

REPORT
ON
THE STUDY OF KATRAJ DAIRY PROJECT
(Poona District Milk Producers' Cooperative Federation Limited)
Pune, India

BY

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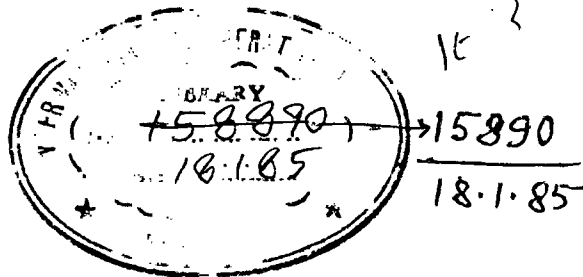
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A
STUDY OF
KATRAJ DAIRY PROJECT

(POONA DISTRICT MILK PRODUCERS' COOPERATIVE SOCIETY LTD.)



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FOREWORD

A study of the Katraj Dairy Project of the Poona District Milk Producers' Cooperative Federation Limited, Pune (India) was carried out by a group of Research Fellows in 1980. The group consisting of the following members were selected under the ICA Fellowship Programme for Cooperative Teachers.

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The focus of the study was on critical review of the performance of the Katraj Dairy Project with special reference to its impact on the weaker sections. All the basic material was collected by the group members from the Poona District Milk Producers' Cooperative Federation Limited and a sample of five primary dairy cooperatives selected for the study. The collection of data as well as preparation of the Report was completed during the short period of one month of the Fellowship Programme.

We are grateful to Professor D. Tha, Director, and Dr. G.S. Kamat, Professor, Vaikunth Mehta National Institute of Cooperative Management (VMNICM), Pune, for guiding the ICA fellows in their research project. Thanks are also due to Dr. D. Vir, Joint Director in our office for reading through the Report carefully and offering valuable comments.

It is hoped that this Report will be found informative and useful by cooperators interested in the promotion and development of dairy cooperatives in South-East Asia.

New Delhi
24.8.1982


J.M. Rana
Director (Education)

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Chapter - I

THE KATRAJ DAIRY PROJECT - THE BACKGROUND

Dairying in rural India has always been linked to agriculture. Land and animals have gone together. Therefore, as a State policy dairy activity was logically conceived in the cooperative sector for purposes of its organisation, management and development. The cooperative dairying has been tried in number of ways such as, for example, for advances to the milk producers for the purchase of cattle or for collection, processing, and distribution of milk through the dairy cooperative societies. Particularly, efforts have been directed towards providing an organisational set up that would safeguard the interests of the small farmers adopting dairying as a subsidiary occupation, by providing a remunerative market for the milk produced throughout the year and a package of inputs to safeguard the health of their animals against hazards, by adopting better animal husbandry practices. Dairying has great potential for raising income of small farmers, marginal farmers and landless labourers through establishment of dairy cooperatives that are owned, managed and controlled by milk producers themselves.

At the grass root level, there are primary dairy cooperatives admitting individual milk producers as members. The primaries are federated into a cooperative union that is usually organised for the district as a whole. At the State level, the district unions are federated into the apex dairy cooperatives federation. In totality, this cooperative structure is intended to build up an integrated system, facilitating collaborative efforts in procurement, handling, processing and distribution of milk, as also development of various supplementary services for the benefit of its

constituents working at different levels. The whole system generates directly opportunities for gainful employment thus, improving income of the weak milk-producers, who are collectively the basic owners of the entire system, as also indirectly of those employed to run it.

In 1961, the West German Cooperative Consumers Congress offered to finance a rural project in the field of cooperative dairying in India under their Aid India Programme. The International Cooperative Alliance, through its Regional Office for South East Asia at New Delhi, received this offer from the above organisation. It consulted the Government of India and selected two projects, one of which was aimed at establishing a milk pasteurisation plant at Bhor. This area was specially selected in view of the concentration of milk producers there, who were experiencing number of difficulties in selling their milk to the consumers either directly or through the Government dairy, as they were mostly residing in mountainous region. Due to lack of transport facilities, quite often their milk got spoilt in transit. It was thought that location of the plant at Bhor or near about, would help the milk producers from the hilly areas to collect milk and pasteurise it before sending it to the Government dairy for distribution to the consumers in the city of Poona.

Dr. Godberson, the expert representing the West German Cooperative Congress, approved and selected the site in 1965 and it was decided to implement the Project through the Poona District Milk Producers Cooperative Union Ltd. which was registered in 1960 as the federation of primary dairy cooperatives working in the Poona district. The Milk Union was accordingly asked to raise the required share capital for the purpose (25 p.c. of the Project cost). The West German Cooperative Consumers Congress had initially agreed to give assistance of the order of Rs.265,000. The District Cooperative Union was found unable to collect its part by way of share capital and the project was, therefore, handed over to the Maharashtra State Cooperative Milk Federation (State

apex organisation) in December 1967. The West German Cooperative Congress approved the change in the implementing agency. In 1967, it was decided to change the location of the plant from Bhor to Katraj to bring it nearer to the city of Poona, the main consuming centre. The State federation secured the plot from the Government on which the present plant is located. The Government granted this area on lease in 1969 which admeasures twenty acres. The Maharashtra State Dairy Cooperative Federation also received Rs.5,00,000 as Government contribution to its share capital for the project.

Due to loss of time, in the process, the cost of project had gone up and the original estimates had to be revised. Finally, the capital outlay was raised to Rs.42,50,000. The West German Cooperative Congress agreed to gift machinery valued at Rs.12,59,000. The balance of about Rs.30,00,000 was raised by way of share capital and external loan. The Federation collected Rs.50,000 by way of share capital from the milk producers. The State Government as stated above contributed Rs.5,00,000 towards its share capital (as a special category member) and a loan of Rs.24,00,000 was raised from the Bank of Maharashtra, Poona. Later, another loan of Rs.10,00,000 was raised from the Bank of Maharashtra for purchase of cans, crates, bottles etc. against Government guarantee. Thus, the project was completed in December, 1971 at a total capital cost of Rs.64,86,000.

Table: Break-up of Project Capital Cost

	<u>Rs.</u>
1. Gift-machinery from the West German Consumers' Coop. Congress, Hamburg (W. Germany)	12,59,000
2. Indigenous machinery ..	39,14,000
3. Buildings and roads ..	7,23,000
4. Motor vehicles ..	1,50,000
5. Cans, crates and bottles ..	4,30,000
6. Milk booths ..	10,000
	<u>64,86,000</u>

N.B.: The West German Consumer Coop. Congress also supplied at their cost the services of a dairy technician trained in W. Germany for a period of three years from January, 1970.

The objective of the Katraj Dairy Project is to collect, pasteurise and bottle milk for distribution to consumers in Poona. The milk is primarily collected from the relatively underdeveloped regions of Poona district. The installed capacity of the dairy plant is 50,000 litres of milk per day of which half of the supply is adjusted to pasteurise bottled milk (containing 6 p.c. milk fat) for distribution in Poona city. The other half of the capacity is intended to be used for processing of surplus milk procured in the flush season into skimmed milk powder (about two tonnes) and butter (about 1.8 tonnes) per day. A part of the collection is delivered to the local Government dairy as per agreement entered with the cooperative dairy from time to time.

By the time the Project was almost completed, the management of the Poona District Cooperative Milk Federation had recorded marked improvement. Its collection of milk had gone up from 1,400,000 litres (1960-61) to 9,378,900 litres. Therefore, it was returned to the District Federation as originally envisaged, in June 1972. The dairy plant was formally inaugurated by the Minister of Finance, Government of India in March, 1973. The representatives of the West German Cooperative Congress were present at the inaugural function. The representatives of the I.C.A. Regional Office, New Delhi also participated in the function. It needs to be mentioned that the I.C.A. Regional Office had played a very commendable role of a catalyst. It helped to secure the gift of the plant from the German Cooperative Movement and later to get things moving up to the stage of final completion of the Project.

As could be seen from the foregoing account there was inordinate delay in the setting up of the pasteurisation plant. Consequently Project cost also went up. This was mainly due to following reasons:

- (a) The Poona District Cooperative Milk Producers' Federation was organisationally and financially a very weak organisation at the time when the

Project was decided to be entrusted to it. Later, therefore, the Project was passed on to the State Federation for implementation.

- (b) Because of the indecision in selecting the project site, a feasibility study could not be prepared for some years.
- (c) The Dairy Development Department continuously resisted the efforts to establish a cooperatively owned pasteurisation plant and instead insisted that the external assistance should be in the form of insulated road tankers for carrying milk from the rural areas to the Government dairy at Poona.

All the same, the Katraj Cooperative Dairy was set up and will always remind the cooperatives in India as a Project signifying and achieving international cooperation. The exemplary initiative shown by the German Consumers Cooperatives, their members and employees is commendable. The assistance given by the ICA in this project was an effort in the direction of removal of barriers between the people of the world, through the development of cooperative form of production and consumption "While selecting the dairy project for technical assistance, the ICA and the West German Cooperative Consumers Congress had in mind the improvement of food situation for the Indian people, improvement of dairy production and the betterment of consumer services in milk supply", said Dr. Schumakar on the occasion of the inauguration of the Katraj Dairy Plant. (Dr. Schumakar was Former President of the West German Cooperative Consumer Congress and a Former member of the ICA Executive Committee).

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Chapter - IIORGANISATION AND MANAGEMENT

The Poona District Cooperative Milk Producers Federation was registered in 1960, under the Maharashtra Cooperative Society's Act, with eleven primary dairy cooperatives as its members. Its area of operation is entire district of Poona and the primary dairy cooperatives registered in the district are affiliated to it as members.

The main objectives of the Federation as provided in its byelaws are as follows:

- (i) To collect milk from affiliated cooperative dairy societies and arrange for its sale.
- (ii) To undertake all kinds of processing of milk and to arrange for the sale of milk products.
- (iii) To set up and manage machinery for chilling and pasteurisation of milk.
- (iv) To arrange for transport of milk.
- (v) To procure, produce and supply cattle feed.
- (vi) To provide veterinary services.
- (vii) To promote new primary dairy cooperatives in the area of operation.
- (viii) To provide finance for purchase of milch cattle.

Objectives fifth and sixth have not so far been covered while in relation to objective eight, there has been a change in policy and procedure regarding provision of finance by the dairy coop by way of loan to members of the primary dairy cooperatives to buy milch cattle. At present loans are advanced by banks to milk producers on the guarantee of member primary cooperatives.

As stated earlier, the Katraj Dairy Project was originally entrusted to the Poona District Cooperative Milk Producers Federation. However, it was then weak, both organisationally and financially. Because of small membership it was not able to raise 25 p.c. of the project cost. Hence, it was transferred to State Cooperative Milk Federation. After the completion of the project and its management by the State Federation for about one more year (till June 1972) since it was finding difficult to manage the unit for a limited area of district, (as it was expected to meet the needs and demands of dairy development of the entire state) and since by this time, the Poona District Cooperative Milk Federation had also recorded improvement in its strength and had expressed desire to take back the project for management, it was returned to the PDCMPF along with all the liabilities. These consisted of bank loans and interest charges payable as also the accumulated losses as shown below -

- (a) bank loans Rs. 34 lakhs
- (b) bank interest Rs. 8.94 lakhs
- (c) accumulated losses Rs. 17 lakhs

The membership of the PDCMPF Federation consists of primary dairy cooperatives, including service cooperatives, sympathiser members and the state government, contributing to its share capital. Growth in membership over the years 1972-73 to 1978-79 can be seen from the following figures.

Growth on Membership

Year	Membership (societies)
1972-73	120
1973-74	129
1974-75	132
1975-76	139
1976-77	145
1977-78	158
1978-79	166

Between 1974 to 1978 the number of dairy cooperatives in Pune district had gone up from 184 to 295. Obviously, the coverage of the district cooperative dairy federation was more than 60 p.c. However, the primary cooperatives delivering milk to this Federation were showing a slow increase over the years. Their number during the past five years (1974-'79) increased from 67 to 127. Of course, it is true that the number of ultimate beneficiaries who are the individual milk producers at the village level was about 11,500 in 1979. Another reason for relatively lower coverage has been historical in nature. Out of 13 talukas (blocks) in the district 4 talukas have been retained by the Government Dairy Department for collecting milk for feeding their own milk scheme. These blocks are also comparatively more developed and better connected. The Federation covered 9 talukas in which the activities of the primary societies conducting dairy business were relatively underdeveloped. The Federation has been trying to initiate dairy activity in the already existing primary societies. However, the infrastructure facilities are yet not adequately developed. Therefore, the collection work by the Federation is fraught with many difficulties as to collection processing and transportation of milk in good condition, economically and efficiently to the Katraj Dairy Plant located at Pune. Out of 160 institutional membership, 33 institutions were also defunct in 1979.

The management of the Federation vests in the board of 18 directors, consisting of 14 representatives elected by the affiliated primary dairy cooperatives and other nominees. The board holds office for a period of three years. For this purpose, the member societies have been grouped into three categories on the basis of milk supplied by them annually to the Federation. Those primary societies which supply more milk to the Federation get proportionately larger representation on the board of management (By law No.16(1) ii). The

following table will give an idea about the basis of representation as is linked to average supply of milk on a day in relation to total milk supply days in the specific cooperative year.

Table : Linkage of Representation on the Board to Milk supply by coops.

No. of Dairy Coops in a taluka	Milk supply average on a day	Total milk supply days in a coop, year	No. of seats
1 to 5	101 to 2000	305	1
6 to 9	2001 to 5000	305	2
above	5001 above	305	3

This has resulted in providing incentive to the member societies to increase their supply of milk to the Federation. Further, it is in tune with the cooperative ideology which requires that the members extending larger business support should have more voice in the management of their cooperative organisation.

In addition, nominees of the district local authority (Zilla-Parishad), the cooperative department and the financing bank (the Bank of Maharashtra) also find a place on the board. The manager is the Secretary of the board (in recent years he has been the Assistant Registrar of Cooperative Societies sent on deputation by the Government of Maharashtra).

The board meetings have been held regularly as per the requirements of the by-laws, as also the annual general meetings of the general body of members. So far there has been no occasion to adjourn the meetings on any account. There is a provision for constitution of sub-committees of the board. However, so far no sub-committee appears to have been constituted for any specific subject such as finance, establishment, estate and properties etc. Occasionally, a transport sub-committee was seen appointed to meet specific needs.

The processing plant (the Katraj dairy plant) is under the direct supervision of the Dairy Manager who has been with the project from the stage of its implementation. He had experience of working in a large dairy in West Germany and this experience has been of considerable assistance to the Federation in managing its plant. The Federation under the advice of the ICA Regional Office has provided for a clear cut division of responsibilities in the administrative management of the Federation and the dairy plant management. The Dairy Manager is fully responsible for all the technical operations connected with collection, pasteurization and distribution of milk. The plant is having the minimum staff required for processing and for maintaining strict hygienic conditions at the plant level. It had 168 employees in the administrative section and 136 at the dairy plant. The wage bills amounted Rs. 3.30 lakhs and Rs.4.61 lakhs respectively in 1979. The departmentation at the head office level and at the Katraj Dairy Plant is shown in the appended chart - (page 11 - 12).

Funds :

Financial position of the Federation is given in annexures on pages 18, 19 & 20 for the years 1974 to 1979.

The authorised share capital of the Federation, was Rs.10 lakhs in 1979. However, actually the share capital had crossed this limit and had gone up to Rs.11.67 lakhs. The Federation has proposed to raise the limit of the Authorised share capital to Rs.25 lakhs by amending its by-laws. Out of the share capital amount, the contribution of the state government was Rs.5 lakhs, leaving the balance of Rs.6.67 lakhs, being the contribution of member cooperative societies to the share capital of the Federation. The face value of the member societies three paise per litre of milk supplied to the Federation by way of share deposit money to be converted into share contribution in the name of the concerned primary member society. Since 1978 deductions from the price payable to member societies on this account has been reduced to one

Chart - I

POONA DISTRICT COOPERATIVE MILK FEDERATION LTD.
1885 SADASHIV PETH, POONA

Statement showing staff at the head office

MANAGER

Katra Dairy (see page 12)	Administrative section	Accounts Section	Milk Accounts Section	Store Section	Recovery & Inspection Section	Liquidation section	Legal section	Milk Procurement Section
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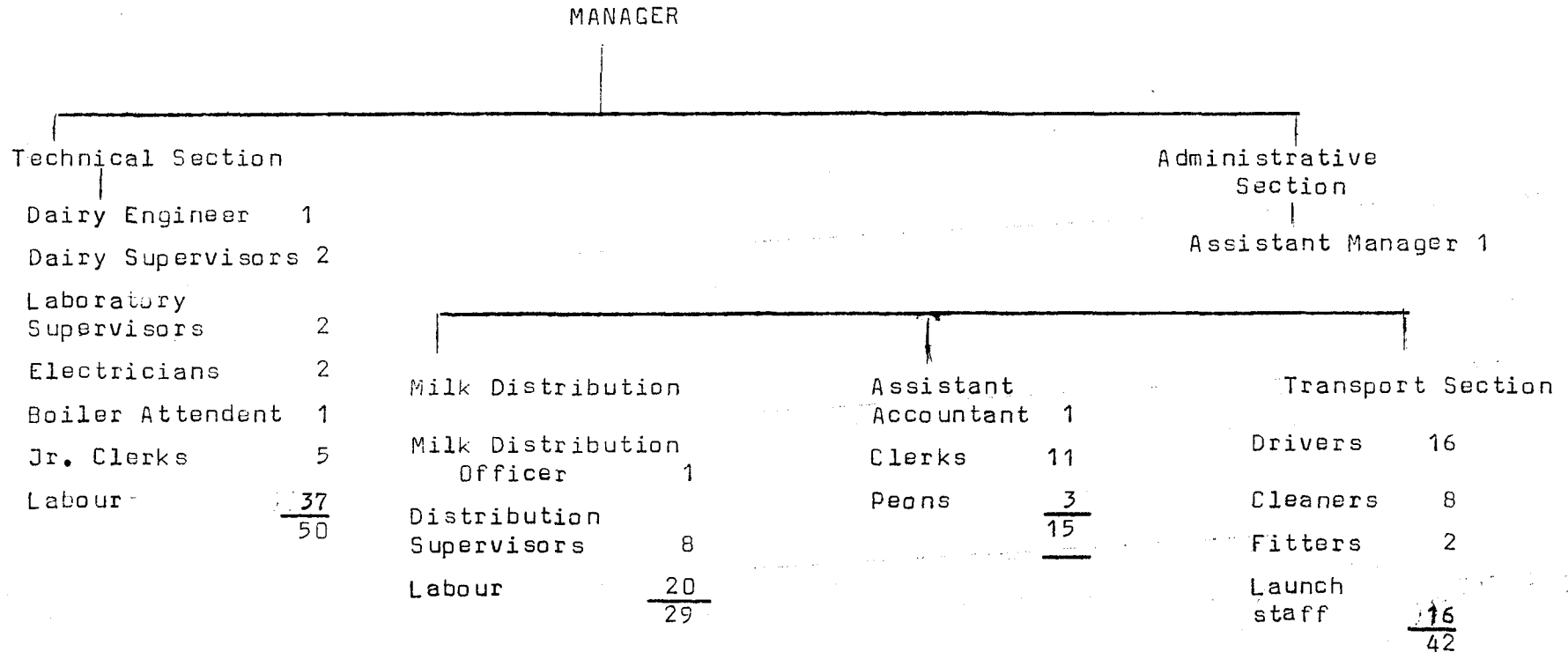
Plant Manager	Office Supdt.	Accounts Officer	Milk Accounts Officer	Stores Officer	Recovery Officer	Liquidation Officer	Legal Officer	Milk Procurement Officer
	1	1	1	1	1	1	1	1
	Clerks 5	Assis- tant 1	Clerks 2	Clerks 2	Clerks 2			
	Peons 5	Accoun- tant 1						Milk Officer 1
		Cashier 1						Dairy Officers 2
		Clerks 2						Super- visors 40
								Testers 24
								Labour 72

Total - 168

Chart - II

POONA DISTRICT COOPERATIVE MILK PRODUCERS' FEDERATION LTD.
 KATRAJ DAIRY, POONA -411 009

Staff at the Plant



Total staff - 136

paise per litre. The Federation had been thus able to collect Rs.5.92 lakhs by 1979. Essentially, the strong good working primary cooperatives have been continuously contributing to their individual share deposit account in a progressively increasing proportion every year. Their number is however small. In recent years the grievance of such societies has been that in return they have not been receiving anything tangible. These deposits are also without interest and the Federation has also not paid any dividend on the existing share holdings of such societies. Therefore, these societies have expressed a desire that the continuously and consistently growing strong primary member societies should not be taxed in this manner hereafter as they felt that their contribution had reached a reasonable limit. They would rather prefer to receive their dues in their entirety which would be more profitably and directly used for the promotion of interest of their own local members. More diversified services and amenities can be provided by them to their own needy members which would ensure larger coverage and better servicing and loyalty of members.

Other funds and reserves have been recording continuous increase over the years and amounted to Rs.30.66 lakhs by June, 1979. Among these mention may be made of the dairy development fund (1.37 lakhs), the depreciation fund (Rs.23.12 lakhs), and the investment fund (Rs.3.03 lakhs) loans raised from the Bank of Maharashtra for the setting up of the dairy plant was of the order of Rs. 24 lakhs in 1970. It stood completely redeemed in 1979. The total borrowings on other accounts were Rs.18.90 lakhs.

The Federation was channelising medium-term funds of the State government in favour of primary member societies for being ultimately advanced to their milk producer members for purchase of milch cattle. All along the Federation has been repaying the dues from time to time arising on this account on behalf of the member societies. Thus, there were no dues payable on the part of district federation to the State

government so far as money advanced for purchase of cattle was concerned. However, the member societies have continued to remain indebted and over due to the Federation, under cattle finance. In the mean-time some of the primary member societies have also gone into liquidation. Thus, by June, 1979, 33 member societies had been liquidated and they were owing Rs.161,000 to the Federation on the above account.

As for the other dues, such as price of milk supplied to the Government and to be received by the Federation are concerned, although the amounts outstanding at the end of almost every year during the last five years had ranged between Rs.11 lakhs to Rs. 21 lakhs, it was reported that these were finally recovered by the Federation from the State Government. The figures, however, continued to appear on the balance sheet as dues receivable at a point of time. (end of the year).

On the liability side a substantial amount of Rs.17.98 lakhs appears under the head "donation". This is the amount which has shown a slight increase in the year 1978-79. In the preceeding five years it has practically remained stable. This amount indicated assistance made available by the German cooperatives to the Federation through the good offices of the ICA Regional Office, New Delhi. In addition, the ICA and the West German Cooperative Consumer's Congress had offered to provide certain quantities of skim milk powder to enable the Federation to convert it into liquid milk during the lean season, for being sold to the Poona consumers, the proceeds being used to repay the old debts by the Federation. Thus, in December 1975 the ICA Regional Office and the Poona District Cooperative Milk Producers Federation entered into an agreement under which the ICA supplied skim milk powder worth approximately Rs. 5 lakhs, as a part of ICA's total assistance to the project. The powder was to be supplied over a period of three years, following 1975. The Federation created a special Dairy Development Fund and withdrawals from the Fund

were made by the Federation in consultation with the ICA Regional Office. The amount to the credit of this fund by June, 1979 was Rs.1.37 lakhs. The Federation also has been receiving from time to time a dairy development grant from the state government which is linked to specific performance of the Federation. However, this has not been available on a regular basis and fluctuated from year to year. Thus, in 1976 the Federation had received Rs.28,000 under this head while it was increased to Rs.1.58 lakhs in 1977. Again by end of June, 1979 this grant had shot up to Rs.4.92 lakhs.

Quite sizeable amounts also appear to be outstanding especially on account of milk price payable to member societies. They have also varied from Rs.19.52 lakhs to Rs.22.60 lakhs over the period of five years under study. The explanation was that these outstandings appeared at a point of time and were adjusted in due course.

The rise in the total turnover of the Federation over the years would appear to be encouraging as can be seen from the facts that it was Rs.12 lakhs in 1961-62, Rs.123 lakhs in 1971-72 and had gone upto Rs.265 lakhs by end of 1979. The total assets by end of 1979 also were to the tune of Rs.68 lakhs.

All said and done, one would still notice a lack of proper system in the maintenance of accounts. A clear example of this is reflected in regard to figures showing profit-loss position of the Federation over the years 1974-75 and 1978-79. Figures on these accounts appearing in the balance sheets do not indicate a consistent link. Perhaps, to suit the convenience of the Federation profits in certain years seem to have been adjusted towards accumulated losses of the previous years. Thus, for example, in the year 1976-77 the accumulated loss of Rs.21.77 lakhs in the previous years was adjusted to the profits of Rs.14.16 lakhs (1975-76) and Rs.7.63 lakhs (for June 1977) leaving a surplus of Rs.1800.

This is perhaps the only year which showed a small surplus during the period of five years under study. However, the auditors did not seem to have appreciated such adjustments especially prior to the auditing of accounts by them. Consequently, the original position was restated in the subsequent balance sheets of 1978-79. At any rate, it is extremely desirable that real net position in regard to overall profitability of the Federation is indicated in the balance sheets.

Another aspect of the profit-loss position of the Federation concerns analysis of the operational performance of the Federation at the head office level as well as at the plant level, separately. Thus, the statement appended at the end (annexure page 19) would give an idea about the performance and profits or losses separately for the head office and the dairy plant. On further enquiry, it was revealed that the profits shown at the head office level were essentially due to the amounts deducted by the Federation from the price payable to the member societies for the quality of milk supplied by them. There used to be drastic cuts imposed by the Federation as per schedule prescribed by the State Government in respect of milk of lower quality supplied by the primary societies, to the Federation, while the payment received under the Government Milk scheme used to be sizeably higher for the pooled milk than the amounts paid by the Federation. This practice was considered unfair by the societies and from 1977-78 onwards the percentage of quality cuts was reduced substantially which apparently affected the profit position of the Federation appearing in balance sheet. Thus, this year onwards the head office has been showing losses of the order of Rs. 3 lakhs and more, while the Katraj Dairy Plant has been showing profits. The position inter se in the preceeding three years was just reverse. Briefly stated, the dairy plant was being managed at a profit and offered considerable support to the Federation. In a way, it also

suggests indirectly that there is need for rationalisation at the head office level, requiring particular attention to the important cost centres and appropriate cost control measures. As it is the dairy plant promises increasing profitability in years to come especially if it is allowed to diversify further, as proposed by the P.D.C.M.P.F. More about this is discussed in the following chapters.

Poona District Cooperative Milk Producers' Federation Ltd.

Selected Financial Data

(Rs. in lakhs)

Serial Item	LIABILITIES					ASSETS					
	1974-75	1975-76	1976-77	1977-78	1978-79	'74-'75	75-76	'76-'77	'77-'78	'78-'79	
Paid up share capital	8.39	8.39	8.40	11.66	11.67	Cash in hand and at bank	1.54	3.03	1.42	1.94	3.15
Govt. Coops.	5.00	5.00	5.00	5.00	5.00	Investments	2.77	1.79	5.12	3.51	4.29
Share capital (advance)	3.39	3.39	3.40	6.65	6.67	Loans advanced	5.77	3.67	3.66	3.69	6.09
Funds & Reserves	0.76	2.35	3.78	3.48	5.92	Other advances	8.95	5.93	2.11	5.63	4.18
Loans	13.73	17.35	22.00	25.00	30.65	Properties	66.23	69.02	65.73	67.05	68.28
Dairy Development Grant (Govt.)	46.00	47.79	31.95	19.20	18.90	<u>Milk sales</u>					
Donation	1.13	0.28	1.58	1.58	4.92	Price repayable	11.62	12.31	16.58	21.84	19.53
Amounts payable & provisions	12.59	14.14	14.14	14.14	17.98	Other dues	6.85	6.85	9.58	11.39	10.48
Profits	-	-	0.2	-	-	Losses	5.92	2.22	-	3.32	0.14
						Accumulated losses written off Rs.21.77					

AnnexurePROFIT/LOSS POSITION OF P.D.MILK PRODUCERS COOPERATIVE
SOCIETY AND THE KATRAJ DAIRY PLANT

(Rs. in lakhs)

Year	P.D.M.P.Cooperative Society	Katraj	Total
1974-75	+ 8.85	- 14.77	- 5.92
1975-76*	+ 14.96	- 1.37	- 2.21
1976-77*	+ 7.63	- 21.77	+ 0.2
1977-78	- 3.05	+ 2.65	- 0.40
1978-79	- 3.59	+ 3.73	+ 0.14

* Accumulated losses till 1977 of Katraj Dairy were written off against accumulated profits for that year for the Federation.

AnnexureStatement showing the growth of paid up share capital, owned funds and other funds

	1974-75	1975-76	1976-77	1977-78	1978-79
<u>A. Share Capital</u>					
i) Society Members	3,39,500	3,39,500	3,40,100	6,65,860	6,66,600
ii) Individuals	400	400	400	400	400
iii) Government	5,00,000	5,00,000	5,00,000	5,00,000	5,00,000
	8,39,900	8,39,900	8,40,500	11,66,200	11,67,000
<u>B. Share Capital subscription</u>	76,400	2,35,600	3,77,900	3,48,500	5,92,400
<u>C. Reserve Fund</u>	56,300	56,900	57,000	86,200	88,400
<u>D. Building Fund</u>	100	46,100	46,100	46,200	46,200
Total of B & C and D.	1,32,800	3,38,600	4,81,000	4,80,900	5,27,000
<u>Owned funds</u>					
Total of A, B, C, D.	9,72,700	11,78,500	13,21,500	16,47,100	17,94,000
Index of growth	100	121.1	135.8	169.4	184.3
<u>E. Other funds</u>					
i) Dairy Development fund	3,78,000	2,76,000	2,76,000	2,76,000	1,36,800
ii) Depreciation fund	8,92,100	13,01,500	17,35,800	20,09,400	23,12,000
iii) Liquidation fund	46,100	-	-	-	-
iv) Share Capital recreation fund	-	35,000	70,000	70,000	70,000
v) Gratuity fund	-	20,000	9,900	9,900	-
vi) Investment fund	-	-	-	-	3,03,700
Total of i to vi	13,16,200	16,32,500	20,91,700	23,65,300	26,22,500
Grand total	22,88,900	28,11,000	34,12,200	40,12,400	46,16,500
Index of growth	100	122.8	149	175.2	201.7

Chapter - IIIBUSINESS OPERATIONS

The main business activity of the Federation is to collect milk through the member cooperative societies, brought to them by their local members, pasteurise it and sell to the consumers in the city of Poona. The surplus milk is further processed into butter and sold by the dairy. It started handling milk since 1972 with 2000 litres per day. The following figures will show the milk collected by the Federation over the years 1974-75 to 1978-79.

Years	Litres of milk
1974-75	109,29,661
1975-76	100,42,204
1976-77	105,15,937
1977-78	104,68,745
1978-79	105,22,219

The position of primary cooperatives conducting dairy activity is indicated in the table appended at the end of the chapter on page numbers 30 & 31. Of these societies, those delivering milk to the Federation are also shown in Table on page No. 31. Their number has grown from 55 in 1974-75 to 105 in 1978-79. There is Government Milk Scheme operating in the Poona District, collecting milk from cooperatives and distributing it to the consumers in the Poona city through Government's own milk booths. This activity, they have been conducting since 1962. Initially, the pasteurising capacity of the Government dairy plant at Poona was 60,000 litres of milk per day. In 1972, it was further expanded to 1.20 lakhs litres. It distributed litres of fluid milk in Poona by June, 1979 and the balance of milk was supplied to Bombay city after pasteurisation. Cooperative milk societies

were committed to supply their milk to the Government dairy. Some of them have been thus delivering their milk to the Government dairy for past many years, even before the setting up of the Katraj dairy plant.

The Poona Cooperative Federation collected milk from cooperative societies on 18 routes in nine talukas out of the total of thirteen in Poona district. The government dairy collected milk from the remaining talukas. The collecting centres of the Cooperative Federation (No. 18) are located at distant mountainous places while the Government dairy collected milk from nearby villages. The Federation has to collect milk through water launches at certain places. This has been adding to the cost of collection. The Katraj dairy received milk once in a day and not before 11 A.M. This also explains the reasons for high percentage of losses (2%) in milk due to curdling. There were only four chilling centres in the area from which the Poona Milk Federation collected its milk. Of these, two chilling plants have been sold to relatively better managed strong primary member societies (the Wada society and the Pimpalgao society). As stated earlier, for collecting milk from member societies, existing across the rivers in its area of operation, it had bought six launches almost all of which have been operating in losses (loss of Rs.27000 in 1977-78). The talukawise milk collection for the year 1979-80 along with the average supply for the year is shown in the table on next page.

The percentage of shortages in milk collection was 0.3 and of curdling 2.4 in 1979. This year the average cost of purchase per litre of milk was Rs.2.01 (which includes spilt or curdled milk also). As stated earlier, the average cost of collection of milk for the government dairy was Rs.0.12 per litre because of the favourable and compact distance factor.

Taluka	Total Milk (in litres)	Average supply per (in day for the year (litres)
1. Haveli	978135	2679
2. Velhe	230050	630
3. Mulashi	1659345	4546
4. Khed	2729840	7479
5. Ambegaon	3520455	9667
6. Mawal	271855	744
7. Purandar	858564	2352
8. Daund	365852	1002
9. Shirur	802857	2199

Thus, the three cooperative dairy unions working at taluka level at Bhore, Velhe and Baramati were collecting milk from their affiliated primary cooperatives and supplying it to the Government dairy at Poona under their own arrangements.

Further, these costs have been different for different seasons such as flush season, transitory season, and the lean season.[§] The Federation collected about 45,000 litres of milk per day in flush season (October-January). Out of this about 2000 litres were pasteurised and sold to consumers in the Poona city through the Federations own 144 selling booths. Remaining 25000 litres is sold to the Government dairy at Poona. In lean season (April-July) the Federation collected about 18000 litres per day. Out of which 17000 litres were pastuerised and sold to the consumers in the Poona city. The remaining 1000 litres were sold to the Government dairy at Poona to fulfil Federation's commitment - though partly. To meet the shortage during the lean season of milk the Federation reconstitutes skim milk powder supplied to it by the ICA/German Cooperative Movement as donation, to fill in the gap upto 1000 litres. (Table on page 33 for comparative costs of collection).

[§] please see page 26.

Cost of Collection 1980

	(in Rs.)	
	Federation	Govt. Dairy
1. Maximum distance	120 km	80 km.
2. Cost of collection per litre	19	12
3. Govt. rate of assistance transport	12	12
4. Govt. rate of assistance management	2	2

Rs. 6 to 7 lakhs extra cost on some interior routes cost 30 ps. (Pen, Bhor and Bhima shankar). The Federation collected milk on 18 routes. A route in order to be viable at current costs must be able to collect 2500 litres of milk per day.

It is essential to note here that failure on the part of the Federation to maintain the supply of milk to the Government dairy on a reasonably stable basis has led to a conflicting relationship between the two. The Government dairy refuses to accept the surplus milk available from the Federation during the flush season (which is beyond its capacity of processing and preservation). It is extremely necessary to arrive at a certain reasonable understanding between the two and perhaps the Government dairy, placed as it is, may have to extend a more generous support to the Federation. It would be logical to expect the Government unit to encourage a cooperative organisation available at the local level in terms of the accepted policies of developing self reliant cooperatives. The Government also has a financial stake in such cooperatives. The problem, however, continued to exist between the two at the time of studies.

As an alternative arrangement the Poona Milk Cooperative Federation has come out with a proposal to increase the capacity of the pasteuriser from 5,000 litres per hour to 7,000 litres per hour. Also, it has submitted a proposal

to install a spray drier to avoid refusal of milk during the flush season at the collection centres. The skimmed milk powder thus produced could be used for maintaining the supplies during the lean season. The economics of the proposed scheme as worked out by the Federation, is appended at the end of the chapter. The Federation hopes to import the atomiser as a donation through the good offices of the ICA, R.O. & E.C. for South East Asia which could otherwise cost £ 17,000 and if donated could mean a saving ^{of} Rs.6 lakhs (at current costs) for India.

Continuing with the existing system and methods of business operation the study has to make further observations. As stated earlier, it has a basic disadvantage on the front of transporting milk from the collection points to the dairy plant. Its own five trucks and two tankers (now sold to avoid further losses), supported by 18 to 22 trucks hired from private parties have been adding to the cost of collection. In 1979, the Federation was collecting milk from 18 routes in its area of operation. The Government Milk Scheme has discontinued supplying cans for collection of milk as also the cones. Consequently, the Federation had to buy these for supplying them to the member cooperatives. In 1979, about Rs.1.88 lakhs were thr; invested in cans, cones, crates and bottles. Most of the finance for the purpose had been raised internally by the Federation.

In order to improve the efficiency in supply of milk to the consumer, the dairy plant had bought, out of its own resources and installed a new fill pack machine at a cost of Rs.5.33 lakhs. (1979) This has facilitated delivery of milk through plastic bags under hygeinic conditions, ensuring the quality and the contents of the milk to the Poona consumer.

The price of milk is determined by the Government Dairy Department. It specifies the price payable to the milk producers on the basis of percentage of fat content and also the percentage of S.N.F. It is noticed that in the whole of

India, highest price for milk is paid to the producers in Maharashtra state. The price paid to the milk producers by the Federation has been on the following basis (1979).

For Buffalo Milk 6% Fat & 9.00 S.N.F.

For Cow Milk 3.5% Fat & 8.50 S.N.F.

The Federation paid following price for cow and buffalo milk.

(in Rs.)

Item	Flush Season	Transit Season	Lean Season
	October to January	February, March, August, Sept.	April to July
Milk producer (per litre)	1.95	2.15	2.45
Society commission (%)	0.06	0.06	0.06
Dist. Union for Transport Ice and Management (%)	0.16	0.16	0.16
Total	2.17	2.37	2.67

Average: Cows Milk Rs.62/- per Kg. Fat
Buffalo Milk Rs.36/- per kg. Fat

It has been the policy of the Dairy Development Department of Maharashtra to encourage production of cow milk in the state. Therefore, it is paying the same price for both the cow milk and the buffalo milk despite different fat percentage and S.N.F. content. This had led to the problem of temptation on the part of the farmer to dilute the buffalo milk and sell it as cow milk. Especially, when it comes to meeting commitment to the government milk scheme, the Government officers are seen expressing their grievance that the Federation has been passing on the diluted milk to the Government dairy and retaining for itself for processing and distribution better quality milk.

There is also provision to pay different prices for the milk supplied, as stated earlier during the flush season, transit season and lean season which prevailed at Rs.1.95, Rs.2.15 and Rs.2.45 respectively. This is in relation to the

trends in the open market price of milk in the respective seasons. Further, for every additional 0.1 p.c. fat extra 1½ paise is paid to the milk producer under the pattern prescribed by the Government. This is intended to encourage the milk producers to supply better quality of milk. The Federation also receives 22 paise per litre of milk supplied towards the cost of transport management and ice for preservation. The Federation keeps for itself 16 paise and passes on 6 paise per litre to the primary member society to cover its management cost.

The Federation has been collecting milk from distant places located in 9 talukas out of 13. It employed 18 vehicles on 18 different routes. Nearly 18 trucks were hired daily on a yearly contract basis for collecting milk from the primary societies. The cost on this account exceeded the subsidy received from the government department by 7 paise per litre. The high price paid to the milk producer and the higher cost of collection in totality made it difficult for the Federation to take to further processing of surplus milk whenever available as the final product would invariably be priced out in the competitive market. That explains the reason why the butter making machinery was lying unused practically since its installation. In other states the fluid milk was available relatively at much cheaper rates and therefore, the dairy cooperatives (for example in Gujarat) were able to produce butter, cheese and milk powder at much cheaper cost.

The Federation bought in 1978-79 a fill-pack machine at a cost of Rs.5.35 lakhs in order to sell milk in retail in plastic bags. The total distribution per day had been around 18000 litres. This was after fulfilling the commitment to the Government dairy which requires 50 p.c. of the milk collected to be delivered to the Government dairy at Poona. As stated earlier, the milk powder machine received as donation from Germany could not be commissioned into operation because of the high price paid to the milk producers under the Government directive for liquid fresh milk. Further,

processing of the milk at this initially high cost would not yield economical returns. The following estimates would provide explanation.

Table (1979)

<u>For 100 litres milk purchases and production cost</u>	<u>Sales</u>
220 Rs. for 100 litres of milk.	7.0 kgs. butter out of 100 litres milk
30 Rs. processing and marketing, ----- cost.	16 Rs. per kg. sale price
250 Rs. total cost	112 Rs. sale proceeds.
208 Rs. recovery from sale	8.0 kgs. skim milk powder out of 100 litres milk
042 Rs. loss per 100 litres of milk.	12 Rs. per kg. sale price
	96 Rs. sale proceeds of milk powder
	112 Rs. sale proceeds of butter
	----- 208 Rs. total recovery

The processing operation of the dairy plant, therefore, had not been able to utilise its full capacity. Between 1974 to 1976, 50 p.c. of its collection was thus processed which was increased to two thirds in later years. Production of butter was also undertaken but the quantity fluctuated from year to year. In 1978-79 the dairy plant started production of cream. It produced 10,000 kgs. of cream valued at Rs.1 lakh.

The capacity of the Katraj plant was being used for processing 20,000 litres per day in 1979 while it could process 50,000 litres per day. This problem of under utilised capacity arose in particular during the lean season and the roots of which could be seen in the peculiar relationship of the Federation with the Government Milk Scheme. As also its existing limited capacity, making it unable to process the surplus milk coming to the plant during the flush season. A reference to the plan for expansion has already been made in the earlier pages, and its broad nature has been indicated in the proposal, attached at the end of this chapter.

While any scheme of expansion is welcome it is necessary that it is examined on the basis of a feasibility study conducted systematically. Mere general estimates based on seasonal figures may not help to achieve results in reality in future and at costs that should be manageable. Such a plan ought to cover estimates based on programmes to be carried out at the milk producers' level. Thus, the increase that would be necessary in the number of cows and buffalos to secure milk enough to feed the expanded capacity of the plant the spread-out of the number of collection centres as also distribution points, number of chilling centres, transport vehicles, personnel etc. all these would have to be made integral part of the expansion programme to establish viability of the project. Resource mobilization including their likely costs should be available to help proper decision making. There is also need for providing additional margin to meet the escalation in costs that is sure to occur by virtue of passage of time when the project plan would be finally approved and adopted.

The statements appended at the end will give an idea about the growth trends in regard to procurement of milk and its distribution, the processing of milk by the Katraj plant, the distribution costs (item-wise) the number of societies supplying milk to the Federation etc.

Dairy Cooperatives in Pune District (1978) -A Total View

	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>
1. Societies and Unions	184	236	271	235
2. Membership	7350	18901	19174	31432
3. Share Capital(Rs. in lakhs)	1308	1189	1094	2300
Govt.	500	1	1	1
Owned funds	808	1188	1093	2299
4. Borrowings	6550	7113	9323	3610
5. Working capital	12838	12924	15615	20765
6. Milk produced (value) Rs.	27975	32950	50778	40891
7. Milk and Milk products sold (value) Rs.	29725	33390	38615	100704
8. Societies in profit	76	97	82	164
9. Amount of profit Rs.	580	1972	1542	1497
10. Societies in loss	61	63	88	79
11. Amount of loss Rs.	359	2746	1725	112
12. Dormant societies	32	32	27	67

NB: Rs. in thousands.

Growth Trends of Poona District Milk
Cooperative Producers' Federation

	1974-75	1975-76	1976-77	1977-78	1978-79
1. Member societies	128	135	141	152	160
2. No. of societies supplying milk to federation:members	55	57	60	73	105
Non-members	-	-	25	18	10
3. Total procurement of milk lakhs -					
in litres	109.50	10042	105.16	104.16	105.22
in Rs.(in lakhs)	11341	9700	12,090	14,504	16,059
4. Total milk distri- buted lakhs in litres-					
own centres	51.90	44.10	56.40	66.70	72.40
Government	57.60	56.32	48.76	37.98	32.82

Working of the Katraj Project:

The Katraj Dairy started in 1972 with handling of 2000 litres milk per day. The following figures show the price paid to the milk producers in last 7 years since the starting of the Katraj Dairy.

Type of Milk	season	<u>Price paid to Milk Producers</u>						
		'72-'73	'73-'74	'74-'75	'75-'76	'76-'77	'77-'78	'78-'79
Buffalow Milk containing 6% Fat and 9% S.N.F.	1.Oct. to Jan.	0.90	1.45	1.85	1.85	1.85	1.85	1.95
	2.Feb. to Mar. Aug., Sept.	1.45	1.45	1.95	1.95	1.96	1.95	2.15
	3.April, to July	1.45	1.45	2.15	2.15	2.15	2.15	2.45

Over and above, minimum grade prescribed for each 0.1% fat, the Federation paid 1.5 Np. more per litre of milk. At the same time for 0.1% S.N.F. more than 9% S.N.F. the Federation paid 1 Np. more per litre of milk. The Federation spent about 16 Np. per litre of milk for the transport of milk, ice and management cost. Moreover, the Federation paid 6 Np. per litre to the rural dairy societies for their management expenditure, testing equipment and to meet other cost. The following figures show the total milk quantity handled at the Katraj Dairy and supplied to the Government.

Distribution of CostKatraj Plant

	1975-76	1976-77	1977-78	1978-79
1. Collection of milk (in lakhs litres)	100.42	105.15	104.68	105.22
2. Supply to Government Dairy (in lakhs litres)	56.32	48.76	37.98	33.56
3. Processed and sold by Katraj dairy (in lakh litres)	44.10	56.40	66.70	72.40
4. Milk purchase (in Rs.)	97,00,123	1,20,90,754	1,45,64,278	1,60,59,051
	<u>2,65,427</u>	<u>2,87,315</u>	<u>2,18,007</u>	<u>2,00,427</u>
	99,65,550	1,23,78,069	1,47,82,285	1,62,67,578
5. Milk transport "	3,24,402	2,29,150	1,29,225	59,078
	<u>2,65,427</u>	<u>2,87,315</u>	<u>2,18,002</u>	<u>2,08,427</u>
	5,89,829	5,16,465	3,47,232	2,67,505
6. Milk processing "	3,59,646	3,14,314	18,501	2,702
	<u>2,65,527</u>	<u>2,87,315</u>	<u>2,18,007</u>	<u>2,08,427</u>
	6,25,073	6,01,629	2,36,508	2,11,129
7. Milk distribution "	1,78,513	2,04,164	5,21,480	5,16,554
	<u>2,65,427</u>	<u>2,87,315</u>	<u>5,18,008</u>	<u>2,08,427</u>
	4,43,940	4,91,479	7,39,487	7,24,981
8. Administrative cost "	2,65,427	2,87,315	2,18,007	2,08,427
a) Establishment	3,51,706			
b) Provision for depreciation	4,09,416	4,34,316	2,73,688	3,02,549
c) Bank interest	4,95,170	4,80,976	2,42,391	32,336
d) Administrative expenses	70,843	71,843	19,012	19,688
(Total a to d)	<u>13,27,135</u>	<u>14,36,578</u>	<u>10,90,035</u>	<u>10,42,138</u>
9. Total costs	1,18,89,809			
10. Purchase cost per litre of milk	99.6 paise			
11. Transport cost per litre	5.8 paise			
12. Processing cost per litre	14.2 paise			
13. Distribution cost per litre	10.3 paise			
14. Administrative cost per litre of milk	<u>2.6 paise</u>			
15. Total cost per litre of milk	<u>13.5</u>			

Statement showing the collection, utilisation and distribution of
milk by Katraj Plant

	<u>1974-75</u>	<u>1975-76</u>	<u>1976-77</u>	<u>1977-78</u>	<u>1978-79</u>
1. Opening balance	18,438	22,185	21,429	18,800	25,888
2. Purchase of milk	51,96,242	55,02,598	44,22,454	65,64,340	71,65,500
3. Total of 1 + 2	<u>52,14,680</u>	<u>1,36,500</u> <u>56,61,330</u>	<u>44,50,874</u>	<u>91,500</u> <u>66,74,640</u>	<u>44,950</u> <u>72,36,338</u>
4. Distribution of milk	49,85,827	54,58,765	42,97,620	64,94,303	70,22,385
5. Used for preparing butter	1,67,374	1,73,160	1,14,760	1,55,510	1,98,706
6. Used for preparing powder	14,431	-	4,880	-	-
7. Sale of Govt. Milk Schem	7,000	-	-	-	-
8. Used for testing and ques.	723	948	735	1,353	1,815
9. Shortage	17,905	9,660	10,694	-	-
10. Total	<u>51,93,260</u>	<u>56,42,533</u>	<u>44,28,689</u>	<u>66,51,166</u>	<u>72,22,906</u>
11. Closing balance (3-10)	21,420	18,800	22,185	25,888	23,728
	<u>52,14,680</u>	<u>56,61,333</u>	<u>44,50,874</u>	<u>66,74,640</u>	<u>72,36,338</u>
Excess per day average sale	13,600	13,675	11,750	2,414	10,230
Rate of increase sales		+9.4	-21.2	+51.9	+8.1

Economics of the Project: (at 1974-75 costs)

On an average, milk purchase cost was as follows -

	1.98	Rs. per litre of milk to milk producers.
	+ 0.16	Rs. transport, ice management of Federation.
	0.06	Rs. primary dairy society's expenses.
sub-	<u>2.20</u>	Rs. purchase rate at dairy
total	+ 0.20	Rs. processing cost and marketing per litre.
	<u>2.40</u>	Rs. cost
sub-	+ 0.10	Rs. interest and depreciation
total	<u>2.50</u>	Rs. total cost.

Selling price of milk per litre	Rs. 2.60
Total expenditure per litre	Rs. 2.50
Net profit per litre	<u>Rs. 0.10</u>

At present, the Bhor Dairy was handling about 5 million litres of milk per year. At that rate it estimated Rs.5,00,000 net profit per year. This profit could enable it to repay the Bank loan in about 6 years, according to the management.

Distribution of cost of milk per litre over
different trades of expenditure (1979)

	<u>Head Office Rs/Litre</u>	<u>Katraj Dairy Rs/Ltr.</u>
1. Salary	8.5	8.1
2. Transport	16.0	3.7
3. Ice	4.2	-
4. Interest	2.0	0.5
5. Milk Commission	-	3.2
6. Polythene	-	13.7
7. Depreciation	1.8	4.3
8. Maintenance	-	0.5
9. Electricity	-	1.7
10. Furnace Oil and Chemicals	-	3.6
11. Miscellaneous	0.5	0.5
Total	<u>33.0</u>	<u>39.8</u>
Govt.	16.00	50.00
	<u>17.00</u>	<u>10.2</u>

statement showing procurement, distribution
and processing of by-products by the Katraj Dairy

Table- 8 A

Year	Procurement of milk in lakhs Litres	supply to Govt. dairy in lakhs litres	Processed and sold by Katraj Dairy in lakhs litres
1974-75	109.10	57.20	51.90
1975-76	100.00	55.82	44.18
1976-77	105.00	48.56	56.44
1977-78	104.00	37.98	66.02
1978-79	105.21	32.82	72.39

Table 8-B

Year	Production of butter (in Kg.)	Value in Rs.	Production of cream in Kg.	Value in Kg.
1974-75	8,993	143,888	-	-
1975-76	6,751	101,911	-	-
1976-77	11,524	182,627	-	-
1977-78	5,747	92,874	-	-
1978-79	1,978	33,641	10,000	100,070

Economic Feasibility of Fill-pack Machine

If the Federation handled about 15,000 litres of milk per day, then following would be the comparative costs for both systems:

<u>Sr. No.</u>	<u>Cost for Bottling per day (in Rs.)</u>	<u>Cost for Fill-pack machine per day in Rs.</u>
1. Capital Investment	-	166.00
2. Maintenance	50.00	10.00
3. Water	80.00	20.00
4. Steam	400.00	-
5. Labours	150.00	50.00
6. Breakage of bottles	244.00	30.00
7. Caustic soda	15.00	5.00
8. Electricity	50.00	20.00
9. Cold storage compressor	80.00	40.00
10. Shortage of milk	675.00	15.00
11. Plastic Film	-	1950.00
12. Aluminium Foil	600.00	-
13. Distribution employee	180.00	120.00
14. Distribution transport	630.00	420.00
	<u>3154.00</u>	<u>2846.00</u>

PROPOSAL OF THE FEDERATION:

Main problem faced by the Federation was regarding collection of milk in flush season and lean season. The Federation collected about 45,000 litres milk per day in flush season in months of October to January. Out of this quantity, about 20,000 litres milk was pasteurised and sold in the Poona city by Federation. Rest about 25,000 litres milk per day was supplied to Government of Maharashtra. In lean season, (that is in month of April to July), the Federation collected about 18,000 litres milk per day. Out of this, about 17,000 litres milk was pasteurised and distributed in the Poona city. It supplied about 1,000 litres milk per day to Government. It also tried to reconstitute Skimmed Milk Powder about 1,000 litres milk per day and mixed with 17,000 litres milk. Thereby, coop. could increase the supply of milk to government Dairy in lean season by about 1,000 litres per day, and supplied about 2,000 litres milk per day to Government in lean season. In each flush season Government was not accepting the coop. milk and therefore, it had to stop the collection of milk once in a week, (about 45,000 litres milk per week). Therefore, it proposed an increase in a capacity of pasteuriser from 5,000 litres per hour to 7,000 litres per hour, a milk road tanker and cream packing machine. Also it proposed a spray drier to avoid the stoppage of the procurement of the milk, to use its skimmed milk powder to reconstitute milk in summer. The economics of the powder plant is given ^{as} under. If it handled about 6,000 litres milk per day for 4 months in flush season then 7,20,000 litres milk would be used for separating cream and powder making, for 4 months of the flush season.

	<u>Rs.</u>
7,20,000 litres milk at 7.20 NP per litre cost	16,62,400
Production cost 23 NP per litre	1,65,600
Total	<u>18,28,000</u>

7,20,000 litres of milk, at an average of 5% fat when separated would produce about 72,000 kgs. of cream and skimmed milk powder of about 56,300 kgs. The sales would be as follows:

	<u>Rs.</u>
72,000 kgs. cream at rate of 11/Rs. per kg.	7,92,000
24,000 kgs. skimmed milk powder for reconstituting milk in summer to be sold at Rs.3/- per litre 24,000 x 10 x 3	7,20,000
32,300 kgs. to be sold at a Rs.13/- per kg.	4,19,900
Total income ..	<u>19,31,900</u>
Total expenditure..	<u>18,28,000</u>
Net income per year	<u>1,03,900</u>

However, the main advantage of the putting up a spray drier would be that the dairy would be able to handle all milk which it received in flush season and S.M.P. could help it to reconstitute it in the lean season. It could maintain supply to its consumers constant.

The economics of whole dairy plant was estimated as follows:

1. Average quantity handled per day	20,000 litres.
2. Purchase price per litre		Rs. 2,40,000
3. selling price per litre		Rs. 2,90,000
4. Margin per litre		Rs. 0,50,000
5. Gross income per year		Rs.35,00,000
6. Total expenditure		Rs. 3,50,000
a) Wages and salaries 5 Np. litre.		Rs. 3,50,000
b) Processing cost 20 NP/Litre ..		Rs. 14,00,000
c) Depreciation 5 NP/Litre		Rs. 3,50,000
d) Repair Maintenance 4.7 NP/Litre		Rs. 3,29,000
e) Interest 9% 1.7 NP/Litre		Rs. 1,21,000
f) Transport, milk sale commission etc.		Rs. 6,00,000
Net Income per year	...	Rs. 3,50,000

LIST OF THE PROPOSED MACHINERY AND ITS ESTIMATED COST:

(A) Processing section	Rs. 4,00,000
1. Expansion of the pasteuriser from 5,000 litres/hr. to 7000 litres/hr.	Rs.1,50,000	
2. 10,000 litres storage	Rs.1,00,000	
3. Creampacking machine	Rs.1,50,000	
4. Spray Drier	Rs.4,00,000	Rs.12,00,000
		<u>Rs.16,00,000</u>
(B) Alteration of building for powder plant, cold storage etc.	...	Rs. 1,00,000
(C) Transport milk road tanker	...	Rs. 2,20,000
	Total	<u>Rs.19,20,000</u>

Chapter - IV

THE GOVERNMENT MILK SCHEME AND THE POONA DISTRICT COOPERATIVE MILK PRODUCERS FEDERATION

Aspects and Prospects of Inter-relationships

The Poona District Cooperative Milk Producers Federation had been collecting milk from the Poona district area and distributing milk to the consumers in the city of Poona. This activity had been going on since 1971. The government milk scheme had been carrying on similar activities in the same area even earlier to the emergence of the Poona Milk Federation, since 1960s. The objective of the Government Milk scheme has been to encourage the dairy activity amongst the farmers - especially, the small farmers, enabling them to add to their income through productive employment. Another objective has been also to ensure to the consumers in urban areas, regular supply of quality milk at reasonable price. On the collection side the G.M.S. primarily depended on the village service societies, conducting dairy activities through their members. They were providing finance initially through institutional agencies, using the village service society as the agent for distribution of finance for the purchase of milch cattle. The loans thus advanced were recovered out of the price of milk supplied by the milk producers to the Government Milk scheme. The primary village service society was paid a certain service charge for all these operations.

The P.D.C.M.P.F. was also started with similar objectives (and some more such as provision of fodder and veterinary services to the members-producers of the village service society). The nature of coordination between the G.M.S. and P.D.C.M.P.F. was rather broad, loose and, therefore, in a way vague also. Declaredly, the policy of the Government has been to encourage cooperatives in rural areas, supported by their higher level federations, enabling them to function and manage the dairy activity on business lines and as far as

possible on a self-reliant basis. However, once the G.M.S. came into existence and operation, the collaboration between the cooperatives and the G.M.S. remained restricted to the collection of milk from the cooperatives in rural areas. The G.M.S. arranged for direct sale of milk to consumers in urban areas. Later, the primary societies established their own cooperative milk federation in some districts and with the passage of time because of good leadership, their strength, both financial and organisational, increased. In the initial stages of federations, like the one for the Poona District, it was allowed to collect milk from the member societies, conducting dairy activity in certain parts of the district and deliver it to the Government dairy at the district level. A certain quantum of milk was got committed on the part of the district federation for being delivered to the Government dairy throughout the year (with permissible allowance for fluctuations due to seasonal variations - flush and the lean seasons).

The P.D.C.M.P.F. was no exception to this arrangement and commitment. It worked till 1972, when the P.D.C.M.P.F. received by way of donation the Katraj Dairy Plant from the German Consumers movement through the good offices of the I.C.A. ROEC for South East Asia. The beginnings of conflicting operations and vascillations in the original commitments on the mutual side could be seen from th's stage onwards. Currently, the P.D.C.M.P.F. has been collecting milk through the member cooperatives spread over (nine) 9 talukas of the Poona District and the G.M.S. collected milk from the primary cooperatives from the remaining four talukas, while the G.M.S. was selling milk thus collected from Poona and other adjoining districts of Maharashtra, as much as possible, to the Poona consumers, taking the surplus milk to Bombay. The P.D.C.M.P.F. has been selling milk collected by them through their milk booths entirely to the Poona consumers. (after meeting their commitment as originally agreed upon, though not fully to the G.M.S. dairy at Poona).

Thus, in 1975 there were 184 cooperatives conducting dairy activities through their members. Their number had gone upto 295 in 1978. Of these, 65 societies were supplying milk to the cooperative Federation in 1975 and their number went upto 73 in 1978. The remaining societies were supplying their milk to the G.M.S. (119 cooperatives and 222 cooperatives in 1975 and 1978 respectively). In terms of value all the cooperatives put together collected milk worth Rs.2.79 crores in 1975 and 4.08 crores in 1978. The value of milk supplied by the member societies of the Federation was around Rs. 2 crores.

By 1979, there were 416 primary cooperatives in Poona district conducting dairy activities. Of these 178 societies were affiliated to the Poona Milk Federation, 126 societies were delivering milk to the G.M.S. and the remaining 112 societies were dormant. It is broadly noticed that the relatively more developed and better connected areas were connected with the G.M.S. (although restricted to 4 talukas). On the other hand, despite larger area assigned to the P.D.C.M.P.F. the scattered and relatively under developed member coopeatives only added to the cost of collection, transport, preservation etc. There might be some kind of a solace that the Federation has been contributing to development of the relatively backward areas, yet, in terms of returns and results, it appeared relatively less efficient and a losing enterprise. Further, it appeared on the face of it that the G.M.S. would not like to withdraw and handover the entire district to the care of the P.D.C.M.P.F. so far as the organisation and development of dairy activity in the entire Poona district which is legitimately the registered and notified area of operation of the Federation.

The G.M.S. has been collecting milk from primary milk cooperatives and taluka cooperative milk unions not only from the four talukas in the Poona district assigned to it but it has been collecting milk also from the adjoining districts of Ahmednagar, Satara and Solapur. Major part, of this milk

was used for distribution in the city of Poona and the surplus was taken to the city of Bombay. The following table shows collection of milk by G.M.S. between the years 1974-79.

Table
(in lakh litres)

Year	Flush season		Lean season		Total	Trend
	Litres	%	Litres	%		
1974-75	46.61	50	46.61	50	93.22	100
1975-76	80.85	50	80.85	50	161.71	173
1976-77	117.19	60	78.13	40	195.32	209
1977-78	134.36	60	89.58	40	223.94	219
1978-79	192.17	70	82.53	30	274.70	295

The table above shows substantial increase in milk collection by the G.M.S. The pricing policy under the Government scheme varied in relation to flush, transitory and lean seasons. (based on the standard fat content and s.N.F. percentage). Thus, in flush season the G.M.S. paid Rs.2.10, and in transitory season Rs.2.30 and in lean season Rs.2.60 for buffalo milk with 6 p.c. fat and 9 s.N.F. and for cow milk 3.5 p.c. fat and 8.50 s.N.F. As against this, the P.D.C.M.B.F. paid Rs.1.95, Rs.2.15 and Rs.2.45 respectively. The price for the consumer was Rs.2.50 under the G.M.S. and Rs.2.90 under the P.D.C.M.B.F.

The transport cost and the administration cost made substantial difference as to the final returns for the G.M.S. and the P.D.C.M.B.F. The latter was particularly unfavourably positioned in regard to these two costs. The Government Milk Scheme paid to its collecting societies standard transport cost at 12 paise, per kilometre and the responsibility of delivering milk to the Government dairy at Poona or at the appointed G.M.S. assembling/delivery point was that of concerned milk societies. As against this, the PDCMFB was collecting milk from distant collection points through its own vehicles and the cost on this account was much higher than provided for under the G.M.S. rates. Extra cost had to be met by the Federation

out of its own resources. The federation had its own six vehicles in 1979 of which there were two tankers (recently one was sold to the member society at Wada and the other was hired out to the needy milk cooperatives). In addition the Federation operated 3 motor launches. The entire transport operation was being conducted at a heavy loss to the Federation. The cost of transport to the federation on this account was about 82, paise per km. Further as stated earlier, while the government paid 2 paise per litre as the management cost, the same for the Federation was 6 paise per litre. This indicated, in a way, the need for more rationalised approach to the management of transport operation as also at the organisational level.

Under the original understanding between the GMS and the FDCMPF, which was reached as far back as in 1960s, the Federation was expected to deliver the milk to the GMS. since the commencement of distribution activity on the part of the Federation to the consumers in the Poona city (1972) the commitment of the Federation under the agreement had been fluctuating over the years. In particular, the trends in this regard during the last five years can be seen from the following table.

Table
Collection of Milk by the Federation and Supply
to the Government Milk Scheme

Year	Total collection in lakh litres	Perce- tage	Total supplies to Govt. Scheme (in lakh litres)	Percentage
1974-75	109.42	100	57.31	100
1975-76	100.42	92	56.34	98.2
1976-77	105.16	96	50.06	88
1977-78	106.69	98	38.94	68
1978-79	105.22	96	33.57	58

The figures above will show how the milk delivered by the Federation to the GMS has been showing decrease in quantity. This was because of improvement in quantum and quality of

that is distributed by the Federation to the consumers in Poona city. Another reason, which may be incidentally stated, for a fall in milk delivered to the GMS by the Federation, was that, particularly in lean season the Federation reduced its delivery to the GMS, to maintain the level of its supply of milk to its regular customers. Consequently, during the flush season also the GMS refused to accept all the extra milk available from the Federation. Marginally, some milk could have been rejected in case it was of the lower quality. One way out to overcome the strained relationship between the two would appear to be to increase milk production at the member society's level by the Federation and also to affiliate larger number of milk cooperatives to itself through greater coverage. This will enable the Federation to maintain and sustain its committed quantity of milk to the GMS while it can maintain and sustain its level of milk distribution to the growing number of consumers in the Poona city.

Distribution of Milk

As is known by now, both the GMS and the PDCMPF have been operating, side by side, in the city of Poona so far as sale of milk to the consumers is concerned. The following table shows the number of centres run by the GMS and the PDCMPF and the milk distributed by them respectively.

Table

Distribution of Milk in Poona

Year	Centres		Distribution in litres (in lakhs)		Share		Trends	
	GMS	PDCMPF	GMS	PDCMPF	GMS	PDCMPF	GMS	PDCMPF
1974-75	236	117	125.88	49.86	72	28	100	100
1975-76	233	120	151.39	42.98	80	20	120	87
1976-77	283	124	170.22	54.59	80	20	133	109
1977-78	299	125	181.51	64.00	74	26	144	137
1978-79	303	129	187.66	70.22	73	27	149	140

The above table shows that in 1974-75 the GMS distributed 125.88 lakhs litres through its 236 centres in Poona. As against this the PDCMPF distributed 49.86 lakhs litres through its 117 centres (72 p.c. and 28 p.c. respectively). Over the years, upto 1979, both have shown some improvement in regard to distribution of milk through a larger number of milk centres. Thus, the GMS distributed 187.66 lakhs litres through 303 milk centres, the PDCMPF distributed 70.22 lakh litres through it 129 milk centres (73 p.c. and 27 p.c. respectively). While the mutual share in regard to total distribution of milk in Poona city would appear to have remained more or less constant, one would clearly notice a sizeable improvement in the performance of the PDCMPF or the GMS. This has been in spite of the fact that the price charged to the consumers in Poona was higher than the price of the GMS. The price difference was justified on the basis of higher fat content and other quality ingredients. All the same the price to the consumer charged by the Poona Coop. Federation was in line with, even slightly lower than, the price charged by the private milk vendors to the Poona consumers. Even today the share of the latter in total milk distribution in the city was much higher than that of the GMS and PDCMPF put together.

There is no doubt that the GMS and the Poona Federation have been operating in unequal competition in the city of Poona, so far as milk distribution was concerned. It would be desirable if this competition could be more fair and in tune with the ultimate accepted objectives of encouraging cooperative dairying by the Government.

The obvious areas of discord or conflict between the GMS and PDCMPF would, therefore, appear to be as under:-

- (a) conflict in regard to collection of milk
- (b) conflict in regard to distribution of milk in Poona city
- (c) conflict in regard to supplying agreed quantity of milk to the GMS by the Poona Federation.

As to the collection of milk, as has already been stated in earlier pages, the Poona Milk Federation had clear disadvantages on account of the location of collecting centres in the interior distant parts. They added to the cost of collection. Socio-economically, this exercise, although conducted at a loss by the Federation, may be justified upto a point, as in absence of it, dairy activity in the remote parts of the Poona district would not have received initiation and encouragement. Even for the small farmers who were conducting dairy activity, an urban market was made available by the Federation, yielding higher returns than was the case previous to the extension of the Federation's activity in their area. As reported earlier, relatively, more favourably placed collection centres were retained by the GMS. These were more economical for collection of milk in terms of quantity collected and the distance and the condition of roads.

As already seen, the conflict in regard to distribution of milk to the Poona Consumer emerged because of the element of price subsidy given by the GMS to the consumers. For those card holders who were not chargeable for income-tax, a lower price per litre of milk was prescribed (the quality content was also lower). Apart from this, even the normal price charged to consumers per litre was quite close to the basic purchase price from the milk producers, indicating thereby that the costs of collection and distribution were being subsidised by the Government. Further, the quality contents of the government milk were also lower than that of milk sold by the Federation.

The Katraj dairy plant came to be set up with foreign assistance to a district level cooperative dairy federation. When this project was cleared by the Government it should have been obvious by that time that the Federation would require more and more encouragement in years to come enabling it to increase its capacities and share in both collection and distribution of milk in its area of operation.

Without this, it was futile to expect growth and development of the Federation. It would have been in the fitness of things, if gradually the Government share in collection in the Poona district had been passed on to the Poona Federation to enable it to increase and improve its share of Poona consumers. The Federation would be doing what the GMS intended to achieve. Thus, basically there was no conflict in the objectives set by the respective agencies before themselves. Actually, however, it was noticed that the GMS was compelling the Federation to meet its minimum commitments when it was itself operating under unfavourable conditions in certain seasons of the year and the GMS using it as a basis for refusing to accept the excess milk available during the flush season at the Federation. Unfortunately, the existing capacity of the Federation being limited it could not put to use the excess milk available even for producing by-products, if required. As against this, the attitude and the approach of the GMS appeared to add to the crisis from which the Federations suffered apparently for no fault apparently on its part. The way out for the Federation under such conditions would be for it to take to further expansion in its capacity and diversification in milk products. Of course, this would have to be permanently supported by an increase and reasonably stabilized milk supply from its members from its area of operation.

Immediately to secure better understanding and constructive cooperation between the GMS and the PDCMPF, a coordination committee (already existing) should be activated further. More frequent meetings and comprehensive integrated dairy development programmes would lead to mutual growth and development and ultimately to contain the exploitative malpractices of the indigenous milk traders operating in the urban areas. The GMS and the PDCMPF should be able to work in close collaboration to safeguard and promote the interest of both the rural milk producer and the urban consumer on the basis of fair return and reasonable price to the respective parties.

Chapter VTHE DISTRICT DAIRY FEDERATION AND THE PRIMARY COOPERATIVES - AN OVERVIEW OF INTER-RELATIONSHIP

As stated in the earlier chapter, there were 175 primary societies conducting dairy activity that were affiliated to the Poona District Cooperative Milk Producer's Federation (PDCMPF). In this chapter it is proposed to take an overview of the impact of the PDCMPF on the member societies and the nature of inter-relationship subsisting between them. For the purpose of study, five primary member-societies were selected on a purposive sample basis.

These societies were -

- i. Pimpalgaon Dairy Society
- ii. Wada Group Dairy Cooperative Society
- iii. Shri Bhairavnath Dairy Coop. Society, Ambale
- iv. Pavana Valley Milk Producers Coop. Society, Babadhol
- v. Gomati Cooperative Dairy Society Ltd., Khutbav.

The criteria in selecting these primary societies were:

- a) the period of inter-relationship
- b) the size of business with the Federation
- c) location of the society (whether in irrigated tract or dry/drought prone area)
- d) existence of small farmers and weaker sections.

The Pimpalgaon Dairy Society and the Wada group Dairy Society were relatively better organised and managed societies with a long period of business association with their Federation. The society at Babadhol was also one of the oldest societies but showed declining trends in business activity. The societies at Ambale and Khutbav were organised recently - 1975 - 1977, respectively. The number of members, the quantity of milk delivered and the level of managerial efficiency were relatively quite small but had exhibited potential for further development. Further, these societies were located in the dry/rain fed areas and were usually existing under the perpetual shadow of drought. The societies at Wada

and Babadhol were operating in hilly regions with less developed means of transport and communication. The population logically had remained relatively economically under developed. For instance, out of a total of 2215 members nearly 685 members of the Wada society belonged to the scheduled-tribes. Most of the members were engaged in subsistence farming and other allied small activities.

As could be expected, sizeable variations in the level of managerial efficiency were noticed amongst these sample societies. The societies at Wada and Pimpalgaon had fairly long period of existence and experience in dairy activity. (being registered in the year 1962 and 1960, respectively) The Babadhol society was registered much earlier to the above two (in 1951) yet its performance was not that satisfactory especially in recent past years. It is noteworthy that the PDCMPF was organised under the major initiative of this society in 1960. The remaining two societies at Ambale and Khutbav were still in their formative stages. The turnover of business was small and logically they had remained financially weak.

The Pimpalgaon and Wada dairy cooperatives have all along been awarded "A" class by the Government auditors, because of systematic working, proper management participation of members in business activity and sustained efforts in diversification of activities in their respective area of operation. Most of the activities were being organised by these societies on a self-reliant basis, and contributed to, apart from development of dairy business, development of infra-structural facilities such as transport, storage, education, etc., locally. Being financially sound and progressively productive, the resources were mostly generated by the societies themselves for developing and maintaining services and facilities. A study of the trends and operations clearly exhibited the dynamic and progressive methods of operation.

A larger credit for this must be given to the local leadership. While the societies could be said to have drawn progressively increasing support from their district cooperative dairy federation for their growth and development, it could be equally said that, as a result, in return, they helped to strengthen their own dairy Federation in the process. In fact the Federation has been the creation of such old good working primary dairy cooperatives. The total structure, when supported and assisted through international aid through the good offices of the ICA Regional Office and Educational Centre for South East Asia, New Delhi, has been endeavouring to meet the needs of the Poona Milk Consumers to an extent, of certain quality of milk at reasonable price. Their major contribution however, pertains to securing for the small milk producer from the interior areas, a market for their milk at a fair price on a regular basis, thus generating additional source of income and dependable employment opportunities for them.

It is true that the coverage of the PDCMPF has still remained small even in the parts of district allotted to it, in organising dairy activity through primary cooperatives. The rate of increase in member cooperatives since its inception has been quite low and many of the member cooperatives had continued to remain weak both, financially and operationally. Some of the member societies were seen functioning under divided-loyalties (along with their member milk producers) thus, wavering between the PDCMPF and the Government milk scheme. This calls for planned efforts on a sustained basis on the part of the PDCMPF. A service oriented professional approach to business inter-relationship between the Federation and their existing member societies has become overdue and urgent in the face of increasing opportunities available for development of dairy activities on cooperative lines (esp. under the NDDB schemes). Side by side, aggressive promotional efforts are required on the part of Federation which is essentially a leadership function expected of a cooperative federal organisation. The slow pace of progress and development noticed

in the area of operation of the PDCMPF has been essentially due to neglect of these aspects of managerial responsibilities, as is evidenced by serious variations noticed in the performance of the member dairy cooperatives, contributing further to the weaknesses of both, the Federation and the member societies themselves.

Business Relations -

The main thrust of the PDCMPF has been collection of milk from member societies and its sale after primary processing to the consumers in the Poona city. The member societies collect milk from the member milk-producers and deliver it to the Federation mostly through hired transport (and exceptionally through owned milk container-vehicles). The milk is tested and graded at the collection centres and the price is paid at the specified rate schedule of the Federation to the primary members usually at an interval of a fortnight. The collecting society earned the commission from the PDCMPF, at a specified rate for this activity. The rate of commission is linked to the total quantity of milk supplied by the society to the Federation. (These have been stated in the preceding chapter "Business Operations").

The five societies under-study sold milk to the Federation on an average per day in 1979, as under:

<u>Name of the society</u>	<u>Litres of Milk</u>
Pimpalgaon	3221
Wada	4826
Ambale	284
Khutbav	423
Babadohol	438

It would be seen that the Pimpalgaon and Wada Group societies were supplying a substantial part of the total milk collected by the Federation. These two societies also had their own chilling plants which further contributed to their improved collection and holding capacity of milk. The Federation was not extending any other services such as supply of cattle feed or veterinary services to the primary societies,

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and their members. They have been asking for these services from the Federation for the past some years now. The Federation appears to be contented with payment of the highest price per litre of milk in the country to the milk producers in its area of operation, leaving them alone to organise other supplementary and complementary services and facilities on their own (which are not adequately available on dependable basis regularly and at reasonable costs locally).

The financial position of the milk societies at Wada and Pimpalgaon was logically relatively more sound and improving over the years. As stated earlier, a sizeable part of the revenue receipts was invested in building up essential assets like the chilling plants and building up infrastructure facilities. The Pimpalgaon society has been arranging credit in the past four years (1975-1978) for the farmers to enable them to add to their milch cattle wealth, largely out of its own funds. Currently the society provides only guarantee to the financing nationalised banks for the loan extended to its milk producing members.

Of the remaining societies, the society at Ambale and Khutbav were registered recently and are still filling their ground. Their management costs are relatively higher in comparison to their revenue receipts. Unlike the two strong societies at Wada and Pimpalgaon which were supplying quality cattle feed to the producer members, the remaining relatively weaker societies could not meet the needs of the members on this account. The Federation's role in this matter has been utterly inadequate.

By and large, the inter-relationship between the PDCMPF and the member societies under study were found satisfactory over the years. Whatever grievances that were noticed, were with regard to lack of provision of inputs and services by the Federation to the member societies. A constant demand for increase in price per litre of milk by members was understandable but not clearly convincing. As observed in the earlier chapters the milk producers in its area of operation

are being paid the highest price per litre of milk today, perhaps in the country. This has adversely affected the capacity of the Federation to process the surplus milk during the flush season to produce milk powder and similar allied by-products. The investment in machinery already installed for the purpose at the Federation's dairy plant at Pune has remained blocked and unused. The final product will be priced out in the competitive open market when the basic raw material is already charged with heavy cost. This area of difference or disagreement between the Federation and the member societies can be overcome by proper educative extension programmes, for members. It is extremely necessary to stress the need for ensuring to the producer a larger share in consumer price rather than paying an unconscionably high price for the basic raw material itself.

Another important area of disagreement between the Federation and particularly the strong old societies was in respect of continued deductions from the price payable for milk towards advanced deposits for share capital in their name. The societies at Wada, Pimpalgaon and Babadhol had observed that the time had come to stop unlimited deductions on this account. They had already contributed substantial amounts to share capital and sizeable money was locked up as advanced share money on which they were not getting any return. If they could receive their share in deposits, they would be able to reinvest it in schemes of local development. The members of these primary societies were clamouring for various services from their society which for want of funds they were unable to provide. There was a feeling that only the few strong societies had to bear the burden and for a long time without prescribing a ceiling, which they considered was in a way a tax on their efficiency.

In sum, the observations of the member societies under study, on the role of their Federation vis-a-vis their primary members societies were as follows:

- (1) The function of collecting milk from the

primaries by the Federation was on the whole being performed satisfactorily yet on many occasions due to distance or delay, the milk got spoiled and the society as a whole suffered by way of deductions. As a result there have remained sizeable amounts as disputed claims, in the books of account of the Federation.

- (2) The Federation was no doubt paying a high price for the milk supplied by the producers to the Federation. Yet they felt that there was need for rationalisation in sharing the margins so as to pass on a fair share to the member society in order to strengthen its financial position.
- (3) The procedure and efficiency in regard to testing and grading of milk collected at the milk centres and subsequently at the dairy plant, required further improvement to minimise chances of error and consequent misunderstanding.
- (4) The member societies should be helped by the Federation to organise much needed veterinary and other services as also inputs like cattle feed, at fair costs.
- (5) Continued deductions as share deposit money beyond reasonable limits from good working societies was not a desirable on the part of the Federation as it did not yield any return to the farmer and restricted their capacity to develop their own management and services in the interest of their local members. The Federation should concentrate on strengthening the weaker societies through services and supervision. The Federation might consider introducing incentive schemes for goodworking societies to improve their performance. They may be related to quantum of milk supplied, regularity, quality, good management etc. The Federation should organise extensive member education programmes for the benefit of milk producers of the primary societies for improving their capacities and eventual performance.

A Study of Impact on the Members of the Primaries -

As a part of this study five members from each of the five selected primary dairy cooperatives were interviewed to study the impact of the dairy activity through cooperative action. The total 25 members interviewed were selected during visits to the primary societies in question on a purposive basis. Thus, members in different categories of land holdings, as also landless workers conducting dairy activities were selected for the purpose. Some of the members were promoters of their respective societies. Amongst the 25 members interviewed, there were 8 owning land between one to five acres, 3 having land between five to ten acres, and 9 owning land ten acres and more. Five landless workers and village artisans conducting dairy activity were examined.

With the exception of the farmer members at Pimpalgaon where irrigation facilities were available due to newly started lift irrigation schemes, most of the farmers owning land were engaged in dry farming activity. Amongst these the small farmers owning land between one to five acres appeared to have substantially benefited from dairy as their subsidiary occupation. Out of eight members interviewed four belonged to the schedule castes.

The position of the members belonging to the each selected society is described in detail in the respective studies appended at the end. Most of the members were maintaining milch cattle of local varieties and the milk yield was also low. After introduction of the scheme for financing purchase of cattle of quality breed, there appeared improvement in milk production. This was particularly noteworthy from the year 1975. The role of the primary dairy cooperatives and the support they received from the local branches of the nationalised banks for this purpose was mainly responsible for improving the capacities and conditions of the members. At Ambale the branch of a nationalised bank advanced loan for purchase of milch cattle of improved variety under the Drought Prone Area Programme (DPAP) at concessional rate of interest and 25% subsidy in loan repayments. The

Pimpalgaon society initially advanced loans out of its own funds. Comparatively the District Cooperative Bank had not shown much initiative and enterprise in regard to provision of funds for purchase of milch cattle by the farmers, particularly the weaker sections. The repayment of loan instalments was not found to be a serious problem as the payment of price for milk was being arranged at regular intervals and deducted from the price payable to the members, at the source itself. There were a few cases of defaulters reported who remained overdue in regard to repayment of loan instalments. This was because the concerned members deliberately avoided repayment through automatic deductions by selling their milk through other channels. In such cases the society concerned was required to take coercive action against the defaulting members as it provided guarantee to the financing bank.

At the collection centres the societies had arranged to test and grade the milk brought by the members as to percentage of fat and SNF contents. Generally there were no complaints from the members, yet a systematic orientation of the members in regard to the use and maintenance of equipment and procedures of grading was felt necessary to improve credibility and minimise element of arbitrary decision making.

The Federation had prescribed the schedule of prices in relation the percentage of fat and SNF content. The society at Pimpalgaon had a further provision for penalty for milk below the standard. The members of the society seem to have no grievance about this and had accepted it voluntarily. The payment of price to the members was regularly made at an interval of fifteen days. At times there were cases of disputable deductions between the society and the Federation which appeared finally in the balance sheets of the respective organisations as amounts due but not received or paid. The members in general desired an increase in price of milk supplied by them on the grounds of increasing cost of maintenance of milch cattle. It appeared they were not aware

of the lower price paid to the milk producers by dairy cooperatives in such other states as Gujarat and Tamil Nadu.

The difficulty expressed by members of the societies was in particular relation to the distance they had to cover for bringing their milk to the collection point. They suggested starting of new collection point at convenient locations. This should be possible with a vigorous dairy development programme in the area of operation of the primary dairy cooperatives. Particularly the members of the societies at Khutbav, Wada and Babadhol seemed to suffer on this account.

The members of the societies in general expressed their satisfaction about the returns they had enjoyed from their dairy activity. They confirmed that their income from dairy activity had considerably improved their economic conditions and provided employment opportunities to their family members on a dependable basis. The support which dairy occupation provided to the farmers and weaker sections in the rainfed areas was particularly noteworthy. While the agricultural seasons were uncertain, income from dairy was regular and throughout the year it had provided the much needed economic stability to the small milk producers.

All the same they desired that further improvement in quality of services and supply of inputs by their societies was necessary and feasible. The district federation should provide more imaginative leadership and tangible assistance in these regards.

Benefits to the Consumers -

One of the objectives of the Katraj Dairy scheme was to provide quality milk at reasonable price to the consumers in the city of Poona. This scheme was operated by the PDCMPF in competition with the government milk distribution scheme. Both the schemes may not be fully comparable in regard to structure, costs, etc. as basically the approaches are distinctly different. In case of the GMS the primary objective of milk distribution is in the nature of a welfare activity. On an

overall basis the GMS is operating beyond reasonable costs, supplying milk two categories of customers - those paying income tax and those not paying. Different pricing for different quality of milk is in force under the GMS. The desirability or otherwise of such an endeavour need not be discussed here. However, against this approach the commercial ventures of the PDCMPF could be understood more clearly.

Although the share of PDCMPF in the quantum of milk supplied to consumers in Poona would appear to be smaller, it is recording a gradual increase every year. It has to be noted that it collects milk exclusively from the parts of the Pune district allotted to it. While the GMS has been able to collect milk from other districts as well to supplement the supply to the consumers in Poona. The organic structure that has merged under the leadership of PDCMPF has to be properly understood. Its objectives does not remain restricted to mere collection of milk and it's sale but extends beyond marketing. It covers total development around dairy activity of the member milk producers at the grassroot level and their surroundings. At the same time the system ensures supply of quality milk at a fair price, through its own distribution centres. These centres are managed by the young unemployed and enterprising persons on a commission basis.

Chapter - VISUMMARY OF FINDINGS, CONCLUSIONS
AND RECOMMENDATIONS

In 1961 the West German Cooperative Consumer's Congress offered to finance a rural project in the field of cooperative dairying in India under their Aid India Programme. The International Cooperative Alliance through its Regional Office for South East Asia at New Delhi, received the offer and in consultation with the Government of India decided to set up a milk pasteurisation plant at Bhore. The site was selected in 1965 and it was decided to implement the project through the Poona District Milk Producers Coop. Federation Ltd., Poona. This organisation was registered in March, 1960, affiliating primary dairy cooperative societies working in the Poona district. Initially, WGCCC agreed to provide assistance of the order of Rs. 2,65,000. The 25% of the project cost was expected to be raised through shares by the Milk Federation. The Federation was unable to fulfil its commitment due to its weakness. The project was, therefore, handed over to the Maharashtra State Cooperative Milk Federation, Bombay, (State apex organisation) in December, 1967. The same year, the proposed location of the plant was changed from Bhore to Katraj, still nearer to the city of Poona which was to be the main consuming centre. The land was secured on a lease basis admeasuring 20 acres from the state government. The state government also provided Rs. 5 lakhs as its contribution to the share capital fund for the project.

Much time was lost in the process and consequently the cost of the project went up to Rs. 64.86 lakhs by December, 1971, when it was ultimately completed. Proportionately, the WGCCC also raised its share in the capital outlay to Rs. 12.59 lakhs and this was given as a gift in the form of machinery.

The object of the Katraj dairy was to collect, pasteurise and bottle milk for distribution to consumers in the city of Poona. The installed capacity of the dairy plant

was 5000 litres of milk per day of which half the supply was adjusted to pasteurise bottled milk for direct distribution to consumers in Poona city. The other half of the capacity was intended to be used for processing surplus milk particularly available in the flush season into skimmed milk powder (about 2 tonnes) and butter (about 1.8 tonnes) per day. A part of the milk collection was committed by the Federation for being delivered to the Government dairy at Poona as per an earlier agreement between the two agencies.

In June 1972, after ensuring that the management of the PDMPCF was strengthened and improved, the management of the cooperative dairy plant was returned to it. The plant was formally inaugurated in March 1973.

The PDMPCF was registered in 1960 under the Maharashtra Cooperative societies act with 11 primary dairy cooperatives as its members. Out of 8 objectives listed in its byelaws, excepting 5th and 6th (pertaining to procurement, production, and supply of cattle feed and provision of veterinary services) the rest of the objectives had been more or less fulfilled. The objective 8, relating to provision of finance for purchase of milch cattle was not taken up due to change in policy and procedure in regard to direct financing of members by dairy cooperatives. Under the new policy loans to milk producers for purchase of milch cattle are advanced by the banks on the guarantee of their primary dairy cooperative from that area.

Between 1974-1978, number of dairy cooperatives in Poona district had gone up from 184 to 295. However, the coverage of the PDMPCF had improved from 129 to 166. The number of member dairy cooperatives delivering milk increased from 65 to 72. The other members societies were either delivering their milk to the Government milk scheme on behalf of their members or some of them had become extremely weak for various reasons or their members had been selling milk to the open market, to the private milk traders.

The PDMPCF was collecting milk from 13 talukas assigned to it with the concurrence of the GMS, the latter collecting milk from cooperatives in the remaining 4 talukas in the district to feed their own milk scheme. The area assigned to the dairy Federation was comparatively underdeveloped both cooperatively and in regard to other infrastructural facilities. It is a challenge for the PDMPCF to develop its area quickly through extension and operational activities as well as promotional measures in order to improve its coverage and share in milk collection in order to secure its rapid growth in years to come.

So far as the board of directors of the Federation was concerned, a noteworthy feature was that the representation to member societies was linked to average supply of milk on a day in the specific cooperative year. This was expected to provide incentive to the member societies to increase their milk supply to their Federation. This arrangement was also in tune with the accepted cooperative philosophy.

The executive management was broadly subdivided between the general administration of the Federation and the management of the processing plant. The manager of the processing plant was an experienced person with technical qualifications while the manager of the Federation was the Government Assistant Registrar on deputation each time for period of 3 years.

The authorised share capital of the federation was Rs.10 lakhs. However, it had already exceeded the limit by Rs.1.69 lakhs in 1979. It has, therefore, proposed to raise the limit to Rs.25 lakhs by amending its byelaws. Excluding the state government contribution of Rs.5 lakhs, balance of Rs.6.67 lakhs was the contribution of the member dairy cooperatives.

The Federation had been collecting from member societies 3 paise per litre of milk delivered to the Federation as share deposit money to be converted into share

capital contribution later by the society concerned. since 1978 deduction on this account has been reduced to one paise per litre. The Federation had thus, collected Rs.5.92 lakhs by 1979. Essentially, the strong good working primary dairy cooperatives were contributing in this manner over a long period and in few cases their individual share deposit account had been increasing at a fast rate. These few societies had expressed a desire that any further deduction on this account should be discontinued as they felt they had more than proportionately contributed their mite. They needed more funds at home, for initiating necessary schemes of development at the local level. The members expectations from their society in terms of provision of diversified services and building up of assets had been continuously growing. The Federation did not seem to react favourably to this suggestion as it appeared keen to develop and strengthen its own resource position vis-a-vis its member societies at large in its area^{of} operation.

The total turnover of the Federation had been growing over the years but not adequately for a variety of reasons such as internally, inadequate resources, material financial and personal and externally constraints placed on its growth and developments on account of government milk pricing policy, mode and method of allocating areas for collection as well as distribution of milk etc.

The Federation particularly needs careful attention to maintaining proper system of accounts and exercising intelligent control over important cost centres.

Operationally, the cost of collection appeared to be quite high due to the fact that the Federation was required to collect milk from distant parts, spread over eighteen routes. The percentage of sourage of milk and curdling was high and contributed to increase in cost of purchase per litre of milk. While the role of the Federation in extending its coverage to the relatively underdeveloped

interior parts of the district could be described commendable, the diseconomies of operation would need to be carefully balanced with a reasonable degree of so called social cost elements.

since the Federation had its own commitment to its consumers in the city of Poona in regard to stability of supply of milk to their card holders throughout the year, it had to strive hard particularly in lean season to adjust its commitments to the GMS as originally agreed. The diversion of greater part of its milk collection during the lean period to meet the demands of the card holders led to cut in supply of its milk to the Government dairy. Consequently, during the flush season, the excess collection of milk was not accepted by the Government dairy. The Federation was constrained to refuse excess milk brought to it by its member societies. This contributed to undesirable instability in milk marketing at the small milk producers level. There was no arrangement existing for conversion of milk into milk powder. An enterprising effort in that direction by setting up appropriate machinery with its own resources or those received externally could provide some solution to this seasonal problem.

The pricing of milk collected by the federation also would need a critical review. The milk producer in the Maharashtra State is paid a price at the rate prescribed by the Government. This is reported to be the highest price paid to the milk producer in the country. However, this has set limitations for the secondary and tertiary processing of milk for securing larger returns under relatively more favourable supply conditions. In other words, the cost of the final processed product would be so high that even with a reasonable margin added to it, the milk products of the Federation would be priced out in the competitive market. This explains as to why even the existing milk processing machinery (for butter) had remained unused since its inception.

The operation of the Government milk scheme in certain parts of the district, (which was the prescribed area of operation for the Federation) had set obvious limitations for future growth and development of the PDCMDF. The conditions under which the latter was found operating were also somewhat unfavourable both in regard to collection as well as distribution. It would be fair to hand over the complete area to the PDCMDF for its full growth on the lines of AMUL pattern. The GMS may exercise overall supervision and in keeping with its commitments under the accepted national cooperative policies, it should provide opportunity and scope for cooperativisation of dairy industry wherever feasible. This might necessitate withdrawal from such areas on the part of the GMS. However, it would be worthwhile taking such steps, objectives being almost the same. Due to lack of such understanding and clarity, the inter-relationship subsisting between the GMS and PDCMDF was not found to be on the whole quite healthy, and mutually complementary and supplementary. The major areas of conflict between the two appeared to be the following:

- (a) Conflict in regard to collection of milk
- (b) Conflict in regard to distribution of milk in Poona city.
- (c) Conflict in regard to supplying agreed quantity of milk to the GMS by the Poona Federation.

It would be desirable that a proper understanding and cooperative collaboration is reached between the two in the ultimate interest of both the milk producer and the consumer.

The inter-relationship between the Federation and the member societies appeared on the whole satisfactory. The member cooperatives however desired their Federation to take up further activities such as for example provision of cattle feed of standard quality and at a fair price as also arrangements for veterinary services on a regular basis. In some quarters the member societies expressed a desire that a larger share of the consumer price should be passed, on to the

dairy cooperatives to enable them to become more serviceable to their members and be financially stronger for the purpose. The Federations view appeared to be that the margins had been already quite low for the Federation while it is expected to come up to a certain level of its performance. In the face of increase in costs of transport, storage, personnel, processing and distribution the scope for any reduction in margin appeared to be extremely bleak.

The only way, therefore, available for the Federation and the member dairy cooperatives, appeared to be in the direction of -

- (a) increase in coverage of milk producers as members in the area,
- (b) improvement in quantum and quality of milk production,
- (c) efficient organisation of collection, preservation, transport, processing and distribution operations,
- (d) diversification of business activities including input supply services.

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P A R T - II

C A S E - S T U D I E S

Part - II

In this part a brief profile of each of the five sample societies selected for field-visits is given. These, as stated in the Chapter-V, were selected on a purposive basis out of 175 member societies conducting dairy activity in the area of operation of the PDCMPP: -

- (1) Pimpalgaon dairy cooperative society Ltd.
- (2) Shri Bhairavnath dairy cooperative society, Ltd., Ambale.
- (3) Wada group dairy cooperative society Ltd., Wada.
- (4) Pavana valley milk producers coop. society Ltd., Babadhol.
- (5) Gomati dairy cooperative society Ltd., Khutbav.

The Pimpalgaon Dairy Coop. Society, Ltd.

Pimpalgaon is a small village, about 70 kms. away from Poona, located in the Ambegaon taluka. It has a population of 3,500 and a total acreage of cultivable land of 1,200. A dairy cooperative society was set up in this village in 1962. Earlier to the establishment of the cooperative dairy, the local milk producers, numbering about 70 were producing about 100 litres of milk per day and maintained indigeneous breed of buffaloes. They sold their milk to the local hotel keepers at a very low rate of 32 paise per litre. They suffered from many handicaps in this business activity. A group of enterprising milk producers thought of promoting a dairy cooperative similar to one, they had occasion to see in a nearby village. They raised their initial share capital in a small measure and got their society registered. They started dairy activity as a subsidiary occupation next to agriculture. By 1966 in their area, some lift irrigation schemes were completed with State assistance. Certain well-irrigation schemes were also completed with assistance from the cooperative land development and some commercial banks. These helped to improve agricultural activities of number of landholders. Even then the small farmers continued to dominate the local scene.

As stated earlier, the most enterprising amongst these farmers provided initiative through conduct of weekly meetings of the villagers to consider promotion of a dairy cooperative. At the beginning there were only 85 members who delivered about 150 litres of milk per day to the society. The immediate problem was of marketing the milk. The Government Milk scheme provided the initial encouragement and over the years, the farmers could add to the strength of their buffalos. Their society provided guarantee for the loans advanced by the banks to their members for purchase of milch cattle. The supply of milk was collected by the society and it delivered to their Federation. The recovery of loan instalments was made through the price paid to the milk producer concerned. This arrangement encouraged development of dairy activity in favour of the small producers on the basis of a reasonable security of funds advanced to them. The society encouraged the members to purchase buffalos of improved breed which constituted, by 1979, about 200 out of a total local strength of about 800 in number. In recent years, cross-breed cows of Jersi variety have also been added to the milch cattle population. This was because of more favourable price policy towards cow milk.

Increase in membership of this society over years 1975-1979 can be seen from the following figures:

<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>
271	276	287	310	314

It will be seen that the rate of increase has been quite low. It was reported that about 150 non-member milk producers from surrounding area were also delivering their milk to this society.

The general management of the society was supervised by the managing committee which was elected at the annual general meeting every year. This committee elected a chairman for a period of one year. The society employed 10 persons, including secretary, Cashier, Machine Operator, Testing Clerk and other assistants and helpers. The accounts of the society were maintained upto-date and in a satisfactory manner.

The financial position of the society can be seen from the following important items from the balance sheet over the years 1975-79.

The statistics reflect a desirable degree of self reliance in regard to funds and revenue receipts. It has been able to own and maintain office building and a chilling plant, (bought over from the Federation recently).

The Society collected milk from the milk producers and delivered it to the Federation for which it received 6 p.c. commission per litre. Care was taken to maintain quality in regard to fat and SNF percentage content. Penalty was imposed on the members who delivered milk below the prescribed minimum quality standards. The milk supplied in litres and in value by the society over the years 1975-79 is shown below:

	1975	1976	1977	1978	1979
Milk sold in litres	6,21,884	6,26,795	7,31,335	8,36,211	11,11,886
Milk sold in Rupees	8,62,018	12,53,590	14,62,660	17,68,421	22,23,796

As stated earlier, society arranged to secure finance for its members through the nationalised bank since 1979. Previous to that such finance was provided out of its own funds although on a small scale. The amount loaned to members went up from Rs.63,700 in 1975 to about Rs.4 lakhs by 1979. The recovery of instalments was linked to the milk-price payable to the members, hence there were no serious overdues.

Amongst other services the society undertook to procure cattle-feed of standard quality and supplied it to the milk producers at a low margin. The response from the milk producers in the area of the operation of the society has been increasing over the years. The sale of cattle feed had gone up from Rs.25,220 in 1975 to Rs.2.64 lakhs in 1979.

On the basis of its annual performance, this society has been able to maintain its "A audit classification" over a number of years by now. Its relation with the district Federation has been quite healthy. However, there appeared a grievance on the part of members towards compulsory deductions of 1 paise per litre of milk from the price payable to the members concerned as advance share deposit money for the Federation.

Being one of the strongest primary societies, it has been continuously and substantially contributing in this way for a number of years now. This society has been one of the few major suppliers of milk to the Federation. In recent years however, its cost of management has been increasing due to improved scales of payment to the employees and other management expenses.

The member's reactions as reflected through the interviews (of five selective milk producing members) presents a mixed picture. While on the one hand, they expressed satisfaction at the contribution of their society to the development of dairy activity in its area of operation, helping the small farmers to improve their income through supplementary dairy activity, they expected a relief from compulsory contribution to the Federation as share deposit money in view of the fact that they felt they had contributed enough on this account. The money that would be thus available to the society would be reinvested in some local schemes yielding direct benefits to their members.

As stated earlier, the sample of selected members was decided on a purposive basis, consisting of a large farmer, a medium farmer, a farmer owning as irrigated land, a small farmer from dry area conducting dairy activity as a subsidiary source of income, and a landless labourer benefitting from dairy activity. Particularly the proportion of benefits accruing to the small farmers were in real terms, more than proportionate in relation to their original income

level. Thus, it shows potential for cooperative action in dairy farming activity conducted by small agriculturists.

The local members were also enabled to add to the number of milch cattles owned by them. The improved high-breed variety had led to sizeable increase in yield per milch-cattle. Compared to the increase in number of buffalos, increase in number of cows was remarkable in respect of individual members covered for the purpose of study. They found maintenance of cows more economical and paying. The process was also facilitated because of easy accommodation provided by the nationalised bank. Because of the linking arrangement, recovery of loan instalments was not a problem, by and large.

The members expected additional services from their society such as supply of quality cattle feed at reasonable price, veterinary services on a regular basis at a fair cost and an increase in margin in favour of the primary society on the part of their District Coop. Federation. Locally, the society had arranged to provide education upto the highschool stage. As a result of improved incomes through dairy activity, a larger number of graduates have been recently turned out from the local population. A small number of doctors, engineers, and advocates had also been produced by the village. The local young people had set-up a Youth Club in the village through which annual sports were organised and prizes were awarded to the successful teams and sportsmen. There was also a library managed with a reading room facility in the village.

Thus commercially, economically, socially and culturally the Pimpalgaon dairy cooperative had contributed to the growth and development of not only individual members but the larger community as well. It is not surprising that due to enlightened and progressive type of leadership it had been able to maintain 'A' class since the commencement of its activities.

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The Wada Group Dairy Cooperative society Ltd.

This was a society located at a distance of about 70 kms. from the city of Poona. Wada is a comparatively big village, located about 25 kms. away in the interior from the main road. As a consequence, the approach road was not in quite satisfactory condition. Further, the area of the society covered hilly region consisting of small 33 hamlets. The total population covered by Wada village was approximately 10,000 and it constituted the main market centre for the surrounding villages.

The dairy society was registered in 1960 and was affiliated to the District Federation since its inception. Its membership in 1979 was 2215. About 10 p.c. of the total membership belonged to the scheduled castes and scheduled tribes. Of the remaining membership, majority were small farmers, owning land on an average between 1 to 5 acres. The total area under cultivation was reported to be 3830 acres of which about 250 acres were irrigated, essentially by wells. The dairy activity had come very handy for the weaker sections from the area which remained all along, the main source of their income. In respect of the quantum of milk supplied to the Federation, the Wada society has had always a dominant share about 20 p.c. of the total milk collected by the Federation. The society started with a milk supply of 68,886 litres, (worth about Rs.45,000) and had reached a level of 20 lakh litres (worth about Rs.44 lakhs) by 1979.

The society was operating through 22 collection centres spread over 33 villages. The society had a chilling plant which originally belonged to the District Dairy Federation. It's capacity was 8000 litres. At the collection centres the society had provided equipment to test fat and ~~SF~~ contents of the milk brought by the producer members. Ice was being supplied by the society to preserve the quality of milk through journey to the chilling centre. About 400

Adivasis (backward tribes) were engaged to carry milk from the centres located in the distant hilly tracks to the chilling plant of the society. This had provided some employment opportunity to the poor located in its area. The wages were paid according to the distance covered by them. Each individual carried about 20 litres of milk and quite a number of them were themselves with producers.

The price was being paid at the Government rate, once in a fortnight. One payment, in the course of the year, was carried to the member's deposit account with the society on which 6 p.c. interest was being paid by the society to the concerned member. The society had arranged to supply fodder and medicines for the cattle of the producer-members. This had helped to increase quantity of milk supplied to the society. As can be seen from following figures. The decline in quantity during the last two years was due to unfavourable natural conditions in the local region.

Year	Quantity of milk supplied	Amount in Rs.
1975	18,57,985	37,31,182
1976	22,46,785	48,47,020
1977	23,10,830	50,08,681
1978	22,20,292	48,86,545
1979	20,21,103	44,16,883

The society had arranged to secure loan for purchase of milch cattle for the needy members through the Bank of Maharashtra and provided guarantee for repayment of loan on the

basis of instalments. Over the years 1974 to 1978, the loan amounts thus advanced increased from Rs. 3 lakhs to 10 lakhs. The animals were bought from the market in the presence of the representatives of the financing Bank, the society and the farmer-member himself. The society had also attempted in 1977 a census of the milch animals in its area of operation - both buffaloes and cows. The number of buffaloes then was around 3000 and the number of cows 1600. The society had been encouraging the members to go in for improved breed of milch-cattle since 1970.

The financial position of the society was found to be sound with assets and investments recording a continuous rise over the past five years. The profits recorded by the society increased from Rs.33,000 in 1975 to Rs.72,167 in 1979. The 2215 members contributed Rs.1.64 lakhs as share capital to the society. As stated earlier the society bought over the chilling plant belonging to the District Federation and located at its headquarters by raising a loan of Rs.5 lakhs from Bank of Maharashtra in 1978. The repayments on this account were being made as per schedule by the society.

The society was being managed by a committee of 13 members, elected in the annual general meeting. The managing committee co-opted two additional members on the basis of their specialization. The tenure of the managing committee was for three years. The chairman was elected every year. On the management side, the secretary was the chief executive and was assisted by the assistant secretary, the accountant, supervisor of the chilling plant, liaison officer of the milk collection centres, and a senior clerk. In addition, there were as many employees in the 30 collection centres.

Apart from its satisfactory performance on the business front, the society had endeavoured to contribute to the development of the local area and the educational and cultural environment in the village. For example, the society had constructed a bridge at a cost of Rs.1.2 lakhs over the

river Bhima near Wada out of its own funds to maintain communication during the rainy season with other parts, across the River. Eventually, the bridge was intended to be taken over by the Government by paying due compensation to the society. Further, the society had also helped the farmer members to improve their agricultural practices and to convert dry farms into irrigated farms. The society started a school at Wada, the student strength of which was around 900, in 1979. Girls were also taking more and more to school education and the number of graduates turned out from the village had shown a sizeable increase in recent years. Particular mention may be made of the assistance extended by the society to the tribal weaker-sections in its area to purchase buffaloes and maintain them well through provision of cattle feed. The extension work was being conducted through an employee specially appointed for guidance to them. In the total number of employees (about 70), 10 belonged to the tribals. Residential schools were also being run for them at the Government cost.

The society, it would be seen, was one of the best managed and quite successful societies, affiliated to the Poona District Federation. Financially it was sound, operationally, it was efficient and managerially it was quite progressive in its outlook towards growth and development of the weaker sections in particular, educationally and culturally. Its relations with the Federation also were on the whole healthy.

The sample of members selected for interviews reflected the healthy environment built up by the society vis-a-vis their members. Out of five members selected for the purpose, two were promoter members, the remaining joining in later years. The members interviewed, belonged to different villages from the area of the society. 2 of them belonged to the scheduled castes and the backward communities. The individual land holdings varied from 4 to 15 acres and most of them were unirrigated. One of the members was an artisan.

The main crops were potatoes, rice and occasionally, vegetables. Excepting one, the other 4 members had taken to dairy activity for the first time, and they unanimously reported the substantial contribution made by the dairy activity to their levels of income. The society provided the necessary inputs for the dairy activity apart from enabling the members to buy milch cattle and also arranged for the transport and sale of their milk on a regular basis. It also arranged to make regular payments to which the weaker sections looked forward always eagerly. The average number of milch cattle owned and maintained by the 5 members was 3. They maintained, excepting in one case, buffaloes for dairy activity. Gradually, the members hoped to add select breed of milch cattle to their animal strength. With the present arrangement in regard to services and marketing, they visualised no serious difficulty in repaying the loan instalments to the financing bank as per their prescribed schedules. Some members reported that they used bicycles for delivering milk to the society. They expressed need for further extension of veterinary services by the society. Already there were 3 dispensaries managed by the Zilla Parishad and they also organised a camp once in a year for general examination of the cattle population of the area. However, this was found to be rather inadequate in the face of growing milch cattle population and suggested further extension of these facilities in area.

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AMBALE COOPERATIVE DAIRY SOCIETY

This society functioned in a drought prone area of the Poona district and usually suffered from scanty rainfall. The land was mostly unirrigated and agriculture was conducted at subsistence level. The dairy activity was introduced through organisation of the primary society in 1976. It provided substantial support to the weaker sections through productive employment and generation of regular income receipts. The state government's Drought Prone Area Programme (DPAP 1975) also helped the process of development of the dairy activity further.

Ambale is a small village 50 kms away from Poona city. It had a population of 2500 and the 600 households in the village. It depended mainly on farming as the main source of income. The main crop was food grains raised from about 2,000 acres of cultivable land. It was mostly rainfed area.

As stated above, the society was registered in 1976 as part of the DPA Programme. Under this Programme milch cattle were supplied to the farmers through loans advanced by the commercial banks from the area at a subsidised rate of interest and on the basis of convenient repayment schedules. 25 p.c. of the loan under the scheme was given a subsidy, if the instalments were paid according to the schedule. This encouraged weaker sections to organise dairy business. The PDCMPF encouraged organisation of dairy society to collect and transport milk to the cooperative dairy at Poona. The initial membership of the society was 285 (1976). It rose to 446 in 1979. However, the number of active members delivering milk regularly through the society varied between 120 to 150. The large majority of members belonging to the weaker sections included about 25 scheduled castes members.

The Managing Committee of the society consisted of 9 members. There were no sub-committees. The chairman was elected for a period of one year. The Manager looked after the overall affairs and accounts of the society. He was assisted by 3 assistants - assistant manager, machine operator for cattle feed pounding machine and one for grading (testing fat percentage) of milk.

The society was collecting milk from members for delivery to the Poona Cooperative Dairy. It had the necessary grading equipment and a trained person to do the job. The price was paid fortnightly to the milk-producer member. The following table will give an idea about the milk collected in litres, in value and the commission earned for itself.

Year	1977	1978	1979
Milk collected in litres.	2,314	31,412	91,311
Milk sold in Rs.	4,628	62,835	1,82,621
Commission earned	133	1,870	5,237

Although the above mentioned figures indicate a rising trend in milk collection and sale in terms of both volume and value, it had yet to go a long way to reach a break-even point. For this purpose, it would have to endeavour to enlarge its business operations at least two times. On the one hand, it must record an increase in milk production in its area of operation and secure maximum share of milk through collection from larger number of active and loyal members. On the other hand, it must enlarge its supply and service operations, to support the increasing trend in production and collection of milk. The United Commercial Bank had been advancing loans to the farmers for purchase of milch cattle on the basis of the guarantee provided by the society. The recovery percentage was reported to be on the whole satisfactory.

As to supplies of inputs, the society was preparing fodder mixture through a pounding machine bought by it at a cost of Rs.7,750. The price of the cattle field provided a small margin to the society which was mostly considered as a service charge. The shed constructed for setting up the fodder unit cost the society Rs.14,000 of which Rs.2,400 were received as subsidy from the Government.

Financially, the society recorded slow progress, as a result of slow growth in membership and relatively higher investments in block capital. Lower active support from the existing members also was responsible for depressing the net financial results. The overheads were more than the revenue receipts. A larger turnover which was feasible even in existing conditions, could help the society to come out woods soon. The relations of the society with its Federation were on the whole satisfactory. The management of the society expected greater support from the Federation, especially in regard to supply of quality cattle feed and periodical veterinary services on a dependable basis to its members.

The sample of five members selected from the total membership of the society on a purposive basis, reflected the following position. The three members out of five had joined the society at the time of promotion in 1976. The remaining two were admitted in 1978. Two of the members belonged to the scheduled castes and occupationally two were landless labourers. The following table will give idea about the land holdings of the sample members.

Sr. No.	Total land holding (in acres)	Irrigated	non-irrigated
1.	28	5	23
2.	57	2	55
3.	2	-	2
4.	-	-	-
5.	-	-	-

The dairy activity provided additional source of income for the landholders. Most of their land was non-irrigated, rendering the agricultural production uncertain and at any rate low yielding. For the landless labourers, the dairy activity provided stable and gainful employment throughout the year. The DPA Programme considerably helped the small farmers and the landless workers in getting financial assistance at concessional rates of interest (along with some subsidy) for purchase of milch cattle. The setting up of the primary dairy society and the support of the dairy cooperative Federation facilitated organisation and conduct of dairy activity on commercial basis. This was a new experience for the local population and visibly they could see the benefit accruing to the small people out of dairy activity - in terms of regular income and stable employment. The ownership of the milch cattle of members interviewed is given below.

Sr. No.	Year	Total No. of milch cattle	Buffaloes	Cows	Variety
1.	1968	1	-	1	Hariyana
2.	1976	2	2	-	Local
3.	1975	1	-	1	Local
4.	1978	1	-	1	Hariyana
5.	1979	1	-	1	Tharparkar

The loans advanced to the members varied between Rs.2,000 to Rs.6,000. The recovery of loan instalments was linked to price payable to the member-producers. Hence there were no overdues in respect of loans. As stated earlier, majority of the members took to dairy activity after the formation of the dairy cooperative society in their village. Particularly the Tharparkar, Geer and Hariyana varieties of breed contributed to rapid increase in their milk production. The rate of interest on loans for the weaker sections was brought down from 10.5 p.c. to 4.5 p.c. The period of loan was 24 months and 25 p.c. was treated as subsidy, which was adjusted to the lost instalments payable by the borrower. The collection

and transport of milk was arranged by the Federation and the price was being paid at fortnightly intervals (after deducting the dues on loan account). The collection centres were reported to be conveniently located.

The general impression of the sample members was of appreciation in regard to their society and the District Dairy Federation. However, they desired that their society could arrange for provision of quality cattle feed at reasonable costs and veterinary services on a dependable basis as far as possible at the local.

The members, it appeared, had derived positive benefits out of their dairy activity in the shape of regular income with the help of the local cooperative and its Federation. Although the rise in their income level indicated a broad approximation, it nevertheless showed a noteworthy improvement as a result of taking to dairy activity. In fact, compared to their income from agriculture the dairy activity promised to become a major source of income available to them all the year round, keeping the members of the family productively employed. The following table can give a broad idea about the comparative improvement for the two year 1975 and 1979.

Sr.No.	(1975) Income from agriculture Rs.	Income from dairy Rs.	(1979) Income from agriculture Rs.	Income from dairy Rs.
1.	15,000	-	18,000	3,200
2.	20,000	3,200	25,000	7,000
3.	1,000	680	2,500	2,000
4.	1,200(wages)	-	1,800	3,200
5.	1,000(wages)	-	1,500	3,504

Thus, the dairy cooperative proved to be a boon for the weaker sections in the famine stricken areas of the Poona district.

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THE PAWANA VALLEY MILK PRODUCERS COOPERATIVE
SOCIETY LTD. BABADOHOL

This society was one of the oldest dairy cooperatives working in the relatively hilly region of the Poona district and was once not easily approachable by a good road. In recent years, in the course of some development schemes, the road connecting the region was repaired and made tolerably good. This infrastructure facility facilitated transport of milk produced in the region to the nearby Poona city.

The village Babadohol is situated 50 kms. away from the Poona city. The area was having satisfactory pastures though the size of cultivable land available was quite small. The twenty hamlets surrounding Babadohol constituted the area of operation of the society. The area was called the Pawana Valley, named after the Pawana river flowing through the region. This region was particularly suited to conduct dairy activity and with the passage of time it had been flourishing on a sustained basis as a result of continued increase in demand for milk from the nearby industrial belt. The private trade in sale of milk in retail was also developing fast as a consequence.

The population of the village was about 4000 and the cultivable land was 850 acres, (of which only 100 acres were reported to be well-irrigated). The Government Milk scheme was started in the year 1950 in the Poona city and the Dairy Development Department provided initiative in organising this society in 1951. While distribution of milk to the consumers of the city of Poona was the declared objective, the Dairy Department, as a complementary objective, encouraged registration of dairy cooperatives for organised dairy activity on the part of small farmers and producers in the surrounding region. This society in the beginning collected about 100 to 150 litres of milk per day and gradually reached the level of 5000 litres per day. The milk was collected both in the

morning and the evening. Initially there were about 40 members. Their strength went up to 204 by 1979. The number of members belonging to scheduled castes and tribes was 16.

In 1960 the Poona District Milk Producers Cooperative Federation was promoted with a major initiative from this society. The society was being managed by an elected managing committee, consisting of 11 members. There was a noteworthy provision made in the byelaws to provide regional representation to milk producers in its area of operation. The Chairman was elected by the managing Committee for a tenure of one year. On the executive side, the manager was elected from amongst the members of the managing committee who also worked as honorary secretary of the society.

The share capital of the society had practically remained stagnant over the past five years (1974-79). The society, however, was collecting deposits by way of regular standard deductions from the price payable to them for the milk delivered to the society. These deposits had increased from Rs.14,326 to Rs.18,535 during the period of reference. Some of the members had also kept with the society additional deposits on a voluntary basis. However, they were hardly Rs.1,343 and had remained practically stationary over the years 1974-79.

The financial statements gave an impression of a largely stagnant society. On the one hand, the assets remained stationary, on the other, dues receivable both from the Federation and the members showed a rising trend. Particularly, the overdues from the members were mainly on account of diversion of milk to buyers other than their own cooperative. As a consequence, the profit-loss position was also fluctuating over the five years under study.

The procedure of collecting milk after testing and grading was same as observed in other dairy cooperatives. The

volume of milk supplied by the society during the five years in question, can be seen from the following figures:

Year	1975	1976	1977	1978	1979
Milk sold (litres)	5,76,131	6,31,665	20,75,005	2,65,332	21,90,336

The above figures show a declining trend. As stated earlier, this was essentially due to diversion of milk to the G.M.S. and the private milk traders. Particularly, the buffalo milk was diverted as it fetched relatively higher price in the open market than the cow milk. The price for the cow milk was paid by the society at the government prescribed rate which was same for the buffalo milk also, under the scheme. This policy led to the consequent diversion of milk to buyers other than their cooperative.

The society was also providing cattle feed to the members. However, business on this account also exhibited declining trends. This called for organised marketing and promotion activity on the part of the society, on the basis of active price policy. It was unfortunate that an old society of this type should have suffered a set back in the face of increasing potential available for dairy business in the region. It was largely going to the private milk traders. Apparently, the price paid by the private milk traders was higher than that paid by the society. The procedure followed by the private milk traders in regard to collection, grading and payment was more simplified and quick though not necessarily satisfactory and in the interest of the milk producers. The milk producers seemed to fall a prey to the short-run tactics pursued by the milk traders and this inflicted loss of business on the society. The management gave an impression of helplessness over the policies and procedures followed by the private traders. In times to come it would be necessary for the society to revamp its operations relating

to increased milk production through more efficient and effective services and supervision with a view to overcoming the on-slaught of the private milk trade largely functioning in a dubious manner.

The five members selected on purposive basis during the visit to the society exhibited variations in regard to the period of membership, size of land holdings and the number of milch cattle owned by them, individually. Four out of five members had quite a long association with the society as members - ranging from 14 to 23 years. One of them belonged to the scheduled caste and had joined the cooperative relatively recently. His holding was five acres and was non-irrigated. Even in regard to the remaining four members the farming operations were dependent on the seasonal rainfall. Their individual land holdings, however, varied between 15 to 40 acres. For an essentially subsistence level farming operations, the dairy activity provided a dependable support. Three out of five members owned buffaloes, their number varying from 3 to 8. In addition cows also were owned by all the five selected members. The breed was local. The initial impetus was provided by the Government Milk scheme. The recent trend was more in favour of purchase of cows of improved variety rather than buffaloes, as the former proved to be more economical for maintenance and in terms of yield of milk. The usual procedure of collection, grading testing of milk and payment of price was being followed by the management of this society also. The members carried milk over a distance of 2 to 5 kms. In comparison to the simplified procedures followed by the private milk traders, the relatively more complicated though objective tests prescribed by the society were found to be somewhat inconvenient and time consuming by the milk-producers. The apparently higher price paid by the milk traders proved to be additional point of attraction in the face of increasing costs of maintenance of milch cattle. Nonetheless a clearly discernible trend in terms of faster rate of income growth from dairying was noticed in respect of the members selected for study from this society.

GOMATI COOPERATIVE DAIRY SOCIETY LTD., KHUTBAV

This society was registered in 1977 at the village called Khutbav which was located at a distance of 52 kms from the city of Poona. The surrounding region was being described as drought prone area where dry farming operations were conducted till recently. Therefore, there was no significant dairy activity noticed till the completion of the dam. Now, regular water supply has been assured and this has led to a fast change in not only cropping pattern but also diversification in agri-horticultural activity. In recent years with the organisation of the above society dairy activity also had been receiving lot of encouragement.

The population of the area under the perview of the society was about 4000. There were 750 land holders with cultivable land around 2200 acres. slightly more than 50 per cent of land was under irrigation. The main crops grown in the area were sugarcane, grapes and foodgrains and lusern grass for milch cattle. Majority of the farmers were owning land less than 5 acres.

The society was started with 51 members and its area of operation extended to 3 villages. Their distance from the main headquarters at Khutbav was between 7 to 9 kms. The society was organised to encourage and develop dairy activity amongst the agriculturists and to provide for the purpose cattle feed and other input services to the member producers. The society provided guarantee to the financing bank when it advanced loans to the member borrowers for purchase of milch cattle. The growth in membership although had doubled in 1978, in the following year the increase was marginal leading to the total of 107. There were 11 members belonging to the scheduled castes. The Poona District Cooperative Milk Producers Federation had taken special efforts in the promotion of the society. In the year of study the chairman of this society was also the chairman of the PDCMPF. The society had adopted

the model bye-laws prepared for the dairy cooperatives by the cooperative department of the State. Accordingly, the general body elected 11 members to the managing committee for a period of 3 years in the annual general meeting. In turn, the managing committee elected the chairman for a period of one year. There were no sub-committees created for special decision areas. The chief executive was the secretary who directed and supervised the managerial affairs of the society.

Operationally the society was functioning as agent of the Federation for collecting and transporting milk for which it received a commission of 6 paise per litre. During the short span of 3 years, the society had recorded faltering growth in respect of main areas of business activity such as collection of milk, arrangements for securing milch cattle for the members etc. The supply services had also not been organised by it till 1979 as expected by the members. The following table clearly indicates the declining trend over the 3 years beginning from 1977 in respect of milk sold in litres and in value.

<u>Year</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>
Milk (in litres)	258,040	208,725	159,456
Value of milk in Rs.	516,080	409,450	318,913

The main reason for the fall in the collection of milk was close proximity of the village to the city of Poona which tempted the milk producer members to sell their milk directly to the traders or consumers in the city. The defective policy of the state government which prescribed same rate per litre for both buffalo milk and cow milk was also responsible for larger diversion of buffalo milk to the open market, while the cow milk was supplied to the society. The procedure and the basis for collection and grading of milk was same as elsewhere. The society had the necessary staff and equipment for the purpose.

The sample members interviewed at the society's level had expressed overall satisfaction regarding the method and manner of working yet they unanimously recorded the deficiency in necessary services in relation to the producer members. Especially the small farmers and other weaker sections expected greater diversification in operational management. Some of the members were solely dependent on dairy activity for their livelihood right from the inception of the society. There was hardly any dairy business conducted on commercial lines prior to the organisation of the society. To such members the society provided much needed support and contributed to improvement in their individual incomes to a considerable extent. It was obvious, the society's operational and financial position could have stabilised and improved further even within a short span of 3 years had the members remained consistently loyal to their society.

The position of the 5 members selected at the society during the visit in regard to cattle ownership appeared as below:

Sr. No.	Year	Total No. of Milch cattle	Buffaloes	Cows	Variety
1.	1976	7	1	6	Local
2.	1976	1	1	-	Local
3.	1976	2	2	-	Local
4.	1976	2	-	2	Local
5.	1976	2	-	2	Local

It would be noticed that the milch cattle owned by the sample members were of local breed giving low yield per animal. Greater effort were, therefore, necessary to bring within their reach high yielding varieties of milch cattle. The management expressed various constraints operating in their area and felt that the process of change over from old breeds to improved varieties could only be gradual. However, with improved water supply in the area and consequently likely improvement in supply of green fodder, it could expect faster development in the near future. It expected the Financing

agencies to increase their scale of finance in view of the increase in the purchase cost of milch cattle. Some trends were already discernible in 1979 in the direction of not only addition to the existing cattle heads but qualitatively also better varieties of milch cattle were bought. With more than proportionate increase in yield of milk per cattle, re-payment of bigger loans and recovery of costs did not seem to pose any serious problem. Particularly clear preference was noticed in favour of cows now, as on the basis of experience the member producers found the maintenance of cows more economical. Not only yield per animal was considerably more in respect of a improved breeds of cow. The lactation period was also much longer than a buffalo. The splendid promotional work carried on by the well-known Bhartiya Agroindustries Foundation was also demonstrated in the nearby region. With the assured marketability of milk, the element of risk in financing purchase of milch cattle had been greatly reduced and the guarantee provided by the dairy society ensured recovery of loans on the basis of easy convenient instalments.

At the society's headquarters the milk was brought by the members on a bicycle from a distance of 7 to 9 kms. The price of milk was paid fortnightly and the members had generally no grievance about the grading and testing of milk. The members, however, expressed a desire to locate the milk collection centres at convenient points in the area of operation of the society. The response from the members could be expected to grow quickly in years to come. This might necessitate planned preparation on the part of this dairy society to be able to meet the needs of the situation as and when it emerges. Unfortunately there was hardly any sign noticed in that direction.

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