## Fertiliser demand forecast

## Shortages may pose problems

N pursuing policies for the fertiliser sector, we seem to be missing the growth perspective. The Eighth Plan working group on fertilisers, which submitted its report to the Planning Commission in 1989, projected demand for fertiliser nutrients, nitrogen, phosphate and potash by 1999-2000, at 12.75, 5.8 and 2.05 million tonnes respectively, which aggregates to 20.6 million tonnes.

The estimate represented a judicious blend of what could be achieved on the basis of past growth trends in demand and nutrient requirements based on foodgrain production to feed the projected population of one billion by the turn of the century. The deficit was to be bridged by setting up additional production capacity or expansion of existing units. This included immediate action on setting up four mega size (2,200 tpd urea) gas-based plants.

Almost five years have passed since the working group submitted its report. During this period, the installed capacity of nitrogen has increased from about 8.2 million tonnes in 1989 to just about 8.5 million tonnes. Nagarjuna Fertiliser Ltd., in Kakinada was commissioned in 1992 with a total installed capacity of 2,28,000 tonnes per annum. Chambal Fertilisers & Chemicals in Gadepan (Kota), with a total installed capacity of 3,34,000 tonnes per annum, was commissioned in 1993 and is expected to be fully operational in 1994-95.

In the case of phosphates, the installed capacity has increased from about 2.7 million tonnes in 1989 to about 2.8 million tonnes. This was primarily due to the setting up of Deepak Fertilisers & Petrochemicals' plant at Taloja in July 1992 and GNFC's plant in April 1991. Both are dedicated to the manufacture of ammonium nitro phosphate.

The country achieved maximum production in 1991-92 when the production of nitrogen touched 7.3 million tonnes and phosphate 2.7 million tonnes, representing a capacity utilisation of 89 per cent and 94 per cent, respectively. In 1993-94, while the production of nitrogen was lower at 7.2 million tonnes, that of phosphate declined sharply to 1.9 million tonnes. This represented utilisation rates of 84 per cent and 68 per cent respectively.

While the demand for nitrogen increased from eight million tonnes in 1991-92 to 8.8 million tonnes in 1993-94, consumption of Plans to meet the projected demand for fertilisers by the end of this century from indigenous sources appear lofty in view of the wide chasm between supply and demand. Fertiliser plant needs to be modernised to meet the goal at least half way through. The fear of decontrol of urea prices poses a damper on the economic viability of its expanded manufacturing units.

What is needed is a co-ordinated policy in which nominees of the government, industry and farmers help solve the problem, says Uttam Gupta.

phosphate went down from 3.3 million tonnes in 1991-92 to 2.7 million tonnes in 1993-94. Decline in the consumption of phosphates by itself is not a healthy sign and this would show up in reduced production of foodgrains consequent on the aggravation of imbalance of nitrogen, phosphates and potash use. But, much worse is the significant reduction in the degree of self-reliance. At present, a lower share of consumption is being met by domestic production. That is, 82 per cent of nitrogen and 70 per cent of phosphates as against 90 per cent and 82 per cent, respectively in 1992-92.

That we have not been able to satisfy fully even reduced levels of consumption, particularly of phosphates, is a matter of concern. And, even assuming that the declining trend in consumption would continue, which would have dangerous repercussions for Indian agriculture, it is unlikely that we would be able to supply even the reduced level from our factories. A large number of phosphatic plants in the country are closed, while others are operating at substantially reduced capacity. Almost the entire phosphatic industry in the country is reeling under the threat of competition from cheap imports and price resistance from farmers.

In the light of the 1992-93 and 1993-94 trends, the working group estimates have become irrelevant and the demand forecast needs downward revision, contend some observers. This is clearly a despondent view of the future and would, in fact, be tantamount to an attempt to disregard the foodgrain needs of an

estimated population of one billion by 1,999-2,000. Whether the 235-240 million tonnes of foodgrain requirement, as projected by the Planning Commission, continues to be a credible forecast or needs downward revision is debatable. But, as long as the Government's view is that so much food is needed by the turn of the century, the fertiliser needs cannot be arbitrarily scaled down.

In the case of nitrogen, two mega projects. Tata's plant at Babrala and Hindal Agro's at Shajahanpur, each of 3,34,000 tonnes per annum capacity will start production in the current and next year, respectively. The expansion plans of IFFCO, Aonla, and NFL, Bijapur, involving doubling of installed capacity of 3,34,000 tonnes, are also under implementation and could be commissioned well before 1,999-2,000. Put together, these four projects add up to a total installed capacity of 1,34 million tonnes.

Some addition may be expected from revamp/expansion of the MFL plant at Manali in Tamil Nadu, although its implementation is seriously constrained by inadequate availability of resources. All put together, the installed capacity of nitrogen by 1,999-2,000 could be 10.2 million tonnes. Even assuming 90 per cent all-India capacity utilisation, nitrogen production could at best be 9.2 million tonnes as against a demand of 12.75 million tonnes. This leaves a yawning gap of 3.55 million tonnes.

In the case of phosphates, only a marginal capacity build-up from the expansion and revamp of existing plants, is envisaged. This will take the total to about three million tonnes by 1,999-2,000. And, even assuming 100 per cent utilisation (the maximum achieved was 94 per cent in 1991-92) the deficit in phosphates by 1,999-2,000 could be 2.8 million tonnes.

Production projections may need a downward revision as a number of constraints may develop. About 8.2 million tonnes of urea capacity, which in terms of nitrogen translates into about 3.8 million tonnes, will not be available until plant, machinery and equipment are immediately replaced. Current indications are that this may not happen and one runs the risk of losing about three million tonnes of nitrogen (3.8 x 0.8) assuming 80 per cent utilisation in these plants, which could raise the deficit to 6.55 million tonnes. Even the plants set up in the eighties need modernisation to ensure present operating rates.

In the event of urea price decontrol by 1996, of which there are signals, the three new plants at Chambla, Babrala and Shahajahan-pur, besides Nagarjuna, run the risk of being completely wiped out since realisations at the market-determined price of urea at Rs.5,000 per tonne (even under most optimistic assumptions) will not even cover interest costs, let alone depreciation. In such a situation, there could be a serious threat to the economic viability of Aonla and Bijapur expansions.

In the worst possible scenario, the country might incur a staggering loss of about five million tonnes in the production of nitrogen. This means only about 4.2 million tonnes of nitrogen will be produced by 1999-2000, that is, the production level achieved in 1985-86.

Hence, there is need to evolve a co-ordinated policy; an endeavour in which the Government, industry and farmers' nominees will participate. This can be done as plenty of data is available. In fact, much of the detailed work would have already been done by the core group on restructuring fertiliser policies. Once implemented, the policy, at least the fundamentals, should not be changed till 1,999-2,000. Some individual units may need special help to survive; that may be provided without disturbing the broad policy.

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