CHAPTER TWO

FERTILIZER INDUSTRY IN INDIA - AN OVERVIEW

2.1 INTRODUCTION:

Agriculture holds the key to the economic development of a country like India, as nearly 50 percent of its national income is derived from agriculture sector. Agriculture provides a means of livelihood to nearly two-thirds of the country's population. The prosperity of the industrial sector is also closely linked with agriculture. A large proportion of exports still includes products of agricultural origin. Agricultural base of the country must, therefore, be strengthened to speed up the country's economic growth. To attain this objective, agricultural practices have to be improved from their traditional pattern to a higher technological plane involving better irrigation, better quality seeds, fertilizers, etc. Chemical fertilizers is the kingpin in this process.

In India, the use of chemical fertilizers started at the end of the 19th century with the import of nitrates from Chile. In latter years, fertilizer consumption rose with greater speed, especially with the introduction of high-yielding varieties of seeds, particularly what, in the 'sixties. This was accompanied by the introduction of Government policy with regard to fertilizer promotion.

2.2 A BRIEF HISTORY OF FERTILIZER INDUSTRY:

The fertilizer industry in India made its beginning in 1906 with a small super-phosphate factory set up at Madras by the House of Parrys. Nearly quarter century later, in 1933, Tata Iron & Steel Company Limited produced ammonium sulphate as a bye-product and marketed it commercially. In 1941, a small plant at Belagula in Karnataka produced

synthetic ammonia for the first time in the country. In 1947, the year of country's freedom from foreign yoke, the Fertilizers & Chemicals Travancore Limited (FACT) made a major investment in a nitrogeneous fertilizers plant which was set up at Udyogmandal in Kerala. After this sporadic and stymied growth of fertilizer industry in the country over a period of about fifty years, the Planning Commission took over the development of agricultural and industrial infrastructure and it was only then that the fertilizer industry received a filip for development.

During 1951-61, four new nitrogeneous fertilizers plants were commissioned; Fertilizer Corporation of India (FCI), a public sector enterprise, set up an ammonium sulphate nitrate plant at Sindri in Bihar in 1951 and a calcium ammonium nitrate plant at Nangal in 1961; the New Central Jute Mills, a private sector company, set up an ammonium chloride plant at Varanasi in 1959 and the FACT's Phase-I at Travancore was commissioned in 1960. In 1960 itself, the FCI also commenced the production of urea at Sindri for the first time in the country.

During 1961-71, there was a considerable growth of the fertilizer industry in the country. From January 1961 onwards, FCI started to grow, first with the consolidating the management of its Sindri and Nangal plants and by the end of the decade had established its plants at Trombay, Gorakhpur and Namrup. Phases-II and III of FACT were completed; fertilizers manufacturing facilities of the Neyvelli Lignite Corporation at Neyvelli, Hindustan Steel Limited at Rourkela, EID-Parry at Madras, Gujarat State Fertilizers Company at Baroda, Coromandel Fertilizers at Vizag, IEL and Kanpur and SCI at Kota went into production. Overall, the

FCI grew into a giant organization managing a substantial fertilizer capacity in the public sector. On 1st April 1978, however, it was divided into five separate Corporations.

During 1971-75, Phase-IV of FACT was completed. Besides, Madras Fertilizers, Madras; Zuari Agro Chemicals Limited, Goa; Cochin Unit of FACT, FCI at Durgapur, IFFCO units at Kalol and Kandala and the expansion of SCI at Kota also went on production. During 1975-79, the already functioning fertilizer plants completed their expansion programmes; of which, GFL, Vizag (April, 1976), FACT, Cochin and Phase-II of Ambalamedu (December, 1976), FCI, Namrup (December, 1976), MFL, Manali III Stage, (October, 1976), FCI, Nangal (January, 1978) and FCI, Trombay IV Stage, (January, 1978), SAIL, Bokaro II Expansion (March 1977) are worth mentioning. Besides, FCI, Barauni, MCFL, Mangalore, and SPIC, Tuticorin, also went on production. During 1978-79, NLC, Neyvelli, switched over to fuel oil and at Rourkela Fertilizer Plant II, naptha reformer was completed.

As regards phosphatic fertilizers, as stated earlier, the first fertilizer to be manufactured in thecountry was a single superphosphate in 1906 using bones and sulphuric acid. In 1960, first ammonium phosphate plant went on production at FACT, Alwaye. EID-Parry, Madras, also commenced the production of ammonium phosphate/sulphate during 1963. Production of various grades of nitrophosphate commenced at the FCI's Trombay unit in 1965, of diammonium phosphate at GSFC, Baroda, in 1976, and urea ammonium phosphate at CFL, Vizag in 1968. Various N-P-K (nitrogen-phosphorus-potassium) complex fertilizers also begun to be produced by the MFL since 1971. During 1974, IFFCO plant at Kandala commenced the production N-P-K fertilizers.

2.3 PRESENT SITUATION OF FERTILIZER INDUSTRY:

Since late 1970's, extreme care and appropriate policies have been evolved to facilitate rapid increase in fertilizer consumption supported by a growing and dynamic domestic industry. The Retention Pricing and Subsidy Scheme was introduced for nitrogeneous fertiliers from November 1, 1977, and for phosphatic fertilizers from February 1, 1979.

During the year 1989-90, the output of the fertilizers was 85.43 lakh tonnes. It increased significantly to 90.45 lakh tonnes in 1990-91 at the rate of 5.9 percent increase during 1990-91, as compared to 4.7 percent increase in the previous year. The improvement in the production of fertilizers was due to the increase in the capacity utilization of phospatic plants from 65.3 per cent to 74.6 percent due to increase in the demand of fertilizers.

Production of fertilizers increased by 9.1 percent in 1991-92. But during April-December, 1992, fertilizer output showed a marginal growth of 0.3 percent. The output of fertilizers from the years 1998-89 to 1992-93 is shown in Table 2.1 (on the following page).

2.4 PROJECTED FERTILIZER PRODUCTION FOR THE YEAR 1999-2000:

Production:

The exercises regarding the future projection of the fertilizer production in India have been varied in number as well as nature. The estimated production for the year 1999-2000 will have 17.61 million tonnes, all nutrients consisting of 10.94 million tonnes of N, 4.73 million tonnes of P and 1.94 million tonnes of K. In N, the present total production capacity is 8.5 million tonnes. In addition, three more

gas-based projects of 0.33 million tonnes each are under implementation and two more expansion projects have been already approved. Putting together all these projects, the installed capacity is raised to 10.3 million tonnes. Assuring 90 percent capacity utilization for nitrogeneous fertilizers, the production capability will work out to about 9.27 million tonnes.

In the phosphorus sector, the existing installed capacity is 2.891 million tonnes and with a marginal addition of about 40,000 tonnes and on the basis of average capacity utilization of 94 percent, the production capability works out to 2.68 million tonnes.

Consumption:

India has achieved remarkable progress in raising fertilizer consumption in the country in the last two decades. Consumption of the fertilizers increased by 8.2 percent during 1990-91 as compared with a rise of 4.3 percent in 1989-90. Consumption of fertilizers, however, has suffered in recent years because of a very casual approach in regard to fertilizer pricing and distribution policy.

During Rabi season 1992-93, consumption of P and K fertilizers was lower by 23 percent and 25 percent over the season of 1991-92. In contrast, consumption of N increased by 6 percent and urea has continued to incurease. During Kharif season 1993, consumption of P and K became lowered by 21 percent and 26 percent, respectively, over the season of 1992. During 1993-94, India reached the consumption level of about 8.8 million tonnes N, 2.4 million tonnes P and 0.76 million tonnes K.

The National Informatics Centre (NFC) has estimated the demand for fertilizers by 1999-2000 at 17.6 million tonnes consisting of 10.76, 4.73 and 1.94 million tonnes for N, P and K, respectively.

2.5 PERSPECTIVE PLAN FOR DEVELOPMENT OF FERTILIZER SECTOR:

Significant steps had been taken towards liberalization when the fertilizer industry was delicensed from 24th July 1994, whereby the promoters of fertilizer units have been given the freedom in the selection of plant location, plant size, production process, manufacturing technology, equipment suppliers, etc., subject to only some environment restrictions.

1. Changes in the Exchange Rate System:

Introduction of full convertibility of the Rupee on trade account from 1.3.1993 has enabled the fertilizer industry to move away from the controlled regime of seeking approaches for import of capital goods and also for the allocation of the foreign exchange for the import of their requirements.

2. Decanalization of Imported Raw Material and Finished Products:

Significant steps have also been taken towards liberalizing imports of raw materials and intermediates used in the manufacture of fertilizers and some finished products such as import of DAP and MOP.

3. Waiver of Customs & Import Duties:

From 27th August 1992, custom duty on fertilizer project imports and on the imports of phosphoric acid was eliminated.

4. Position in regard to Public/Cooperative Sector under Government Control:

Progressively increasing role of the market and private initiative in deciding supplies of input, raw materials and finished phosphatic and potassic fertilizers and also in implementing new projects including expansion, revamping and modernization of plants.

5. Supply of Pricing of Feedstock and Utilities:

In respect of the supplies of feedstock, particularly gas, naptha, fuel oil, coal and utilities, such as power, freedom of choice both in respect of price and supplies are still controlled by the government.

2.6 POLICY OF THE GOVERNMENT OF INDIA TOWARDS FERTILIZER PRICING:

The guiding principle for the fertilizer pricing policy in India is the 'self-sufficiency' in food production and supply the same at lower price to the consumer. Retention Price Scheme (RPS) was introduced in November 1977 based on the recommendations of the Marathe Committee. The main objective of this scheme was to protect the industry against the rising cost of production and thereby attract more investment in this sector. Thus, current policy of fertilizer pricing has two objectives, i.e. supplying fertilizers at lower cost to the farmers and also ensuring fair return to the producers. In doing so, RPS adjusts the difference between the cost of production cost and the wholesale price of fertilizer, mostly in the form of subsidies.

The main factors leading to the increase in fertilizer subsidy is accounted by increase in the prices of inputs and freight, which are controlled by the Government and its agencies. The reason for continuous

fertilizer subsidies in India are based on two assumptions - (1) more fertilizer leads to higher agricultural production, and (2) lower the price, greater will be the consumption.

In 1986-87, the subsidy on imported fertilizers was Rs.355 per tonne and on domestic fertilizer, Rs.2405. In 1987-88, it increased upto Rs.1626 and Rs.2875, respectively. In 1988-89, ther was a decrease in the subsidy of imported fertilizer from 1626 to Rs.1555; on the other hand, on domestic fertilizers, it increased to Rs.3347. In 1988-90, subsidy on imported fertilizer went upto Rs.2667 pertonne and on domestic fertilizers to Rs.4432 per tonne. In 1991-92, the subsidies amounted to Rs.4800 crores and gone upto Rs.6577 crores in 1992-93.

The Joint Parliamentary Committee (JPC) on 'Fertilizer Pricing' submitted its report on 20th August 1992. A number of recommendations made by the JPC were accepted and implemented such as:

(1) Urea price reduced by 10 percent from 25.8.1992;

(2) ammonium and ammonium chloride brought back under control from 25.8.1992;

(3) Complete decontrol of phospatic and potassic fertilizers from 25.8.1992;

(4) Railway freight for fertilizers, except urea, MOP, CAN and ammonium chloride and rock phosphate, was lowered from 5.9.1992;

(5) Custom duty on phosphoric acid was withdrawn from 27.8.1992;

(6) Customs duty on fertilizer projects was withdrawn from 23.9.1992.

In the Union Budget of 1993-94, Finance Minister Dr.Manmohan Singh announced the major decision of withdrawing the 'backdoor subsidy' on the decontrolled fertilizers that brought down the actual outlay on the

fertilizer subsidy from Rs.5800 crores to Rs.3500 crores, out of which indigenous urea units were given Rs.3000 crores and imported fertilizers only Rs.500 crores.

During the first half of 1994-95, price fixation allowed an increase in diammonia phosphate (DAP) selling price to about Rs.1,000 per tonne over the price of 1993-94. For the remaining half of the year, the Governmenthas decided to release 100 percent payment of the subsidy directly to the manufacturers. This scheme is known as the Fertilizer Concession Scheme and was implemented on August 17, 1994 and its objective is to short circuit the state bureaucracy and to facilitate expeditious settlement of subsidy accounts of the fertilizer manufacturers.

The unified exchange rate proposed by the Finance Minister in the same Budget will have adverse impact on the fertilizer industry and the price of the decontrolled phosphatic and potassic nutrients. Hence, the unified exchange rate introduced in trade account the impact of allowing import of ammonia and phosphoric acid at official exchange rate is cancelled. The same is also the case with potash. As a result, the import bill of the fertilizer industry towards raw material go up by 20-22 percent across the board, which will reflect in the production costs by Rs.1300 per tonne in case of diammonia phosphate (DAP). The increase in case of MOP is Rs.1000 per tonne.

In the case of DAP, the prices will hit top. While the production costs are put in the range of Rs.7500-8300 per tonne, sales price will not be less than Rs.8800 to 9300 per tonne during the next Kharif and Rabi seasons. MOP prices will go up to Rs.6500 from the present Rs.4500

per tonne after subsidy.

The highlights of the new policy are:

(1) Unified exchange rate to hike decontrolled fertilizer prices;

(2) Ad-hoc subsidies on phosphatic and potash withdrawn;

(3) Import duty on caprolactum hiked from 50 to 60 percent;

(4) Fertilizer subsidy curtailed to Rs.3500 crores;

(5) Subsidies on urea remains untouched;

(6) Unpaid subsidy bill cross over Rs.777 crores;

(7) DAP and MOP make fertilizers costlier by Rs.2400 and Rs.2000 per tonne.

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Table 2.1
OUTPUT OF FERTILIZERS DURING THE PERIOD 1988-89 TO 1991-92

Particulars	1988-89	1989-90	1990-91	1991-92	1991-92 April- December	1992-93	Change over Previous Year 1990-91	1991-92	1991-92	1992-93
							%	%	%	%
1. Nitrogenous (N)	6.71	6.74	6.99	7.30	5.33	5.46	0.45	3.71	4.43	2.44
Public Sector	3.08	2.88	2.87	3.02	2.16	2.22	-6.49	-0.35	5.23	2.78
Private Sector	2.04	2.21	2.40	2.55	1.88	1.96	8.33	8.60	6.25	4.26
Cooperative Sector	1.59	1.65	1.72	1.73	1.29	1.28	3.77	4.24	0.58	-0.78
2. Phosphatic (P)	2.25	1.79	2.05	2.56	1.97	1.82	-20.44	14.53	24.88	-7.61
Public Sector	0.67	0.44	0.51	0.73	0.56	0.51	-34.33	15.91	43.14	-8.93
Private Sector	1.28	1.13	1.31	1.48	1.15	1.06	-11.72	15.93	12.98	-7.61
Cooperative Sector	0.33	0.22	0.23	0.35	0.26	0.25	-26.67	4.55	52.77	-3.85
Total (N+P)	8.96	8.53	9.04	9.86	7.30	7.28	-4.80	5.98	9.07	-0.27

Source: Government of India, Ministry of Agriculture, "Annual Report 1991-92".