	1722.1	1622.7	1728.6	1646.8	1705.4	1625.5	1633.5
Private . . .	2036.0	2041.0	2281.0	2209.8	2293.0	2398.0	2488.5	2552.3	2822.0	2703.2	2954.8	2678.1
Total	6400.0	6712.0	7000.0	6747.3	7075.0	6993.1	7350.0	7301.3	7700.0	7430.3	7800.0	7300.0
Phosphate (P)												
Public	646.0	671.0	671.0	439.8	552.0	510.9	748.1	731.7	760.9	656.4	572.0	524.8
Coop.	325.0	296.0	309.0	223.7	208.0	233.1	340.3	349.9	340.9	308.1	313.9	346.2
Private . . .	1229.0	1285.0	1420.0	1132.3	1240.0	1307.9	1561.6	1480.5	1648.2	1341.7	1314.1	959.0
Total	2200.0	2252.0	2400.0	1795.8	2000.0	2051.9	2650.0	2562.1	2750.0	2306.2	2200.0	1830.0
Grand Total	8600.0	8964.0	9400.0	8543.1	9075.0	9045.0	10000.0	9863.4	10450.0	9736.5	10000.0	9130.0

ANNEXURE-VIII

DETAILS OF NON-PLAN AND PLAN PROVISIONS MADE IN BE 1993-94, RE 1993-94 AND BE 1994-95

		(Rs. in Crores)		
		B.E.1993-94	R.E.1993-94	B.E.1994-95
I. NON-PLAN PROVISIONS				
A. REVENUE SECTION				
1. Sectt.Proper		2.00	2.20	2.27
2. Office of FICC		0.39	0.39	0.41
3. Subsidy on indigenous fertilizers		3000.00	3800.00	3500.00
4. Subsidy on imported fertilizers	Gross	1200.00	1650.00	1700.00
	Recovery	-700.00	-1050.00	-1200.00
	Net	500.00	600.00	500.00
5. Grant to M.I.S studies		0.05	0.05	0.91
6. Productivity Award in the field of Fertilizer Production		0.01	0.01	0.01
7. Payment under DEB.		10.00	5.00	10.00
8. Reimbursement of exchange loss to RCF in respect of loan from Kuwait		—	—	150.88
TOTAL (REVENUE SECTION):		3512.45	4407.65	4164.48
B. CAPITAL SECTION				
Non-Plan loans to PSU's:				
HFC		27.50	46.00	64.25
FCI		37.50	37.50	37.50
PDIL		1.50	1.50	1.50
TOTAL (CAPITAL SECTION):		66.50	85.00	103.25
TOTAL NON-PLAN		3578.95	4492.65	4267.73

Contd.....

ANNEXURE-VIII (Contd..)

DETAILS OF NON-PLAN AND PLAN PROVISIONS MADE IN BE 1993-94, RE 1993-94 AND BE 1994-95

(Rs. in Crores)

	B.E.1993-94	R.E.1993-94	B.E.1994-95
II. PLAN PROVISIONS			
A. REVENUE SECTION			
1. Grant under Indo-EEC Programme	2.00	2.00	2.00
2. Grant to HFC for IBFEP	9.50	9.50	-
3. Grant to HFC for RFP	1.40	1.40	1.70
4. Grant to KRIBHCO for RFP	2.32	2.32	3.30
5. Grant to PPCL for GAFDP	0.68	0.68	0.40
6. Grant to PDIL for R&D	4.00	4.00	4.00
7. S&T Programme of Department	1.00	1.00	0.50
8. Grants under			
Voluntary Retirement Schemes(VRS):			
FCI	25.00	20.00	34.00
HFC	15.00	15.00	34.00
PDIL	18.00	14.50	11.00
PPCL	0.50	0.50	1.00
Total (Grants under VRS):	58.50	50.00	80.00
Deduct amount met from NRF	-58.50	-50.00	-80.00
Net:	0.00	0.00	0.00
TOTAL (REVENUE SECTION):	20.90	20.90	11.90

Contd.....

ANNEXURE-VIII (Contd..)

DETAILS OF NON-PLAN AND PLAN PROVISIONS MADE IN BE 1993-94, RE 1993-94 AND BE 1994-95

(Rs. in Crores)

	B.E.1993-94	R.E.1993-94	B.E.1994-95
B. CAPITAL SECTION			
Investments in and loans to PSU's:			
1. FCI	30.00	30.00	23.00
2. FACT	40.00	40.00	68.50
3. HFC	35.00	35.00	17.00
4. PDIL	4.00	4.00	1.50
5. PPL	20.00	28.00	34.00
6. MFL	10.00	10.00	24.00
7. PPCL	-	-	4.00
Total PSU's:	139.00	147.00	172.00
8. National project for strengthening of Fertilizer Handling and Transportation	0.10	0.10	0.10
TOTAL (CAPITAL SECTION):	139.10	147.10	172.10
TOTAL PLAN :	160.00	168.00	184.00
TOTAL- DEPARTMENT OF FERTILIZERS	3738.95	4660.65	4451.73

ANNEXURE-IX

PROFITABILITY OF PUBLIC & COOPERATIVE SECTOR UNDERTAKINGS UNDER DEPARTMENT OF FERTILIZERS

(Rs.in Crores)

Name of the Undertaking	Net Profit (+)/Net Loss (-)								
	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94 (April-Dec.'93) (Prov.)
1. PUBLIC SECTOR ENTERPRISES									
(A) PSUs OTHER THAN LOSS MAKING UNITS									
1. NFL	37.13	24.41	44.22	4.90	11.60	29.74	83.61	111.47	52.28
2. FACT	11.23	41.45	12.90	7.72	3.01	23.61	28.99	2.85	7.77
3. RCF	32.23	20.10	53.17	69.94	48.81	40.76	18.78	-26.58	0.24
4. PPL	-	-8.26	-20.34	12.04	-36.92	-47.25	13.12	-80.91	-71.09
5. MFL	-7.60	6.64	-26.05	9.87	2.96	6.38	16.36	12.13	-59.11
6. PPCL	0.91	0.46	0.88	1.21	-1.24	0.20	0.24	-8.29	-11.36
Total (A):	73.90	84.80	64.78	105.68	28.22	53.44	161.10	10.67	-81.27
(B) LOSS MAKING UNITS									
1. FCI	-129.38	-102.53	-42.66	-191.24	-146.80	-168.35	-225.41	-225.98	-237.02
2. HFC	-71.56	-86.22	-104.84	-156.38	-169.79	-231.45	-330.53	-349.44	-292.03
3. PDIL	0.52	-0.39	-5.18	-9.52	-19.08	-17.86	-16.48	-13.66	-18.61
Total (B):	-200.42	-189.14	-152.68	-357.14	-335.67	-417.66	-572.42	-589.08	-547.66
Total (1):	-126.52	-104.34	-87.90	-251.46	-307.45	-364.22	-411.32	-578.41	-628.93
2. COOPERATIVE SECTOR ENTERPRISES									
1. IFFCO	33.92	10.18	*	20.60	55.91	108.11	100.91	115.77	59.51
2. KRIBHCO	1.16	45.06	126.80	85.75	91.51	94.65	98.04	145.58	78.41
Total(2):	35.08	55.24	126.80	106.35	147.42	202.76	198.95	261.35	137.92
Grand Total:	-91.44	-49.10	38.90	-145.11	-160.03	-161.46	-212.37	-317.06	-491.01

NOTE: *Accounting year for Co-op. Sector Enterprises was July-June upto 1987-88 and thereafter financial year (April-March).
In case of IFFCO, 1987-88 and 1988-89 are clubbed together (21 months) and in case of KRIBHCO 1988-89 represents only 9 months.

ANNEXURE-X

YEAR-WISE PRODUCTION, CONSUMPTION AND IMPORTS

(Lakh Tonnes)

Year	Consumption				Production				Imports				C & F Value of Imports (Rs.Crores)
	N	P	K	Total	N	P	K	Total	N	P	K	Total	
1980-81	36.78	12.14	6.24	55.16	21.64	8.41	-	30.05	15.10	4.52	7.97	27.59	925.22
1981-82	40.69	13.22	6.73	60.64	31.44	9.49	-	40.93	10.54	3.43	6.44	20.41	716.62
1982-83	42.24	14.37	7.27	63.88	34.24	9.80	-	44.04	4.25	0.63	6.44	11.32	273.53
1983-84	52.05	17.30	7.75	77.10	34.85	10.48	-	45.33	6.56	1.43	5.56	13.55	365.05
1984-85	54.87	18.86	8.38	82.11	39.17	12.64	-	51.81	20.08	7.45	8.71	36.24	1500.00
1985-86	56.61	20.05	8.08	84.74	43.28	14.28	-	57.56	16.80	8.16	9.03	33.99	1405.00
1986-87	57.16	20.79	8.50	86.45	54.10	16.60	-	70.70	11.03	2.55	9.52	23.10	651.00
1987-88	57.17	21.87	8.80	87.84	54.66	16.65	-	71.31	1.75	-	8.09	9.84	223.77
1988-89	72.51	27.21	10.68	110.40	67.12	22.52	-	89.64	2.19	4.07	9.82	16.08	644.53
1989-90	73.86	30.14	11.68	115.68	67.47	17.96	-	85.43	5.23	13.11	12.80	31.14	1538.77
1990-91	79.97	32.21	13.28	125.46	69.93	20.52	-	90.45	4.14	10.16	13.28	27.58	1335.82
1991-92	80.46	33.21	13.61	127.28	73.01	25.62	-	98.63	5.66	9.67	12.36	27.69	1934.19
1992-93	84.26	28.43	8.84	121.53	74.30	23.06	-	97.36	11.37	6.89	10.82	29.08**	2216.00
1993-94 (Anti.)	94.20	28.43	9.00	131.63	73.00	18.30	-	91.30	15.44	7.36	7.20	30.00 **	908.27 *

* C & F value of fertilizers imported on Government account upto 31.12.1993

** Import of DAP was decanalised on 17.9.1992.
Import of MOP was decanalised on 17.6.1993.
Hence figures of imports in 1993-94 are tentative.

ANNEXURE-XI

STATEMENT SHOWING EMPLOYMENT OF SC/ST, EX-SERVICEMEN AND PHYSICALLY HANDICAPPED PERSONS IN PUBLIC SECTOR UNDERTAKINGS AS ON JANUARY 1, 1994

Name of PSU	Group	Total no. of Employees	Number of employees belonging to			
			SC	ST	Ex-Servicemen	Physically Handicapped
(1)	(2)	(3)	(4)	(5)	(6)	(7)
MADRAS FERTILIZERS LTD.						
	A	319	2	-	1	-
	B	409	28	3	1	3
	C	780	153	-	21	6
	D	63	33	-	-	-
	Total:	1571	216	3	23	9
FERTILISERS & CHEMICALS TRAVANCORE LTD.						
	A	901	25	2	6	1
	B	2474	178	24	28	21
	C	3855	438	97	207	43
	D	1559	305	42	57	31
	Total:	8789	946	165	298	96
NATIONAL FERTILIZERS LTD.						
	A	1464	224	40	21	7
	B	1893	363	64	82	12
	C	2992	719	151	183	39
	D	524	296	8	45	6
	Total:	6873	1602	263	331	64
HINDUSTAN FERTILIZER CORPORATION LTD.						
	A	1857	45	19	9	4
	B	1689	160	50	16	2
	C	4505	632	441	181	25
	D	1177	361	170	76	16
	Total:	9228	1198	680	282	47
PYRITES, PHOSPHATES & CHEMICALS LTD.						
	A	240	14	6	5	1
	B	207	14	1	3	1
	C	1364	186	15	26	8
	D	904	152	23	59	8
	Total:	2715	366	45	93	18

(Contd..)

ANNEXURE-XI (Contd..)

Name of PSU	Group	Total no. of Employees	Number of employees belonging to			
			SC	ST	Ex-Servicemen	Physically Handicapped
(1)	(2)	(3)	(4)	(5)	(6)	(7)
PARADEEP PHOSPHATES LTD.						
	A	114	3	-	1	1
	B	280	15	3	3	1
	C	458	43	7	2	5
	D	132	22	-	70	6
	Total:	984	83	10	76	13
PROJECTS & DEVELOPMENT INDIA LTD.						
	A	1059	31	10	-	2
	B	626	27	13	-	4
	C	1135	139	106	-	4
	D	49	8	6	-	5
	Total:	2869	205	135	-	15
RASHTRIYA CHEMICALS & FERTILIZERS LTD.						
	A	1736	167	32	11	5
	B	1732	141	39	5	2
	C	2283	299	146	14	15
	D	152	25	17	-	1
	Total:	5903	632	234	30	23
FERTILIZERS CORPORATION OF INDIA LTD.						
	A	1794	177	19	4	4
	B	1862	288	79	10	5
	C	4122	531	257	111	28
	D	905	242	80	13	9
	Total:	8683	1238	435	138	46

