CHAPTER NO. 1
INTRODUCTION AND RESEARCH METHODOLOGY

1.1 Introduction

Maximum People of thickly populated India live in villages. Majority of them are involved in agriculture. The cattle animal is correlated with agriculture in India as the old method of cultivation is still vogue here. Rearing of cattle animal is also an additional source of income of the villagers in our country. “In 1965, National Dairy development Board (NDDB) was set up with the object of meeting the increasing demand of milk especially in urban areas as well as developing the rural economy through the enhancement of the milk production of the country. In 1970 National Dairy development board took up Operation Flood programme in order to organize milk producers co-operative in several probable places of India taking the Kaira, District (Anand) Co-operative Milk Producers union Limited (AMUL) of Anand, Gujarat as a model with the above object in view”

India is World’s largest milk Producing Nation with a gross output of 98.9 million tons in 2006. It has achieved this on the strength of a producer owned and professionalism managed co-operative system in the business. The dairy co-operative system represent more than 12 million dairy farmers belong to about 1.18 Lac primary co-operative societies, which sell their product to one of 190 milk producers co-operative unions which in turn are supported by state co-operative milk federation. The dairy Co-operative network (As on march 2008) in India includes 170 milk unions operates in over 346 districts. It covers around 1, 28,799 village level societies. It is owned by around 13.4 Million farmer members of which 3.7 million were women. India ranks first with 283.1 million total bovine population comprising 185.2 million cattle and 97.2 million buffaloes. The annual value of India’s anticipated milk production is amount to more than Rs.1232 billion in 2007-08. The Milk production has increased from 21.2 million MT in 1968 to 100.9 million MT in 2006-07 and 102 million MT milk way 246 gms per day in 2007-08 increased from 241 gms per day 2005-06 apart from opportunities for around 12.88 million farm families.

Maharashtra is the leading state in co-operative movement at present there are 101 Tehsils and Zillah Co-operative Dudh Sangh in Maharashtra. It is estimated that Maharashtra has over 89.70 Lakh milch animal composing of over 14.73 Lac cross
bred and 38.02 Lac in indigenous cow and 36.95 Lakh buffaloes Maharashtra ranks 5th with producing milk of 6769 thousand tones, whereas in terms of per capita availability of milk (i.e. 176 gms/per day) Maharashtra is ranked 13th in India. The Maharashtra State has played a conceal role in milk production in the country.

**Structure of Dairy Co-operative Federation**

All state level federation is member of National Co-operative Dairy of India (NCDFI). They become members by purchasing share. The main function of the NCDFI is to promote the dairy industry on a co-operative basis. It offers services in procurement, processing and marketing of milk and milk product from one state to another with in the country and is also responsible for international marketing NCDFI, further it organize and operates the national milk grid. The NDCFI board consists of the entire chairman and managing directors of the state federation, state co-operative union. It helps the member’s federation (Dudh Sangh) in the purchase, storage and distribution of machinery and equipment. The National Cooperative Dairy Federation of India [NCDFI], based at Anand [Gujarat], is the apex organization for the cooperative dairy sector. Its members include federal dairy cooperatives of states and union territories (Dudh Sangh).

1.2 Statement of Problem

Mahanand is apex institution of dairy co-operative in Maharashtra and is presently facing organizational and managerial problems. It is affected on efficacy of Mahanand. The various problems are below.

1. Problem of providing quality and fresh milk to the customers.
2. Mahanand also having a major problem of milk collection and marketing.
3. Mahanand facing a problem of competition from other milk brand.

Hence, it is necessary to make indepth study of Mahananda Dairy in general and particular to its organization and management. Through this research work sincere efforts made by the researcher for suggesting appropriate solution to overcome these problems.

1.3 Significance and Selection of the Research Subject

Dairy Industry is allied industry based on agriculture. It gives employment and source of income for rural area. It plays important role in rural development so; I have
decided to make study on this area to understand the various problems in co-operative dairy industries.

Mahanand plays an important role of milk collection and marketing in Maharashtra state and particularly from rural part of the Maharashtra in Taluka and District Dudh Sangh. Under the Mahanand programmes there are number of programmes for Taluka and District Co-operative Dudh Sangh training and active participation in dairy industries. Mahanand are playing important role in co-operative dairy industries in Maharashtra because they try to maintain quality milk procurement and marketing.

Milk co-operative organizations able to take task in to own hands of creating productive employment overcoming poverty and achieving social integration. Milk is cheap sources of animal protein .Thus milk is the only article of food that fairly represents the complete diet .Thus milk became an integral part of Indian food for both vegetarians and non-vegetarians. By considering the importance and role of Mahanand particularly distribution of milk and milk product in Mumbai area the researcher has been selected research subject entitled for the purpose of the study.

1.4 Relevance of the Study

Maharashtra Rajya Sahakari Dudh Mahasangh, Maryadit, Mumbai (here after called as Mahanand) is an apex federation of District/Taluka milk unions established to implement the operation flood in state of Maharashtra. The main objectives of Mahanand are to procure milk from the member milk union at remunerative rate and distribute the same to the consumers at reasonable rate. Mahanand is thus working as a vital link between the milk producers and consumers and working for the economic development and upliftment of the farmers in the areas. It has the largest dairy co-operatives in country. In India it stands First in terms of procurement as well as sales. One of the core function of the Mahanand is collection of milk and marketing of milk and milk products .The brand ‘Mahanand ‘ is the house hold name for pure and fresh milk and milk product .Mahanand milk , the world-wide taste of happiness. Mahanand Dairy is the largest cow milk packing and distributing dairy in Asia. Mahanand dairy is always related to any breakthrough or advent in the milk production and dairy technology in India. Milk is that inevitable bond which binds a child to its mother, a bond to which everyone can relate. Mahanand milk keeps alive
the Indian heritage, helping, strengthen and nurture the bond. At present Mahanand dairy is distributing 8.5 Lac liters milk per day through 722 milk distributors (ex dairy distributors-174 and shop distributors, commission agent etc-548).

Co-ordination of activities among the union and developing market for milk and milk products is the responsibility of Mahanand. Marketing milk in the respective milk unions. Surplus/deficit of liquid milk among the members milk union is monitored by the Mahanand. While the marketing of all the milk products is organized by Mahanand both within and outside the state, all the milk product are sold under a common brand name ‘Mahanand’. The research work is fruitful to Mahananda, Govt. of Maharashtra and milk producers in the state.

1.5 Objectives of the Study

The study has following objectives to-
1. To study the development of Indian co-operative milk movement.
2. To study the formation and development of Mahanand.
3. To study the milk collection and marketing of milk by Mahanand.
4. To analyze the financial performance of Mahanand.
5. To study the problems faced by Mahanand.
6. To study the problems faced by customers of Mahanand.
7. To study the organization and management of Mahanand.

1.6 Scope and Limitation of the Study

The present study is mainly related with an organization and management of Mahanand. Its formation progress, organization, managerial problems faced, marketing of milk and financial performance are studied by researcher. The study period is 2005-06 to 2010-11 only. Co-operative milk institutions working in Maharashtra is taken as a base. Out of these 2 Districts level co-operative milk institutions, 5 Sangh from Taluka level, multistate union were selected by the researcher for the purpose of study. The study is mainly based on an organization and management of Mahanand.

However, other co-operative and private institutes engaged in milk collection and distributions are not studied by the researcher. Conclusions are also based on responses given by the respondents. Total 85 co-operative Dudh Sangh are working
(2012-13,103 Sangh) in the Mahanand, out of these 08 co-operative Dudh Sangh are selected by the researcher, Hence conclusions are based on their 8 Dudh Sangh only.

1.7 Statement of the Hypothesis

The study is based on certain assumption keeping in view the objectives of the study the following hypothesis

1. The organization and management of Mahanand is efficient in its working.
2. The members and customers of Mahanand are satisfied with its working.

1.8 Working Definition Term Used

**Milk:** A whitish liquid containing protein, fats, lactose and various vitamins and minerals that is produced by the mammary gland of all mature female mammals (cows and buffalos etc.).

**Milk Collection centers:** Taluka Dudh Sangh collect milk through the village co-operative societies and village co-operative societies collect milk from individual farmer. Specific area milk collection from farmer in selected place is called as milk collection center.

**Milk Distribution centers:** Distribute milk in their own vehicles to the customers in the specific areas allotted to them. They distribute milk on commission basis. They have signed an agreement with Dudh Mahasangh which is to be renewed annually. This is the major distribution system of Mahanand. Mahanand supply milk to various centers to distributors, to commission agents, customers. It is called distribution of milk center.

**Dudh Sangh:** Dudh Sangh means co-operative Taluka, District and Multi state milk federation in Maharashtra state.

**Management:** - The activities with running a company such as controlling, leading, monitoring, organizing and planning.
**Organization:** A social unit of people that is structured and managed to meet a need or to pursue collective goal. All organization have management structure that determine relationship between different activities and the members and subdivides and assigns roles, responsibilities and authority to carry out different tasks. Organizations are open systems they affect and are affected by their environments.

**FAT:** A fat contains only saturated fatty acids are solid at room temperature and comes chiefly from animal food Products. Some examples of saturated fat are butter, lard, meat fat solid shortening, palm oil, coconut oil etc, Fat is an important part of healthy diet. It provides energy and also helps you.

**SNF:** Solid not fat is in part of milk.

**SMP:** The milk from which the cream has been removed the residue from whole milk after the cream has been skimmed off. In today usage it is the residue after the butterfat removed.

**Butter:** A soft yellowish or whitish emulsion of butter fat, water, air and sometimes salt, churned from milk or cream and proceed for use in cooking and as a food. A soft solid having at room temperature consistency like that of butter.

**Condensed milk:** Is cow’s milk from which water has been removed. It is most often found in the form of sweetened condensed milk with sugar added, and two terms condensed milk and sweetened condensed milk are often used synonymously today.

**Dry fodder:** Jowar, Ragi and Paddy straw were the main dry fodder fed to milch animals in the study area.

**Green fodder:** Green fodder included green Grass, Jowar straw, Bermuda grass, Elephant grass etc.

**Pasteurization:** Pasteurization is called as the process of heating every particles of milk at least 72°C for 15 seconds in approved and propertied equipment after this process immediately cooled to 5°C or below.
**Toned Milk:** Addition of skim milk powder (SMP) and Water in whole milk under food safety rules. Toned milk should be minimum quality 3.0% Fat and 8.5% SNF is called as toned milk.

**Double Toned Milk:** Addition of skim milk powder (SMP) and Water in whole milk under food safety rules. Toned milk should be minimum quality of 1.5% Fat and 9.0% SNF is called as double toned milk.

### 1.9 Classes of Respondents to be Contacted

The present research work has been related with Mahanand. The primary data has collected by the researcher by using questionnaire, interview method and field surveys. The classes of respondent are contacted are follows

1. Chairman and directors of Mahanand
2. Managing Director and Executive Officers of Mahanand
3. Chairman and General Manager of Taluka, District, Multistate Dudh Sangh
4. Customers of Mahanand
5. Employees of Mahanand
6. Milk producer’s member.

### 1.10 Universe and Sample Size

Maharashtra state is the jurisdiction of Mahanand. It collects milk from state of Maharashtra. Taluka Dudh Sangh, District Dudh Sangh and Multistate Sangh working in the state are members of the Mahanand. Mumbai is the main milk distribution center of Mahanand The collection of primary data 10% only. The respondents which are selected by the researcher as per universe sampling. Total 85 Dudh Sangh working at Taluka, District level are members of Mahanand.
Total universe and selection of sample is given below.

### Table No.1.1
**Universe and Selection of sample (2010-11)**

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Types of members</th>
<th>Total Members</th>
<th>No. of Respondents selected</th>
<th>Percentage of selected Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>District Dudh Sangh</td>
<td>25</td>
<td>2 (Nasik and Jalgaon district)</td>
<td>10%</td>
</tr>
<tr>
<td>2</td>
<td>Taluka Dudh Sangh</td>
<td>49</td>
<td>5 (Ahmednagar and Nasik district)</td>
<td>10%</td>
</tr>
<tr>
<td>3</td>
<td>Multi state Dudh Sangh</td>
<td>11</td>
<td>1 (Ahmednagar District)</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>85</strong></td>
<td><strong>8</strong></td>
<td><strong>10%</strong></td>
</tr>
</tbody>
</table>

All the top executives of Mahanand have been contacted by the researcher. Their interviews has arranged for collection of primary data. It includes General Manager, Finance Manager, Chief Accountant, Procurement Officer, Sales Manager, Production Manager, By Product Manager, H. R manager, Chief Engineer, Purchase officer etc.

Three districts are selected on random sampling basis Ahmednagar district has been selected due to its highest milk producers through the co-operative societies. Nasik district has been selected because of slow development of co-operative movement and Jalgaon district has been selected because the milk business was in total loss of district co-operative Dudh Sangh. This business is takeover by National Dairy Development Board. Therefore those three districts have been selected.

### Table No.1.2
**Selection of Milk Producers**

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>District</th>
<th>Number of selected milk producers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ahmednagar</td>
<td>84</td>
</tr>
<tr>
<td>2</td>
<td>Nasik</td>
<td>83</td>
</tr>
<tr>
<td>3</td>
<td>Jalgaon</td>
<td>83</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>250</strong></td>
</tr>
</tbody>
</table>

For the study purpose only 250 milk producers are selected from Ahmednagar, Nasik and Jalgaon district.
<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Types of customers</th>
<th>Total customers</th>
<th>Selected customers</th>
<th>Percentage of selected customers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ex-Dairy Distributor Shop</td>
<td>174</td>
<td>17 (Mumbai)</td>
<td>10%</td>
</tr>
<tr>
<td>2</td>
<td>Distributor &amp; Commission Agent</td>
<td>548</td>
<td>55 (Mumbai)</td>
<td>10%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>722</td>
<td>72</td>
<td>10%</td>
</tr>
</tbody>
</table>

There are total 722 milk distributors of Mahanand. However, 10% from that customer has been selected for the study on the basis of random sampling method. All the selected customers of Mahanand belong to Mumbai area. All there wholesalers are selected by the researcher under purposive sampling method. Along with there wholesalers the researcher has selected 300 daily customers who resides in near of Central Railway Mumbai.

1.11 Research Methodology

Research is the part of any systematic knowledge. It is related with cooperative dairy sector. Project Methodology includes steps and Procedures. These should be systematic way of collecting data or information and presentation of project report. Methodology is the systematic way of solving problem. It includes research method and logic. Behind this method collection of data and analysis the same is conducted for the main study.

It is governed by the subject matter of the unit of inquiry and the scale of the survey. Mostly questionnaires, schedule observation and personal interview commonly used to collect data from the respondents. The primary data collected by the researcher by using questionnaire and interview method for Chairman, Directors, Managing Director, Customer, Executive Officers of Mahanand and Chairman, Managing Directors of Taluka, District and Multistate Dudh Sangh. The secondary data have been collected from Annual Report of Mahanand, published source like books, periodicals and journals.

The Present Study attempts the micro level efforts made by farmer for their economic Development. This Study is based on the Primary and Secondary data which are taken from Mahanand. Time series data will collected for a period of five
years. Data is what the researcher observes in particular facts. Data is the relevant material for the study and analysis. The different methods of data collection are Primary and Secondary data.

The required data for this investigation has been collected from following sources

**Primary Data:** - Primary data has been collected from conducting survey of Mahanand. It has been collected through following way

A) **Questionnaires:** For the purpose of Collective primary data, a detailed and compressive Questionnaire was prepared on the basis of the objectives of the study. 250 milk producers and 300 daily customers were selected as sample and they fill up questionnaires.

B) **Discussion and Interview’s:** Personal Discussion and interviews has held with the 9 Chairman, 9 General Manager, 65 Employees.

C) **Observation:** method has also used for Collection of related information.

**Secondary Data:**

Published and unpublished secondary data was collected from various books, annual reports, research journals and websites.

1. Annual Reports of Mahanand.
2. Published Sources like Books, Periodicals and Journals etc.
3. Audit Statement of Mahanand.
4. Website, Mahanand, NDDB, etc.
5. News papers
6. Reference Books;

For the purpose of collection of secondary data the researcher has visited following places

1. Central Library, P.V.P college, Loni, Tal-Rahat, Dist- Ahmednagar
2. Library, S.S.G.M college, Kopargaon, Tal-Kopargaon, Dist-Ahmednagar
3. Library, C.D Jain Commerce College, Shrirampur, Tal-Shrirampur, Dist-Ahmednagar
5. National Dairy Development Office, Goregaon, Mumbai (M.S)
6. Maharashtra State Dairy Development office, Nasik Region, Dist-Nasik(M.S)
1.12 Note on Statistical Tool To Be Used

The information collected has presented in the tabular form. This statement, tables has presented in the form of Graph. These have been analyzing by using simple statistical tools such as percentage, growth rate and average.

1.13 Review of the Important and Relevant Literature on the Study

A number of researchers have worked on the various aspects of co-operative milk sectors such as development, problems of the co-operative dairy and its prospects, labour situation in the dairy organization, management problem, financial structure, government policy and regional planning for dairy sector the importance of dairy in rural economy and other aspects of the dairy.

A. Books:

Dr. S.B Verma, written a book entitled “Rural Credit and Co-operative Development” (2006), Deep and Deep Publication Pvt. Ltd. New Delhi focused an important issues of milk producer co-operative societies performance indicators, the cooperative as a form of development organization, dairy co-operative and sugar co-operative are compared.


Sigh H. “Dairy Farming” (2005) A.P.H Publication, New Delhi in his books has focused about building managing self Dairy Farming organizations which will succeed in the rough and tumble of to-day competitive world. Here he explores important empirical questions drawing up on cases of success and failure from efficient regions and types of co-operative enterprise.

Prof Dr. Koli, “Dairy Development and India Challenges Before Co-operatives” Shruti Publication, Jaipur, 2007 in his book books focused on before the co-operatives dairy challenges in India, and after Dairy co-operatives progress in dairy business in India. Therefore the growth of movement in some the most advanced through co-operatives and women co-operative dairy are discussed.

Mr. T. Shah (1996), Written a book entitled “Catalysing co-operation design of self governing organizations” in his books has focused about building managing self governing people’s organizations which will succeed in the rough and tumble of to-day competitive world. Here he explores important empirical questions drawing up on cases of success and failure from efficient regions and types of co-operative enterprise. These range from tube well companies in north adjutant and sugar co-operatives in Maharashtra to what is considered movement in India-Kheda district in south Gujarat based on these field studies professor shah address a set of four over arcing principles e.g. “Design” ‘self-creating’, self propagating and self-preserving’ which can be used to build robust self governing peoples organizations. These features are the result no good leadership nor of favorable social conditions but success in securing and retaining the allegiance of members. Here he offers a new perspective on what makes co-operative succeed.

Dr. Rajan Kumar Sahoo, has published book “Co-operative for economic development” (2005) in focused about the co-operative movement in various countries of the world has development in a varied way. In some countries it started and failed and in others it has weakness on spectacular achievement. Therefore the growth of movement in some the most advanced countries are discussed.

Dr. G.S. Kamat, Written a book entitled “New Dimensions of Co-operative Management” (1987) in his book has focused about the co-operative sector and economic development, Professionalized management for co-operatives, role of
leadership in co-operative, effects of co-operative law on management, the co-operative sector can hope to serve social objectives if it takes due care of its financial health for which effective management of human and technological resources is essential.

**V.B Bhise** Written a book entitled “Some Aspect of Agricultural Development in Maharashtra” in his book has focused about Number of milk plant and milk chilling centers and their capacity in Maharashtra and co-operative, government dairies and their processing capacity, production of milk product the co-operative sector and economic development, professionalized management for co-operatives and government dairy role .

**B. Review of Research Articles**

Review of the relevant literature and past empirical studies connected with the research work is presented here in brief.

A number of researcher’s have worked on the various aspects of Dairy sector, such as development problem of the bank and its prospects. Labour situation in the Dairy management problem, financial structure, government policy and regional planning for banking sectors, the importance of banking in rural economy and other aspect of the banking.

**Mr. Nirajan Raj**, has published research articles on ‘Dairy Economy of India- A study of Its various facts” focused on state-wise milk production and availability, bovine population and milk productivity, contribution of co-operative in dairy development, contribution of dairying to National economy expenditure of milk and milk product.

**Mr. S. Vasanthi**, has published research articles on “The Nilgiris Co-operative Milk Market in Udhagaunalam” co-operative prospective, in focused about attempts to analyze performance of Niligires co-operative milk producers union Ltd, valuable suggestion are made to improve the market share.

**Mr. Shivaji R. Pawar, Dr. Vasant & B. Kodag** has published a research article on “Women’s Contribution in Dairy Co-operative- A case study of Ahilydevi
Mahila Shakari Dudh Utpadak Sansth Ltd. Burgaon” The Maharashtra co-operative quarterly state that, it plays an important role in women’s in co-operative dairy.

Priti Srinivas Sajja, has published a research articles on “Multi agent System for Dairy Co-operatives” focuses on effective utilization of information technology (IT) helps co-operative dairy industry in providing cost effective processing facilities and innovativeness in the business. These articles propose and justify the need of an integrated multi agent system for various function of co-operative dairy.

Dr. Sanjay M. Patil has published research articles on “Problems of Dairy Co-operative Societies” The Maharashtra co-operative quarterly, focuses on structure, progress and problems of Dairy Co-operative Societies in India.

V.M Rao written a research articles on “In Service Rural People: A case of Sikkim cooperative milk union”, Co-operative perspective state that, it an attempt is made in this paper describe organization, development and management of Sikkim Cooperative Milk Union, though located in far belong area, the union has been working scientifically and helping both producers and consumers.

Jigna Trivedi, P.K Priyan & Vinay H. Bhinde written a research articles on “An Illustrative Case Study on Gandhinagar District Co-operative Milk Producers Union”, co-operative perspective focused on present study is an attempt to look at the success story of Gandhinagar District Cooperative milk producers union, a two decade old unsung hero of Gandhinagar. This study focuses on history of Madhur, Advertisement channel, product line product width, milk procurement and sale.

Dr, Arjun & B. Rajage, has published research articles on “Can Dairy Co-operatives Eradicate the Rural Poverty” The Maharashtra Co-operative Quarterly, focused on the study that with the help of dairy co-operative the villagers can be self sufficient and can eradicate their poverty and they can be out of money lenders clutches. The study analyzed milk producer’s occupational distribution, income, number of milch animals, loan facilities, financial help of dairy co-operative to members, etc.
A.B Rajage, has published research articles on “An Economics Analysis of Co-operative Milk Union In Sangli District A Case Study” Co-operative Perspective, focused on the progress of the Rajarambapu Patil Co-operative milk union, Isalampur in Sangli distribution, cattle feed production and sale, membership growth share capital , deposit etc. have been analyzed.

Bhagyashree Puntambekar, has published research articles on “Dairy Industry in India” The Maharashtra Co-operative Quarterly” focused on livestock of cattle and Buffalo, milk production and consumption in India, profile of the Indian milk producers.

Ganga Devi and D.K. Jain written a research articles on “Economic Impact of Micro-Finance: a Comparative study of Dairy Self Help Groups (SHGs) in Jaipur District of Rajasthan”, India Journal of Agriculture Economics focuses on cost of milk production and income measures, milk production function for buffaloes, crossbred cows and provide facilities from SHGs to milk producers members.

Anand Singh Kodan, Narender Singh & Sandeep Mehra written research articles on “Spatial Pattern Challenges of Co-operative Dairy Farming in India”, Co-operative perspective focuses on the discusses about important and contribution of dairy in agriculture sector in India, the growth of co-operative dairy farming, milk production, per capita milk availability, describes the spatial pattern of co-operative.

M.S Ramananda & S. Mahendra Kumar has published research articles on “Dairy Co-operative: A Stimulant for Rural Women” Co-operative perspective state that the growth of dairy co-operative in Karnataka state. Emphasis of the paper is a working of women dairy co-operative societies located in southern Karnataka.

Shobana Nelasco, T. Tamil Selvi, A. Nilasco Arputharaj & S. Rajaram has published research articles “A Study on Sales of Madurai Co-operatives Milk and Milk Products” focused on the Avin milk and milk products in Madurai city. Dairy products includes milk cream, curd, skimmed milk, cheese, processed cheese, ice cream, condensed skim milk, milk powder, ghee , butter etc. this paper is an attempt
to study the seasonal variation in the sale of milk, so that the co-operative can plan their supply according to demand.

However, all the above books research articles are related with co-operative milk. Organisation and management of Mahanand as a research topic has not been studies by any other researcher. By considering new area of research and its utility to the Mahanand, Govt. of Maharashtra and customers, this topic has been selected by the researcher for the purpose of study.

C. Published Ph.D Thesis

Mahob Kanti & Bandyopadhay, has published a Ph.D thesis on “Dairy Co-operative and Rural Development” (with special reference to comparative study between the Kaira District Co-operative Milk Union Limited and the Himalayan Co-operative milk producers union) the thesis submitted to North Bengal University, Rajarammohanpur, Darjeeling, July 1994. Focuses on the analysis as to how far the Operation Flood Programme i.e replicating the ANAND model programme taken by the National Dairy Development Board achieved in India. This analysis depicts that the programme which was taken with a view to replicating the ANAND model has not achieved success throughout the country.

1.14 Chapter Scheme

The study consists of eight chapters

Chapter 1st This chapter divided in two parts. First part is related to the research methodology of the research and second part concerned with the dairy literature regarding the cooperative dairy. This chapter reveals the introduction of Co-operative Dairy, Significance of present study, Objectives of the study, Scope and Limitation of study, statement of Hypothesis, Research methodology and data Collection with the help of Primary Data and Secondary Data and Review of Literature.

Chapter 2nd This chapter briefly covers the information in two parts:-

A) Cooperative Dairy in India.
B) Co-operative dairy in Maharashtra.

Co-operative in India deals with the genesis’s and growth of co-operative dairy in India its brief history and the reforms in dairy sector and also financial performances, polices growth NDDB functions of dairy co-operative in India it also
reveals the financial performances, growth, polices of dairy co-operative in Maharashtra.

**Chapter 3** This chapter deals with the Formation and working of Mahanand.

**Chapter 4** Is about the management and organization of Mahanand it introduces organizational set up of Mahanand organizational structure with functions and responsibilities of administrative set up including chart of Administrative set up and organizational structure of Mahanand.

**Chapter 5** This chapter is related to process, production milk and milk products of Mahanand.

**Chapter 6** Considered the financial performance of Mahanand includes, Share capital, Reserve Funds, Borrowings, Assets, Milk Purchase, Milk and milk Product Sale, Expenses, profit, Turnover and milk collection.

**Chapter 7** This chapter is related with analysis and interpretation of milk producers, customers, employees and members of Mahanand.

**Chapter 8** This chapter presents a brief summary of the study and contained the conclusions on the basis of different table, charts and graphs etc. It also gives recommendations and the conclusions. The study will open new avenues of research in this field.
References


2. Shivaji R. Pawar, Dr. vasant B. Kodag, “Development in Dairy Co-operative in Maharashtra”, The Maharashtra Co-operative Quarterly, Page no.11,12