LECTURE 21

PROSPECTS OF FERTILIZER USE

Growth in the future will have to come from an increase in cropping intensity and productivity growth, which implies the higher use of fertilizers. This is because during 1991-2000, food grain production grew at a rate of 1.7% (population growth over the same period: 1.9%), while net sown area stagnated at 1.41 m hectares.

Agriculture constitutes 33% of GDP and farmers constitute over 60% of the vote bank in India. Considering the importance and sensitivity of the sector and the strong lobby of farmers in Indian politics, it is unlikely that the government will frame a clear longterm policy in near future to resolve problems faced by manufacturers. Hence, regulated pricing and subsidies is likely to continue.

Availability of natural gas will be crucial to the fortunes of fertilizer manufacturers as it is the preferred feedstock. Any reduction in availability and changes in its pricing will affect production and profitability of the companies in this sector.

In a much-deregulated environment, market forces will dictate the competition. Distribution netw 27 (6/8) mpetitiveness and regional imbalances will assume importance. In such a scenario, efficient producers and distributors will do well. Potash fertilizer will continue to be imported, as it cannot be manufactured domestically due to the absence of supplies of critical raw materials.

FERTILIZER LEGISLATION

Chemical fertilizers are becoming increasingly expensive day by day due to hike of prices of petroleum, inflation etc., which tempts dealers to adopt malpractices for earning more profits through adulteration, supplies of underweight materials or blending of degraded fertilizers etc. Thus, the farmers are ditched and often they fail to get good response of applied fertilizers. Therefore, the laws regulating the manufacture and sale of various fertilizers are essential to ensure that the consumer or the farmer is supplied with fertilizers of standard quality.

Keeping these points in mind, the Government of India brought in the fertilizer Control Act.

FERTILIZER CONTROL ACT

The Union Government of India promulgated the fertilizer Control Act (F.C.O) in **1957** under the ***Essential Commodities Act***, 1955 (section 3) with a view to regulate fertilizer business in India.

The F.C.O. keeps a strict watch on quality control of fertilizers, provides for the registration of dealers and statutory control of fertilizer prices by Government. Therefore, everybody involved in fertilizer business as a manufacturer, dealer or a salesperson, must have proper understanding of the F.C.O. in order to avoid infringement of Government regulations.

The provisions given in the Order will also help the consumers/ farmers to know their rights and privileges in respect of fertilizer quality and Authorities to be approached for their grievances regarding supply of sub-standard materials, overcharging or containers of underweight supplies.

The F.C.O. is published by the Fertilizer Association of India (F.A.I.), updated when ever felt necessary. The Order has provisions on quality for

each consumed fertilizer product and F.C.O. should be consulted under infringement of any of them.

Control of Quality of Fertilizers

The F.C.O. has provisions to penalize manufactures, distributors, and dealers for supply of spurious or adulterated fertilizers to consumers or farmers. The F.C.O. has fixed specifications for various fertilizers, which must be present in them failing which the legislation comes in force, and guilty is punished.

Example: The specifications for **urea**

Moisture % by weight (Max.)	…	1.00
Total nitrogen % by weight (Min.)	…	46.00
Biuret % by weight (Max.)	…	1.50

Particle size:

Granules must pass through IS sieve 320 and

Not less than 80% by weight shall be retained on IS sieve 100.

If it is in the form of **prill**, it shall pass IS sieve 200 and

Not less than 80% by weight shall be retained on IS sieve 100.

Example: The specifications for **Rock phosphate**

Particle size:

The material must completely pass 27 (7/8) 6.3 mm IS sieve and not less than 20 % material shall pass through 1.50 micron IS sieve.

Total P_2O_5 content is to be guaranteed by the dealer.

Example: The specifications for Potassium **Schoenite**

Moisture per cent by weight	…	1.50
Potassium % (K_2O) by weight (Max.)	…	23.00

MgO % by weight (Min. on dry basis)	…	10.0
Total chloride % (Cl) by weight (Max. on dry basis)	…	2.5
Sodium % (as NaCl) (Max. on dry basis)	…	1.60