Seed Banks: the way forward?

Pradeep Kumar Patnaik

National Seeds Corporation Ltd. (NSC) is a Schedule 'B'-Miniratna Category-I company, owned by the Indian government and operates under the Ministry of Agriculture and Farmers Welfare. It is undertaking the production of certified seeds of nearly 600 varieties. Pradeep Kumar Patnaik, Dy. General Manager (Mktg.), Regional Manager, National Seeds Corporation Ltd., spoke to BE's Isha Chakraborty.

Q. How are you facilitating seed security for the agricultural sector?

A. The National Seeds Corporation (NSC) is a Government of India (GoI) undertaking company. We are generally producing certified seeds. For certified seeds, we need the foundation seeds where the complete information history of the seeds is detailed. So, declaring the parentage of these seeds is one of our most important activities since this is important to make sure that the farmers are getting better quality seeds.

Q. How are seed banks helping the farmers?

A. Seed banks are maintained for supplying seeds in time of some serious disaster or natural calamity. The seeds in these banks are provided to the farmers belonging to different states. There are different seeds starting from paddy to pulses. Secondly, these seed banks are maintained for supplying seeds to the north-east region because of their distance and difficult terrain. We also receive remuneration for maintaining these seeds seasonally and these seeds are not sold outside. We only sell or provide these to the West Bengal government's agricultural department or to the farmers who are associated with us.

Q. What is the difference between traditional seeds and High-Yielding Variety (HYV) seeds?

A. The normal or traditional seeds are the farm soiled seeds, where a farmer is producing his greens and he keeps some of the produced seeds for future use. But in the case of high-yielding variety of seeds, there is a chain from breeder to foundation. A breeder from ICAR produces the nucleus after genetically selecting and isolating the specific good variety. It is then transferred as the breeder seed to a foundation seed and from there it is finally made into a certified seed. The whole process is done for maintaining the purity and the quality of the seeds. HYV seeds are definitely better than the farm seeds since they deteriorate in terms of quality in the breeding process or the seed circle. HYV seeds need better management. If you maintain the HYV seeds properly, the returns would be certainly better.

Q. What problems do you find in seed sale and distribution?

A. The biggest crisis that is to be dealt with is low volume and very high margin but in our case, the volumes are higher than the margins. Transportation is a problem which is faced all over the country. This also affects the seed costs as well. For proper HYV seeds, a particular ratio of everything is required. Some people are even buying seeds from general markets, and then putting a tag of certification and selling it. At NSC, we are trying to stop these malpractices and regularise the correct procedures. There is another side to this. If the farmers don't get a proper produce even after investing so much, they are likely to face financial and mental pressure. But then one has to check the soil fertility as well in order to get the best produce.

Q. What are the factors that affect the seed quality?

A. First, the breeder to the foundation seed journey is very important and should be true to the type. They should be bought from a reputable institute where rouging is seriously performed so that the off types are removed. Secondly, the seeds should be harvested at a proper moisture level, i.e., at 12% for proper maturity. If the level of moisture goes up to 14% or more before maturity, then the harvested product will be of poor quality. Thirdly, while storing the seeds, proper protection should be taken to combat insect attacks.

Q. What kind of seeds is being focused on and why?

A. In Bengal, Odisha, and in the north eastern states, we are dealing with paddy since all these states have the best production in terms of paddy cultivation. We are also focusing on lentils or pulses like moong and urad. Apart from this, we also have vegetable seeds and fodder crops.

Q. Are the farmers purchasing the seeds themselves or are there some middlemen?

A. Generally, there are two sectors from where we receive our registration. One is the governmental sector and the other is the non-government sector. So, in government sectors we generally deal with the state government and certain institutes where we have registered dealers who purchase the seeds. The non government dealers are also actively purchasing from us through dealers and then supplying them ahead. The number of dealers who are purchasing the seeds has definitely gone up in recent years. Since the government has reduced the subsidies on seeds, people are selecting to shift to the non-government dealers.

Q. Has demonetisation affected the whole situation?

A. Direct Benefit Transfer (DBT) and demonetisation has recently come into the picture. DBT ensures that whenever there is a subsidy on the seeds, it should go to the farmers directly but for that he has to pay the full cost of the seeds. After demonetisation, the farmers were not prepared to give the full rate. The cost might come down to ₹2000 after the application of subsidy but they still have to pay the full amount and wait for the ₹3000 to be returned. Not every farmer was financially able to purchase the seeds for ₹5000. This forced many of them to buy seeds from the market at a much cheaper price. The government has been changing the modules which further tries to help the farmers in terms of rates of the seeds but it is going to take some time. ■

Farm feed industry sees a rise

Amit Saraogi

Anmol Feeds Pvt. Ltd. forayed into the animal feed industry with a single unit in Muzaffarpur, Bihar, in 2000. It now caters to the animal feed requirements of 19 Indian states and is working with more than 10,000 farmers and 1,000 employees. Amit Saraogi, Managing Director, Anmol Feeds Pvt. Ltd., spoke to BE's Isha Chakraborty.

Q. How did it all start?

A. My uncle used to stay in a small place called Ramnagar, Bihar, where he had a shop which would sell wholesale materials like fertiliser, oil, flour etc. When I would visit him on vacations, he would put the complete responsibility of manning his shop and business on me. What I learnt there was that there was a huge demand for poultry feed products and that there was a large gap between demand and supply. We spent around ₹3 to ₹4 lakh for a cattle feed plant from a Punjab based company. We created feed from it after four to five months of experimentation. That was the starting point. We also took advice of other people who were doing the same job and on January 1, 2000, we started our production in a full-fledged way.

Q. What are the different types of poultry, cattle or aqua feeds that you are dealing with?

A. Our main business is the broiler feed which is the food for chicken. The biggest consumers of this product are the broiler farmers. We also have feed for layers, dairy, floating fish and sinking fish. For diary feed we have different categories based on the milk yield. We have also started a new state of the art floating fish feed plant equipped with the latest technology in Panchla, West Bengal with an investment of around ₹ 30 crore. We signed a memorandum of understanding (MoU) in 2015 with the West Bengal government and started production in 2017. We are planning to set up a new shrimp feed plant as well.

Q. What differentiates your products?

A. You must understand that most of the raw products that we use are agricultural produce and it is very difficult to standardise it. In these 20 years that we have operated in the market, we have tried to maintain a standard quality of our products. Secondly, we constantly try to foresee future market demands and try to create our products accordingly. We have lowered the feed conversion ratio (FCR) and maintained a good quality control test record as well and have also provided technical support to the farmers.

Q. What are the different quality control measures that are undertaken by you?

A. Firstly, all our plants are fully automated. We have successfully reduced human involvement or handling. This ensures that our products are completely hygienic.

We also have laboratories in all our factories where we check the quality of the raw materials that we use. We ensure that no quality parameter is left unchecked. We also check the metal content in these raw materials. We also have Near Infrared (NIR), which allows us to get the details of adulteration in raw materials within few seconds. Additionally, we have in-house nutritionists who monitor the nutritional aspects of our products.

Q. Who is your biggest consumer?

A. As of now, our biggest consumers are the poultry and the fish farmers.

Q. What is the difference between traditional feed and your feed products?

A. People who still follow traditional farming do so due to limited awareness and for financial constraints. The input costs in both the cases are very marginal. However commercial feed is yet to attain the traction that it deserves. The farmers need to think of it from a business point of view and only then, they will understand the benefits. Farmers can increase their return substantially if they use our products as against traditional feed.

Q. Do you sell your products direct to the farmers or are there agents?

A. We have at least two to three distributors in each district. The farmers are catered by these distributors who further have sales, management and technical teams working under them. We also conduct farmer meetings where we spread awareness about these products and feeds. ■

from other countries in Southeast Asia and the lowering of the countervailing duty on Indian shrimp in the United States.

The growth of shrimp trade brought a number of intermediaries in market chain and helped in inflow of private and informal credit into the fisheries sector. About 90% of the farmer in marine and brackish water aquaculture own less than 2 ha area and have difficulties obtaining finances for production and export.

Exporters of fishery products in India face problems of lack of market information, processing infrastructure, advanced technology in value addition, quality control and research and development. Only 40% of the production quantities satisfy the criterion for export and hence 60% of fish are sold away in the domestic market. Therefore, there is a need for improvement in quality.

Sales Promotion

In domestic fish marketing the fish farmers should form cooperative marketing which will help to get remunerative price and will give incentive to more production, increase in market share. Aquaculture production has increased sharply from 0.75 million tonnes in 1950-51 to 9.5 million tonnes in 2013-14. Yet it falls short of demand. The consumption demand for fish is still lagging behind supply.

Promoting sales of fish and fish product will give incentive to boost production. Programmes to encourage sale and increase in market share by influencing potential purchasers may be initiated through advertisement, food fairs and other sponsored events held to display new and traditional fish and fish product to purchasers. Government should also try to provide proper marketing infrastructure by building cold storage, improved transport facilities, processing facilities and financial assistance to the fish farmers for marketing.

Conclusion

It is found that the marketing system in freshwater aquaculture as well as in brackish water in India is not efficient. For operation of middlemen in the marketing channel both in domestic and international market, farmers are deprived and exploited. Development of marketing infrastructure with cold storage and transport facilities, improved processing technique, sales promotion, quality control and safety measures, provision of credit to fish farmers, fish marketing through Cooperative and Govt. aid to farmers will improve the present crisis of farmers and inefficient marketing system. ■

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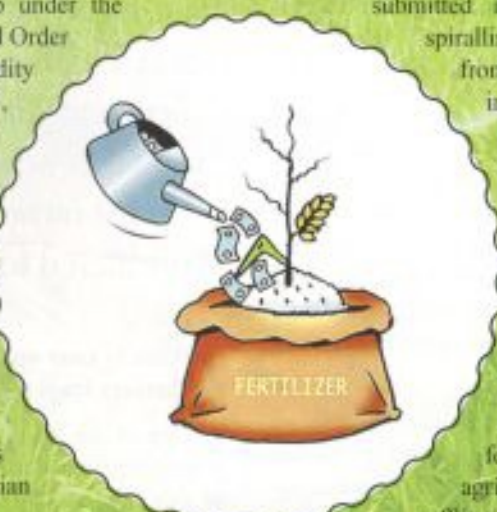
[The view expressed here are personal and don't reflect those of the government]

Green revolution and subsidies of fertiliser

The Indian government regulates the sale, prices, and quality of fertilisers. It does so under the provisions of the Fertiliser Control Order (FCO) under Essential commodity Act (EC Act) of 1957. In 1973, the Movement Control Order was passed for regulating the distribution of fertilisers by the central government. In the early 1990s, India faced a foreign exchange crisis due to fiscal deficit. The government was forced to increase process of fertilisers by around 40% and some subsidy schemes were decontrolled. This led to distress in the country's expansive agrarian sector.



The government eventually set up a Joint Parliamentary Committee (JPC) on fertiliser pricing to review the manufacture of fertilisers and also to look into its pricing in 1991. The committee aimed to reduce the prices of fertilisers. In 1992, the committee submitted its report. It concluded that spiralling prices of fertilisers originated from increasing cost of fertiliser imports and was complemented by the de-valuation of the rupee at that time. It advised to decontrol the import of phosphate and potassium based fertilisers. It also advised a reduction in the cost of urea. According to the recommendations of this report, extensive subsidies were given on hybrid seeds, fertilisers and pesticides. Though agricultural production has taken off in a big way after 1991, the sector is not completely risk free. Subsidies are still required to keep cost of the food grains in control and to avoid inflation of food prices.

— Composed by Anwesha Chowdhury