Fertiliser - Make in India?

India embarked upon industrial development through five year plans in early 1950s. In the initial phase of development India was faced with lack of financial, technological and manpower resources and poor infrastructure. These problems were addressed through investment by the government in large industrial and infrastructure projects. These included steel plants, refineries, heavy engineering industries and fertiliser plants. Soft loans and rupee loans were also arranged from foreign countries to address the issue of non-availability of finances and especially hard currency. Simultaneously, technologies were acquired through collaboration or licensing agreements. A large number of technical institutions were established to train the manpower for the developing industrial sector.

Initial phase of industrial development also emphasized on development of capabilities in fabrication and supply of equipments by indigenous companies. After a struggle of decades, India was able to establish world class engineering and fabrication industries which could supply up to 90% of capital equipments to modern chemical process plants. A large number of small and medium level vendors have also been developed to supply parts and spares. Needless to mention that large manufacturing capacities of all basic industries be it steel, refinery, cement, fertilisers, etc., were built up during the first three decades. In fertiliser sector, country also achieved near self-sufficiency by the end of 1990s.

Government of India has once again adopted the theme 'Make in India'. But context has changed in last 40-50 years. A large number of new factors have to be taken into consideration now which were nonexistent in initial phase of industrial development. We have a large number of trade agreements including World Trade Agreements to comply with. Availability of foreign exchange is not a limitation. Indian industry has to be cost-competitive inspite of drastically reduced trade tariff and poor infrastructure. There is also lack of sufficient R&D activity to develop new materials and technologies. These factors do not bode well for 'Make in India'.

However, there are two strong factors favouring 'Make in India' concept. One is need to manufacture goods and services of strategic importance in the areas of defence, space, nuclear, agriculture etc. and second is the large domestic market for all goods and services.

Both the factors work in favour of manufacture of fertilisers in the country. These are of strategic importance in view of the fact that 50% food production is through application of fertilisers. India is the second largest consumer of fertilisers in the world only after China. Therefore, the continuous and timely availability of quality fertilisers is key to India's agriculture output in general and food crops in particular.

India is the largest importer of fertilisers and fertiliser raw materials in the world. There are large fluctuations in prices of fertilisers in the international market. India has paid as high price as US$ 500 in 2008 per tonne for urea which has now gradually came down to $200 per tonne. Similarly, price of imported DAP touched US$ 900 per tonne and came down to present level of $380 per tonne. Even under 'normal' market conditions, India's increase or decrease in import of a particular fertiliser or raw material swings its prices. In such a situation will it not be wise to attain a high level of self-sufficiency in production of fertilisers? Consideration for self-sufficiency should be with long-term perspective rather than based on prices of commodities in a particular year. Therefore, there is strong case for making fertilisers in India.

But the third important consideration for making fertilisers in India is cost competitiveness of

Indian industry. India faces a handicap due to lack of natural resources. In case of urea, there is not enough natural gas available in the country. But the current projections show that imported gas will be available at reasonable prices in short and medium terms. Moreover somewhat higher prices of gas due to cost of liquefaction and transportation be made up with lower capital cost of new plants and efficient operation of existing plants.

For example, the weighted average cost of domestic production was always substantially lower than imported urea for last 10 years. Even in 2015-16, when urea prices crashed, cost of production of Indian plants was competitive and remains so currently. This is because gas prices also came down substantially and conversion costs are one of the lowest in the world. India produced 24.5 million tonnes urea in 2015-16 which was 2 million tonnes higher than level achieved in 2014-15. This helped to cap import of urea at 8.5 million tonnes which was lower than 8.7 million tonnes imported in 2014-15. If the production in 2015-16 remained at the level of 2014-15 then imports would have been higher by 2 million tonnes. This would have pushed urea price higher in international market and India would have paid the higher price for entire import of more than 10 million tonnes except that from joint venture project in Oman.

Inspite of its achievements in terms of high level of production at competitive costs, urea industry is struggling for survival. This is because government continues to ignore the difficulties faced by the industry. First of all, industry continues to be reimbursed fixed cost at the level prevailing in 2002-03. Simultaneously government went ahead and reduced the energy consumption norms without recognizing the investment made in energy saving schemes. Worse, more stringent and impractical energy consumption norms have been set up *w.e.f.* 2018-19. Third, government continues to drag its feet on timely payments of subsidy. It is only matter of time when significant part of urea industry will turn sick. If that happens, the country will pay a heavy price by importing urea at exorbitant prices.

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In case of phosphatic and potassic (P&K) fertilisers, India is almost entirely dependent on imported inputs. Government in such cases should atleast provide level playing field to the domestic industry. At present, the import duty on both imported raw materials and finished products is same. It is an established principle that raw materials should attract lower custom duty than finished products to encourage domestic production. Industry has been requesting the government for last 3-4 years to lower import duty on ammonia, phosphoric acid, rock phosphate, sulphur and other raw materials but to no avail. Unlike urea, imports of P&K fertilisers are free. Exporters of raw materials and finished products are same entities and few players control the international market. They are fixing the export prices of raw materials and finished products in a manner that domestic production in India becomes unviable. With such a state of affairs, domestic industry is operating at very low level of capacity utilization. Sub-optimal operations are affecting the financial health of manufacturers adversely.

Government needs to address these issues in a timely manner to save the industry from annihilation. In addition, there is need for reforms in policies for the sector. Reforms in the sector will not only help the cause of 'Make in India' but also help industry to provide innovative products and services to the farmers. These are necessary to increase the yield of major crops significantly and serving the twin objectives of continued food security and farmers' welfare.

The Seminar this year devoted to the theme '**Fertiliser - Make in India**?' will have 18 presentations related to fertiliser policies, supply-demand, production technologies, fertiliser use efficiency, sustainable agriculture and marketing and distribution. ■