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**ALTERNATIVE DIARY PRODUCTION AND
MARKETING SYSTEMS: CASE STUDIES OF
INDEPENDENT COOPERATIVES AND
PRIVATE MARKETING SYSTEMS**

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PUNE - 411 004**

RESERVE SECTION

X9(X311:71):61.2315.N8
7M8
241074

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Alternative Dairy Production and Marketing Systems:
Case Studies of Independent Cooperatives and
Private Marketing Systems

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Workshop on Cooperative Enterprises and Rural
Development in India

India International Centre, New Delhi, 28-30 December 1988

Sponsored by the International Development Research Centre
Ottawa, Canada

The organisation of production and marketing of milk in Maharashtra State is, for historical reasons, different from other States in India. In 1947, the State Government (Government) started a Milk Scheme for Bombay to supply milk at reasonable price to the urban consumers. In due course, demand for such organised supply of milk developed at other urban centres. The Government established Dairy Development Department in 1958 to promote dairying as a supplementary occupation to bring incremental income to the farmers, particularly in backward areas, by establishing Primary Milk Producers' Cooperative Societies (Milk Cooperatives), organising inputs and veterinary services, including cross-breeding of cows and grading (breeding) local breeds of buffaloes with Mehsana breed by Artificial Insemination (AI). The Government set up a number of Milk Schemes for procurement, processing and marketing of milk during the last thirty years.

At the village level are the Milk Cooperatives, with milk producers as members. Taluka/District Unions (Dairy Cooperatives) are formed with Milk Cooperatives as their members. The District Unions are federated into Maharashtra Rajya Sahakari Duddh Mahasangh (Mahasangh). Though the Mahasangh was established in 1967, it was almost dormant until it was revived in 1983. The milk producers and their cooperatives, disillusioned by the failure of the Mahasangh to protect their interests, have formed a few years back their own forum, viz., Maharashtra Rajya Duddh Utpadak Sangh, to voice their feelings and to agitate on price and other issues.

The Dairy Cooperatives supply milk to the Milk Scheme, after whatever they can sell within the District in which they are located. The Milk Scheme, after

pasteurisation, sells milk in Bombay and other urban areas. The Mahasangh established Mahananda Dairy in 1963 which also receives milk from some Dairy Cooperatives and sells it in Bombay. Besides, Warna Dairy Cooperative and private traders from the State as also some cooperatives and traders from Gujarat and Karanataka sell milk in Bombay.

Operation Flood Programme (OF): The OF envisages to replicate the rural Milk Cooperatives in Kaira District in Gujarat (Anand Pattern). Financial and technical assistance under OF is available to the Milk Cooperatives and Dairy Cooperatives in organisation of production and its enhancement, procurement, processing and marketing of milk and milk products on Anand Pattern. The funds generated from the sale of Skim Milk Powder and Butter Oil, donated by the European Economic Community and soft loans from the International Development Agency/World Bank and used to assist dairy projects taken up under the OF.

In the first phase, i.e., OF I, Jalgaon and Kolhapur Districts were selected for OF assistance. It is stipulated under the OF that there shall be only one District Union. Except the Chalisgaon Taluka Union in Jalgaon District and the Shirol Taluka Union and Warna Dairy from Kolhapur District, which refused to merge, the other Taluka Unions merged in the District Union. Under OF II, 19 more Districts in the State were selected for assistance. The National Dairy Development Board (NDDB) prepared a perspective plan for dairy development in the State and worked out sub-project details for 10 unions by August 1983. The Indian Dairy Corporation (IDC), through which the OF funds are sanctioned, approved in April 1984 a sum of Rs.95.67 crores for the

State under OF II. The IDC releases the funds through the Mahasangh for use of the Dairy Cooperatives. An agreement for a loan of Rs.40.47 crores and a grant of Rs. 24.15 crores was signed between the Mahasangh and the IDC on 30 May 1985.

It was envisaged under OF II, among other things, that a) Government should liquidate the Taluka Dairy Cooperatives or permit them to merge into the District Dairy Cooperatives, b) transfer the dairies and chilling plants under its Milk Scheme to the District Dairy Cooperatives and c) the Mahasangh would market milk and milk products outside the jurisdiction of the Dairy Cooperatives. The Government, vide its Resolution dated March 6, 1986 declared its policy regarding cooperativisation. Thereupon, there was strong opposition from some Members of the Legislative Assembly (MLAs) and the Trade Union of the employees of the Milk Scheme. Hence the Government appointed a Committee (Basak 1986) to evaluate the OF in Maharashtra. The Committee's recommendations regarding cooperativisation caused considerable controversy and commotion. In the event, the Government has not yet taken any action on the recommendations of the Committee.

The Problem: In view of the proposed cooperativisation and consequent responsibility the Dairy Cooperatives may have to shoulder, it will be useful to know why some of them are successful while others perform poorly. Some private dairies are very successful. Hence the present study.

Objectives of the Study: To examine 1) Why some Dairy Cooperatives operate with reasonable success and make substantial contribution towards growth while others perform poorly and fail regularly? What are the factors

responsible for their success or failure? 2) Whether the Government's financial assistance is a pre-requisite for success of a Dairy Cooperative or whether, if the latter is run on commercial basis/free competitive enterprise, it can meet its financial requirements from the banks and other agencies and perform well without the Government's contribution, i.e., contribution to share capital and assistance in milk collection and conditional but compulsory patronage over purchase of all the milk and milk products so collected? 3) To what extent nearness to an urban market helps in direct sale of milk and milk products to the consumers and as a result bring additional benefits to the milk producers and their Cooperatives? 4) Should the Milk Cooperatives, situated near about the metropolises/towns, take up marketing of milk on their own so as to enable the milk producers to get a higher share in prices? and 5) In what ways the Dairy Cooperatives, Milk Cooperatives and dairies in the Private Sector are beneficial to the rural poor?

Methodology: To study the problem, we decided to adopt the case study method. However, a random selection from 90 Dairy Cooperatives could not have given us different types of successful and not so successful ones and also varying in terms of their management, finance, nearness to urban market, dependence on the Government, etc. Hence we made a purposive selection of three Dairy Cooperatives, viz., Jalgaon Dairy, Katraj Dairy and Warna Dairy, one Milk Cooperative, viz., Yelgud Dairy and a Private Dairy, viz., Chitale Dairy. Warna Dairy, though not a Taluka/District Union, is considered as a Dairy Cooperative as its milk producer members come from the Milk Cooperatives in 66 villages from four Talukas of Kolhapur and Sangli Districts.

Jalgaon and Katraj Dairies are District Unions of

Jalgaon and Pune Districts respectively. The former received assistance under OF I and the latter under OF II. Jalgaon Dairy had reached a maximum procurement of over two lakh litres (lts) per day (lpd) in 1985. However, it could sell only about 10 per cent locally and had to depend upon the Milk Scheme for marketing of milk. It incurred repeated losses and its accumulated losses exceeded Rs. three crores. Thus it is a case of failure. Katraj Dairy collected mainly cow milk and sold locally in Pune more than 50,000 lpd. It is partly independent. It earned profit and is considered successful. Warna Dairy in Kolhapur District, about 35 kms from Kolhapur, met its capital expenditure from bank loans. From commissioning the pasteurisation plant in 1976 till 1980-81 it was dependent on the Milk Scheme for marketing of milk. It incurred losses and was unable to service the loan as scheduled. However, thereafter it established its own marketing organisation at Bombay and earned profit from direct sale to consumers. It repaid the loan of Rs.1.25 crores with interest by 1985. Thus it is a case of failure till 1980-81 and of success since then.

With a view to find out if a Milk Cooperative situated on an urban periphery can successfully market milk on its own and benefit the milk producers from direct sale to the consumers, we selected Yelgud Dairy, about 30 kms from Kolhapur. It utilises fully its marketing organisation, not only for sale of milk and milk products, but also bakery products it manufactures and sale of other commodities. Its sale exceeds Rs. one lakh a day. It has met its capital expenditure from its own funds.

For comparison with the Cooperatives, we selected Chitale Dairy from Sangli District. It is about the same size as Warna Dairy in terms of procurement of milk. It

procures mainly buffalo milk and uses about 30 per cent of it for manufacture of milk products. It sells milk and milk products at Pune, 250 kms away, through its sister concerns. It has met its capital expenditure from own funds. While prospering itself, it implemented various schemes to increase productivity and production and benefited a number of small farmers and landless labourer milk producers.

Thus the selected Dairies represent different types. Given in Table 1 are some data about their financial position and procurement and marketing of milk. Data was collected during the case studies from the records, Annual Reports and Financial Statements of the dairies. Some milk producers, Directors, Chairman and top management were interviewed to discuss the problems faced and how they were resolved. Discussions were also held with senior officers in the Dairy Development Department and Animal Husbandry Department of the Government and financing agencies. The fieldwork was carried out mainly between March 1986 and September 1987.

Measurement of Success: Net Profit is an easily understood measure of success. However, it must be seen in the context of the reserves created, price paid to the milk producers for milk, and rebate paid, if any, as these reduce the net profit. Besides, the cash flow in rural areas, incremental income due to dairying, women's participation, and benefits to the rural poor are some other indicators of success. Going by the criteria of net profit, in the evaluation of Warna Dairy (Apte 1982: 42-63) and the study regarding dairying with cross-bred cows (Apte 1987b-47), it was found that many of the Milk Cooperatives earned profit. In the present study also, the Milk Cooperatives at Shendurni and Nashirabad from

Jalgaon District earned large net profit, about Rs.85,000/- in 1985-86. At the State level, in 1981-82, of the 94 Dairy Cooperatives, 52 earned profit, 28 incurred loss while 14 were dormant. Of the 8,552 Milk Cooperatives, 4,229 earned profit, 1,886 incurred loss and 2,455 were dormant (Reserve Bank 1987: 253-264). However, the Milk Scheme incurred repeated losses, the loss in 1985-86 being Rs. 77.09 crores (Dravid 1987: 1).

Factors Leading to Success/Failure: The success/failure is closely related to milk procurement, plant utilisation, production system, marketing organisation, terms and conditions of finance, nearness to urban market, and the Government's and management's role. We shall consider the five dairies with regard to these.

Milk Procurement: Adequate procurement to use the plant capacity to the maximum is crucial in view of sizeable amount of annual depreciation and interest on loan, taken if any, for plant. It is also necessary to procure enough milk to meet the demand of the consumers and to earn incremental income from manufacture and sale of milk products. The procurement of the five dairies, from 1981-82 to 1986-87, is shown in Table 2. All, except Jalgaon Dairy, show continuously increasing trend in milk procurement.

Reasons for Increase/Decrease in Procurement: The milk procurement in the State showed an increasing trend. Hence no dairy should show a declining trend unless something was wrong. Though Jalgaon Dairy had reached a maximum of about 2.25 lakh lts. a day in January 1985, its procurement had declined to about 58,000 lpd. in July 1987, despite its Cattle Development Programme and Cattle

Feed Factory. Partly, it was due to drought conditions but more so due to delay in payment and large deductions, ranging from 8 paise to 47 paise per lt. before passing on payments to the Milk Cooperatives (Basak 1986: 16). The private traders seized the opportunity, and, by giving advances for various purposes and timely payment for milk supplies, attracted the milk producers in a large way. The disputes in management and the Boards of Directors, suspension and later on termination of the services of the Managing Director, and overall mismanagement adversely affected milk procurement of Jalgaon Dairy.

Katraj Dairy deducted only four paise per lt. towards share capital. It has made arrangements for prompt payment of milk bills on presenting at the bank. Almost 90 per cent of its procurement is cow milk. Due to the cross-breeding programme of the Government (of the 64.36 lakh AI between 1970 and 1985, 13 per cent were in Pune District and large number of cross-bred cows, 17 per cent of the total cross-bred cows in the State) (Apte 1987b: 25) also, its milk procurement is gradually increasing. Besides, the private traders are not interested in cow milk. Thus, the cross-breeding programme, prompt payment and minimal deductions and efficient organisation have enabled it to procure milk in increasing quantities.

The area of operation of Warna Dairy is only 66 villages from Kolhapur and Sangli Districts, inspite of assurances by the Government from time to time to expand it. The Government issued a Resolution in 1974 to create Warna Milk District consisting of 300 villages but never put it into effect because some influential Ministers disliked Warna Dairy functioning as an independent entity. On the other hand, the Government has now allowed Walwa

and Shirala Dairy Cooperatives to collect milk from 25 out of 66 villages, which fall in their Talukas (Apte: 1986: 98). All along Warna Dairy had to depend upon procurement of milk from outside its area of operation. Even in 1986-87, only 47 per cent of buffalo milk was procured from its area of operation. The problem was not acute in the case of cow milk, as 93 per cent of the procurement was from its area of operation.

Its scheme of purchases of buffaloes by the cultivators from bank loans failed to succeed. It did not construct silos and community milking sheds and did not extend enough veterinary services though all these were included in its Integrated Dairy Development Scheme. The result was that its procurement was not enough to break even in the five years after commissioning the pasteurisation plant (Apte 1982: 164). In recent years, it has started giving subsidy on purchases of Mehsana buffaloes, supplying cattle feed manufactured in its own factory, cross-breeding of cows, etc. Besides, the increase in irrigated area due to construction of a dam, will produce more fodder for the milch animals. Due to various efforts, its procurement of buffalo milk from its area of operation increased from 60 lakh lts. in 1976-77 to 101 lakh lts. in 1985-86 and of cow milk from 10 lakh lts. to 89 lakh lts. respectively. However, considering its growing requirements and the Government's unwillingness to expand its area of operation, the Dairy will have to depend upon procurement from outside, which means more expenditure on transport of milk from longer distances.

Yelgud Dairy procured about 6,380 lpd. in 1985-86, most of which was buffalo milk. Only upto 15 per cent of the procurement was from its members. It is trying to

increase milk production by giving subsidy on purchases of Mehsana buffaloes. It has recently completed a project to irrigate 600 hectares of land which will produce more fodder for the milch animals. The village is adopted by the Bank of India for its development programme and also included in Krishi Pandhari Scheme of the Government for land improvement, supply of inputs and agricultural extension. These programmes also indirectly help increase production and procurement of milk. Besides, it pays the milk producers regularly every ten days and about 80 paise per lt. of buffalo milk, more than the Milk Scheme. Milk is tested on electronic equipment. Payment is based on fat content of milk. Such measures have helped it in gradually increasing its milk procurement.

In the initial years, Chitale Dairy had its own herd of buffaloes but had to start procuring buffalo milk from about 40 villages near about to meet the growing demand in Pune. The prosperity of the Dairy created an element of hostility among some local people. There were instances of its buffaloes being poisoned. Hence it reduced the herd of buffaloes which now serves as a demonstration farm, and has concentrated on increasing productivity, production and procurement of milk from the villages within a radius of 40 kms. In 1966, in collaboration with a cattle feed manufacturing firm, it surveyed 25 villages near/about and selected a village for an experiment. The Dairy sent its staff daily for three weeks to supply, free of charge, cattle feed for buffaloes owned by the milk producers. It was reported that milk productivity increased by 10 to 15 per cent. The farmers realised that the incremental income from additional milk exceeded the expenditure on cattle feed. Later on, it started supplying cattle feed on no-profit, no-loss basis.

In 1970-71, it identified buffaloes from 25 villages with the help of expert veterinary doctors, suitable for grading (breeding) with Mehsana buffaloes. In their endeavor, they graded some 2,000 buffaloes, 75 per cent of which conceived. It has now stationed 10 breeding buffaloes in its area of procurement besides facilities for insemination by frozen semen of Mehsana buffaloes.

In 1980, it introduced a scheme for supplying Mehsana buffaloes. A person capable of maintaining a Mehsana buffalo was to give Rs.1,000/- towards its purchase at about Rs.5,000/-. The Dairy gave 25 per cent subsidy on purchase price and the balance was treated as interest free loan recoverable from sale proceeds of milk. The beneficiaries had to give an undertaking not to sell it within three years from purchase and deliver all milk to the Dairy, except whatever required for family consumption. The Dairy met the cost of travel for purchases by its partners, transport of buffaloes upto village and one year's cattle insurance premium. Many of the beneficiaries could repay the loan in the first year itself. Between 1980 and 1985, about 1,000 Mehsana buffaloes were supplied under the scheme. Even the Integrated Rural Development Programme (IRDP) Agency sought the Dairy's assistance in its scheme of giving buffaloes to those below the 'Poverty Line'. However, as the IRDP funds were not adequate for Mehsana buffaloes, the Dairy enabled the beneficiaries to buy Mudalgi buffaloes, costing Rs.3,000 each. The Dairy gave subsidy on these purchases also and recovered loans from the sale proceeds. It rendered veterinary services free or at subsidised rates.

In 1985-86, it collected about 75,000 lpd. in the

flush season and about 45,000 lpd. in the lean season, 90 per cent of which was buffalo milk. At most of its centres, milk is collected by the local milk producers, who work in turns and receive commission for collection services. Chitale Dairy thus took pioneering steps to increase productivity, production and procurement of milk. Though in the private sector, it has been giving services an ideal Dairy Cooperative is expected to give. In the process, it is able to procure more and more milk. It is thus seen that deliberate efforts by the management enabled the Dairies to procure increasing quantities of milk, except Jalgaon Dairy, where mismanagement reversed the trend.

Plant Utilisation: A dairy has to bear financial burden on account of annual depreciation and interest on loan, taken if any, to meet the capital expenditure. This adversely affects its net profit. The terms and conditions of loan under OF assistance are easier than bank loan, as the latter attracts higher rate of interest and has shorter duration for repayment. However, irrespective of the source of finance, every dairy must use its plant capacity to the maximum. Hence, let us consider the plant utilisation in respect of the selected dairies. Jalgaon Dairy established its plant under OF assistance. Katraj Dairy got one from the Mahasangh and for its further expansion, received assistance under OF II. Warna and Chitale Dairies met the capital expenditure on plant from bank loan and own resources respectively. Yelgud Dairy does not have pasteurisation plant.

The pasteurisation capacity of Jalgaon Dairy was initially one lakh lpd. It was raised to two lakh lpd.

in 1982-83 due to increase in milk procurement. It decided in 1983-84 to raise it further to three lakh lpd. The work of expansion was in progress in 1987. However, by 1985-86, its procurement had started dwindling rapidly. If the newly elected Directors fail to rapidly raise the procurement, the Dairy may not be able to utilise even 50 per cent of the three lakh lts. capacity.

Jalgaon Dairy raised its powder plant capacity also, from 5 tonnes to 10 tonnes a day in 1983-84. A proposal to raise it to 15 tonnes was, however, stalled as in 1984-85 and 1985-86 it manufactured only 1,600 m. tonnes of milk powder a year. The Basak Committee observed that, "The dairies with milk powder plant generally generate losses on account of the fact that powder manufactured out of milk procured at high price in Maharashtra is costly but has to be sold at market price involving a minimum loss of Rs. 0.94 a lt. For this reason, Jalgaon and Kolhapur Unions have always tended to underutilise their powder plants". (Basak 1986:9, 21).

Katraj Dairy had to overutilise its pasteurisation capacity due to growing market for its milk in Pune. Hence, under OF II, it decided to raise the capacity from 30,000 lpd. to 1.5 lakh lpd. The work was in progress in 1987. It expects to use the increased capacity fully in the next few years and has already prepared plans for raising it to 2 lakh lpd. However, its powder manufacturing plant remained largely underutilised.

Warna Dairy could use only 70 per cent of the pasteurisation capacity of one lakh lpd. in the first eight years. However, since 1984-85, it is utilising the plant capacity fully, its average in 1986-87 being

1.25 lakh lpd. It could use only 30 per cent of the capacity of manufacturing 5 m, tonnes of milk powder a day. It had installed Shrikhand manufacturing plant also with a capacity of 3.5 tonnes a day. In 1986-87, it produced 3.0 tonnes of Shrikhand a day in the flush season. The plant remained under-utilised during the rest of the year.

Chitale Dairy has been utilising fully its plant capacity of pasteurising 6,000 lts. of milk per hour. It has a roller-drying powder plant with a capacity to process 1,500 lts. of milk per hour. The powder plant is operated in the flush season and for a part of the transitory season, that is, about seven months in a year.

Thus, except Jalgaon, the other dairies are able to utilise their pasteurisation capacity fully. The powder manufacturing plants, however, remains grossly under-utilised in the case of all of them. The Government will have to decide whether to subsidise manufacture of milk powder and also decide not to establish additional plants until the existing manufacturing plants are used to their full capacity. There is need for greater coordination as lack of it leads to declaring 'Milk Holidays', that is, refusal by the Milk Scheme to accept milk, causing severe losses to the milk producers.

Milk Holidays: Due to the programmes of cross-breeding of cows and OF, milk procurement in the State is increasing every year. Because of limited capacity of its pasteurisation plant, the Greater Bombay Milk Scheme is unable to accept large quantities of milk in the flush season, when milk procurement goes up by 40 per cent, and declares Milk Holidays. The phenomenon is old, the Katraj Dairy having reported losses due to Milk Holidays in 1972-73.

The Satara Dairy Cooperative complained in 1984 about its losses due to Milk Holidays. Its Chairman argued that the Milk Scheme must accept whatever milk is offered for sale by the Dairy Cooperatives. He stated that the Minister for Dairy Development had assured that the Government will ban supplies of milk to Bombay from other States, and help the Dairy Cooperatives in Maharashtra to sell whatever milk they have to market (Sakal: 24 January 1984). However, no such ban has been imposed so far. It is estimated that about five lakh lpd. of milk from Gujarat and Karnataka States sales in Maharashtra. The MLAs, in their Memorandum to the Chief Minister, alleged that the Chairman, NDDB has made available to the Dairy Cooperatives in Gujarat, through the private traders in Bombay, a market for 2 lakh lpd. of milk and was planning to sell another 50,000 lpd. of milk from Gujarat in Bombay through the Warna Dairy (Basak 1986: 42).

Severe protests were also lodged by the Nashik Milk Scheme (Sakal: 7 May 1985) and Koyana (Satara) Dairy Cooperative (Sakal: 1 November 1985). They alleged that the Dairy Cooperatives having political patronage bribed the officers of the Milk Scheme to accept their milk tankers expeditiously. They also referred to lack of planning and coordination in appropriately diverting the milk tankers to the powder manufacturing plant at Miraj and delay in reaching the empty tankers to the Dairy Cooperatives. In the event, considerable quantities of milk had to be separated and skimmed milk destroyed because it could neither be sold or powdered. The skimmed milk so destroyed was 82 lakh lts. in 1984-85 and 197 lakh lts. in 1985-86 (Basak 1986: 9). Milk Holidays cause considerable loss to the milk producers. Hence need for better planning and greater coordination.

Agitation by the Milk Producers and Their Cooperatives: In recent years, the milk producers and their cooperatives organised several rallies to protest against the Milk Holidays and the price paid for milk under the Milk Scheme. Though the prices of fodder, cattle feed, etc., were continuously rising, the Government did not revise milk prices since April 1983. As such, the profit of the milk producers declined. The Milk Cooperatives complained about the payment for milk collection while the Dairy Cooperatives continuously protested about the inadequate payment received for procurement, processing and transport of milk. The political leaders from the Ruling Party, who were out of power, seized the opportunity, hoping that agitation on the milk issue may expedite the process of dislodging the Chief Minister and bringing in his place an ex-Chief Minister from the 'Sugar Lobby'. On 30 August 1987, they organised the largest rally of about two lakh milk producers at Kopergaon in Ahmednagar District. Some ex-Ministers, MLAs, Members of Parliament (MPs), Presidents of Zilla Parishads, Chairman and Directors of many Milk Cooperatives and Dairy Cooperatives, who supported the ex-Chief Minister, were also present. It looked like an attempt to form a 'Milk Lobby'. It was resolved to stop the milk tankers on the road and organise demonstrations on 16 September 1987. The Chief Minister, who is neither in the Sugar Lobby or Milk Lobby, drew attention to the Report submitted on 31 August 1987 by Dravid Committee appointed by the Government, and appealed to wait until the Government had examined its recommendations. The demonstration was cancelled. Thereafter, the Government took six months to announce the revised prices, effective from March 1988.

Alternate Dairy Production Systems: The organisation of production depends mainly on the market for milk and milk products. Jalgaon Dairy depended on the Milk Scheme

for marketing its milk. It has not diversified its production on a commercial scale. Katraj Dairy is able to sell locally all the milk it can pasteurise and sell the remaining to the Milk Scheme/Mahasangh. As 90 per cent of its procurement is cow milk with low fat content, it has not diversified. Warna Dairy has introduced Shrikhand and established a market at Bombay, and other places. It is now planning to manufacture and sell products made from cow milk and diversify in a large way. Yelgud Dairy, besides sweetmeats from milk, makes milk-bread, other bakery products and snacks. It finds more profitable to convert milk into milk products and sell them.

Though manufacture of cream, butter and ghee is common to all, it is produced in small quantities, except by Chitale Dairy. It is able to manufacture from buffalo milk and sell at a profit, large quantities of cream, butter, Ghee, Chakka and Shrikhand and other milk products. The manufacture of milk powder, except Yelgud Dairy which does not have a plant, is common to all, though not on a commercial scale on account of the difficulties stated earlier.

Jalgaon Dairy started manufacturing cattle feed in 1975. Under the CP assistance, it constructed another factory in 1978 with a capacity of 36,000 tonnes a year. However, the plant capacity remains under-utilised, though it sold cattle feed at Rs. 1,450 a quintal when the traditional cotton-seed oil-cake was selling at Rs. 1,720 per quintal. It was alleged that some Directors were interested in selling concentrates or cattle feed manufactured by others. Its sale of cattle feed declined from Rs. 109 lakhs in 1984-85 to

Rs. 90 lakhs in 1985-86. Its accumulated losses on this account were Rs. 1.97 lakhs. The management explained the losses as due to its inability to revise the feed prices when the cost of manufacture increased, as the revision could be made only by the General Body, which met once a year. In view of this, the Katraj Dairy's decision to give low priority to a cattle feed factory seems justified.

Warna Dairy started selling cattle feed from 1979-80 in increasingly large quantities. Hence it established a factory and sold 87,000 bags of Warna cattle feed in 1985-86. In 1986-87, it manufactured 27.4 m. tonnes a day, against the capacity of 20 tonnes. It has decided to raise further the plant capacity, manufacture and sell 12,000 tonnes of cattle feed a year and earn a net profit of Rs. 19.45 lakhs per year.

Yelgud and Chitale Dairies do not manufacture cattle feed. It is felt that since cattle feed is easily available in the market, a Dairy Cooperative need not indulge in its manufacture unless it is confident of making it a viable enterprise.

From the above it seems that diversification is dependent on strong marketing organisation of its own, as evident from the Chitale and Yelgud Dairies and to some extent Warna Dairy. Yelgud Dairy has demonstrated how diversification may be adopted to use the marketing network to the maximum. Flavour, taste and other qualities create a demand for milk product. To keep up the reputation, once it is established, needs constant efforts by the management. That is how Warna Dairy is able to compete with Amul Shrikhand, in spite of

Anul's large-scale advertisement and lower cost of production. The same is found in the growing demand for the products manufactured by Chitale and Yelgud Dairies. To conclude, it may be observed that no particular type of constitution and organisation leads to success automatically. The production system depends mainly upon the marketing organisation.

Marketing of Milk: Before considering the marketing organisation and marketing of milk by the five Dairies, we may consider, as background information, data regarding sale of milk by the Government and the Cooperative Sectors (Basak 1986: 24).

Sale of Milk - Government and Cooperative Sectors
(In lakh litres per day)

Area	1984-85		1985-86		1986-87	
	Govt.	Coop.	Govt.	Coop.	Govt.	Coop.
Greater Bombay	9.98	0.87	9.72	1.49	9.87	2.30
Districts	1.56	0.80	1.86	1.02	2.60	1.80
Outside States	0.40	-	0.57	0.21	0.65	0.04
Total:	11.94	1.67	12.15	2.72	13.12	4.14

It is seen that, though the share of the Government Sector is declining, still it sells little more than three times the milk sold by the Cooperative Sector and also, the sale in Districts is still not large, and is negligible in Outside States. The OF envisages gradual withdrawal of the Government's direct involvement

in marketing of milk. The Dairy Cooperatives and the Mahasangh will have to manage, in the years to come, procurement, processing and marketing of milk, which the Milk Scheme is presently handling. Mahananda Dairy has made a beginning. By the end of 1986-87, it was selling only 2.67 lakh lpd. of milk. It has thus a long way to go.

It may be mentioned that some staff in the top management in the Dairy Cooperatives had no praise for the Mahasangh, except Jalgaon Dairy reporting that the Chairman of the newly elected Board was able to persuade the Mahasangh to reduce the rate of commission the Mahasangh collected on sale of milk in Bombay, from the Dairy Cooperatives.

The Dairy Cooperatives and the Maharashtra Rajya Dudh Utpadak Sangh feel that the Mahasangh can not serve their interests with the Minister for Dairy Development as its Chairman and a senior Government Officer as Managing Director. The Basak Committee, on the other hand, feels that the present arrangement should continue at least for a period of ten years (Basak 1986: 10). They allege that there is no difference between the Milk Scheme and the Mahasangh, as both of them make inadequate payment for procurement, processing and transport. They do not approve of the Mahasangh starting Mahananda Dairy in Bombay, and acting as an agent for marketing milk and collecting commission from the Dairy Cooperatives. They feel that the Mahasangh should act as an agent of only such Dairy Cooperatives, as are unable to organise marketing of milk in Bombay on their own, either being situated away or because their milk procurement is not adequate to make them viable. It may be stated that the Basak Committee, without mentioning Warna Dairy, observed

that, "There are certain milk producers' cooperative institutions which are presently operating independently. Such cooperatives should be brought under the overall cooperative discipline of the Mahasangh". (Basak 1986: 7). However, Warna Dairy believes in every Dairy Cooperative standing on its own, without the support of or intervention by the Government/Mahasangh, in the matter of marketing of milk and becoming financially viable.

Similar views were expressed by the Action Committee of the Maharashtra Rajya Duddh Utpadak Sangh and the Trade Union of the employees of the Milk Scheme. The Dairy Cooperatives and the Trade Union have strong feelings against the IDC and the NDDB also. The Chairman of the Satara Dairy Cooperative observed that the Dairy Cooperatives have to accept whatever equipment offered by the NDDB, at a price which is not negotiable. He expressed that the Anand pattern has no place in Maharashtra and in view of the development of Dairy Industry in Maharashtra by the Government, OF must take a different view while implementing the OF programme in Maharashtra (Sakal 1986: October 23). An officer from Jalgaon Dairy also expressed his reaction likewise.

Some managerial staff of the Dairy Cooperatives stated that the NDDB officers often act with an air of supremacy and the staff feels humiliated the way the NDDB officers treat the Dairy Cooperatives. It was alleged that they bring pressure on the Government to accept the schemes involving huge capital expenditure, though the schemes are not likely to be viable.

The Trade Union in its Memorandum alleged that as the Amul's growth is stranded the Chairman of the IDC,

NDDB, and Gujarat Milk Marketing Federation who "with all his authoritarian position, is now trying to retrieve its former glory by restricting funds for Maharashtra's Dairy Projects, imposing unhealthy conditions on its organisational set-up, by impeding its market development and even by insidiously promoting unhealthy rivalry amongst different dairies in Maharashtra ... His strategy has already ruined dairy development in Jalgaon and has brought Kolhapur on the brink of disaster" (Basak 1986: 38). It proposed shifting the NDDB and IDC headquarters to Bombay or Delhi to make them real apex organisations rather than lobbies of Anul or Gujarat. It also opposed the three tier structure proposed under OF and suggested that the pressure from the NDDB, IDC or OF authorities should be stoutly resisted and OF funds, if made conditional on changes in organisational set-up, be rejected. It advocated that the producers' cooperatives in Maharashtra are prepared to accept the challenge of further growth and raise the necessary funds for any further technological development of the dairy industry in the State. The Basak Committee has recommended that the Government of India may be requested to give representation to Maharashtra on the Board of Directors of NDDB/IDC, as the coming years are most vital for the success or otherwise of the OF II in Maharashtra.

It appears that the relations between the Dairy Cooperatives and organisations concerned with them are not smooth. There may be some truth in the allegations made. Hence, need for greater coordination and cooperation between the Dairy Cooperatives and the Government, Mahasangh, NDDB and IDC. These organisations must enable the Dairy Cooperatives become independent and

viable and help only those which can not become physically and financially viable, for reasons beyond their control.

Impact of Cow Milk/ Buffalo Milk on Performance: Warna, Chitale and Yelgud Dairies, which were successful, mainly sold buffalo milk. Warna Dairy sold as fluid milk in 1985-86, 73 per cent of its total procurement of 216.15 lakh lts. of buffalo milk and 86 per cent of its total procurement of 95.84 lakh lts. of cow milk. Katraj Dairy procured and sold mainly cow milk. Its direct sales formed 24 per cent, and sales to the Milk Scheme, 76 per cent of the total milk sold in that year. Though it incurred loss on its sale to the Milk Scheme, it earned enough from direct sales to cover the loss and ended up with net profit. In the case of Jalgaon Dairy, buffalo milk formed about 60 per cent of its total procurement. In 1985-86, it sold 52,560 lpd. of buffalo milk and 14,345 lpd. of cow milk, in all, about 80 per cent of its total procurement being sold as fluid milk. However, though Warna Dairy earned profit from sale of 52,560 lpd. of buffalo milk, Jalgaon Dairy incurred loss, even though it sold 85,000 lpd. of buffalo milk. Thus success does not depend upon marketing of cow milk or buffalo milk per day.

Nearness to Urban Market: Katraj Dairy sold about 50,000 of cow milk locally. The low cost of transport within city limits, along with other factors, enabled it to earn profit. Yelgud Dairy, on the metropolitan periphery of Kolhapur, about 30 kms away, sells milk directly to consumers in the city. It shows how a Milk Cooperative situated on metropolitan periphery

can earn profit and benefit its members. Similar is the experience of the Choryasi Taluka Milk Sale Cooperative Society from Surat District in Gujarat State. Situated on the periphery of Surat, it sells directly to the consumers about 25,000 lpd. of unpasteurised milk in Surat and has been benefiting its members by direct sale to the consumers (George 1988: 95). Warnā and Chitale Dairies, however, had to transport milk over a distance of 400 and 250 kms respectively. Still both of them found it worthwhile incurring expenditure on long haulage, because they were marketing milk on their own and received higher price for milk.

It may be recalled that the Dairy Cooperatives are permitted to sell only in the District in which they are located. Chitale Dairy in the Private Sector and Yelgud Dairy, which sells within the District, are not affected by this directive. Katraj Dairy is situated in Pune. Still it has now announced its decision to sell milk in Bombay, despite the Government's directive not to sell directly outside the District.

Jalgaon Dairy is dependent on the Milk Scheme as the intermediary for sale of its milk in Bombay. However, if it has to come out of its present crisis, it will have to explore markets and sell milk and milk products on its own. Bombay and Nagpur, to the east and west respectively, about 450 kms from Jalgaon, are potential markets. Bombay is an evergrowing market. Nagpur had a population of about 16 lakhs in 1986. The Milk Scheme sells only about 60,000 lpd. of milk at Nagpur. It did not succeed in its scheme of privatisation of its milk booths. "The callous attitude of the Government suggests that it is not interested in Nagpur market". (Kothari 1986). There is

thus considerable scope for a Dairy Cooperative to sell milk at Nagpur. Jalgaon Dairy should seize the opportunity, since it is not able to sell more than 10 per cent of its procurement within the District, and has not succeeded in selling milk at Calcutta situated 1,500 kms from Jalgaon. It means going against the directives under OF but such a step seems unavoidable.

Thus it may be observed that nearness to an urban market helps in marketing milk profitably. However, it does not help by itself. Marketing organisation and efficient management are essential for exploring the potential markets.

Marketing Organisation: It takes time to develop marketing organisation. For instance, though Warna Dairy decided and took a bank loan for the purpose in October 1979, it took nearly three years to develop a network and record adequate sales to break even. By 1987, it had about 300 outlets including arrangements with Apana Bazar, a successful Consumers' Cooperative in Bombay. It had its salaried staff at 12 centres and four shops and also 100 agents in Bombay for sale of milk products. In Kolhapur District, it had 30 sales centres in Kolhapur, Ichalkaranji and other towns. Besides, it had four agents in Gujarat, ten in Andhra Pradesh and seven each in Karnataka and Kerala States for sale of milk products.

Katraj Dairy started direct sales in Pune in the 'seventies. However, a rapid development of its marketing organisation is evident from the 'eighties, and particularly from 1983-84. Yelgud Dairy also developed its

marketing organisation over the years. It has now a number of sale centres in Kolhapur and nine other towns nearby, including two in the Karnataka border. Its policy is to utilise the marketing network and organisation fully. Besides milk, milk products and eggs, it manufactures and sells bakery products and snacks through these centres. The sale of cattle feed, fertilisers, consumers' goods, etc., is confined to Yelgud and Gadhinglaj centres. Its success is evident from daily sales which exceed a lakh of rupees.

Chitale Dairy sells milk and milk products through its sister concerns in Pune. Though for accounting purposes, the sister concerns have a separate identity, they work in close collaboration with the Dairy for marketing its milk and milk products.

Jalgaon Dairy tried to sell milk through the local cooperatives and milk traders. However, it failed to establish a satisfactory organisation for local sales. Besides failure of the management to create a network, the main reason is the control of the private traders from Jalgaon and Dhule Districts over the local milk market.

Thus it is seen that, though it takes time, if the dairies are able to establish and develop their own marketing organisation, they can market milk and milk products successfully, even if they are situated away from their market.

Finance: Jalgaon and Katraj Dairies received OF finance, 30 per cent of which was subsidy and 70 per cent was loan with interest at 8.5 per cent per annum, repayable in 20

years. However, Warna Dairy met its capital expenditure by borrowing from a Nationalised bank in 1974. The loan was repayable by 1982, with interest at 11 per cent per annum. Yelgud and Chitale Dairies met the capital expenditure from their reserves and own funds respectively. In Table 1 is given some financial statistics for the year 1985-86 in respect of these Dairies.

The paid-up capital goes on increasing due to deductions from milk bills towards share capital. The Government's contribution is received when loan from National Cooperative Development Corporation NCDC/OF is received, and is redeemable. The Katraj Dairy received in all Rs. 14.04 lakhs as the Government's contribution to share capital. Its paid-up capital was Rs.36.97 lakhs. As for Warna Dairy, inspite of repeated promises, the Government did not make a matching contribution to its share capital as some influential Ministers in the State did not want Warna Dairy to grow. Only in 1980-81, it received Rs.2.25 lakhs as the Government's contribution when it took loan from the NCDC for expansion of ice factory, purchase of trucks, etc. Similarly, Yelgud Dairy received the Government's contribution in 1985 when it took loan from the NCDC for its scheme of extension of the milk products manufacturing activity.

The Dairy Cooperatives also collect deposits by deductions from milk bills and pay interest thereon. It helps them meet working capital requirements. It is a cheaper and easier way of raising funds. Besides, they create reserves, as per the statutory provisions, and use them as working capital or for creating assets.

The paid-up capital and reserves, if available in large amounts, give considerable financial relief, as no interest is payable on them.

All the Dairies had to incur sizeable expenditure on annual depreciation and interest on loan. These, coupled with creation of reserves, reduce profit/increase loss. In 1985-86, Katraj, Warna and Yelgud Dairies registered a modest profit of about Rs.30,000. However, Jalgaon Dairy incurred a loss of Rs.73.55 lakhs. In fact, it incurred repeated losses, the accumulated losses being Rs.305.67 lakhs by 30 June 1986. While Yelgud Dairy had no accumulated profit, Warna had a small accumulated profit of Rs.30,000 and Katraj Dairy had Rs.1,25,000.

It may be mentioned that dependence on the Milk Scheme caused considerable financial strain due to inadequate payment for procurement, processing and transport of milk and also due to delay in settlement of claims for additional payment. The inadequate payment reduced the profit or resulted in net loss.

As stated earlier, net profit by itself does not reflect fully the financial performance. It is essential to consider the reserves created also. Though Jalgaon Dairy had accumulated losses of Rs.305.67 lakhs, its reserves amounted to Rs.339.68 lakhs. However, considering its past performance, the accumulated losses will soon eat up its own funds as also deposits, if the management fails to improve its performance. Jalgaon Dairy is in real financial trouble and is unable to pay on time the Milk Cooperatives for milk supplied, which in turn affects its milk procurement adversely.

Warna Dairy had reserves amounting to Rs.242.21 lakhs. Its paid-up capital was Rs.39.78 lakhs and has thus created strong financial base. Katraj Dairy had reserves amounting to Rs.75.47 lakhs and paid-up capital, Rs. 36.97 lakhs. Considering its performance in recent years, it is likely to build up large reserves in the coming years.

Yelgud Dairy used its reserves to meet its capital expenditure. For the first time in 1980-81, it took bank loan for buying trucks because of subsidy on purchases. Chitale Dairy is run on commercial basis and has sound financial base. It finds convenient to meet the capital expenditure from own funds and, later, if necessary, borrow against the asset.

Further, it may be stated that, though Warna Dairy while it was dependent on the Milk Scheme was unable to repay the loan until 1981, it started earning profit thereafter by marketing milk on its own at Bombay. It repaid the loan fully by 1985 and has proved that the Government finance is not a pre-requisite for success. On the other hand, Jalgaon Dairy, despite OF loan and subsidy, incurred huge losses every year.

Management's Role: We shall now consider the role of management, beginning with Chitale Dairy. The principal aim of a private concern is maximisation of its profits. However, when doing so, Chitale Dairy took up various schemes, described earlier, to help raise milk production. Due to these schemes the milk producers have benefited themselves to a large extent. Thus while helping itself to prosper, it has brought prosperity to the milk producers

also. Being a family concern, there is a sense of belonging among the partners. The members of the second and third generation of its founder, head a department each and shoulder the responsibility. Its management took pioneering and progressive steps which have set an example for others to follow. Thus, the foresight, progressive attitude, honesty, discipline and entrepreneurial ability of the management have contributed to the success of Chitale Dairy.

The Founder Chairman of Yelgud Dairy is re-elected the Chairman every time. Its Board of Directors has seen some changes but even in the present Board, 7 out of 11 Directors have been re-elected in most of the years since 1967. There are five cooperative institutions in Yelgud which provide fifty five positions on their Board of Directors. As there are not many aspirants vis-a-vis the positions of Directors, there is not much of a tussle in the elections. The decisions in the Board Meeting are taken unanimously. The General Manager is given freedom to execute its policies and decisions. The work is divided into 17 departments. The Departmental Heads submit to the General Manager at 10 a.m. daily report of work done. A consolidated report is conveyed to the Chairman, who stays at Kolhapur, on telephone at 8 a.m. every day. Accounts are closed at 5 p.m. and all cash is deposited in the bank. The Internal Auditor regularly audits the accounts. Various meetings of the Dairy are held on the scheduled dates and hour every month, irrespective of whether such days fall on Sundays or holidays. Such meetings enable the management to periodically review its performance and take decisions and actions to make further progress.

The strict routine of work and discipline is due to its Chairman, who is at present the Managing Director of the Shetkari Sahakari Sangh, Kolhapur, a Consumer Cooperative meeting the needs of the farmers as also others. He resisted temptations to accept political power and has devoted himself exclusively to the cooperatives. Credit is also due to its General Manager, who is qualified and experienced. He was for some years the Manager of Chitale Dairy and prior to that obtained a couple of years' training abroad in dairying. The success of Yelgud Dairy is thus due to its Chairman and also his team of Directors and the General Manager.

The Founder of the Warna Sugar Cooperative established Warna Dairy and other cooperatives in the Warna Complex. He is a devoted cooperator and has kept away from politics, though an old time Congressman. Coming from a business community, though not highly educated, he took many bold decisions when the Dairy was going through critical stages. Having realised that the Dairy can not become viable unless it marketed milk on its own, he decided to establish its marketing organisation at Bombay. Within a few years his decision proved correct. The Dairy, which was unable to repay the loan of Rs. 1.25 crores and interest thereon, managed to repay it with interest by 1985. The credit is entirely due to the entrepreneurship of the Founder Chairman.

Long tenure as the Chairman and later on as the Director, the election of his brother in his place as the Chairman and of his son as a Director, helped the Dairy in implementing successfully various schemes of dairy development. The role of its Managing Director is also

important. He has risen from ranks and knows his responsibilities very well. Recently, he prepared a proposal for the second phase of development of the Dairy, estimated to cost Rs. three crores. Like Yelgud Dairy, we find that the Founder Chairman, the Board of Directors and the Managing Director are the cause of success of Warna Dairy.

Katraj Dairy had some managerial troubles in the first seven years. However, the Chairman of the Government nominated Administrative Committee, was later on elected as the Chairman in 1973 till 1976, and thereafter as one of the Directors till his death in 1981. He was the main person behind the progress of Katraj Dairy. Later on his son, who was already a Director since 1976, took over as the Chairman in 1978. Thus the long association of the father and son helped Katraj Dairy. Both of them were also elected as M.L.A.s. One of its Directors was for some years the Minister for Dairy Development. Their political contacts helped the Dairy in getting necessary facilities under the Milk Scheme and OF.

Between 1966 and 1973, two persons were appointed as Secretary to the Administrative Committee. Thereafter, between 1974 and 1982, five persons worked as the Manager of the Dairy. These changes affected the efficiency of the management to a certain extent. One saving factor was the continued association of the Chairman, so that he could pursue long term policy of its development. The present Managing Director was appointed in June 1983. He is on deputation from the Government's Dairy Development Department. Due to his experience, expertise and devotion, the Dairy is making rapid progress. The strength of

Katraj Dairy is as much due to political patronage as efficient management, both in procurement of milk as also in building up sales organisation in Pune.

Finally, Jalgaon Dairy. Though the local M.L.A. was instrumental to its formation, he did not exert the same amount of influence over the Government as the Katraj Dairy. Though he is at present State Minister, Home Department, he has not been able to get from the Government for the Dairy adequate payment for procuring, processing and transport and has failed to save it from incurring losses.

The Government nominated a Board of Directors in 1974 as stipulated under CF. The elections to the Board were due in 1977. However, the Board kept postponing the elections and instead amended the constitution to elect the Chairman every year. Many of the Directors took turn as the Chairman/Vice-Chairman. It is alleged that they appointed a Managing Director to toe their line. Between 1974-75 and 1986-87, two persons were appointed as the General Manager and five persons as the Managing Director. The person working as the Managing Director was suspended in October 1986 and his services were terminated in May 1987. Thus there were serious problems in management. It is alleged that the Chairman and some Directors used their office to help themselves at the expense of the Dairy. Though in terms of procurement, it has great potential and though OF funds are available, unless the Dairy gets dedicated, honest and efficient leadership, it won't come out of the woods. To conclude, given other favourable factors, it is the management which decides the fate of an institution.

Benefits to the Rural Poor: We did not conduct a survey to assess the benefits from the selected Dairies to the rural poor. In the following are some of the findings from the present study as also some other studies. (1) Incremental income from Dairy Enterprise benefits the rural poor, because of an assured market round the year, at pre-determined prices provided by the Milk Cooperatives locally. A large number of them have purchased milch animals and taken to dairying during the last decade. Under the IRDP alone, about five million cattle were purchased during a period of five years in India. (Rath 1985: 244). (2) The study of Warna Dairy revealed that among the beneficiaries in the scheme of financing purchases of buffaloes from bank loans, 67 per cent were marginal and small farmers and landless labourers. (Apte 1982: 47). Other studies also indicate that they constituted between 50 to 100 per cent of those who sought such financing. (Apte 1987a). In the study on Dairying with Cross-bred cows, it was found that the landless labourers and small farmers were left with a surplus, even though they had to buy fodder and cattle feed (Apte 1987b: 233). (3) As most of the rural poor are unemployed or under-employed, the opportunity cost of their labour is zero. They are primarily interested in incremental income (Apte 1987a). A Milk Cooperative provides employment to about four persons in milk collection and related work (Apte 1982: 45). The Dairy Cooperatives generate employment to a few hundred workers in their plants, transport of milk and other activities. There are many jobs which do not require special training. As such, the rural poor who have no special qualifications find employment in large numbers in Dairy Cooperatives. (3) Payment for milk is made every 10/15 days. Regular cash flow gives them great

relief. (4) The successful Dairies paid higher price than the Milk Scheme and rebate also, thus benefiting the rural poor. (5) The Dairies give donations to the educational institutions for construction of buildings and other purposes. Chitale Dairy constructed roads in the village. In these and other ways they benefit the society at large. Some Milk Cooperatives construct buildings for their offices and make them available for social functions to the villagers.

Participation of Women: As many of the milk producers take loan for purchase of milch animals against the security of land they own, they are registered as members, though the females do various chores of dairy enterprise. Warna Dairy, which is progressive in its outlook, had only 16.7 per cent female members in its total members in 1987. In the 17 Dairy Cooperatives included under OF, female members formed about six per cent. In the Milk Cooperatives, they are not at all seen unless provided under the constitution, while in Dairy Cooperatives, they are found in small numbers in their office.

Only in Jalgaon Dairy, there is a female Director since its establishment. She is also a Director of the Jalgaon District Central Cooperative Bank. More importantly, she established a Milk Cooperative at Nashirabad in Jalgaon Taluka in 1969. It is working under her Chairmanship successfully. She has inherited the spirit of cooperation from her father who is an old time congressman and cooperator. She disapproved many actions of some Directors of Jalgaon Dairy. When the situation reached a crisis and a large number of Milk Cooperatives submitted a Memorandum to the Government to dissolve the Board and

hold elections, she led a delegation and met the Chief Minister. She was successful in convincing him. Finally, elections to the Board were held in May 1987. She is among the elected persons. Her achievements show that given an opportunity, females can also successfully run the cooperatives.

Summing Up : At present some of the Dairy Cooperatives are working successfully while others perform poorly. It is stipulated under OF assistance that the dairies and chilling plant under the Milk Scheme will be transferred to the Dairy Cooperatives. Hence, the Dairy Cooperatives will have to shoulder greater responsibility. Hence this study to know what leads to success/causes failure. For the present study, success is measured in terms of net profit and reserves created, as also price paid for milk and rebate paid to the milk producers, cash flow in rural areas and benefits to the rural poor.

Adequate procurement of milk is essential to use the pasteurisation capacity fully, cater to the market for fluid milk and also manufacture milk products to get additional revenue. All the Dairies, except Jalgaon, showed an increasing trend in milk procurement. Katraj Dairy collects at present 2.88 lakh lpd., mostly cow milk. In 1985-86, Warna Dairy collected 0.86 lakh lpd., though 61 per cent was from outside its area of operation. About 69 per cent of its procurement was buffalo milk. Yelgud Dairy collects about 6,500 lpd., mostly buffalo milk. Chitale Dairy procured about 90,000 lpd. in February 1988. Its continuously increasing procurement is due to pioneering efforts in raising productivity by popularising cattle feed and its supply at cost, grading

local breed buffaloes with Mehsana buffaloes, free/subsidised veterinary care and supply of Mehsana buffaloes with subsidy and interest free loans. Jalgaon Dairy procured more than two lakh lpd. in January 1985 but its procurement had declined, due to bad management, to about 58,000 lpd. in July 1987, despite its Cattle Development Programme and Cattle Feed Factory.

Annual depreciation and interest on loan for plant and machinery adversely affect earnings. Hence the need to use the plant capacity fully. Yelgud Dairy had no plant but others, except Jalgaon Dairy, used the pasteurisation plant capacity fully. However, powder making plant was underutilised in all cases as the cost of manufacture of milk powder is high and it is difficult to compete with other States in marketing it.

Increase in milk procurement in the flush season and inadequate coordination, coupled with limited capacity for processing, led to the Milk Scheme refusing to accept milk in the flush season. Consequent losses to the milk producers and delay in revising milk prices led to agitation by the milk producers, Milk Cooperatives and Dairy Cooperatives (the payment for procurement, processing and transport of milk paid by the Milk Scheme being inadequate to meet their actual expenditure thereon). Attempts were afoot by a rival group within the Ruling Party to build a 'Milk Lobby' and use the discontent among the milk producers to dislodge the Chief Minister.

The study revealed that, except the Private Sector, where profit maximisation is the main goal and a sense of belonging prevails, there is no particular

advantage in any particular form of cooperative organisation. What is crucial is independence in marketing of milk, which the Mahasangh declines to give to the Dairy Cooperatives. The milk producers and many of the Dairy Cooperatives disapprove of the Minister for Dairy Development as the Chairman and a senior Government Officer as the Managing Director of the Mahasangh. They are also unhappy about the relation with NDDB and IDC. Hence greater need for cooperation and coordination between the Dairy Cooperatives and these agencies.

Further, it is seen that success is not related to marketing of cow milk/buffalo milk per say but on whether milk is marketed by the Dairy Cooperative itself. Marketing locally or at a neighbouring market is certainly advantageous. However, when marketing on its own, Warna Dairy found it worthwhile selling milk even at a market 400 kms away.

It is seen from the success of Yelgud Dairy, that Milk Cooperatives on urban periphery can successfully market milk on their own in the city and benefit the members. Hence the Government should encourage such efforts and, if necessary, amend the present Act to enable them to market milk on their own in a neighbouring urban market.

Further, it is seen from the experience of Warna, Yelgud and Chitale Dairies that the Government's financial assistance is not a pre-requisite for success. In fact, Jalgaon Dairy with OF subsidy and loan on favourable terms as compared to the commercial banks, failed to achieve success and accumulated losses upto Rs. three crores in twelve years of its working.

Management appears to be the most crucial factor in the success. Long association of the founder and his family members and long tenure of the Manager/Managing Director helps in implementing dairy development schemes successfully. Frequent changes in the Chairman and General Manager/Managing Director was one of the main causes of failure of Jalgaon Dairy. The top management must work with devotion, honesty, discipline and show progressive attitude and entrepreneurial ability. Political patronage often pays but the co-operators must keep themselves aloof from politics. Sometimes, as in Jalgaon Dairy, political patronage breeds unhealthy element and causes harm to the cooperative.

It is further seen that the rural poor benefit from incremental income, regular cash flow, subsidy on purchases of milch animals, loans at concessional rates and higher price for milk compared to the Milk Scheme provided of course, the Dairies are managed successfully. Participation of women is restricted though they participate in various chores of dairying. There are rare instances of their active and successful participation.

In concluding, it may be observed that independence in marketing of milk, dedicated and efficient management and honest and dynamic leadership devoted exclusively to cooperatives help achieve success. Given these, it is possible to get over the difficulties in procurement of milk, finance, distance from the market and such other factors. It should also be mentioned that Chitale Dairy rendered services an ideal cooperative is expected to give, and hence the private dairies should not be rejected per se.

CITED REFERENCES

Apte D.P.

- 1982 Evaluation of an Integrated Dairy Development Scheme (Warnanagar). Pune: Gokhale Institute of Politics and Economics.
- 1986 "Warna Dairy Creates Its Own Image: A Review of Shri Warna Dudd Utpadak Prakriya Sangh, Limited". Rajhans - Special Issue on Mr. V.A. Kore. (pp.97-102).
- 1987a "Employment and Income Due to Dairying With One or Two Milch Animals" (To be published in the Seminar Volume on "Livestock Economy of India" by the Indian Society of Agricultural Economics, Bombay).
- 1987b Economics of Dairying with Crossbred Cows in Western Maharashtra, Pune: Gokhale Institute of Politics and Economics.

Basak, Asoke.

- 1986 Report of the Expert Committee to Evaluate the Operation Flood Programme in Maharashtra. Bombay: Government of Maharashtra.

Dravid, V.R.

- 1987 Report of the Committee for Revision of Sale Price of Milk of Government Dairies in Maharashtra. Bombay: Government of Maharashtra.

George, Shanti,

- 1988 Beyond Anand: An Introductory Overview of the Cheryasi Taluka Milk Sale Cooperative Society Ltd. Interim Workshop on Cooperative Enterprises & Rural Development in India, Delhi: Delhi University.

Kothari, Shantilal.

1986 "Sarakari Dudh Yojanecha Nagpurat Lilaw" (Marathi),
Bombay. Maharashtra Times, Dated June 22, 1986.

Reserve Bank of India

1986 Statistical Statements Relating to Cooperative
Movement in India, 1980-81, Part II. Bombay :
Reserve Bank of India.

Rath, Nilakantha

1985 "Garibi Hatao: Can IRDP Do It?", Economic and
Political Weekly, Vol. XX, No. 6, February 9,
1985.

Sakal

1984 News Items dated January 24, 1984, Pune: Sakal
Newspaper.

1985 News Item dated Nashik, May 7, 1985. Pune: Sakal :
Newspaper.

News Item dated Karhad, November 1, 1985. Pune:
Sakal Newspaper.

1986 News Item dated Karhad, October 23, 1986. Pune:
Sakal Newspaper.

Table 1 : Some Data regarding Selected Dairies

Dairy District	<u>Jalgaon</u>	<u>Katraj</u>	<u>Warna</u>	<u>Yelgud</u>	<u>Chitale</u>
	Jalgaon	Pune	Kolhapur	Kolhapur	Sangli
Year of Establishment	1971-72	1959-60	1968-69	1967-68	1945-46
<u>Position as on 30-6-1986</u>					
1) No. of Milk Producer Members	N.A.	N.A.	5817	1500	6315 (including Agents)
2) No. of Milk Cooperative Members	767	788	N.A.	N.A.	N.A.
-----Rs. in lakhs -----					
3) Paid-up Capital (including State Government's)	113.14	36.97	39.78	0.72	96.91
4) State Govt's contribution to Share Capital	N.A.	14.04	2.25	2.70	-
5) Reserves Created	339.68@	75.47	242.21	22.22	18.28
6) Loans Outstanding	255.97	248.27	76.66	4.89	24.63
7) Deposits	156.46	14.93	108.14	4.36	-
8) Fixed Assets	342.04	367.36	368.96	23.89	65.55
9) Investments	3.97	83.07	5.79	1.32	0.05
10) Dues Receivable from Milk Scheme	116.71*	101.13	72.52	-	23.04
11) Dues Payable for Milk Purchased	361.48*	106.80	79.06	-	16.80
12) Accumulated Profit/Loss (-)	(-)305.67	1.25	0.36	0.30	202.36

Dairy	<u>Jalgaon</u>	<u>Katraj</u>	<u>Warna</u>	<u>Yelgud</u>	<u>Chitale</u>
<u>For 1985-86</u>					
1) Milk Collection (lpd)	148,768	246,364	85,750	6,375	53,380
-----Rs. in lakhs-----					
2) Purchase of Milk	1919.77	2884.36	1219.11	88.11	827.12
3) Sale of Milk (Milk & Milk Prod.)	1892.79	3219.20	1212.23	130.13	744.33
4) Sale of Milk Products		6.89	457.70	28.38	297.66
5) Other Sales	135.44	70.81	129.85	182.19	-
6) Interest on Loan	25.74	10.65	24.24	0.62	3.75
7) Depreciation	39.74	20.66	23.85	2.45	13.84
8) Net Profit/ Loss (-)	(-) 73.55	0.27	0.30	0.30	106.21

* Due represent total dues and not specifically from the Milk Scheme or payable for milk purchased.

@ Including the grant/subsidy from OF for capital expenditure shown as Reserve.

N.A. = Not applicable

lpd = Litres per day

Table 2 : Average Milk Procurement per day

Year	Jalgaon Dairy	Katraj Dairy	Warna Dairy	Yelgud Dairy	Chitale Dairy
	(Average Milk Collected per day in Lakh Litres)				
1981-82	1.03	0.53	0.51	0.01	0.33
1982-83	1.18	0.77	0.58	0.02	0.36
1983-84	1.42	1.27	0.56	0.04	0.40
1984-85	1.42	1.71	0.73	0.05	0.46
1985-86	1.64	2.46	0.85	0.06	0.50
1986-87*	1.14	2.70	1.14	0.06	0.53
*Per cent of buffalo milk	(57.8)	(10.0)	(69.0)	(90.0)	(90.0)