

Chapter-I

Introduction

India is a thickly populated village based country. "The Village system is the foundation rock of Indian economy"¹. The Indian village is claimed to be "the most compact and adequate social, political and economic machinery for working out in daily practice, the great basic ideals of "Plain living and high thinking", striking the happiest combination between work for self-sufficiency and services rather than for gain, and leisure for the higher things of life"².

Thus "One of India's most crucial needs is agricultural development, an extremely thorny and perplexing problem, for it involves as host of highly complex and difficult social

and economic changes. To effect such changes is, indeed, a delicate and frustrating task, particularly in the social, cultural and political context of Indian Society. But for the future welfare of India these changes must take place and the goals of agricultural development must be achieved"³.

The economic development of our country has been initiated through economic plan. In this context co-operatives have been assigned a specific role. At their initial stages, economic plans have emphasised only on credit aspect of co-operatives. But with the passage of time functional areas like Dairy, Piggery, Fishery, Marketing, Housing etc. have received their importance. The agro-based village level societies in India are economically weak, but it could be observed that new avenues of rural income and employment could be created by emphasising on increasing production of milk also.

In India, landless labourers account for 21 percent of all rural household. So they do not have any share in the total land-holding. However they own 12 percent of the milch animals and produce 16 percent of all rurally produced milk. It stands to reason that dairying is a paying proposition for these poor rural people⁴. "Dairying is being envisaged as an important means of reinforcing the income for economically weaker section of the society

constituted by landless and small farmers"⁵. In this context it may be noted that in our country, the urban people make 7 percent expenditure for milk and milk products out of their total expenditure⁶.

India has about one-fifth of the cattle and about half of the buffaloes of the world i.e. largest in the world. There were 54 million breedable cows and 29 million breedable buffaloes in India in the year 1972⁷. But India's share is only about 5 percent in the world milk production (Table 1.1). This is quite insufficient to meet the demand of the country as the man and milch animal ratio depicts a very poor condition (1000:134)⁸.

Table 1.1

Milk Production in India and World (In '000 tonnes/annum)

Sl.No.	Types of animal	Milk Production	
		India	World
1.	Buffalo	11240	20267
2.	Cow	9550	367117
3.	Goat	570	6554
4.	Sheep	-	6348
Total		21360	400322

Source : United Nations year Book, 1971. The given figures pertain to 1970. Secondary source : M.S.Bedi, Dairy Development Marketing and Economic Growth. New Delhi:Deep & Deep Publication 1987, p.11.

Livestock census of India 1972 revealed that the growth rates of cow and buffalo population was 0.2 percent and 1.4 percent per annum respectively. The overall growth rate per annum was 1.6 percent. On the other hand to human population had grown in the same time by 2.5 percent per annum⁹. That means the growth rate of human population is faster than the growth rate of cattle population. In our country, the trend in per capita availability of milk showed a steady decline from 156 grams per day in 1940 to 139 grams per day in 1950, to subsequently, 108 grams per day in 1970¹⁰. In 1985 it is 144 grams only (Annexure 13).

"The Low production of milk in India is due to extremely low genetic potential of our cows and buffaloes as milk producers completed with malnutrition and poor health care. The average annual milk yield per cow in India is estimated at 157 kg. and per buffalo at 504 kg., whereas the average productivity of cows in dairy developed countries like Denmark, New Zealand, U.K. and U.S.A. is twenty times and in respect of buffaloes, it is seven times that of India. The U.S.A. for example, with only 14.5 millions cows produces more than 53 million tonnes of milk every year"¹¹. But Domestication of milch animals especially buffaloes and cows in India for the production of milk was started before 4000 years ago. So milch animals and milk become an important part of the Indian way of life even before our written history began. But dairying in India is

not sufficiently modernized like many other countries in the World¹².

The National Commission on Agriculture (1972) in their Interim Report on milk production recommended that benefits of increasing demand of milk in large cities, towns and industrial areas should go to small and marginal farmers and landless labourers. Efforts should be made to promote as much milk production possible through this section of rural population. The Commission suggested an integrated rural development approach based on a system of "Kaira District Cooperative Milk Producers' Union Limited," commonly known as 'AMUL in ANAND' of Gujrat ¹³

"Thus in view of many positive points in favour of Co-operative sector and practical results shown by milk Cooperatives, in Gujrat, it was finally decided by the Government of India to extend institutional support to industrialize and organize dairy efforts in entire rural India, through co-operatives"¹⁴. In 1965, the National Dairy Development Board (NDDB) was set-up in India. And it drew up a Programme known as "Operation Flood", to replicate the ANAND Pattern Dairy Cooperative in 18 areas of the country in 1970. The original pattern was a two-tier one, but subsequently ANAND Pattern was adopted with three-tier system viz;

- i) Village Society,
- ii) The Union of the Village societies and
- iii) The State Milk Marketing Federation.

Objectives of Study :

The creation of more "ANANDS" was recommended also under World Bank Projects in Karnataka, Madhya Pradesh and Rajasthan. The ANAND pattern cooperative dairying is now being replicated in almost all the states and Union Territories of India and two "Operation Flood" programmes (Operation Flood I and Operation Flood II) had already been completed by 31st March, 1984¹⁵.

Under the 'Operation Flood I', Programme, "The Himalayan Cooperative Milk Producers' Union Limited", commonly known as HIMUL was set up in 1973, in Darjeeling District of West Bengal. It was first of its kind in West Bengal.

West Bengal is relatively backward with respect to milk production and its productivity (Table 1.2 and 1.3). There are enough scope to bring changes for the success of the Operation Flood in West Bengal. West Bengal has sufficient milch animals, but her milk output is low compared to other states in India (Table 1.2).

Table 1.2
Milk Production in Different States

State	Milk Production 1977-78 (000 Tonns)	State	Milk Production 1977-78 (000 Tonns)
West Bengal	1,128	Mizoram	2.4
Bihar	1,860	Punjab	2,730
Orissa	212	Rajasthan	3,100
Tripura	14	Gujrat	2,025
Manipur	53	Haryana	1,620
Meghalaya	50	Uttar Pradesh	5,326
Nagaland	2.8	Madhya Pradesh	2,000
Assam	419	Maharashtra	1,344
Arunachal	30		

Source : Ministry of Agriculture & Irrigation, Govt. of India Publication, April, 1979.

The phase of Operation Flood covered 18 areas. These formed the "Catchment areas" from which milk was drawn into four metro Towns, viz : Calcutta, Delhi, Bombay and Madras. Operation Flood II is extended to organised marketing of milk to 147 towns, which involves development work in 150 milk sheds. Progress in this respect has been rapid during the last five years¹⁶.

Operation Flood seeks to place the instruments of progress in the hands of the farmers themselves. Milk

Table 1.3
Statewise Productivity of Cows and Buffeloes

State	Average yield in kg.	
	Cow	Buffelo
West Bengal	0.65	2.40
Bihar	1.49	2.61
Orissa	0.80	1.65
Tripura	0.50	1.57
Assam & Manipur	0.45	N.A.
Punjab	2.40	4.00
Gujrat	1.76	2.80
Rajasthan	1.92	2.86

Source : Journal on Agricultural Situation in India, September, 1967.

Producers' Cooperatives are organised in villages towards this end. There has been a sharp increase in their numbers since 1980.

The AMUL is the pioneer and largest of milk cooperatives in Gujrat, HIMUL is the largest milk producers' cooperative in West Bengal and also Second Largest in the Eastern region of India (Annexure 11).

The quantity of production and organisation of number of Village Milk Producers' Cooperatives have been increasing rapidly. But in Himul, the number of Village Milk Producers' Cooperatives and the quantity of milk production are not

uniform throughout. On the other hand in Amul, the organisation of number of Village Milk Producers' Co-operatives and the quantity of Production show a steady increase during the last ten years (Table 1.4 and 1.5).

Table 1.4

The Progress Made by the 'Amul' and 'Himul' from 1975-76 to 1984-85

Year	No. of Societies		Quantity of milk collected		No. of Farmer members of the societies	
	Amul	Himul	Amul (kg)	Himul (kg)	Amul	Himul
1975-76	829	88	129041218	3212000	250000	2215
1976-77	831	133	127017040	5339950	255000	4068
1977-78	831	227	141197710	7139400	275000	5722
1978-79	856	254	159262615	3932767	995000	6597
1979-80	895	272	169376542	5436574	308000	6916
1980-81	895	280	189576969	4699681	327000	7044
1981-82	894	296	160018395	5478022	339000	7449
1982-83	895	314	183820076	7411783	352000	8225
1983-84	870	350	193220249	6465428	359000	18370
1984-85	870	350	193220249	6465428	359000	15145

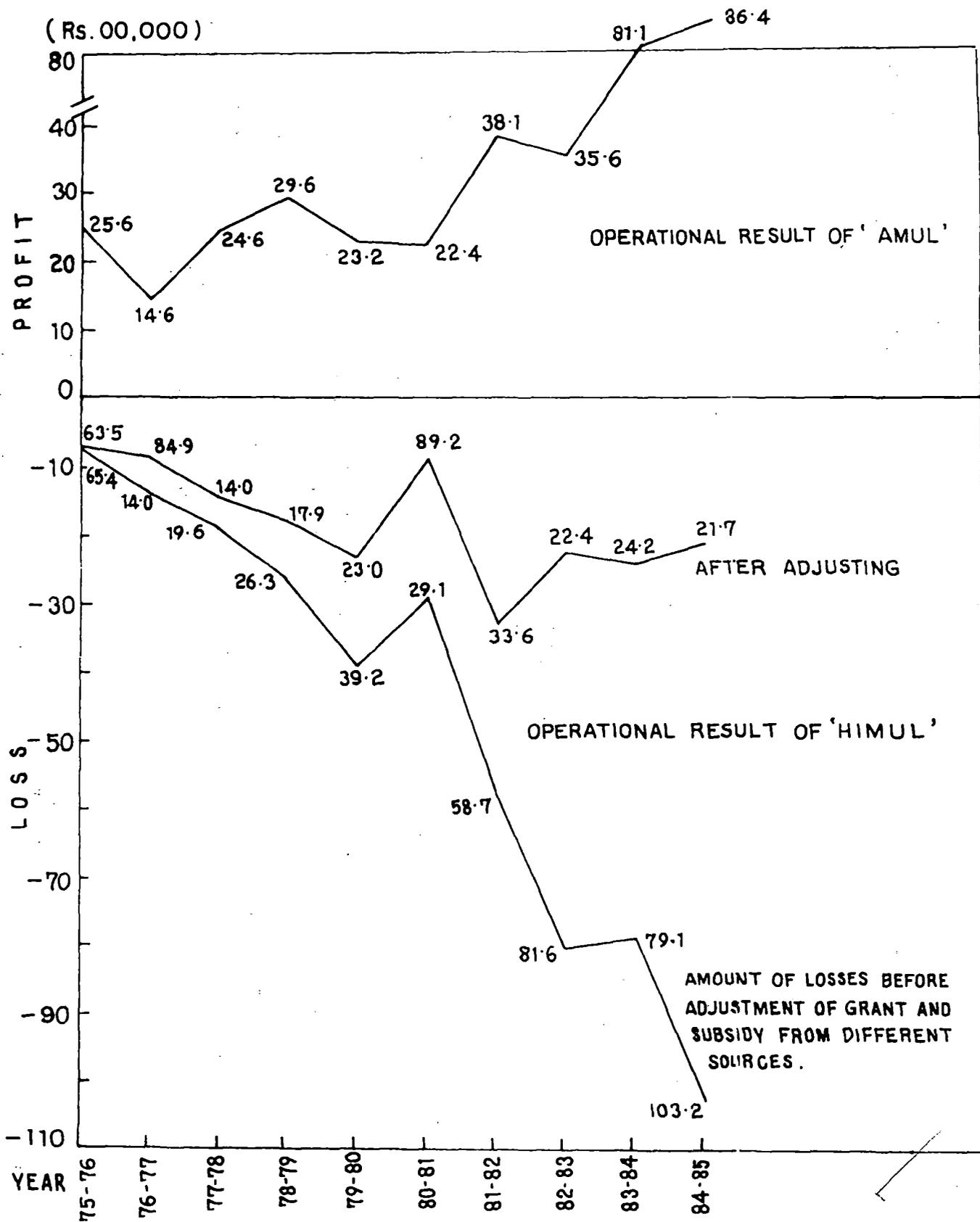
Himul could not achieve its targets since its inception in respect of production; and even was not in a position to achieve a 'Break-even Point' which was fixed at 35000 litres per day. Himul had targets to organise 500 village milk

producer's Societies of which 200 would be in the hills and another 300 in the plains within the first five years. In the hills Himul could achieve the target but in the plains it failed miserably. Though the number of organised village -Milk Producers' Societies in the hills is sufficient yet in respect of functioning, its working was not satisfactory. However, Amul could make steady progress in the same period (Table 1.5).

Moreover Himul had been suffering loss since inception. And this financial loss increased at an alarming rate. Though Himul is getting 'Grant and Subsidies' from the Government, Himul could not attain profit in its whole working life, whereas Amul has always earned profit. Himul has failed as a Commercial enterprise (Graph 1.1).

The objective of the present study is to explore the problem of Rural Development with special reference to Operation Flood. It is well known that rural development implies mainly agricultural development. But as land is in short supply attention has been given to allied activities of the primary sector. Dairy farming is one of such activities and 'Operation Flood' is a special Programme aimed at this dairy development. It is expected that Operation Flood in different areas of India will improve the standard of living of the rural people. Given this goal we have chosen the Kaira District Co-operative Milk

OPERATIONAL RESULTS OF AMUL AND HIMUL



GRAPH - 1.1

Table 1.5

Annual Organisational Progress (Performance) Report of the Societies of Himul

Particulars	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85
Total number of societies organised	88	133	227	254	272	280	296	314	332	350
Total No. of Functioning Society	88	133	363	159	175	184	196	215	215	233
Total No. of Society organised in Hill	88	97	187	210	225	233	241	254	272	285
Total No. of Society organised in Plain	-	36	40	44	47	47	55	60	60	65
Total No. of Society functioning in Hill	88	97	124	137	154	163	168	175	175	188
Total No. of society functioning in Plain	-	36	39	22	21	21	28	40	40	45

Producers' Union Limited popularly known as Amul of Gujrat and the Himalayan Co-operative Milk Producers' Union Limited (Himul) of West Bengal to evaluate critically their successes, failures, problems and impediments.

Related Research :

There had been previous attempts to assess the problem of Dairy Co-operative in Kaira District by several institutions, viz. Institute of Rural Management, ANAND; Sardar Patel University; Amul Dairy; National Dairy Development Board, Anand; Institute of Co-operative Management, Ahmedabad etc. and individually by Homer Hogle¹⁵, Dilip R. Shah¹⁶, Narendra J. Shah¹⁷, Saraswati Prasad Singh¹⁸, and various Indian and Foreign Journalists. But no such attempt has so far been made to study the problem of dairy development for the district of Darjeeling in West Bengal. Our special emphasis would be to assess, why Amul could be a successful venture while Himul could not be, even though structurally both of them are basically the same.

Area of the Present Study :

The geographical location of Amul and Himul and their respective hinterlands viz. Kaira District of Gujrat and

Darjeeling District, Sadar Sub-Division of Jalpaiguri District and Islampur Sub-Division of West Dinajpur District of West Bengal have been considered for the purpose of the present investigation.

The Research Design and Methodology :

The present problem is approached essentially from three directions. First, an attempt has been made to assess the comparative growth and performance of the two Projects - Amul and Himul, as this two have identical objectives and structure of management. It pertains to organisational growth, milk procurement and technoeconomic performance.

Secondly, another attempt has been made to study the financial performance of the two projects. It includes a comparative study of the operational results of Amul and Himul as based on data collected from primary and secondary sources.

Lastly, the most difficult task is to find out the economic impact of the projects on rural development. In this respect we have studied villages of Darjeeling District, Sadar Sub-Division of Jalpaiguri District and Islampur Sub-Division of West Dinajpur District of West Bengal and compared these results with the studies done earlier on the Kaira District of Gujrat.

Our method of study is very similar to the study of S.M. Patel and M.K.Pandey of the Institute of Co-operative Management, Ahmedabad¹⁹. We have compared to two studies to come to a particular conclusion. Since in this part of our study our main objective is to compare the relative performance of Amul and Himul, we have adopted a similar technique of sampling. The methodology used by Patel and Pandey was to study certain sample Villages in some districts of Gujrat. They followed the design of stratified random sampling. The same method has been adopted by us to make our study comparable to the study of Patel and Pandey. The steps that we followed are the following :

1) We have classified the villages into two categories and chosen 6 dairy-villages and 2 non-dairy villages for our study.

2) The choice of villages have been done by following the method of random sampling so that variability in the errors of observations can be minimum. It is to be noted that geographically the area of Himul has been divided into two regions : the hills and the plains. There are six sub-divisions in the area of Himul viz. (1) Darjeeling Sadar (2) Kurseong (3) Kalimpong (4) Siliguri (5) Jalpaiguri Sadar and (6) Islampur, of which first three sub-divisions of Darjeeling district are situated in the hills and another three are in the plains. At the time of sample designing

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for Himul 3 dairy and 1 non-dairy villages have been taken from each of the region (Vide Annexure 32).

3) Having selected the eight villages, the next-step has been to select randomly sample of 150 households of the Himul area (out of which 100 from 6 dairy and another 50 from 2 non-dairy villages). At the time of taking personal interview of the households through a structured questionnaire (Annexure 26) in the villages or at their homes, special care has been taken to explain the questions clearly to all the respondents. And therefore local language was used with the help of local language knowing (Nepali) experts, while conducting our interview.

Collection of data :

Information used for the present study have been collected from two sources :

- i) Primary information through field survey and
- ii) Secondary information through records and reports prepared by several institutions or individuals and discussions with the related people as well as with the concerned institutions and agencies. For Amul in particular we relied mainly on this source. Personal visits at Amul and its catchment areas on several occasions facilitated collection of further information. This study has considered

only the period of 10 years (i.e. from 1975-76 to 1984-85).

Plan of Analysis : For analysing the collected data, several designs of analysis have been followed viz. Tabulations, Charting, Graphical representation and Financial ratio analysis etc. Besides these, some statistical analysis have also been undertaken for the present study, such as Co-efficient of Variation, Rank correlation in the triangular matrix form (t-matrix) etc.

Limitation of the Study :

All information and data to be found in the analysis are collected personally, through interviews and investigations. Precaution has been taken to maintain objectivity, to keep the study free from any bias. For this, an equal emphasis has been given on asking the questions and recording the answers. However, inspite of the best of efforts made, some limitations could not be avoided.

In a big country like India where large number of co-operative Milk Producers' Unions are running it is not so easy as to study in depth the problems of all the Dairy Cooperatives at a time. So only two such Unions - Amul and Himul have been selected for a detailed investigation.

Another problem is the non-availability of necessary information and this has impelled me to give greater importance on verbal interviews. Limited cooperation of enterprise officials in supplying records as well as limited scope of having interviews with them rendered occasional difficulties.

The third limitation of the study is time frame. The time frame of our study is different from that of Patel and Pandey. However, We have made certain adjustments of the income data of their study by taking the trend values in consideration.

Scheme of Chapters :

The study has been divided into eight chapters. The first chapter i.e. the present introductory chapter includes rationale of the study, objective of the thesis, related research, methodology and limitation and scope of the study.

Chapter II deals with the discussion about the history of dairy cooperatives in India.

Chapter III describes the progress of 'Operation Flood Programme' launched by the Government of India to invigourate Dairy industry.

Chapter IV contains a brief discussion relating to background of Amul and Himul.

Chapter V examines the comparative growth of the two Unions Amul and Himul. It includes discussions on organisational growth, milk procurement and techno-economic performance.

Chapter VI examines the financial performance of the two projects. It includes a comparative study of operational results of Amul and Himul.

Chapter VII identifies the economic impact of the projects on rural development.

Chapter VIII or the last chapter contains summary and conclusions of the entire study.

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