

FAI Annual Seminar 2017 held from 5-7 December, 2017 in New Delhi, was devoted to the theme "Fertilizers and Farm Income". The fertilizer is a key input in crop production and its contribution in increasing food production is well documented. Globally, about 50 per cent increase in food-grains production is attributed to increased use of fertilizers alone. Alongwith other inputs, increased use of fertilizers has played an important role in country achieving self-sufficiency in food-grains production. India is now the second largest user of fertilizers in the world after China. However, per hectare fertilizer consumption in India is still low and highly skewed in favour of nitrogen. The average crop productivity is also low compared to other countries. Farmers' purchasing power to buy agri-inputs has gone down due to lowering farm income year after year.

The low and declining farm income has emerged as serious threat to sustainable agriculture. The declining farmers' income is largely on account of low average crop productivity and poor price realization. In view of the fact that there is no scope of bringing more area under plough, the increase in production to meet food demand of ever-growing population has to come from increase in crop productivity. Doubling the farmers' income by 2022 is not possible unless the average yield of major crops is also doubled which has essentially to come from the increased and efficient use of inputs, particularly fertilizers.

NITI Ayog, in its Policy Paper, has also underlined the need of increasing fertilizer consumption to double the farmers' income by 2022. It has estimated that the consumption of fertilizer (N+P+K) needs to be

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increased from the base level of 25.58 million tonnes (Mt) in 2014-15 to 36.24 Mt by 2022-23. The fertilizer consumption was 25.95 Mt in 2016-17. It means that fertilizer use has to increase by 1.7 Mt every year to achieve the target by 2022-23. This translates into Compound Annual Growth Rate (CAGR) of 5.7% in fertilizer consumption during the next 6 years. It seems to be the challenging task considering the average CAGR of 1.82% in fertilizer consumption during the last 10 years. However, the target is within the reach as the country had already achieved CAGR of 6.7% in fertilizer consumption between 2006-07 and 2010-11.

Achieving the required CAGR of 5.7% in fertilizer consumption will require massive extension efforts and policy support. Government would have to make right moves on the policy front to achieve the target. The scheme of providing Soil Health Cards (SHCs) to all farmers of the country by March 2018 is a good initiative but is not enough to ensure the adoption of SHC - based recommendations at the farmers' fields. A comprehensive and committed promotional work by concerned stake-holders would be needed to ensure the adoption of fertilizer best management practices (FBMPs) including soil test based fertilizer recommendations among the farmers.

Pricing of fertilizer nutrients is one of the important factors for promoting the balanced use of fertilizers. Government of India is spending a sum of Rs. 70,000 crores on fertilizer subsidy annually but it has not served the desired objective. The prevailing fertilizer pricing policy under which there is a huge distortion in urea *vis-à-vis* P&K prices has distorted the NPK use ratio. It has adversely affected the crop productivity, soil health and farm profits. It is high time to re-visit the present fertilizer pricing and subsidy scheme. The instrument of fertilizer subsidy should be used to promote balanced and efficient use of fertilizers. Products and practices which improve fertilizer use efficiency need special encouragement.

The concept of balanced fertilisation has gone beyond NPK and should include all the nutrients deficient in soil including secondary and micronutrients. The use of other sources of plant nutrients particularly organic manures and bio-fertilizers has to play important role in supplementing the nutrient needs of the country. The combined use of fertilizers, bio-fertilizers and organic manures helps in improving soil health, nutrient use efficiency and achieving maximum economic yield.

Indian fertilizer industry, a world class efficient industry, has its outreach to every nook and corner of the country through well spread distribution network. The industry has well qualified professional field staff which can play a vital role in supplementing state governments' extension efforts. It can serve as an effective agriculture extension arm to ensure the adoption of FBMPs among farmers by strengthening 4Rs nutrient stewardship (right source, right rate, right time and right place). Fertilizer companies are severely constrained under present policies and do not have resources to expand services to the farmers. Due to unfavorable policies and stifling controls, most companies are operating at negative margins.

Domestic urea industry has been squeezed from both sides by mopping up improvements in operational efficiencies like capacity utilisation and energy consumption on the one hand and disallowing the increase in fixed cost by not updating it for more than 15 years on the other. Indian urea industry under the existing pricing and subsidy policy continues to be reimbursed fixed cost based on 2002-03 cost data. As a result, urea industry as a whole is getting negative returns on netIntegrated nutrient management comprising of fertilizers, biofertilizers and organic manures provides holistic solution to improve soil health, and nutrient use efficiency, and maximize farmers' income.

worth. The situation for P and K fertilizer segment is also not very encouraging with continuing indirect control on MRP and micromanagement by the government. Domestic P&K fertilizer industry is suffering due to inverted duty structure. Customs duty on phosphoric acid and ammonia is 5% and customs duty on finished fertilizers is also same at 5%. The rate of subsidy on imported and domestic P&K fertilizers is also the same. Levy of customs duty on imported raw makes materials domestic production uncompetitive compared to imports. Similarly, the GST rate of 18% on phosphoric acid, sulphuric acid and ammonia against 5% of GST on finished products will aggravate the liquidity problem of industry.

Inordinate delay in payment of subsidy and freight dues of the industry by the government is another major reason impacting the viability of both urea and P & K fertilizer industry. Industry has to arrange for additional working capital to tide over the cash crunch resulting from delayed payment of subsidy with attendant interest cost which is not recognized as cost under policy. With more than Rs. 30,000 crore outstanding pending with the government at any time of the year, additional interest cost on the industry is about Rs. 3000 crores per annum. The government does not pay any interest to the industry on delayed payments.

The way forward lies in deregulating the industry in a phased manner. For urea, it may start with reimbursement of fixed cost increase and special vintage allowance as notified under Modified NPS-III Policy under controlled regime, then moving to NBS policy with fixed subsidy and variable MRP and finally shifting to the system of Direct Benefit Transfer to farmers in true sense i.e. transferring subsidy directly to farmers' bank accounts. The taxation regime should end discrimination of indigenous manufacturers vis-à-vis imports. Fertilizer industry will continue to work with government on formulating and implementing policies & programmes directed towards enhancing crop productivity and doubling farmer' income.

The present issue of Indian Journal of Fertilisers includes resume of all the sessions, speeches delivered during inaugural and valedictory functions and major conclusions and recommendations emanating from the deliberations of the Seminar. The content of this issue should be of interest to the policy makers and to all those concerned with health and growth of fertilizer and agriculture sectors.■