



# Dairy Development Need for Rural Development (A case study of Village)

DR. BHANUBHAI D. PARMAR  
Principal,  
Shree P. M. Patel Institute of Business Administration  
Gujarat (India)

## 1. Introduction

Majority of working population in India are engaged in agriculture as well as allied activities field. But due to imbalance of nature, lack of water resource, high temperature, dealing with the agriculture field has become more challengeable in rural area. On the other hand, the animal husbandry and milk industry is becoming an important part of our society. For the removal of poverty and exploitation, of the rural people, animal husbandry is an important rural enterprise. The co operative societies have played a significant role in rural development of many countries of the world. The livestock population is an important allied activity of agriculture in the world particularly agrarian based countries including India. This stock is providing important commodities like milk, meat, leathers and animal related services for human beings. Among these commodities, milk is an important food in the human basket.

## 2. Definition of Dairy

“A place, where milk is gathered from anywhere, then processed to be edible for long time, then many products are made out of it and then it is sold, even the problem regarding their livestock’s are solved. It means Dairy,”

The word of “milk” is associated with dairy, and the dairy purely associated with the science base activities. The word ‘Dairy’ has origin in the greater traditional word ‘Deyerie’. This word is derived from the ‘Dey’ and that word defined as women servant. Women were mostly engaged as servants in animal husbandry activities during traditional period. ‘Dohita’ (Sanskrit word) is used for daughter. The milking of the cattle was done by the daughter during the traditional period. Thus there is a similarity between the English word ‘Dairy’ Gujarati word ‘Dikari’ and Sanskrit word ‘Dohita’ who generally collect store, process and sell milk and its products.

The Farmers of Denmark had gathered to establish the Dairy co-operative in 1882. Around 800 Dairy co-operative societies had started working by the year 1900. Thus these activities succeeded in Denmark, in the same way many other countries had also entered in this field, Netherland, Switzerland, France, America, New Zealand, Poland, Australia, England and also India.

## 3. Dairy Development in India:

The farmer and women are involved in allied activities, where they are living in remote rural areas, the role of co-operative societies have remained positive and that is due to nice and effective network of co-operative system in economy. Among the co-operative milk producing activities is a special one in the context of Europe countries and other cold countries. In Indian economy, the milk Industry has an important place in Gujarat, Haryana Punjab and Maharashtra. However, this has not covered an internal part of the socio-economic strata among many states of the country. In the milk industry, Gujarat is a developed as well as progressive state. In 2005-06 dairy milk production was 2.28 billion liter of 12 federations of Gujarat. There were about 11962 milk co operative societies and 2.5 million members in Gujarat during 2005-06.

During 2006-07 the dairy milk producing had 2.35 billion liters by 13 federations in Gujarat. The milk co operative societies were 12792 and 2.6 million members in this year. These statistics show that the milk production and number of members have increased year after year in Gujarat. The contribution of educational institution like Agricultural University, Animal husbandry related institution, cattle training centers, Dairy Science College, rural development institutions have been most important in the state. The various milk base products sold in different part of the country as well as other countries also. It shows that milk and milk producers are important basic needs of human being and day by day its demand is increasing. Therefore this activity has been more popular.

The co-operative movement started in India in the last decade of the 19<sup>th</sup> Century with objectives in view, i.e. to protect the farmers from the hands of the private money lenders and to improve their economic condition. Madras provincemoney was the birth-place of this movement. With the setting up of an 'Agricultural Co-operative Banks' where the movement took its root in our land and slowly gained strength. However, the growth of Co-operative movement in India during British rule was very slow and haphazard one. In most of the cases, the provincial governments took the lead. The foreign roller had only made some committees or framed a few rules and regulations. But they did not take any wide-ranging programmed to spread the movement all over the country.

The golden era of Co-operative movement began after India had won its freedom. Within two decades of independence the membership of primary societies had increased four times while the share capital and working capital increased 23 and 31 times respectively. During the pre-independence period this movement was limited to a few pockets of Calcutta, Madras, Bangalore and Gujarat. The most notable of this venture was Kaira District Co-operative Milk Producers' Union Limited of Anand, Gujarat. But after independence the National Government took great initiative in setting up new Dairy Co-operatives in many parts of the country. The National Dairy Development Board was set up to make the ambitious project a great success, which has been briefly detailed in the following part.

#### **4. Dairy Development in Gujarat**

Out of total population, 70 per cent people are living in rural areas and about 68 per cent of them are engaged in agricultural and allied activities for their lively hood. Among the number of rural agriculture allied activities, the animal husbandry i.e. milk producing is the significant economic activity in Gujarat. A co-operative milk dairy industry has exclusively developed in the state during the last three decades. For the 'White Revolution' in the country, the Gujarat is playing the leading role and even today also, our country has the important position in the milk industry in the world. Thus, 'The Gujarat' is known as the 'Denmark' today. The Milk industry has developed only in some states i.e. Gujarat, Punjab and Haryana while in the other states this industry has less developed in India. Geer and Kankrej variety for category of cows and Jafrabaji, Surati, Mahesani variety for of buffalos category are important for the mulch animal.

On the large scale cattle husbandry activities was started in the urban areas of Gujarat particular for cow and Polson dairy was provided best services for the butter during 1990. The Polson dairy was found to have exploited the milk producers in Gujarat and could not contribute to the development of the milk producers in the state. Therefore, the milk producers advance farmers, village leaders etc. met to Tribuvanbhai Patel, Vallabhbhai Patel and Morarjibhai Desai. This people were given lot of ideas by the National Leaders for the milk industry.

Milk producers had made the Milk Union for the restriction of milk trader's exploiting policy at Sujrat in 1938. This union was started to sell the milk directly to the customers. Gradually the milk co-operative societies started in 84 talukas and the exploiting policy of milk traders was closed down. The milk producers were got rescannable prices of their produce<sup>9</sup>.

The first co-operative milk producing society was established in Kheda district in 1946 and that was the fundamental of 'Amul'. The administration of Amul was transparent and favorable to the milk producers. The growth of Amul was impressive. As a result, the Mahesana District Milk Producers Federation was established in 1960. Later on, many District Milk Producers Federation was stated viz. Rajkot in 1963, Surendranagar in 1964, Vadodara 1965, Banas in 1970 and Sabar in 1971 etc. Besides, the income of milk producers was going up because the services related to health of cattle increased. About 13 District level federations were in the year 1971 functioning in the Gujarat and around 64.38 lack liters milk were collected per day

The state government as well as co-operative industry provided all cattle related maximum facilities and services to milk-producers co-operative industries have actively implemented many programmes, schemes and activities for the splftment for the cattle quality and also obtained the assistance from the other countries. Due to all this a variety of animal were developed in the state. Among the milky animal, the cow was yielding the milk of about 20 to 30 liters per day, to the milk producer's in the rural and semi rural areas. The milk producers received more milk with less cost from the animal which promoted the milk business in the rural areas. The growth rate of milk production was 10.6 per cent during 2001-02. During 2003, about 67.52 lack liters milk was collected per day by the dairy industry which has been the highest over the period of year.

For the scientific academic development of milk industry in the state, the Dairy Science College in 1961 and Animal Husbandry University in 1964 was established. Later on many other institutes were also activating for the Animal Husbandry like, Gujarat Vidyapitha, Krishi Diploma and IRMA etc. All the wigs of the Dairy industry were developed in Gujarat. For the marketing and selling of Gujarat milk products the Milk Marketing Federation was started in 1977 and then the products were sold in all the states of country and in the other countries. Today, Gujarat dairy industry has provided milk in Delhi, Mumbai, Calcutta and Ahmadabad. The National Dairy Development Nigam was established at Anand in 1965. The National Dairy Corporation was established at Vadodara in 1970. The efficient management of dairy industry, the Institute of Rural Management Anand (IRMA) started from 1980 in Anand. The IRMA has provided all kind of services related to milk industry for the overall development of this Industry in the state and country.

### **5. Development of AMUL Dairy**

Sardar Vallabhbai Patel wrote a letter to the Social Workers of the Kheda district that, there is only one way for the development of Farmers and that is a Co-operative dairy industry. The social workers thought for an establishment of Co-operative Dairy Industry. The first meeting held was under the chairmanship of Shri. Morarjibhai Desai with all leaders, farmers and milk producers at Samarkh village. Shri Morarjibhai Desai understood the various benefits of co-operative activities and the decision was taken for the established of Co-operative Dairy under this meeting. Shri Morarjibhai Desai had given the weightage on two points with farmers: (1) Don't send milk in Mumbai and (2) to start the co-operative milk society.

The Greater Bombay Milk Scheme was closed to receive the milk from the milk societies due to presser of private milk traders. Co-operative workers met to the government but didn't receive attention. Consequently, the milk producers had not given the milk to private traders and went on strike. This strike was extended for about 15 days. Due to this closed down the milk could not be provided to the Mumbai from the Anand and the government scheme also failed. The Milk Commissioner of Mumbai visited Anand and he accepted all the demand of milk producers.

Shri Tribhuvandas Kishabhai Patel was the President of Anand Taluka Sahkari Kharid Vechan Sandh (Federation) in this period. This federation throughout regarding purchase and sell of milk's scheme but there was no results. Some stakeholders or private milk traders did not like that the development of

co-operative dairy and they misguided to milk producers. In this situation, the president and advance farmers met at Nadiad and strongly decided to establishment of co-operative dairy. This result in 'The Kheda District Co-operation Milk Producers' Federation Limited which was registered on 14<sup>th</sup> December 1946

Shri Tribhuvandas Kishabhai Patel had started to establish the co-operative milk producing societies at the village level. Shri Patel discussed with the village leaders and farmers of the villages and explained the benefits of the co-operative. He also associated the experts of the Amul dairy with this activity. Consequently, co-operative milk society at Hadgud and Gopalpura was registered first.

## 6. Establishment of Vishrampura Milk Co-operative Society

The small village namely Vishrampura, is located in Pelad Tehsil, Anand. In this village, the Milk Co-operative Society was started in 3<sup>rd</sup> February in year 1966. The entry fee was only Rs 1 for the membership at that time. Total member of the society were 110 and the total fund was Rs 550. The Society kept the value of share Rs 5 in the same period. During 1966, this society collected about 300 liters of milk per day (1.10 lakh liter annually). Now membership of the society has gone up by 462 members and the fund of share is Rs. 2300. At present about 2.92 lakh liters of milk is being collected per day by this co-operative society.

The above figures show remarkable or appreciable achievement of a co-operative society in increasing membership and milk collection during the last four decades. The membership of the society has increased to about 320 per cent with growth rate of 3.32 per cent per annum. In the same manner, milk production of the society has gone up by 167 per cent and its growth rate of 2.26 per cent per annum during the last four decades.

## 7. Milk Co-operative Society

The Milk Co-operative Society of Vishrampura had started in the year 1966. During the beginning period, the total member was 110. Tables 1 and 2 reveal the various statistics and annual compound growth rate of Vishrampura Milk Co-operative Society.

1. **Number of Members:** The total number of member of the milk society was 285 in 1980-81 which has been continuously increased with 481 during 2010-11. The membership in the society has increased about 68.77 percent during 1980-81 to 2010-11. But incremental rate maximum was found during the 1990s with 43.16 percent and minimum was found during 2010s with 5.95 percent. The annual compound growth rate of the number of member is 4.87 per cent per annum.
2. **Quantity of Milk:** The main aim of the society is to collect milk from the society's members. The total filled milk quantity of milk was 1.75 lakh liters during year 1980-81 which had been increasing during year 2005-06 with 3.46 lakh liters, while it was increased in year 2010-11 with 5.78 liters. During three decades, the quantity of milk has been increased more than three times in the society. The growth rate of filled quantity of milk is registered in two digits with 11.48 percent per annual during 1980-81 to 2010-11. It is also to examine per member filled milk in the society, and it is shows that the milk quantity has been increased. In 1980-81 per member it was 613 liters which increased up to 1201 liters in year 2010-11, and its growth rate is 6.30 percent per annum.
3. **Profit of Milk Society:** Ultimate the purpose of any economic activity is the profit; therefore, it is to assess the profitability of the society. About Rs 28,291 was the profit in this society during 1980-81. This was gradually increased during the mentioned period and it was Rs 5.77 lakh during 2010-11. The growth rate of profit is 33.63 per annual during year 1980-81 to 201011, which is remarkable
4. **Sold of Amul Feed:** The milk cooperative society is selling the various items and feed for the animals. This society is selling the amul dan as feed for animals, and the data of the sold of dan

indicates that the demand of amul feed day by day increased. After year 2000-01, this demand marginally declined due to other feeds in the market available with cheapest rate.

**Table 1: Various Statistics of the Vishrampura Milk Co-operative Society**

Sr. No.	Particular	Unit	Years						
			1980-81	1985-86	1990-91	1995-96	2000-01	2005-06	2010-11
1	Number of Members	No.	285	353	408	419	454	457	481
2	Filled Qty. of Milk by Member	In Lakh Liter	1.75	2.21	2.91	3.40	4.57	3.46	5.78
3	Per Member Filled Milk	Liter	613	627	714	812	1007	758	1201
4	Profit of Milk Society	Rs in Lakh	0.28	0.26	0.34	0.20	1.15	1.40	6.86
5	Fund of Shares	Rs	1566	1800	2075	2130	2200	2300	2430
6	Bonus to the Members	Per cent	4.8	14	0	13	12	14	24
7	Sold of Milk	Liters	5038	7400	2476	2913	11907	23164	17877
8	Sold of Amul Feed	Kg in Lakh	1.20	1.67	1.86	2.05	3.40	2.37	3.20
9	Per Member Cons. of Amul Feed	Kg	421	472	457	489	749	519	666
10	Per Day Amul Feed Cons.	Kg	1.15	1.29	1.25	1.34	2.05	1.42	1.82

Source: Various annual reports and figures available from the Milk Co-operative Society, Vishrampura

- Amul Feed Consumption:** Per day per member the consumption of amul feed was 1.15 kg in year 1980-81. It is noticed here that this was increased very less up to 2000-01 with 2.05 kg than after declined.
- Bonus Rate:** The rate of bonus to the members has been also increase, and it was about 24 percent in year 2010-11.

**Table 2: Annual Compound Growth Rates of the Vishrampura Milk Co-operative Society**

Sr. No.	Particular	Annual Compound Growth rate (%)			
		1980-81 to 1990-91	1990-91 to 2000-01	2000-01 to 2010-11	1980-81 to 2010-11
1	Number of Members	3.32	0.98	0.53	4.87
2	Filled Quantity of Milk by Member (Cows + Buffalos)	4.76	4.18	2.15	11.48
3	Per Member Filled Milk	1.39	3.17	1.61	6.30
4	Profit of Milk Society	1.63	11.76	17.65	33.63
5	Fund of Shares	2.59	0.53	0.91	4.08
6	Sold of Milk	-6.25	15.35	3.76	12.20
7	Amul Feed (Dan)	4.08	5.62	-0.54	9.33
8	Per Member Consumption of Amul Dan	0.74	4.60	-1.06	4.25

*Source: Calculated on the basis of data available from the Milk Co-operative Society, Vishrampura*

### 8. Various Activities of the Milk Co-operative Society

For the increasing level of milk production and for improvement of milk fat, the milk co-operative society of the village has been playing positively role in rural areas. Societies are to pay their attention toward to increase the milk production and productivity per milk animal. The following various activities or programs are conducted by the sample milk co-operative society.

- 1. Animal Feed:** The society has providing a different kind of animal feeds namely amul dan, mineral powder, chatan dan, green and dry fodder etc. These items has been providing on the basis of animal age, weight, type of fodder.
- 2. Breeding:** For increasing the number of milk animal, the society has various breeding items through various program and scheme e.g. program for unfertilized milky animals, activity for AI etc.
- 3. Health of Animals:** For the good heath as well as maintain the health of various animals of members, this milk society has providing veterinary services at the primary level with very low charges compared to the market charges. In this services, they covered many disease to animals e.g. galsudho, karvaso/movaso etc.
- 4. Program for Society's Members:** This milk co-operative society has been also arranging various activities/programs for the development of the members. The aims of this kind of activities are to increase the numbers of society's members. They also conducted programs for members development programs namely 1) provided fund for society's members 2) assistance for member death scheme 3) women member saving scheme.

### References

1. Amul patrika: 2003, 2006, 2007, Published by AMUL, Anand
2. Annual report of Vishrampura milk cooperative society (2006-2001). Published by Vishrampura Milk Co-operative Society, Vishrampura
3. Government of India (1997). Basic Animal Husbandry Statistic Ministry of Agriculture, Development of Animal Husbandry and Dairying Krishi Bhavan, New Delhi.

4. Government of India (1956 to2000). “Annual Report” Department of Animal Husbandry Dairying and Fisheries, Ministry of Agriculture New Delhi
5. Government of India (1976).Report of the National Commission on Agriculture 1978, part 7 Animal Husbandry, Ministry of Agricultural and Irrigation, New Delhi
6. Government of India (1987).Indian Livestock Census , Summary Tables- volume-1, Directorate of Economics and Statistics, Department of Agriculture and Co-operation, Ministry of Agriculture, New Delhi.
7. Government of India (1988). Report of the Technical Committee of Direction for the Improvement of Animal Husbandry and Dairy Statistics, Ministry of Agricultural, New Delhi
8. Government of India (1995). “A Reference Annual, Ministry of Information and Broadcasting,” New Delhi.
9. Government of India, (1998-99). “Annual Report Development of Animal Husbandry and Dairying Ministry of Agriculture,” New Delhi
10. Government of India, First to Eleventh Five year plan Department of Animal Husbandry Dairying and Fisheries, Indian Planning Commission, New Delhi
11. Govt. of Gujarat (2008). “Socio- Economic Review” Directorate of Economics and Statistic, Gandhinagar, Gujarat State, Gujarat