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Challenges in Agriculture and Fertilizer Sectors

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Agriculture sector has always been an anchor for Indian economy. It proved its importance again during recent public health crisis. While industrial and service sectors suffered badly registering high negative growth, agriculture remained largely unaffected growing at the rate of 3.6% during 2020-21. Food grains and horticulture production touched all time high of 309 million tonnes and 331 million tonnes, respectively in 2020-21. With export of about 18 million tonnes, India was the largest exporter of rice in the world. In spite of such laudable achievements, one cannot ignore the fact that yields of major crops remain lower than the world average and even lower than in our neighbouring countries. While there is challenge of increasing crop productivity, there is still bigger challenge of sustainability of Indian agriculture. Soil health is continuously deteriorating, water resources are depleting and there is more and more use of agri-inputs with lower and lower response.

The remedial measures are well defined but the challenge is in implementation. Farmers have to be weaned away from water intensive crops and mono cropping system. There are ways of more efficient use of the precious resource like water and optimum use of agro-inputs. There is also a very important role of organic fertilizers in increasing the carbon content of the soils. Carbon enriched soils help to achieve higher use efficiency of water and mineral fertilizers. Other organic materials inclusive of crop residues available locally have to be collected and used as farm yard manure. The efforts to collect crop residues and other waste at local level should be part of our strategy of increasing agriculture productivity. These efforts need encouragement from state and central governments in terms of financial and logistic support.

For increasing agriculture productivity, plant nutrients through both inorganic and organic sources are by far the most important inputs next only to irrigation. Indian fertilizer sector has so far been highly successful in meeting the nutrient requirement of Indian agriculture. The pricing and other policies have played a very important role in expansion of capacity, production, distribution and sale of fertilizers over the years. But the sector now faces multiple challenges which have threatened security of supplies and also led to improper use of nutrients.

The foremost challenge for the sector is its dependence on import of major inputs and finished products. India is the largest importer of phosphoric acid and urea and has large share in the trade of rock phosphate, ammonia, potash and diammonium phosphate (DAP). In recent times, these commodities have witnessed very unusual spurt in prices in international markets. Their availability has also been affected due to several developments in exporting countries. Logistics of ocean transport have put additional challenge due to non-availability of vessels and ever increasing freight rates partly due to COVID situation.

This has underlined the importance of domestic industry. For example, while international prices of urea have gone beyond USD 900 per MT, average cost of domestic industry remains around USD 350 per MT inspite of high prices of imported gas. Share of imported gas used by urea industry has increased to more than 80% of total consumption. Therefore, it is

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essential that government ensures the viability of domestic industry which operates under controls through pricing subsidy policies. Urea units continued to suffer from under recovery of both fixed and variable costs. Fixed cost was revised in a very limited way in 2014. This was based on the cost data of 2008-09. Since then there has been all round inflation leading to almost 100% increase in fixed cost elements like, salary & wages, maintenance, insurance, warehousing, etc.

Further, urea units have made large investment in energy saving projects during last 10 years resulting in reduction in average energy consumption per tonne urea. But this saving has been mopped under the urea subsidy policy twice by way of downward revision of energy consumption norms in 2015 and 2018. Urea units have been left high and dry finding it extremely difficult to service the capital investment in energy saving schemes. With the result, half of urea units are making net losses. Revision in fixed cost not only makes the production up to reassessed capacity viable, but it will also make additional 4 million tonnes production beyond reassessed capacity feasible. This additional capacity has come through investment in debottlenecking projects. Production from this capacity is reimbursed based on variable cost plus minimum fixed cost of all urea units for the entire industry subject to import parity price. This proves the urgency for revision of fixed cost and minimum fixed cost to maximize domestic production.

The challenge in P&K fertilizers is even more serious because our high dependence on imports and trade is being controlled by a few countries. We have been finding it extremely difficult to procure raw materials such as rock phosphate; intermediates *i.e.* phosphoric acid and ammonia; and finished products like diammonium phosphate (DAP) and complex fertilizers. While there is no quick solution to this challenge, government can take a few steps to alleviate the supply constraints in near and medium terms.

First of all, it has to be recognized that the government will continue to subsidize fertilizers for farmers in one way or the other. Since it means outgo from the exchequer, government should take financial stake in mining and manufacturing projects. It does not necessarily mean direct equity participation. There are several models by which government can ensure that there is a major push for investment in resource rich countries. Second, a thought can also be given to creating buffer stocks of both raw materials and finished products.

There is obvious need for well thought strategies both for agriculture and fertilizers. Security of supplies of fertilizers is very crucial for Indian agriculture. Domestic industry needs to be strengthened by appropriate policy initiatives. We have to safeguard the viability of present production and enable the industry to maximize production. This will require sound financial health of fertilizer companies, especially for procurement of raw materials from international suppliers in cost effective manner. We have the capability to become 'AatmaNirbhar' in supply of fertilizers. This will be in the strategic interest of the country as large as India to ensure food security of her 1.38 billion people.■