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CHAPTER 3
BRIEF PROFILE OF THE SELECTED DAIRY CO-OPERATIVES

The researcher has selected purposively five co-operative dairies as stated below, situated at different geographical areas covering the entire State of Gujarat.

1. THE RAJKOT DISTRICT CO-OPERATIVE MILK PRODUCERS UNION LIMITED.
2. THE PUNCHMAHAL DISTRICT CO-OPERATIVE MILK PRODUCER UNION LIMITED.
3. THE AHMEDABAD DISTRICT CO-OPERATIVE MILK PRODUCERS UNION LIMITED :- UTTAM DAIRY.
4. THE BANASKANTHA DISTRICT CO-OPERATIVE MILK PRODUCERS’ UNION LIMITED :- BANAS DAIRY
5. THE SURAT DISTRICT CO-OPERATIVE MILK PRODUCERS UNION UNION LIMITED :- SUMUL DAIRY.

3.1. Rajkot District Co-operative Milk Producers Union Ltd., Rajkot:
In the year 1956, the Government of Gujarat has started the milk conversion plant at Rajkot, with the help of UNICEF with major objectives of catering to the needs of the city population and meeting their day to day wholesale palatable milk requirement as also to provide nutritious diet to the under-nourished children. Construction of building and installation of machinery was completed in 1963 at the cost of Rs. 1.0 crore and, in this way the Rajkot Dairy started functioning. Initially the milk handling capacity of Rajkot Dairy was 40000 litres of milk per day and 2 M.T. drying capacity of powder plant. It is located on Dudh Sagar Marg, Near New Power House.

The management of the plant was with the Government at that time. Thereafter, the Government started two chilling centres, one at Vurchhiya and the other at Wankaner - both are near Rajkot. These two chilling centres started collecting milk from rural co-operative milk producers located near these centres.
The main objective for establishment of these two chilling centres was to increase the milk procurement and to reduce transportation cost. Initially chilling capacity of these two centres was 5000 litres per day.

In the year 1965, the Rajkot Dairy started making Ghee and butter with the help of Central Government and UNICEF, to cater to the needs of Rajkot city. In 1967, out of three cattle feed plants each one of 1000 m.t. per day at Rajkot (Khandheri), Mahesana (Hinch Boriavi), and Surat (Chalthan), were installed by the Government of Gujarat. The Rajkot plant was erected by N.D.D.B. on turn key basis in the year 1967. Since the union was in its infancy stage at that time, the Government handed over the plant to Gujarat Agro Industries Corporation which was wholly owned by the Government of Gujarat.

In the initial stage, the Rajkot dairy was under the control of Animal Husbandry Department of Gujarat Government. In the year 1961, the Rajkot District Co-operative Milk producers Union Ltd. was accorded registration under the Co-operative Societies Act, with the principal aim to help the cattle keepers of the district consisting of migrating Rabari and Bharwad communities.

Since the Union had to work in drought prone area of Rajkot, it could manage to organize primary Gopalak Milk Producers Society gradually and then became capable to take over the management of the dairy plant and machinery.

In the year 1970, Rajkot District Co-operative Milk Producers Union Ltd., requested the Government to handover the management of Rajkot Dairy from Animal Husbandry Department which was conceded by the Government and the Rajkot District co-operative Milk Producers Union was given a chance to run the dairy for one year, on experimental basis.

UNICEF = United Nations International Children Emergency Fund
The experience was fruitful. Hence, the Government handed over the entire management to the union in 1971, on ownership basis.

Since 1972, the Union has been making Ghee under brand name 'Gopal Ghee' with agmark and skim milk powder under 'Gopal' brand with I.S.I. mark. In the year 1978, the Union began to produce new bye-product of milk, popularly known as 'Penda' and in 1980 it started selling sterilized flavored milk marketed under the brand name of 'Gopal Penda' and 'Gopal Milk' respectively. These two bye-products received tremendous success. In the year 1995-96, the Union has produced and sold 60 tonne penda and 220 litres per day sterilized flavoured milk.

The G.D.D.C. was entrusted to implement the operation flood programme in Saurashtra and Kutch region. Since the Rajkot Dairy fell under G.D.D.C. fold, and since the Union was not in a position to implement the O.F. programme by its own, a joint management committee of the G.D.D.C. and the union was established in 1977.

For effective implementation of O.F. II programme, it became imperative to handover the entire management of Rajkot Dairy to G.D.D.C. and accordingly the management of Rajkot Dairy was handed over to G.D.D.C., on leave and license basis for five year from 2-11-83 to 3-11-88.

Since November 1988, the management of Rajkot dairy rests with the Rajkot District co-operative milk producers union Ltd.

**VARIOUS INPUT PROGRAMMES:**
The Rajkot Dairy has started various input programmes under O.F.II, such as A-I services in 1982 and other Animal Husbandry activities in 1985, co-operative development programme in 1989. As an economy measure, co-operative development programmes and special visits under health care schemes had been discontinued since 1994. Only artificial insemination and vaccination are in operation at present.
FODDER FACILITY:
To reduce the production cost and to increase milk production, Rajkot Dairy procures cattle feed called 'Rajdan' from cattle feed factory owned by G.D.D.C. and sell it at the rate of Rs.3380/- per M.T. on no profit no loss basis.

Plant capacity for various milk and milk products:
The Rajkot Diary has been started in the year 1963 with the name of 'Pilot Milk Scheme' opp.Bhaktinagar Railway Station. At that time, milk storage capacity was 5000 to 10000 litres per day. In 1965, it has been raised to 40000 litres per day and it was further raised in 1988-89 to 1,00,000 litres per day.

The production capacity of Ghee of Rajkot dairy has been raised from 200 kg. in the year 1965 to two M.T. in 1990 and, since then it has remained same till now.

The drying capacity of powder plant has been raised from 2 M.T. per day capacity at the time of starting to 10 M.T. per day capacity in the year 1995. The dairy has produced 33 ton in the year 1996-97.

CHILLING CENTRES:
The chilling capacity of these two centres named Wankaner and Vinchhiya was 5000 litres per day in the year 1967-68 which has been raised to 20000 litres per day in the year 1988. The chilling centre at Pithadia which was started in the year 1993 with capacity of 14000 litres per day and Vinchhiya chilling centres have been closed down on the ground of economy.

3.2. Panchmahal Dist.Co-operative Milk Producers Union Ltd., Godhra:
Panchmahal (Godhra) District is a backward district of Gujarat. It is situated on the boader of Madhya Pradesh and Rajasthan. It covers 8860 km. of land. Average rainfall of the district is 600 mm. The total population of the district is 29 lakhs as per 1991 census figure. It has got 28 lakhs live stock. There are 11 talukas out of
which 5 talukas are in tribal area. It is on the eastern side of the Gujarat State. The land is of very poor fertility. It is therefore, a drought prone area. Moreover, the tribal population of this district is almost migratory and they will be migrating to Kheda, Baroda and Surat for doing manual work. Only in monsoon, they will stay in their villages. Since it is a hilly area, farmers cannot take more than one crop i.e. only maize. So they have to depend on other subsidiary occupation like small cottage industry, dairy industry and poultry keeping for their livelihood.

The milk union was registered in 1973 and the union was supplying the milk collected from its members to other dairies i.e. Sabar dairy- Himatnagar, Baroda Dairy and Amul Diary - Anand, it has not got its own dairy plant. To process the collected milk, it was in the year 1979, that a dairy plant with the capacity of 30000 litres per day was erected with the financial assistance from D.P.A.P. (Drought prone Area Project). In Sept.1982, this union was included under operation flood programme of N.D.D.B. and upto 1996, it remained under the scheme. During this period the milk union was developed on the Anand Pattern. The installed capacity of the union was 30000 litres per day in 1979 which increased to 1,00,000 litres per day in 1982 and again to 2,00,000 litres per day in 1993-94.

The installed capacity of the Ghee was 10 M.T. per day from the beginning. The quality of Ghee is considered one of the best available in the market of Gujarat.

The union has commanded the powder plant with capacity of 10 m.t. per day in the year 1986-87, which was increased to 18 M.T. per day in the year 1992-93.

The union has started production of Table butter and Amulya powder in the year 1994-95 on experimental base.
**INPUT SERVICES:**

The milk union implemented a number of technical input programmes to help the farmers to increase the milk production at lower cost so that it becomes economically viable for them. Such programmes include breeding, feeding and health care. Proper breeding, balanced feeding and better management are the backbones of the profitable dairying. This can be supported by educational programmes for farmers - particularly for women members.

**Breeding:**

An efficient dairy animal is a result of better breeding. The economic gain from the milk business can be made more amenable by adopting the scientific method of breeding. Under milch breed improvement programme, over 37264 inseminations were carried through 477 A.I. centres during the last year i.e. 1995-96.

To get improved breeds of milk animals for better quality milk production in large quantity, the union has implemented ‘Progeny Testing Programme’ in association with Sabar and Baroda milk union under the guidance of N.D.D.B. since the year 1992-93. It is a matter of surprise that the heifers having high genetic potential produce more milk and achieve early maturity period.

The union has selected murah breed for A.I. as it is suitable according to their climate resources.

**Feeding:**

To produce more milk at lower cost, provision of balanced cattle feed in proper quantity is of utmost importance. As the union has no cattle feed factory of its own, it provides balanced cattle feed, by procuring it from the neighbouring milk union. In the year 1989-90, the union has initiated selling of ‘Panchamrut Poshak Dan’ along with the usual ‘Panchamrut Dan’. Panchamrut poshak dan is high protein animal feed which is more nutritious and hence, proved more useful. Recently, the union has also made an arrangement to
provide Amul special dan. Last year the union sold 3800 M.T. cattle feed on ‘no profit no loss’ basis.

To preserve excess green fodder, a silopit scheme has been introduced in the year 1989-90 with the financial assistance from D.R.D.A. (District Rural Development Agency). Such preserved food, called ‘Siege’, can be used in summer when fodder is not available in plenty.

The milk union has also implemented silvi pasture scheme since the year 1990-91.

Since the year 1992-93, the union has started the scheme of urea straw treatment for dry fodder (wheat and paddy straw) for increasing its nutritive value and palatability (with the help of N.D.D.B.).

With a view to making available the improved variety of fodder seeds, more than 275 quintals of fodder seeds were sold in the year 1995-96.

In order to reduce the cost of dry fodder, ‘Amul Mol-u-min’ popularly known as Chocolate is distributed.

To prevent the wastage of scanty fodder, Chaffcutters are provided on 50% subsidy.

**Health Care:**

Along with the animal breed improvement programme, the attention towards animal health is also important. Over 87000 animals have been treated under various health care programmes during the last year.

With a view to making the animal treatment quicker and meaningful, a new concept of veterinary micro centre was initiated from the year 1990-91. Today, 11 veterinary micro centres have been established.

With a view to helping our milk animals to calve regularly, infertility camps were organized regularly. During the year 1995-96, more
than 7500 animals were treated for reproductive problems by infertility camps at different places.

First aid treatment and vaccinations are also conducted regularly. Government is giving 50% subsidy towards the cost of vaccination of foot and mouth diseases.

Training & Extension:
To increase the awareness among members regarding co-operative dairying and their involvement in the day to day working of co-operative societies, the training programmes have been conducted since the year 1989-90 with the help of N.D.D.B’s co-operative development programmes. Last year, 10301 male members, 15863 female members, 1864 management committee members, 146 secretaries, and 44 testers were imparted training in their respective fields. More than 23000 members were benefitted by study tours.

Tribal Welfare Scheme:
As major portion of the district has been dominated by tribal population, various schemes have been implemented under tribal sub plan for the upliftment in socio-economic status of tribal milk producers. Attractive incentives and generous assistance are offered by way of cash awards, subsidies, prizes etc. in the matter of breeding, feeding, health-care, and training so that dairy industry becomes economically viable for them.

3.3. Ahmedabad District Co-operative Milk Producers Union Ltd.
Uttam Dairy :-
Under the guidance of Sardar Vallabhbhai Patel and under the leadership of Tribhuvandasbhai Patel in Anand in Kheda district, milk business was started on co-operative basis, in 1946. After wards in Gujarat, (in Amdavad district) in 1956, a milk union by name Ajod came into existence. Its capacity was 20000 litres per day.

The Ajod’s working was limited and it suffered a heavy loss of Rs.50.00 lakhs due to lack of proper selling system and difference between market rate and procurement rate which was very high.
The situation was so worse that it had no money to pay to the milk producers. So it was decided to liquidate the union but Ajod dairy could not be liquidated and, in 1977, Amdavad district co-operative milk producers union ltd., named ‘Sardar Dairy’ came into being. Besides, in Amdavad, there were other two unions viz., Amdavad district co-operative and Gopalak union Ltd. who were also collecting the milk. In this way, there were four district level unions working for collection of milk from villages, resulting in cut-throat competition among them.

At that time, Ajod dairy had got a 20000 litres per day plant but its milk procurement was meager, while Sardar Dairy had got sufficient milk but no plant of its own. So Sardar Dairy sold the milk collected by it to ‘Abad Dairy’ run by G.D.D.C. but it got very low remuneration compared to its procurement cost. So there was a loss every year and it reached to Rs.1.0 crore. So the Board of Directors passed a resolution to transfer the management to G.D.D.C. and, accordingly, management was handed over to G.D.D.C. with effect from 1-2-85. At that time, the Sardar Dairy had two chilling centres at Viramgam and Katosan with 20000 liters per day capacity and 1 cattle feed plant with 100 M.T. per day capacity at Sarkhej under O.F. scheme. This plant was leased out to G.D.D.C. for five years. After taking over the management of Sardar Dairy, the management of the Ajod dairy had also passed resolution to handover the management to G.D.D.C. with effect from 11-4-85. The registration of both the unions stood cancelled and the Registrar of Co-operative Societies issued orders banning the collection of milk.

**RISING OF ‘UTTAM’ :**

To develop milk business on Anand pattern in the district, the Registrar of Co-operative Societies - Gujarat State, Gandhinagar, merged both the unions (Sardar Dairy and Ajod Dairy) and on 12-9-85, the Amdavad District Milk Producers Union Ltd., was
registered. The names of Sardar Dairy and Ajod dairy were cancelled and the union was renamed as ‘Uttam Dairy’. The property of the union and the combined loss of Rs. 1.1 crores was also given to Uttam dairy and the Government had formed a committee, to administer both these unions, consisting of 5 members, viz. there from G.D.D.C. one from N.D.D.B. and one from District Registrar. The Managing Director of G.D.D.C. was to be the chairman and the expert team from N.D.D.B. and G.D.D.C. was also made available to the union. Dr. M. C. Vyas from N.D.D.B. was appointed as M.D. on loan service. Similarly, there were two primary cooperative societies of Ajod and Sardar at village level which were also merged in one and there was one society for one village according to Anand pattern.

During the hard period, the employees of unions and G.D.D.C. as well as N.D.D.B. had given full co-operation. Standard milk and tonned milk were introduced under the brand name of ‘Uttam’. The people of Amdavad city had given rousing reception to this milk. So the sales of the milk was increasing day by day. The Ghee of Uttam is also in demand. The sales of Uttam dan is 9753 M.T. per year.

Thus, the Uttam dairy was able to create confidence among milk producers by giving prompt payment and making settlement for their administrative problems. So milk production was increasing and there was good amount of profit also. Looking into all aspects of praise-worthy progress and services rendered to milk consumers, the Institute of Self Defense and National Character has awarded the ‘Transworld Trade fare selection Award’ and ‘Gold Medal’ to the M.D. - Dr. M. C. Vyas. In 1993-94, again the union has been awarded, by the Institute of Economic Studies, New Delhi, a “Certificate for Excellence Award” as well as “Udyog Ratna Award” in appreciation for good work done by the union.
Thus, the Amdavad District, Milk Co-operative Society was working with strong footing and milk producers were also happy. They felt that this union belongs to them. They got attractive remuneration for their product (Milk). They were getting Rs.100 per kg. fat and they were feeling that a golden period has dawned for them.

After three years, the Government arranged for the election of Board of Directors and the first Board of Directors was elected in August 1988. Since then, the union is managed by the Board of Directors.

The union has the following units:

(i) Dairy plant of 1.00 lakh litres per day capacity in Ahmedabad.
(ii) 20000 litres per day capacity chilling centres each at Viramgam, Katosan, Dhandhuka and Dehgam. In the year 1992-93, the chilling capacity of Dehgam increased to 30000 litres per day.
(iii) One cattle feed plant of 100 M.T. per day capacity at Sarkhej.
(iv) One cross breed farm at Navapura.

Thus, after a long period of time, the management was in the hands of milk producers. It has got step by step progress. Its other activities are given below:

3.3.1. CATTLE FEED FACTORY:
The cattle feed factory which was leased out to G.D.D.C. for five years was returned to the union in October 1989 as the G.D.D.C. declined to continue the same. At that time, monthly selling of dan was only 265 tonnes. After that, Union improved the quality of dan by adding 18% profit and introduced the new dan under the title of ‘Uttam Dan’ which gained good acceptance from milk producers and in the last year, it reached to 900 M.T. per month.

3.3.2. DAIRY PLANT:
The milk handling capacity of the dairy plant was 20000 litres per day in starting and converted into 1,00,000 liters per day under O.F.III scheme in the year 1989-90. The expansion programme to expand the plant to 200 lakh litres/day is in process.
Due to good monsoon and encouraging support from the member producers, the union was flooded with milk in 1989-90. It had to send surplus milk to the far flung areas of Rajasthan and Madhya Pradesh but here it suffered some losses as the transportation cost was higher than that of selling price. However, to maintain trust in it by the members, it continued to procure milk and it was able to give handsome remuneration to milk producers.

3.3.3. CO-OPERATIVE DEVELOPMENT PROGRAMME:
To arrange good network of co-operation in district and to create awareness among milk producers, the N.D.D.B. has started C.D. programme in Ahmedabad with effect from 1-7-89. Initially, this programme was implemented in the villages of Ahmedabad. The expenditure under C.D. programme is borne by N.D.D.B. but the additional expenditure is borne by the union. By C.D. programme, primary co-operatives and union are becoming self sufficient and thereby milk producers can derive more benefits out of it.

3.3.4. CROSS BREED FARM:
An efficient dairy animal is a result of better breed. In this connection, the union has started cross breed heifer raising farm at Navapura in the year 1990-91 with the help of D.R.D.A. which has been a boon to the milk producers of this district.

3.3.5. INPUT SERVICES:
Dr. V. Kurian, Chairman of N.D.D.B. inaugurated a ‘training centre’ on 5-4-93 as training is a part and parcel of good development process.

3.3.6. VALUE ADDED BY PRODUCTS:
The union has started selling of butter milk in the year 1991-92 and in the year 1994 selling of sterilized flavor milk under the brand name of ‘Uttam F.M.’ was started, which received good response from market.
3.3.7. **IMPROVING FODDER FACILITY**:

An efficient dairy animal is a result of better breed. Its success largely depends upon feed and care given to it. According to a survey, milk production could be doubled, if cattles are adequately fed. As there is acute shortage of green pasture, it is compulsory to make complete use of dry pasture. So the union has established a plant with the help of N.D.D.B. and A.T.I. It was established with the capacity of 1 M.T. per day at cattle feed factory. In the year 1996, due to this newer facility, the digestive power of cattle also increased.

**Benefits given to primary milk Co-operatives**:

The union gives following facilities and benefits to milk co-operatives:

(i) Aid upto Rs.2000/- towards purchase of material and stationery, when a new society is commenced.
(ii) The societies are provided ‘Vitan Dan’ with best quality on no profit no loss basis.
(iii) Subsidy upto 50% is offered to purchase chaff cutter.
(iv) Artificial insemination and primary health care services are offered to the members at subsidized rate.
(v) Vaccination is also administered at subsidized rate.
(vi) 33% amount towards premium of cattle insurance is borne by the union.
(vii) 50% amount of the total premium under Group Insurance scheme of the members is borne by the Social Security Department Rs.16.5 is given by the union and remaining is to be borne by the members. Under the scheme Rs.5000/- is paid in case of natural death and Rs.10000/- in case of accidental death.
(viii) Under C.D. programme, one day tour free of charge is organized to visit dairy plant, cattle feed plant etc.
(ix) 100% subsidy is given for urea process.
(x) Rs.2500/- and Rs.5000/- are given for tour to the milk cooperatives, an if they organize a tour to other district level union respectively.

(xi) Necessary administrative guidance is made available to societies by union supervisors.

(xii) 33% subsidy to purchase colour T.V. is borne by the union. 33% subsidy comes from the Government. So the society has to pay only remaining portion.

(xiii) Incentive schemes are offered at village, taluks, and district level.

(xiv) 50% subsidy is given on siren.

(xv) The union is helpful in making available the grant from D.R.D.A. to make its own milk house.

**Banas District Co-operative Milk Producers Union Ltd., Palanpur:**

Banaskantha is situated in the north border of Gujarat and south of Rajasthan. It is a drought prone district; out of 11 districts, 4 districts are most vulnerable to drought. It is the most backward district of Gujarat. As per the latest census (1991), the population of Banaskantha is 21,58,378. It covers 12,248 sq.kms., out of which 72% is cultivable and only 12% land has facility of irrigation. Here monsoon is erratic and hence animal husbandry is a lone source of income for many farmers of this district.

The co-operative movement in Gujarat has started in January 1946 in Kheda district. Later, it spread to the other districts of State on ‘Anand-Pattern’ experience. It was a red-letter day for Banas Dairy. On 10th March 1966, Palanpur and Vadgam Talukas organized 8 Milk Co-operative Societies and started milk procurement for Mehsana Dairy.

‘Banas Co-operative Milk Union’ was registered on 31-3-69. In January 1971, foundation stone was laid for construction of dairy plant in the premises of Palanpur Vegetable Products Ltd. With the initial milk handling capacity of 1.5 lakh litres per day, Banas Dairy started manufacturing Ghee from 28-7-71. The plant was later
expanded to handle 3.5 lakh litre a day. On 1st January 1975, it had begun manufacturing skimmed milk powder, which has been raised to 42.5 M.T. a day under O.F. III in September 1993.

Similarly, a sub project investment proposal under O.F.II, has already been submitted to N.D.D.B. for the expansion of chilling centres. The first chilling centre was set up at Khimana on 17-6-1972 followed by at Dhanera on 17-10-1972. at Tharad on 14-3-1979, Danta on 2-11-1983 and at Radhanpur on 1-11-1984. From the initial or present chilling capacity of 90,000 litres per day, the capacity is going to expand to 2.75,000 litres per day. The work of project is on the verge of completion by now.

In the year 1980, the union started despatching milk to the Mother dairy - Delhi, through Railway tankers.

Amulya powder was introduced in the year 1986 and now the dairy produces ‘Amulya’ - sweetened milk powder, S.M.P. whole milk powder, table butter, white butter, ghee, butter milk, cassine, etc.

With the help of tremendous hard work and labour on the part of union, there was a flood of 4.0 lakh litres per day - milk from the members but due to inadequate handling capacity, the union had to declare milk holidays often. The situation improved after commissioning new powder plant in September 1994. Movement of liquid milk to various unions in the state has also been carried out particularly during flush season to avoid milk holiday.

**Input Services & Animal Health Care Activities:**
The progress made by the union in all spheres is the direct result of several input services and development programmes which are as follows:

3.4.1. **CATTLE FEED:**
The Dairy has set up a cattle feed factory with the capacity of 100 M.T. per day in the year 1977. The same was increased upto 140 M.T. a day in 1992. Now it is proposed to hike the capacity to 200 M.T. Banas Dan and Poshtak Ahar - are the two brands of cattle
feed. Drought, which affected milk producers adversely, has been successfully checked by providing feed to the farmers. Before introduction of feed, the farmers used to nourish their cattle on cotton seeds, Guwar etc. which were not only expensive but also less balanced diet. In the last year, the production was 32713 m.t. which shows 95.57% capacity utilization.

3.4.2. **ANIMAL HEALTH CARE PROGRAMMES:**

The union began A.H. activities in the year 1974-75 to improve the productivity of the animals. These include mobile veterinary routes, routine visits as well as emergency visits, artificial insemination, infertility camps, establishment of first aid centres, vaccination, infertility etc.

3.4.3. **GREEN FODDER AND OTHER RELATED SERVICES:**

Green fodder and other activities started in 1985-86 with total supply of 19462 kg. fodder seeds, because green fodder is important source of energy and nutrients. This scheme achieved considerable success and recorded growth of 4.5 times in 10 years.

In addition to this, union also supplied hand operated and man operated and electrically operated chaff cutters, with and without subsidy, ranging from Rs.100 to Rs.1500 per equipment. The union has distributed 3712 man operated, 6 hand operated and 4 electrically operated chaff cutters in the year 1995-96. The total amount of subsidy worked out at Rs.3,80,200.

The union gives subsidy under ‘Kisan Van’ and ‘Gram Van’ incentive schemes for the farmers to plant more trees under Silvivapasture scheme and thereby increase fodder facilities.

Another major activity is the manger subsidy scheme. The scheme started in 1993-94 and the total number of beneficiaries was 259 against total 2355 mangers. Last year, the union has given subsidy of Rs.16,68,750 to 734 members against 6675 mangers.
3.4.5. **CO-OPERATIVE DEVELOPMENT PROGRAMME:**
Major part of population in the jurisdiction of the dairy consists of marginal farmers who are totally illiterate and unaware of the life. To give them benefits of cooperative movement, the C.D. programme was started by the union in 1989-90. The financial assistance and guidance were taken from N.D.D.B. and G.C.M.M.F. The total expenditure has also gone up from Rs.2,37,851 in 1989-90 to Rs.14,03,737 in 1995-96.

**IMPORTANT FACTS:**

A. **Computerization And Automation:**
The union introduced computerization in the year 1985 for milk billing, financial accounting, pay roll, diesel billing, and procuring data. Improvement has been made in the year 1995 and complete automation and computerization are now on top priority list.

B. **Technology Mission on Dairy Development: (T.M.D.D):**
The establishment of T.M.D.D. was another landmark in the history of cattle rearing and animal husbandry. The aim of T.M.D.D. is to integrate the efforts of all governmental and non-governmental agencies in O.F. districts involved in dairy husbandry and dairy development for optimum utilization of resources available to the best advantage of farmers.

C. **Galabhai Training Center:**
In memory of the founder chairman of the union, late Shree Galabhai N Patel - a training centre with the following objectives was set up with the help of N.D.D.B. on the 8th October 1984 as a part of manpower development activity of N.D.D.B.

i) To cater to the preliminary training needs of farmers involved in management of primary societies.

ii) To impart knowledge and skills required for A.I. and other related animal husbandry activities for enhancing milk production.
iii) To train the village level functionaries for effective functioning of the societies.

D. National Productivity Awards:
The union was adjudged for the best productivity performance award for the year 1992-93 in Dairy Development and production in co-operative sector (product plant) instituted by National Productivity Council.

E. Quality Assurance Council:
The union started quality assurance programme in the year 1994 under guidance of Dr. A.R. Lang - FAO consultant and other learned persons from N.D.D.B. This programme will be helpful to combat tough competition with multinationals due to liberalization and globalisation of market.

CONCLUSION:
The peculiar geographical condition, erratic rainfall, epidemics, poor education and lack of awareness of the people are the vital constraint which badly influence the dairying practices of the people in the district. In spite of these, overall development of the district has been influenced by the dairy activities which the union had undertaken. The role of co-operatives in determining the standard of living of the people is very important for the Banas union has played a pivotal role in the district to improve the living condition of the people.

3.5. Surat District Milk Co-operative Producers Union Ltd., Surat:
Surat is situated in the southern part of Gujarat. Upto 1939, the requirement of the milk of the city area was fulfilled by the farmers living in or around the city. But the middlemen called the ‘Bhatiya’ exploited the farmers in both ways i.e. selling of milk and purchase of cattle, cattle feed, fodder etc. So the farmers decided to form their own association to safeguard their interests. Hence, the first Co-operative Society was started on
21-12-39 in Surat and that was the beginning of new era of Co-operative movement in Gujarat.

Later on, on 22-8-51, the federation comprising six Co-operatives, named Surat District Co-operative Milk Producers Union Ltd, was registered. After that, many co-operative milk societies were formed in every village.

In 1959-60, the committee was formed to make study of a modern dairy project. The committee prepared and presented a plan to Government of India, costing Rs.35.00 lakhs in 1961. In turn, the Government had sanctioned Rs.11.00 lakhs. The machinery required for the project was not available in India. So it was to be imported. UNICEF and FAO were approached for the same. But the sanction of the UNICEF was conditional and was not agreeable to the union. Under these circumstances, the financial assistance was sought and machineries worth Rs.11.00 lakhs were imported. Moreover, the foundation stone was laid on 30-4-66 for the project involving total assistance of Rs.78.00 lakhs under Swedish programme and Rs.68.00 lakhs from Government of Gujarat.

**CHILLING CENTRE:**

At first, Chilling centre at Bajipura was started on 11-11-1972 with capacity of 30,000 litres per day which was raised to 60,000 litres per day in April 1984. The expansion thereof is on hand to raise the capacity upto 1,00,000 litres per day. Similarly, another chilling centre was established at Uchhal in tribal area with the capacity of 10000 litres per day on 1-4-82, increased to 30,000 litres per day afterwards. Due to excess supply of milk, expansion work of Uchhal chilling centre is on hand. A chilling centre at Pardi with capacity of 2,00,000 litres per day is on the verge of completion and, with the functioning of the same, the burden on the main dairy plant will reduce considerably. Due to this facility, the proportion of milk sourage will be reduced.
Expansion of Dairy Plant:
The plant with the capacity of 50,000 liters per day was inaugurated by Shree Kurian on 24-1-79. To cater to the need of increasing population, capacity was raised from 50,000 litres per day to 1,00,000 litres per day on 21-4-79 under O.F.II and subsequently to 4,00,000 liters per day in 1991 and, for that, Rs.6,42,03,000/- was sanctioned by N.D.D.B. under O.F.III. To tackle the problem of additional milk supply and to avoid milk holiday declaration, a powder plant with the capacity of 12.5 M.T. per day and was commissioned last year.

Tetra Packaging:
Due to enhanced milk supply, to avoid milk holiday and to reduce refrigeration cost as well as to keep the collected milk in good quality, a modern Tetra Packaging plant was commissioned in 1994 but it was not found viable. Hence, the plant was handed over to ‘Dhara’ with effect from 5-3-92.

Powder Plant:
To tackle the question of disposal of excess milk supply and to avoid milk holiday, the union had decided to install a powder plant. Accordingly, the most modern plant of 12.5 M.T. capacity started functioning.

Butter Milk:
As the milk supply was to be sent to the union, the activity of Ghee making was stopped at rural level and hence, the deprival of getting butter milk. Therefore, the SUMUL Dairy started selling of butter milk with effect from 1-6-87. Today selling of butter milk stands at 38000 litres per day.

Cattle Feed Factory:
Surat was selected as one of the centres where cattle feed factory was established along with Rajkot, Mehsana and Ahmedabad. Such factory was started on 10-4-70 on turnkey basis by N.D.D.B. From the year 1988-89, with the help of ‘by pass protein technology’,
Sumul cattle feed factory was started to supply 'Balanced Dan' to the cattle for getting more milk with less cost.

As there is an acute shortage of fodder in summer, a novel idea to make fodder out of silage of sugarcane was successfully implemented by giving steam digestion treatment to it and adding missing nutrients in it.

Recently, a unit to make urea molasses Block was started at Chalthan cattle feed factory to provide nutrient food to the cattle giving less milk at low cost.

**Breeding:**

The Government of India has selected four districts for breeding of buffaloes and Surat is one of them. So in the year 1966, three important plans i.e. Dairy project, cattle feed factory, and Breeding centre were sanctioned.

In order to enhance the quantity of milk and to maintain constant supply round the year, it was decided to start cow breeding centre on 1-4-89 in Surat.

**Tribal Welfare Scheme:**

Since Surat district is dominated by the tribal population, it was imperative to educate them about the importance of co-operation and to encourage the involvement in the activity related to animal husbandry. The help of Tribal Development Corporation, Nationalized Banks, District Rural Agency, Land Development Bank, District Co-operative Bank etc. was sought to purchase cattle for the benefit of tribal people.

**Co-operative Development Programme:**

A co-operative Development programme was launched in 1992 in Sumul. Thanks to this, the involvement and commitment of members was increased towards the union. Participation of women and a new line of leadership emerged.
Thus, Sumul Dairy was started in 1979 with processing capacity of 50,000 litres per day. Initially, it had to face steep opposition from the vested interests but, with the help of members' faithfulness and commitment, it was able to overcome the obstacles and, now, it is a strong union with nearly 900 societies and 2,00,000 members.