

Role of cooperatives in Indian Horticulture sector

The cooperatives played an important role in horticulture sector by providing marketing and distribution network along with credit and inputs to the farmers, which supplemented the efforts of the state and private sector. The brand image along with community guidelines of these co-operatives helps the farmer in procurement, price/value fixation, limiting the post-harvest losses, mental and social support; as well stability in the market as well as in profession. The National Cooperative Development Corporation (NCDC) is major organization in the country which is meant for promoting, developing and financing post-harvest activities through cooperatives in agriculture and allied sectors. A new ministry with the name of Ministry of Cooperation under the Government of India has recently formed (July 2021) to provide a separate administrative, legal and policy framework for strengthening the cooperative movement in the country. The co-operative scenario is developing in the country with the efforts of growers and the government due to the realization of its enormous potential for socio-economic upliftment of its member and overall community.

INDIA is an agrarian economy where more than 55% of the total workforce is engaged in agriculture and its allied sector based enterprises alongside farming. Agriculture is the only sector which has contributed positively to overall Gross Value Added (GVA) in 2nd advance estimate of 2020-21. The share of agriculture in Gross Domestic Product (GDP) is 19.9% in 2020-21, which was 17.8% in 2019-20. This is an encouraging sign after 2003-04, where share of agriculture in GDP reached 20%. This sector has played a vital role in protecting the Indian economy from COVID-19 outbreak in 2020-21 by adding 3.4% incremental share in GDP. On the same line, horticultural crops also gave a boost to the economy by producing 326.58 million tonnes fruits/vegetables in 2020-21, which is an increase of about 5.81 million tonnes (1.81% increment) over 2019-20. This sector contributes 34.04% of the agriculture GDP by producing fruits, vegetables, plantation crops, spices, ornamental plants, and medicinal and aromatic plants.

Growing trends of the horticulture sector promoted agricultural growth in recent past, which played a crucial role in economic and sustainable development by providing employment in primary, secondary and tertiary sector of the economy. It is a matter of great pride that India is the second largest producer of fruits and vegetables after China with first position in the banana, okra, lemon, mango and papaya. The export growth of fresh fruits and vegetables is 14% and of processed fruit and vegetables is 16.27% in term of value. It was realized by the experts that the formation of cooperative societies

for the farmers who are engaged in the cultivation of horticultural crops is essential to assure them for better price of their products. Though, the cooperative sector in India is the citadel for the agricultural development.

Cooperatives are socio-economic organizations which are meant to community services and non-profit motive only to support the poor sections of societies. This sector is working on the basic principle of each for all and all for each which is its inherent strength. AMUL is the well-known example of the white revolution's success through dairy cooperative. MAHAGRAPES (a co-operative partnership firm and well-established brand in international market) is also famous in Maharashtra state for export of grapes with its 16 Grape Grower Co-operative Societies, to fulfill its objective to boost up the export of grapes.

The Indian cooperative movement is the world's largest cooperative system with more than 8 lakh cooperatives with remarkable success and improvement of socio-economic status of resource poor section of the society. At grass-root level, the cooperative sector is bridging the urban-rural divide and creating



opportunities for income and employment generation. The top leadership of the country has also realized that the cooperatives have the potential to revive agriculture and make it sustainable. Keeping in the view of doubling farmers' income by 2022, cooperatives can play critical role in educating, training the farmer to reduce the cost of cultivation and increased income.

Why cooperatives?

The big institutions like Indian Farmers Fertilizer Cooperative Limited (IFFCO), Krishak Bharati Cooperative Limited (KRIBHCO), Anand Milk Union Limited (AMUL), etc. are the best example of the success stories in cooperative sector. As per the cooperative structure in India, a good amount of cooperatives at the state level, like urban cooperative banks, primary agriculture cooperative societies at the village level, fishery and other forms of cooperatives are making unwavering efforts to improve the status of the people in the rural as well as urban areas. It encourages the women's participation which will further give a boost to economic activities in rural areas. Therefore, we need to vitalize cooperatives by which it can work for the well-being of the farmers and give them financial support at the time they need it at most on affordable rate of interest/prices. Cooperatives have enormous potential of solving the problem of prevailed unemployment by skilling them in horticulture particularly in the field of post-harvest. Cooperative are not to be aimed to eliminate commission agents but to control the ecosystem activities through laying down community guidelines by its activities and also offering an alternative channel of sale to cultivators. Co-operatives also have a strong element of trust within the organization which is one of the highest social value needed to run an organization successfully as reported

widely in the literature. Therefore, it can be stated that co-operative marketing must to be strengthened and encouraged to play a greater role.

A new ministry with the name of Ministry of Co-operation under the Government of India has recently formed (July 2021) to provide a separate administrative, legal and policy framework for strengthening the cooperative movement in the country. The vision statement of this ministry is 'Sahkar se Samridhi' (Prosperity from cooperation). This ministry works in strengthening the co-operatives at the grassroots level working to streamline processes for ease of doing businesses for co-operatives and enabling the development of Multi-State Co-operatives (MSCS).

Cooperatives and Horticulture

With the launch of Golden Revolution in horticultural production, the productivity of horticultural crops has increased significantly. A new programme that is Mission for Integrated Development of Horticulture (MIDH) is a centrally sponsored scheme for robust and sustainable growth and development of horticulture sector in a holistic way. In MIDH, Government of India contributes 60% of the total outlay in all states except North East and Himalayan state (contribute 90%). It includes major five scheme, i.e. National Horticulture Mission (NHM), Horticulture Mission for North East and Himalayan States (HMNEH), National Horticulture Board (NHB), Coconut Development Board (CDB) and Central Institute of Horticulture (CIH). It was anticipated that the cooperative movement would largely be focused in the field of agriculture and playing a significant role across the various operations like production, marketing and distribution.

Farm sector experts notified that cooperatives

The objective of the NCDC Scheme is to provide the benefit of value addition to the cultivators in respect of their horticultural produce through agro-processing in an efficient manner, which in turn may contribute in increment in the income of the farmers. NCDC has released ₹ 61.09 crore for 80 fruit and vegetable processing units, as on 31.03.2020 (cumulatively). NCDC has promoted cooperatives involved in processing of Foodgrains, Oilseeds, and Plantation Crops by providing financial support through respective State Governments, as well as directly to the processing societies, to meet the needs of these cooperatives.

NCDC provides financial assistance for setting up of fruit and vegetable processing units to these cooperatives. NCDC is assisting and strengthening the cooperative marketing structure under marketing and input scheme with the objective of ensuring facilitative and remunerative prices to the growers of horticultural commodities and minimizing the price spread between the producer and the consumer. Marketing cooperatives provide very good quality of agriculture inputs at the gate of producers and enable them to have access to agricultural produce and inputs at lowest prices. These cooperatives exert a healthy influence on market prices and thus protect from distress sale.

NCDC has implemented centrally sponsored scheme i.e. Mission for Integrated Development of Horticulture (MIDH) with collaboration of the Department of Agriculture, Co-operation and Farmers' Welfare (DAC&FW). In this scheme, credit linked back-ended subsidy @ 35% of project cost in general areas and @ 50% of project cost in Hilly, North East and Himalayan Areas, is provided under MIDH/NHB/NHM schemes for establishment of integrated pack house, pre-cooling units, cold room, mobile pre-cooling unit, ripening chambers and refrigerated transport vehicle. However, higher subsidy is available for some small components, like small pack house with size of 9 m*6 m, evaporative/low energy cool chamber (8 MT), preservation unit (low cost), low cost onion storage structure (25 MT) and Pusa Zero energy cool chamber (100 kg) and in their cases 50% of the total cost is provided as subsidy.

have impacted positively to the horticulture through post-harvest processing, storage, transportation, trade, and input procurement for a range of activities in the horticulture sector. A study conducted by National Council of Applied Economic Research (NCAER) with special reference to the role and importance of National Cooperative Development Corporation (NCDC) and found that marginal and small farmers sell their produce to local village trader at substantial lower price due to lack of adequate storage facilities for their produce especially fruits and vegetables (low shelf-life).

Horticulture and plantation crops are both perishable (e.g. fruits, vegetables, ornamentals, mushrooms, tea, etc.) and non-perishable (e.g. spices, cashew nut, etc.) in nature which alone contributes to a heavy loss in the quantity and quality, and making the investments risk oriented. According to the Swaminathan Committee (1985), post-harvest handling accounts for 20 to 40% of the losses at different stages of grading, packing, storage, transport and finally marketing of both fresh and processed products. As per the study conducted by Central Institute of Post-Harvest Engineering and Technology (CIPHET), Ludhiana on harvest and post-harvest losses (including losses during storage for fruits and vegetables) had revealed that the range of these losses is 5% to 16%, where cooperatives can play a major role. The establishment of Cold Chain units is the need of hour; which already gave proven results in dairy sector. Cooperatives also helped in the construction and operation of cold chain which is mostly meant for storage of fruits and vegetables. NCDC provides financial assistance to primary, district and state level cooperatives, either directly or through respective State Governments. Most of the programmes of Government of India for development of cold chain projects are credit linked back ended subsidy schemes. The role of NCDC is to provide loan assistance at the reasonable rate of interest for creation of cold chain structure and dovetail the same with the grant-in-aid assistance from the Government of India.

Marketing of horticultural produce is a major constraint in the production and distribution system. A subsistence amount of horticultural product is dealing by cooperative marketing societies.

Various government and non-government organizations are handling with trading and processing of horticulture produces in the country, viz. HOPCOM (Horticultural Producers' Cooperative Marketing and Processing Society), DKHOPGCOMS (The Dakshina Kannada District Horticulture Produce Growers Cooperative Marketing Society Ltd.), FRESH (The Farmers' Rural Extension Service in Horticulture Marketing Cooperative Ltd), Cooperative Fruit (Banana) Sale Societies Jalgaon. HOPCOM, Bengaluru (Karnataka) is a successful cooperative organization for marketing of horticulture produce. The society is operating in the districts of Bengaluru (Urban and Rural), Kolar, Tumkur, Mandya, Shimoga, Dakshina Kannada and Mysore. The main objective of the Society is to procure fruits and vegetables from the member growers and supply to consumers through its own retail outlets. There are 405 retail outlets. HOPCOM is handling approximately 44,000 metric tonnes of fruits and vegetables with turnover of ₹400

billion per annum. So, it is thrust area to develop such type of societies to enhance farmer's income through horticulture.

Government of India under Central Sector Integrated Scheme on Agriculture Cooperation (CSISAC) provides subsidy for development of Cooperatives through NCDC and provide assistance to Cooperatives for Education and Training through National Council for Cooperative Training (NCCT) and National Cooperative Union of India (NCUI). Sahakar Mitra scheme of NCDC for training of youths. NCDC along with others organized the first ever India International Cooperatives Trade fair on 11-13 October, 2019 at Pragati Maidan, New Delhi. The fair provided a platform to Indian Cooperatives to interact with international cooperatives and business houses.



Challenges

Despite of the fact of the motto 'one for all, all for one', in many cases, co-operatives did not do wonders in many cases. There were plenty of challenges that have been faced during the replication of the model from one state to another. In case of dairy co-operatives, AMUL model has been tried to be replicated in other states of the country. Uttar Pradesh and Rajasthan are the major milk producers having total milk production more than Gujarat. Still the co-operatives are not as successful in these states as in Gujarat. Many studies have been conducted to identify the reasons. The researchers majorly found the difference in structure of operation and decision making power. Apart from this, the payment cycles to farmers, veterinary provisions and feed supply to dairy farmers were other big reasons because of which the Amul model did not do well in other states. These challenges could be overcome, if proper attention is paid to the quick decision-making and trust building.

Conclusion

In fact, the all India Rural Credit Survey Committee, way back in 1954 itself, has said 'the cooperation has failed but cooperation must succeed'. This statement has assumed much more perspective and significance in present context especially with respect to marketing of fruits and vegetables. India's presence in the world market has been increasing continuously and we have to further strengthen it as the total production of horticulture exceeds the production of food grains in our country. In general, where fruits and vegetable cooperating marketing societies are functioning well, the producers are benefited by marketing (marketing of input and produce both) through these societies. It is evident from various cooperative societies in Gujarat, Karnataka and Maharashtra, could get higher prices selling through cooperative societies compared to other agencies. Horticulture has emerged as an excellent source of income acceleration, employment generation, poverty alleviation and export promotion and ultimately nutritional security too.

Future thrusts

Keeping in view the growth and importance of horticulture sector, there is an immediate need of establishment and strengthen the cooperatives at national level (inclusive) for input, output and post-harvest support with increased quality awareness, adoption of adequate technology with ensured financial and infrastructural support. NCDC is an apex organization in cooperative sector in India, which need to be strengthen according to changing scenario of horticulture sector or increased production and demand of fruits, vegetables, mushrooms. During financial year 2019-20, NCDC has disbursed only 1963.35 crore rupees (7% of total disbursement) for agro processing which includes sugar, textiles, oilseed, food grains, fruits and vegetables. NCDC has been assisting Coir Cooperatives for strengthening of margin

money assistance, development of processing facilities, construction of storage structures and showrooms and purchase of transport vehicles by Apex or Regional level coir cooperatives. It facilitates timely agricultural operations thereby enhancing crop productivity. It is suggested that a strong forward and backward linkage must be provided to horticulture growers through cooperatives.

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