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Deepak Shah*

Genesis of Co-operatives and their Development:

Government of India initiated rural co-operatives chiefly to combat the menace of indebtedness and exploitation of farmers by the money lenders owing to the lack of institutional credit available to them.¹ Initially, these cooperatives were formed at the primary level i.e. village level. These credit institutions were soon found to be beset with their own problems such as poor economies of scale, shortage of funds, lack of guidance on use of funds and the absence of support mechanism in propelling the quantity and quality of services available to their members. These problems also had their echo in the reports submitted by the earlier committees appointed by the Government of India to study the efficacy of the cooperative movement in the country.² And, thus, a three-tier structure for credit cooperatives emerged in India with an aim to strengthen the primaries. The advent of time also saw institutions of many expert committees entrusted with the task of improving the credit flow from institutional financial sources.³ These committees undertook appropriate measures from time to time to strengthen the cooperatives by increasing the flow of institutional rural credit to them. However, some of the committees in the post independence era were also seen to throw light on various problems faced by these cooperatives and this had led to the search for appropriate policies to restructure the cooperative movement.⁴

As for restructuring of the cooperatives, the Agricultural Credit Review Committee (ACRC) of 1989, Chaired by Prof. A.M. Khusro, categorically emphasised upon the need to have new agricultural technology and non-credit business as the hallmark for the viability of Primary Agricultural Credit Societies (PACS). The committee also called for a 'programmed effort' consisting of enlargement of profitable non-credit business, deposit mobilisation, etc. and to improve the loan procedures and policy (Reserve Bank of India, 1989:319). This committee also undertook the issue of

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overdues and traced the causes of overdues in defective loan policies, absence of linkage of credit and marketing, lack of access to institutional credit for consumption purposes, and ineffective supervision.

Cooperatives Under Liberalized Economy:

Today, winds of change is sweeping the terra firma of the Indian economy in the wake of the unleashing of the new package of economic reforms. The New Economic Policies (NEP) not only have posed great challenges before the cooperatives, they have also provided immense opportunities for expansion and diversification of their business operations relating to agriculture and farm and non-farm activities in the rural areas, particularly in respect of providing gainful employment and for increasing income level of the farmers. The withdrawal of the Government regulations⁵ from many spheres of economic and business activities has enabled the use of cooperatives as an institutional set up for implementing the programmes relating to socio-economic development. It is also believed that in the existing situation in India there is virtually no alternative to the cooperatives to serve and protect the interests of those who are prone to exploitation in the market-driven economy and that cooperatives will continue to have their relevance under the economic reforms. Nonetheless, the point that merits attention is as to how far cooperatives will have sustainability in the new environment in which they will have to face competition and may not have reserved areas for their operations (Dwivedi, 1996). Further, it is to be noted that today the private sector stands liberated from a host of regulations and control. However, the total impact of economic reform on the cooperative sector is yet to be fully visualized or gauged. The key feature of the new liberalized economic policy is to desist from specially supporting any particular sector lest it breeds inefficiency in its economic functioning. Cooperatives, therefore, henceforth will have to assimilate the logic of promoting competitive economy-the cherished mantra of the New Economic Policy. The cooperative movement in the near future, especially in the fields of agro-processing, dairy, horticulture, fishery, housing, and, in particular, agri-business, therefore, would require channeling of massive funds to reinvigorate them and they can no longer depend on the government institutions for such support and financial guarantees as it would go against the very ethics of ushering in a self-reliant economic scenario. This means that cooperatives, in future, have to mobilize resources from the

open market. Reduced Government intervention is also likely to democratise controls and create a climate of easing the operations of cooperatives.

As for the impact of NEP on agricultural cooperatives is concerned, it is believed that most of the changes will be felt with respect to export of agricultural produce and to the agricultural processing plants. The processing industries in the cooperative sector, viz., sugar, oilseed, spinning industries, etc. are thus likely to face fresh challenges in their economic functioning. In the competitive economy, both private and public sectors armed with sophisticated technologies may vie with each other to exploit and realise the export potential in these sectors. Since agricultural cooperatives are not very strong in these areas, there is a distinct possibility that they may lose their traditional superiority and ground in some of these sectors such as the agro-processing one. However, it is hoped that the cooperative movement will suitably respond to the changes sweeping the economic firmament and come out stronger by assiduously working towards infusing strict fiscal self discipline.

Scope of Agri-Business Cooperatives:

There are two sets of arguments as for the scope for the development of cooperatives in new market environment is concerned. One of the arguments is that the financial sector reforms, which extends liberty to escalate rate of interest on loan advances, could only raise the cost of credit, loan repayment amount and complicate the whole field of credit and its relation with the production base (Mukherjee, 1998). On the other hand, it is also conceded that the new economic policies of restructure and stabilization will open up opportunities for development on the part of those non-credit cooperatives which are as large as any private or multi-national firm (Chengappa and Shashidhara, 1998). Thus, non-credit cooperatives will have better opportunities for expansion and diversification. And, among the non-credit cooperatives, agri-business cooperatives are expected to acquire newer grounds in the changed market conditions, especially those involved in the export trade of agricultural produce. It is to be noted that agriculture is fast getting commercialized and agriculturists are now exposed to sales operations and advertisement of commercial firm. Many of the commercial crops, especially fruits, vegetables and flowers, are now grown for the export market. However, as pointed out by Dubhashi (1999), the need of the hour is now to set up expert groups to

study the long-term implications of the emerging World Trading System for the Indian farmers.

Today, the cooperative movement has really come of age in this country. The major thrust of the co-operative sector today is towards supporting agricultural production through supply of necessary inputs, providing post-harvest support facilities, and facilitating export trade of agricultural produce. However, apart from the above thrust areas, the involvement of cooperatives in market intelligence service (MIS) is equally important. This emphasises upon the need for the cooperatives to set up a comprehensive computerized information system, especially to advise the farmers about the prices of agricultural commodities prevailing in domestic and export markets and guide them in their decision regarding their productive operations in accordance with the domestic and international market conditions. The extended network of computer-cum-telecommunication would help in setting up a comprehensive information system. So far not much has been achieved in this direction and there is practically a vacuum in this regard. It is to be noted that the budgetary requirement for infrastructure development to bring the country's agri-business on par with the other competing countries is an uphill task.⁶ However, in the present milieu, there is every possibility of India reaping the benefit of being a member nation with World Trade Organization (WTO), especially with respect to MIS encompassing linkages between the producing and forwarding agencies, and also between terminal markets and importing markets.

The need for the development of MIS was also felt in one of the recent studies that specifically focused upon various constraints faced by cooperatives engaged in the export trade of fruits (Shah and Kshirsagar, 2001). This was an evaluation study of National Horticulture Board's (NHB) soft loan scheme (SLS)⁷ for the development of post harvest infrastructure (PHI) and related facilities for horticultural crops in the state of Maharashtra. Although many beneficiaries of NHB soft loan schemes were noticed in the state, this study had specifically focussed upon two grape growers' societies that were developed with the help of finances received not only from NHB under its SLS but also from various other financial institutions. Details regarding soft loan component released to the selected societies along with financial assistance received by them from other institutions are provided in Table 1.

It is to be noted that for civil and mechanical work both the societies received financial assistance from Bank of India. However, for the establishment of pre-cooling unit, cold storage and pack house, the major financial assistance was given to the societies by NHB in the form of soft loan to the tune of Rs. 41 lakhs. One of the societies also received financial assistance from Food Processing Department, especially to construct its processing unit. Thus, it is not the NHB alone but there are some other institutions also engaged in financing various projects related to PHI facilities. However, it is to be noted that the assistance provided under NHB soft loan scheme is for specific components. The NHB assistance is limited to 50 per cent of the actual cost for each component. With the help of assistance received from various financial institutions, both the societies have developed PHI facilities. Details regarding investments made by the selected societies on various infrastructural facilities like buildings, various utilities, air handler, refrigeration equipment, packing lines, etc. are provided in Table 2.

It is to be noted that both the societies have their own pre-cooling⁸ as well as cold storage plants. Table 3 provides an insight into the changes in various performance indicators of the selected societies, especially in respect of their actual and utilized cold storage capacity, quantity of exports, export prices and costs, and also productivity and post-harvest losses of grapes grown on the farms of member farmers. The pre-cooling capacity of both the selected society level plants is noticed to be 6 tons in 6 hours. As for the cold storage capacity, it is found to be 24-30 containers – each containing about 3000 cartons (boxes) of grapes. The capacity of a carton is found to be around 5 kgs of grapes. Interestingly, the utilized capacity was found to be much lower than the actual capacity of cold storage available with the societies. This was mainly because of the dependency of these societies only on grapes. Despite concerted efforts these societies are unable to attract other F & Vs to fully utilize their cold storage capacity. This study also showed higher share of expenses at destination as compared to inland expenses in total export cost of grapes. Although this study has covered various aspects relating to export trade of grapes, here we have mainly concentrated on the constraints faced by these export units, especially with respect to processing and marketing of grapes. The subsequent section evaluates the adequacy of incentives, constraints faced and changes warranted, especially with respect to various provisions for PHI and related facilities.

Adequacy of Incentives and Changes Warranted:

Undoubtedly, the infrastructural facilities created by the NHB have not only helped the selected grape growers societies to boost their export trade of grapes but also reduced post-harvest losses and raised productivity of this valued crop in the area. However, the procedures followed by the NHB towards sanctioning of soft loans for PHI related activities were noticed to be not only time consuming but also quite cumbersome. It is to be noted that it took more than two years for the selected societies to get the loan money sanctioned from NHB. This had not only delayed the project but also raised the project cost. Thus, the need of the hour for the NHB is to have quick and more effective loan processing and disbursing machinery. Equally important is the financing of the entire and comprehensive project rather than for specific components. The selected societies also faced some processing related constraints such as lack of availability of skilled labour for grading and packing of produce, voltage fluctuation, electricity supply at low voltage and frequent cuts in electricity during the season. It is to be noted that during processing of grapes both pre-cooling and cold storage plants require not only regular supply of electricity but also its normal voltage. Any fluctuation in electricity supply, therefore, might hamper the continuous processing of grapes. Nonetheless, both the societies not only faced the problem of electricity supply at low voltage but also frequent cuts in electricity. As for electricity use, another constraint was seen to be related to its tariff. Both pre-cooling and cold storage plants were charged normal electricity tariff as charged for firms operating in urban areas by the Electricity Board. It was, therefore, felt that agricultural tariffs be applied to the pre-cooling and cold storage plants rather than the normal electricity tariffs.

As for the marketing of grapes, it was found that the air freight for the transportation of grapes were subsidized by APEDA. However, such subsidies were not available for the grapes being transported through ships. The selected societies, therefore, wanted the sea freight also to be subsidized. Added to this, they also wanted various organizations to come forward to subsidize inland transportation of grapes, apart from providing insurance cover to their produce. The selected societies were also seen to be in favour of receiving fund for setting up of Research and Development (R&D) units for the marketing of grapes.

According to the Chairmen of the selected societies, the exports of grapes require huge working capital which the societies alone can not arrange. The State Government, therefore, should come forward and recommend to National Cooperative Development Corporation (NCDC) to participate in the working capital requirements of the grape grower's societies. However, according to them, the recommendation should be need based and free from any condition of minimum dividend. Further, they also wanted the State Government to come forward to help them in providing market intelligence service for the export of grapes and other fruits and vegetables round the year. Reimbursement of extension service cost from Maharashtra State Agricultural Marketing Board (MSAMB) was another suggestion put forward by one of the Chairmen of the selected societies. However, how best these suggestions can be taken care of by the NHB and various organizations will depend on their future strategies and policies relating to financing of PHI related facilities for the horticultural crops.

The point, however, that merits attention is that the development of PHI related facilities have certainly boosted country's horticultural exports. The globalization of agriculture through higher market access in international markets have created vast potentialities for agri-exports. Now, the task before cooperatives is to organize effective marketing extension programmes encompassing various products and marketing functions so as to prepare the members to meet the market challenges. Equally important is the role of cooperatives in market information system with a view to increase market avenues both in domestic and global markets. Cooperatives have to effectively utilize the new technology to strengthen their bonds with constituent members and their customers (Chengappa and Shashidhara, 1998). It is to be noted cooperatives have an edge over other competing sectors so far as their organizational structure is concerned. The federal structure despite many inherent weaknesses provides a very wide net work to link up many producers to the tertiary level of economy. Obviously, the organizational structure build up through federal structure over the years would continue to be a point of great strength to cooperatives. Their relevance will be felt in a number of areas where private sectors have either exploited or had not helped the needy ones.

Thus, in the present milieu, cooperatives have a pivotal role to play in shaping and boosting the export trade of the country, especially with respect to those high value crops

such as F & Vs. It has been already established that various horticultural commodities such as banana, grapes, sapota, lychee, onion, tomato and mushroom, etc. of India are highly competitive in the international export market (Gulati and others, 1994). The potentiality in the export trade of these valued crops need to be exploited further. In fact, it has indeed been only in the last few years that Indian horticultural exports got a real boost because of more liberal market environment. Nonetheless, fluctuations encompassing horticultural production due to pre- and post harvest losses have many a times diluted and undermined our efforts, commitments and credibility to bolster India's horticultural exports. There is, therefore, an imperative need to cut down upon the post-harvest losses in order to meet their increasing demand in the international market. An integrated approach to the post harvest management through active and joint participation of various organizations such as NHB, APEDA, NCDC, etc. will, therefore, be more appropriate to boost country's net horticultural exports. It has been already been established that the growth prospects of developing countries will be more favourable in the export trade of F & Vs due mainly to the fact that these countries with abundant labour in relation to capital or land enjoy a comparative advantage in labour intensive horticultural production as compared to cereal production. The past trend has also shown an increase in market share of developing countries not only in the world trade of F & Vs but also in respect of share of F & Vs in their total agricultural exports (Table 4).

Thus, developing countries like India should find potentiality in non-traditional exports at a time when growth in the traditional ones is foundering. At the same time, it deserves mention that the future growth in horticultural production in developing world mainly depend on future price mechanism and also on the import demand of these high value crops in various regions of the world. The production deficit of various regions in fruits and vegetables will act as engine of export growth of the same for developing nations. Import demand for fruits and vegetables has already been predicted to grow sharply in developed region of the world in the near future (Islam, 1990). This will lead to rise in export prices, especially for fruits. Production deficit of other countries and regions and a likelihood of rise in export prices of these high value crops may serve as a catalyst for significant expansion in the production of horticultural crops, particularly in developing world. India is expected to take advantage of this situation and cooperatives

are likely to play a key role in shaping India's exports. However, in order to exploit this situation cooperatives have to be developed as economically effective organizations, capable of meeting the challenges of the new, liberalized economic environment. Besides, they have to achieve full utilization of the existing infrastructural facilities with due emphasis on scaling up of the economy through expansion of production capacity and upgradation of technology (Dubhashi, 1999).

End Notes:

1. To cater to the requirement of rural poor in particular and to safeguard the interests of the farming community in general, the provincial Government during this era encouraged setting up of credit institutions patterned on European banks of the Raiffeisen type in the cooperative sector. And, as a result, the first agricultural bank came into being in Bombay province in 1882. The Agricultural Loans Act was passed in 1884. Subsequently, a successful cooperative society was formed in 1892 in Hoshiarpur district of Punjab. The Government of India appointed a special committee under the chairmanship of Sir Edward Law to go into the possibilities of setting up of cooperative institutions for advancing agricultural credit. On the recommendations of this committee, the Cooperative Societies Act, 1904 was enacted marking the dawn of organised cooperative era in India.
2. The agricultural Finance Sub-Committee, 1944, the Cooperative Planning Committee, 1945, and the Cooperative Sub-Committee, 1948 had consolidated the progress made and suggested measures to strengthen and streamline the cooperative movement.
3. Important among these committees were : (i) All India Rural Credit Survey Committee (1951), (ii) Mehta Committee (1959), (iii) Patel Committee (1961), (iv) Mirdha Committee (1964), (v) All India Rural Credit Review Committee (1966), (vi) Santhanam Committee (1969), (vii) National Commission on Agriculture (1971), (viii) The Committee on Cooperative Land Development Bank (1973), (ix) Hazari Committee (1975), (x) All India Debt and Investment survey (1971-72), (xi) Sivaraman Committee (1979), (xii) All India Debt and Investment Survey (1981-82), (xiii) Agricultural Credit Review Committee (1989), (xiv) Brahma Prakash Committee (1991), and Narasimham Committee (1991).
4. Important among the committees that identified the problems confronted by various cooperatives in the country were : All – India Rural Credit Review Committee (1966), Hazari Committee (1975), Sivaraman Committee (1979), Agricultural Credit Review Committee (1989), and Narasimham Committee (1991). [For more details, please refer “Report of the All – India Rural Credit Review Committee” (1969); Paranjothi (1984): “Committees and Commissions on Cooperation”; and “Report of the Agricultural Credit Review Committee (1990-91)”]
5. The new economic policies, ushering in the era of economic liberalization initiated in early nineties, are expected to provide an opportunity to usher in those favourable

conditions such as autonomy, freedom with greater accountability and changes in cooperative laws, which will lead to a gradual freeing of the cooperatives.

6. As per the estimates reported by Kaul (1997), an expenditure to the tune of Rs. 3000 per tonne will be needed to handle or create post-harvest infrastructural facilities for fruits and vegetables (F&V). This means that a total investment to the tune of about Rs. 30,000 crores will be incurred just to handle 30 per cent of the total F&V products which is at present over 100 million tonnes, leaving aside floriculture and other products.
7. The NHB had undertaken two major soft loan schemes. The schemes were: (i) Integrated Project on Management of Post Harvest Infrastructure of Horticulture Crops, and (ii) Development of Markets of Horticultural Produce through Participation in Soft Loan. The first project was undertaken by the NHB in 1988-89. Under this project, assistance was provided for the creation of post-harvest infrastructure such as scientific grading facilities in the producing areas, improved packaging and transport facilities with special emphasis on developing cool chain including establishment of pre-cooling units, refrigerated transport vehicles, etc. The second scheme came into being in 1993-94. This scheme entailed for the provision of soft loan assistance to the beneficiaries of co-operative societies/private and public limited companies/farmers' association and public sector organizations, etc. Under this scheme, soft loan assistance with a maximum limit of Rs. 1.00 crore is being provided at four per cent service charges per annum with one year moratorium period to set up projects related to infrastructural facilities.
8. Pre-cooling is the removal of field heat from freshly harvested products. Within a specific time after harvest, the field heat is need to be removed from the fruit through pre-cooling. Pre-cooling not only prevents spoilage of fruit but also helps in maintaining pre-harvest qualities of the produce such as freshness, flavour, firmness and appearance. In fact, the fruit cannot be kept directly in the cold storage if the field heat from the fruit is not removed. Thus, pre-cooling is one of the most important processing activities of grapes.

References:

- Chengappa, P.G. and B. M. Shashidhara (1998), 'Impact of New Economic Policy on Cooperatives' in 'India's Rural Cooperatives', Gursharan Singh Kainth (ed.), *Regency Publications*, New Delhi.
- Dwivedi, R.C. (1996), 'Role of Cooperatives in Rural Economy', *Indian Journal of Agricultural Economics*, Vol. 51, No. 4, Oct.-Dec., pp. 713-727.
- Dubhashi, P.R. (1999), 'Business Opportunities for Cooperatives: Perspectives for 2000 AD', in 'Positioning Cooperatives in 21st Century', *Proceedings of the National Symposium*, K.Elumalai and K.Chengappa (eds.), Vaikunth Mehta National Institute of Cooperative Management, Pune, pp. 28-31.

- Gulati, Ashok, Anil Sharma, Kailash Sharma, Shipra Das and Vandana Chhabra (1994), 'How Competitive is India in Agro-Exports? An Analysis of Selected Agro-Products', *Margin*, Vol. 26, No. 4, pp. 844-864.
- Islam, Nurul (1990), 'Horticultural Exports of Developing Countries: Past Performance, Future Prospects, and Policy Issues', Research Report 80, *International Food Policy Research Institute*, Washington, DC, USA.
- Kaul, G.L. (1997), 'Horticulture in India – Production, Marketing and Processing', *Indian Journal of Agricultural Economics*, Vol. 52, No. 3, pp. 561-573.
- Mukherjee, R. (1998), 'Credit Cooperatives in India's Rural Economy', in 'India's Rural Cooperatives', op. cit. pp. 147-158.
- Paranjothi, T. (1984), 'Committee and Commissions on Cooperation', *Rainbow Publications*, Coimbatore, November, pp.79-90.
- Reserve Bank of India (1989), 'A Review of the Agricultural Credit System in India: Report of the Agricultural Credit Review Committee', Bombay, pp. XV + 1074.
- Shah, Deepak and K.G.Kshirsagar (2001), 'Evaluation of Soft Loan Schemes for the Development of Post Harvest Infrastructure for Horticultural Crops in Maharashtra', Agro-Economic Research Centre research report, Gokhale Institute of Politics and Economics, Pune.

Table 1: Project Financed under Various Schemes

Organisation	Project Financed (in lakh rupees)				
	Term Loan from Bank of India*	Soft Loan from NHB@	Member Share Capital	Loan from Food Processing Department	Total Loan
1. Abhinav Grape Growers' Co-operative Society Ltd.	114.75 (49.07)	41.00 (17.53)	18.12 (7.75)	60.00 (25.65)	233.87
2. Vighnagar Grape Growers' Co-operative Society Ltd.	32.64 (39.88)	41.00 (50.10)	8.20 (10.02)	-	81.84

Note : 1) * - Term loan sanctioned by Bank of India for civil and mechanical work

@ - Soft-loan sanctioned by NHB for one pre-cooling unit, one cold storage and one pack – house.

2) Figures in parentheses are percentages to the total project cost.

Table 2: Details of Investments made by the Societies on various Facilities (during 1994-95)

Particulars	Investment (Rs in lakh)			
	Abhinav Grape Grower's Cooperative Society		Vignahar Grape Grower's Cooperative Society	
1. Land and land development	0.47	(0.33)	Received in Gift	
2. Buildings	50.34	(35.35)	25.96	(31.72)
3. Utilities				
a. H.T.Station	2.47	(1.73)		-
b. Generator Set	5.40	(6.04)	8.60	(10.51)
c. Domestic electrification	9.31	(6.54)		-
4. Pre-cooling, cold storage and others				
a. Air handlers	21.81	(15.31)	18.53	(22.64)
b. Refrigeration equipment		-		-
c. Packing lines	49.42	(34.70)	25.47	(31.12)
5. Customs duty on imported Machinery and material including Transport cost from port to site, etc.		-	3.28	(4.01)
6. Margin money for working capital	23.00		-	
Total cost of the project (excluding margin money for working capital)	142.42		81.84	

Note : Figures in parentheses are percentages to the total project cost

Table 3 : Performance of the Selected Grape Grower's Societies in Maharashtra

Particulars	1994-95	1995-96	1996-97	1997-98
Abhinav Grape Grower's Co-operative Society				
1. Actual Storage Capacity (in no. of containers)	24.00	24.00	24.00	24.00
2. Capacity Utilized (%)	40.00	75.00	75.00	40.00
3. Productivity (in MT/hect.)	22.00	24.00	24.00	24.00
4. Post-harvest Loss (%)	13.00	10.00	12.00	12.00
5. Exports (in MT)	120.00	285.00	289.00	120.00
6. Export Cost (in Rs/Box)	140.00	140.00	150.00	150.00
7. Export Price Received (in Rs/kg) -From U. K	37.50	28.07	28.72	44.17
Vignahar Grape Grower's Co-operative Society				
1. Actual Storage Capacity (in no. of containers)	30.00	30.00	30.00	30.00
2. Capacity Utilized (%)	40.00	65.00	70.00	70.00
3. Productivity (in MT/hect.)	25.00	27.00	25.00	22.00
4. Post-harvest Loss (%)	11.00	11.00	11.00	11.00
5. Exports (in MT)	106.22	287.24	243.08	264.49
6. Export Cost (in Rs/Box)	130.00	140.00	150.00	155.00
7. Export Price Received (in Rs/kg)				
- From U.K.	34.82	30.94	28.16	35.50
- From Netherland	30.76	29.08	26.18	32.17
- Average	33.02	29.58	27.53	34.59

