

DISSERTATION
ON
A STUDY ON PRESENT STATUS OF SAMALESWARI REGIONAL COOPERATIVE
MILK PRODUCER'S UNION

A Dissertation submitted for impartial fulfilment of the requirement for the award of the for
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CERTIFICATE

This is to certify that the Dissertation entitled “**A SATUDY ON PRESENT STATUS OF SAMLESWARI MILK UNION**” is an original research work carried out by Miss Mamata Rani Kujur under my guidance and supervision. No part of this work has been submitted for any other degree earlier.

Date: 14.02.2023

Place: Pune

Miss Mamata Rani Kujur

DECLARATION

I hereby declare that the dissertation entitled “**A Study On Present Status of Samleswari Regional Cooperative Milk Producer’s Union** ” is the outcome of research work carried out by me under the guidance of A. K Tiwari, Professor, Vaikunth Mehta National Institute of Cooperative Management,Pune, Maharashtra. I further declare that this dissertation has not been submitted previously for the award of any degree either in this Institute or any other Institute.

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EXECUTIVE SUMMARY

A Study on Current Status of Samleswari Milk Union

The Cooperative sector plays a vital role in the economic development of the country and hence it has been recognized as an integral part of our national economy. The Cooperative movement, which is the largest Socio-economic movement in the world, has contributed significantly to the alleviation of poverty, creation of productive employment as well as the enhancement of social integration in the country.

The study is based on secondary data collected from Samleswari Regional Milk Union in Sambalpur District of Odisha in the year 2022. The current status as well as previous year's performance and overall growth has been studied during the study period.

Based on the existing literature survey objectives were formed for the study; To study the Genesis and Composition of the milk union, to analyse the present status of the union and to study the growth of the union, the methodology for the study is based on descriptive analysis of the milk union.

Major finding has been drawn based on the analysis of Samleswari Milk Union. It is found that the success of Sambalpur District Milk Union in terms of generating decent profit for the member producers has met limited success. Many factors constrain the work of District Milk Union: notable among them is bureaucratic and political interference which works cross purpose to the interest of enterprise and member producers also the outbreak of COVID 19 severely affected the milk cooperative, that even after spreading the activities with the use of available resources, it was difficult to extend facilities to entire potential areas of the districts. Hence, the proposal is prepared to intensify within the existing block is and further extend to other blocks of these districts

The following suggestions are made based on the study. While some of the suggestions are aimed to improving the operational efficiency are aimed at improving the business diversifications in order to make the MPCS more competitive in open economy. The milk union should focus on organizing new MPCS / revive defunct MPCS for increase of milk procurement and they should make more efforts for earning more profits. The union should give training to the farmers to spread awareness among them. Training modules should include information about macro policies and management techniques. Union should organise Animal health camp & Vaccination in the milk shed area of SAMUL with the help of veterinary personnel & OMFED.

Abstract

Milk cooperatives organized under State patronage has contributed to radical transformation in Gujarat, and some other pockets in India. Odisha State imbibed on Gujarat model in Sambalpur district. However, the success of Sambalpur District Milk Union in terms of generating decent profit for the member producers has met limited success. Many factors constrain the work of District Milk Union: notable among them is bureaucratic and political interference which works cross purpose to the interest of enterprise and member producers also the outbreak of COVID 19 severely affected the milk cooperative.

Milk cooperative societies are engaged in arranging marketing facilities, input supply, Artificial Insemination (A.I.) services and veterinary services to the dairy farmers of Odisha. While studying their performance, it was found that they play an essential role in enhancing dairy farming in Odisha. Majority of the dairy farmers in both the districts were satisfied with the functions like marketing of milk and payment for milk but they were found dissatisfied with the supply of inputs, A.I. services, veterinary services and arrangement of infertility and animal health care camps. The findings revealed that milk cooperative societies are playing a positive role in helping the farmers in diversification of their agriculture and conservation of natural resources.

CHAPTER I

1.1 INTRODUCTION AND DESIGN OF THE STUDY

Dairying in India is considered to be an important subsidiary occupation for most of the rural households. It has become major occupation for most of the small and marginal farmers. This holds true especially in case of an agrarian state like Odisha Dairy cooperatives have emerged as the most cohesive and fruitful organization of the farmers, which can handle the procurement, transportation, processing and successful execution of cattle development programme. The sole purpose of these societies is to perform milk marketing functions, arrange facilities for the members for enhancement in milk production, and increase milk production and standard of living of members of these societies. This is done by providing a competitive market for milk as well as by supplying quality input's for dairying at cheaper rates. The study of the functions of milk cooperative societies will help to bring improvement in the working of these societies and providing better services to the member farmers.

Methodology

The study is based on descriptive analysis. The research was carried out in the district of Sambalpur, Odisha. Secondary data from the Samleswari Milk Union was used for the research.

1.2 Objective of the study

- 1.** To study the Genesis and Composition of the milk union
- 2.** To analyse the present status of the union
- 3.** To study the growth of the union

1.3 Need and significance of the study

The research study will be useful to improve knowledge regarding the milk union

It will help better understanding of the situation of the farmers and it will help create awareness among them.

1.4 Scope of the study

1. The study will focus on understanding the resources, facilities being provided, activity profile and its linkages with other Milk union cooperative societies.
2. The study will cover the socioeconomic status and marketing strategies of the Union.
3. The study will explain scope and opportunities for the society.
4. The study will also cover challenges and suitable suggestions in this field.

1.5 Review of literature

Manab Chakraborty¹ and Somnath Ghosh² in State in Livelihood Promotion Case Study of Nainital District Milk Union focused on the role and function of the cooperatives. Though Amul is a successful example of vertically integrated dairy company, its' replication by various State governments has met mixed success. Concerns have been expressed about growing State interventions in the management and control of dairy cooperatives, the poor returns on capital invested, and inability to compete with the private organized dairies. This case study on Nainital Milk Union (official name in Hindi Nainital Dugdh Utpadak Sahakari Sangh Ltd or NDUSS in short), which is six decade old dairy unit in Uttarakhand, we examine the factors affecting the performance of the Milk Union.

Rupinder Kaur in his research **A Detailed Analysis of Anand Milk Union Limited (Amul) in India** explained The Birth of Amul and development of India's Dairy Cooperative Movement, The Three-tier "Amul Model" , Impact of the "Amul Model" , Reasons for Success and what else can AMUL can do.

Suresh Subramonian and **Ramesh Babu Thangavelu** in their article **A Study on Strengthening the Operational Efficiency of Dairy Supply Chain in Tamilnadu, India** focused on issues in improving the operational efficiency of the dairy supply chain in Tamil Nadu, India. Dairy Farming is a major occupation of the people of Tamil Nadu, India and it contributes a significant amount to the growth of our country. In this paper, Tamil Nadu dairy development department's objectives and its three-tier structure were studied. Through SWOT analysis its strengths, weaknesses, opportunities and threats were analyzed. In our study Tamil Nadu Cooperative Milk Producers Federation is compared with Gujarat Cooperative Milk Producers Federation (AMUL). The major issues influencing the dairy farming are studied through literature survey, field study and researchers experience. They are presented in this paper.

CHAPTER II

White Revolution

2.1 Background and History

The Government of India initiated Operation Flood known as the White Revolution after witnessing the huge success of the [Green Revolution](#) that resulted in an immense increase in the production of wheat and rice. White revolution in India started with a motive of increasing milk production to make the country one of the largest producers of milk in the world.

Operation Flood is the program that led to “White Revolution.” It created a national milk grid linking producers throughout India to consumers in over 700 towns and cities and reducing seasonal and regional price variations while ensuring that producers get a major share of the profit by eliminating the middlemen. At the bedrock of Operation Flood stands the village milk producers’ co-operatives, which procure milk and provide inputs and services, making modern management and technology available to all the members.

The revolution associated with a sharp increase in milk production in the country is called the White Revolution in India also known as Operation Flood. White revolution period intended to make India a self-dependent nation in milk production. Today, India is the world’s largest producer of milk and Dr Verghese Kurien is known as the father of the White Revolution in India.

During the year 1964-1965, the Intensive Cattle Development Programme was introduced in India in which the cattle owners were provided with a package of improved animal husbandry for promoting the white revolution in the country. Later on, the National Dairy Development Board introduced a new programme named “operation flood” to increase the speed of the white revolution in the country.

Operation Flood started in the year 1970 and was aimed to create a nationwide milk grid. It was a rural development programme initiated by NDDB – National Dairy Development Board of India.

2.2 White Revolution in India Objectives

Under the auspices of Operation Flood, a connection between milk farmers and consumers nationwide was established in 1970. This approach, which was implemented in more than 700 cities and towns, ensures that milk prices do not vary seasonally or regionally. The cooperative arrangement made guaranteed that milk farmers received all of their income from final customers.

These are the White Revolution's Main Goals:

- Increasing the rural population's income
- Increasing milk production nationwide to create a flood of milk
- Sell milk in the nation at reasonable costs.

2.3 Anand Gujrat

In the 1940s, a group of 411 farmers in Anand, Gujarat, had started a cooperative dairy in order to earn a greater percentage of profits under the leadership of Tribhuvandas Patel. Very soon, with professional help, the initiative grew into a full-fledged business model. The highlight of the model was that it was completely farmer operated. From management to procurement, from marketing to the sale of milk, farmers were involved in practically every stage of the

process. Verghese Kurien's arrival as general manager in 1950 marked a key point in the cooperative dairy's evolution.

But work on implementing the model on a national scale had to wait another 15 years. In 1965, the Indian government registered the National Dairy Development Board (NDDB) under the Ministry of Agriculture with Kurien as its chairman. His work was to replicate the Anand pattern across India. The objective was to create a grid of milk producers with consumers scattered over 700 towns and cities. This came into being in 1970 which saw the launch of Operation Flood, a 'billion-litre' idea.

But a threat loomed over the whole experiment. Before the first phase of Operation Flood could begin, a surplus of skimmed milk powder and butter oil was ready to be exported from Europe free of cost as aid. This would have rocked the Indian market and crippled farmers.

So this milk powder and butter oil was instead sold to generate a revenue of Rs 1165.5 million which financed the first phase of Operation Flood, with the funds being disbursed as 30 per cent grant and 70 per cent loan. Along with this, big milk sheds in 18 cities were connected to four Mother Dairies in Delhi, Mumbai, Kolkata and Chennai to feed the large consumer base here.

In phase two, the number of milk sheds increased from 18 to 136 and the market also increased from just four big cities to over 290 urban markets. To expand the project vigorously, a loan of USD 150 million was taken from the World Bank which helped connect 34,500 village milk cooperative societies producing 261 metric tonnes per day.

In phase three, implemented during 1985-1996, all the cooperative societies were made self-sufficient with financial assistance from the World Bank and commodity assistance from

European countries. The number of milk sheds grew to 173. The results began to show. In 1990, India was flooded with milk with 50 million tonnes of milk being produced per year. The NDDB soon began to export milk and milk products to Nepal and Europe.

As of 2017-18, the total milk production has more than tripled to 176.3 million tonnes every year. India's dairy exports stood at 48039.4 million tonnes of yielding revenues worth Rs. 1196.19 crores.

The cooperative societies not only made the farmers self-sufficient but also broke the shackles of gender, caste, religion, and community. Women, dalits, Muslims, tribals -- everyone was included in the process. It was truly epoch-making.

CHAPTER III

White Revolution in Odisha

3.1 White Revolution in Odisha

It transformed India from a milk-deficient nation into the world's largest milk producer, surpassing the United States of America in 1998. India has the highest level of milk production and consumption of all countries. The annual production was 186 million tonnes as of 2018. As of 2020, approximately 4.2% of India's gross domestic product was due to dairy production. Odisha is eager to bring a milk revolution in the State, Chief Minister Naveen Patnaik said recently at the inauguration of the newly commissioned ultra-modern automated dairy plant of OMFED at Arilo, Cuttack. The Odisha State Cooperative Milk Producers Federation also known as OMFED is a statutory corporation under the ownership of Ministry of Fisheries, Animal Husbandry and Dairying, Government of Odisha. It is an apex level Milk Producers' Federation in Odisha registered under Cooperative Society Act – 1962. OMFED was established in Bhubaneswar based on the similar pattern of AMUL (Anand Milk Udyog Limited) under operation flood-II of National Dairy Development Board (NDDB), for promoting, production, procurement, processing and marketing of milk & milk products. The newly-inaugurated ultra-modern dairy plant has milk processing capacity of 5 lakh litres per day (LLPD) and can produce 20 tonnes of milk powder per day and other milk products like butter, ghee, bottled flavoured milk, paneer etc. The plant will certainly augment the status of white revolution of the state therefore benefiting the dairy farmers immensely. Simultaneously the dairy farming challenges in the state are also to be addressed. Farmers are not capable of managing high - cost feeding. Mineral, hormone and vitamin deficiencies lead to fertility problems and also reduce net productivity. Regular and periodical vaccination schedule has to be maintained.

Many cattle owners are not able to provide shelter in a designed manner to their cattles leaving them exposed to extreme climatic conditions. Sometimes we find open roof cow sheds also in many places. Dairy farmers most of the times are also not satisfied with remunerative price for milk supply. Village wise education and training programmes on good dairy practices could add value and result in the production of safe dairy products.

3.2 OMFED

History & Background of Its Establishment:

The **Odisha State Cooperative Milk Producers Federation** also known as **OMFED** is one of the Milk Federation affiliated to the [National Dairy Development Board](#) (NDDB), situated at [Bhubaneswar](#), the state capital of [Odisha](#) was founded in 1985. It is an apex level Milk Producers' Federation in Odisha registered under Cooperative Society Act – 1962. Omfed was established based on AMUL pattern under operation flood-II of [National Dairy Development Board](#) (NDDB), for promoting, production, procurement, processing and marketing of milk & milk products initially in undivided districts of [Puri](#), [Cuttack](#), Dhenkanal, [Keonjhar](#).

The Odisha state Cooperative Milk Producers' Federation Ltd. is controlled by a Board of Directors which consists of Chairman of all affiliated Dist. Cooperative Milk Producers' Unions, three nominees of Government of Odisha, a nominee from the National Dairy Development Board and Managing Director of the Omfed (Who is the *ex officio* member). The Chairman of the BOD is elected amongst the members of the Board. The post of Chairman of the Federation is honorary.

3.2.1 Functions of a Milk Federation:

The important functions of the state milk marketing federation are:

- Marketing of milk and milk products.
- Manage production planning and State Milk Grid (movement of milk within the state).
- Coordinate with state government, central government, NDDB and other agencies.

The Milk Unions become members of a Cooperative Milk Marketing Federation by subscribing share capital to it as per provision of the bye-laws of the Federation. The Federation is responsible for evolving and implementation of policies on cooperative marketing of all member unions' liquid milk and milk products, deciding the product-price mix, cooperative provision of joint services (artificial insemination, breeding, cattle feed etc.), cooperative marketing of technical inputs to members and strengthening the institutional structure of the dairy cooperatives.

The Federation's Board consists of the elected chairmen of all the members unions and the Federation's Managing Director. There are also other members in the board as ex-officio and also as technical experts. The Board of the Federation evolves the Federation's policies on all its functions. Equitable distribution of profit is done on the basis of business transacted by the milk unions with the Federation and as per the provisions of the bye-laws.

The Federation's Board is advised by its Programming Committee, which is composed of each member union's chief executive, the Federation's chief Quality Control Officer and one or more non-voting co-opted technical experts. The Committee meets on a regular basis and is also responsible for day-to-day implementation of the Board's policies and plans

CHAPTER IV

Milk Union

4.2 OBJECTIVE OF THE UNION

4.2.1. The objectives of the Union is to carry out activities conducive to the economic and socioeconomic, development of the milk producers by organising effective production, processing and marketing of commodities.

4.2.2. To achieve the above objectives, the Union may:

- Purchase, pool, process, manufacture, distribute and market commodities of the members and others without affecting the interest of the members.
- Organise new Milk Producers Cooperative Societies, develop affiliated societies to the utmost and advise, guide, assist, rectify, control or take over their management partially or fully when necessary and if appointed as an administrator by the Registrar or at the request of the members.
- Organise supervision of affiliated societies and for the purpose to collect supervision charges with the permission of the Registrar.
- Provide veterinary and artificial insemination services and other technical inputs for enhancement of milk production and medicines for prophylactic and preventive purpose.
- Undertake and/or encourage production of milk, growing of fodder and agricultural products and extension activities.
- Own herds of cattle for breeding programme.
- Undertake or to assist in marketing of cattle.

- Arrange training of employees of Union and members of Primary Milk Producers' Cooperative Societies.
- Own or hold on lease or otherwise movable or immovable properties and dispose off the same.

4.4 Relation between DCS, Union and Federation:

The basic unit of the Anand Pattern is the village milk producers' cooperative society. The functions of a dairy cooperative society can be classified into the following two categories:

1. Managerial
2. Operational

Managerial

The milk producers of the village with the support of the milk union form a village dairy cooperative society. The milk producers become members by buying a minimum of one share of the society and paying an entrance fee as per the bye-laws. All these members form the general body of the society, which has the supreme powers subject to the State Cooperative Act, Rules and Bye-laws. The society has an elected Managing Committee (MC) including the Chairman from amongst the member producers as per the provisions of the bye-laws. All the positions of the MC are honorary. The committee employs paid staff to run the day-to-day affairs of the society. The number of such staff depends upon the size of the business of the society.

The provisions of the bye-laws govern the term of the MC and the Chairman of the society. The committee decides policy matters and frames guidelines for efficient running of the

society. The committee holds its monthly meetings to discuss issues pertaining to society, members, milk producers, suggestions/guidelines provided by the Milk Union and other relevant matters.

Operational

The society's major operations can be classified in two groups: milk trading and providing input services. Milk trading involves reception, testing, local and sample milk sale, dispatch of milk to milk union, payment and accounts keeping. Input services include animal health coverage, breeding, supply of cattle feed, fodder development, clean milk production and extension services to producer members.

4.4.1 Milk Trading

Reception of milk:

Each society has milk collection centre either in an owned or hired premise. Each morning and evening, the milk producers bring milk in their own containers (stainless steel) to the society. A representative sample of milk is drawn for testing the quality milk. Milk is collected in milk cans or directly to the cooler as the case may be. The collection accessories are made up of stainless steel (AISI 304). The measurement of milk is done carefully so as to avoid foam, shortage etc. Quantity of milk supplied by each individual along with the sample bottle of milk is recorded against her/his name in the purchase register and the card/pass book of the pourer. In many of the societies the process is semi automatic with the help of computer and Electronic Milko Tester placed on line. A printed slip is generated for each member giving details about the date, shift, type of milk, producer identification number, weight and fat% of milk, rate, price etc.

Testing of milk:

Where the Gerber Centrifuge/Electronic Milkotester is used for fat test of milk samples, once sufficient number of samples are collected these are tested as per laid down procedure. The test results are recorded against each sample number in the Fat Test Register. This ensures the confidentiality of the owners of the samples. After the testing is over, the records are compiled; the left over sample milk is disposed off in a manner decided by the management committee. At pourers' request retesting is also carried out before the samples are disposed off and the changes if any, are recorded.

After the milk collection is over, a composite sample is drawn from the total quantity of milk collected observing the general procedure to draw the sample. This sample is tested for fat and lactometer reading is also noted in the test register. This is commonly known as General Test (GT) of milk collected by the society. All the accessories/equipment used in reception and testing of milk, are then cleaned thoroughly with warm water and or detergent solution.

Despatch of milk:

Lids cover all the filled milk cans tightly and the cans are loaded in the milk vehicle/truck as per the time schedule of a particular society. The staff of the truck deliver the fat slip of previous shift, letters from milk union, other materials as indented by the society. This is done quickly to avoid any stoppage of the vehicle more than the schedule. The vehicle also unloads the cleaned empty cans received from the dairy plant for the use of the society for the next shift milk collection.

Wherever the AMCU/Bulk Cooler is installed in the society, the milk tanker from dairy/chilling centre comes once or twice in a day as per requirement to lift the chilled milk from the society.

Payment for the milk:

The milk union depending upon the policy it adopts on pricing decides the price of the milk. Quality and quantity form the basis for the payment. Normally a price chart or ready reckoner is prepared and supplied by the union to the societies. The society pays the pourers daily/weekly/after every ten days as per the decision of the managing committee. The relevant entries are made in the Card/Pass Book of the members and the registers of the society.

Milk union generally pays the price of milk so procured from societies through bank advice on a regular interval i.e. weekly, every ten days as the case may be. This frequency is generally not changed and is same for all the societies.

Accounting:

There is a set of a standard registers, most of which are to be completed daily. The others are completed as and when any transaction takes place. It is the responsibility of the concerned staff of the society to complete the records on time and regular basis. All the records are to be countersigned by the Secretary/ Chairman as per the decisions of the society and as required under the provisions of bye-laws. The registers and formats are designed in such a way that they reflect the volume of business and financial standing of the society at any given time.

A society appoints a local person as an internal auditor who audits the transactions made by the society on regular basis. The society prepares its monthly accounts statement for the managing committee meeting and also other accounts statements on quarterly basis. The annual accounts are prepared for statutory audit.

Cleanliness:

Milk is a perishable commodity. In order to have improved quality of raw milk and avoid spoilage besides contamination of milk, a society maintains cleanliness through the clean milk production process and techniques from producers to society level. Various activities and steps are undertaken for cleanliness of the utensils, staff, equipment/ accessories and building emphasising procurement of clean milk.

Standardisation of Testing Equipment and Chemicals:

Generally, the milk union supplies to the society milk testing equipment, accessories and chemicals that have BIS and or another relevant standard. However, the society needs to check the quality / standard of these articles periodically. Otherwise a society may face milk and fat shortage problem and eventually run into losses.

Local Milk sale:

The managing committee is authorised to fix the quantity and price of milk to be sold locally. The price varies from season to season. The general fat in the milk, local demand etc. determines the price of milk.

Sample Milk sale:

After conducting the fat test for all the samples and also the retests, if any, the remaining sample milk is spooled for sale. This sale is generally done on open contract basis (quarterly/half yearly/yearly) with a fixed price as decided by the managing committee.

Distribution of profit:

Besides regular payment of milk price, the society at the end of the year pays dividend on paid up share capital. The major portion of society's net profit is paid in the form of bonus to the producers proportionate to the value of milk supplied by them during the year. The extent of these benefits is decided in accordance with the provisions made in the bye-laws.

4.4.2 Inputs Services

The second important work of a society after milk trading is making available the technical inputs to the milk producers for production enhancement activities. Generally the basic facilities are owned by the milk unions and the services are provided to the members through the societies on cost / no profit no loss / grant basis as decided by the milk union.

The society has a trained Artificial Insemination (AI) and Veterinary First Aid (VFA) Worker who looks after the job regularly through Single or Cluster Centre basis. Generally the milk union supplies liquid nitrogen, semen doses and veterinary medicine, cattle feed, fodder seed to the society on cost for the members. Apart from this cattle insurance and other group insurance schemes are also available for the benefits of the members.

4.4.3 Other Functions/Activities

Besides the functions as stated above dairy cooperative society also organises with the help of milk union various awareness and training programmes, meetings, camps, visits in connection with capacity building of managing committee members and members, women involvement in dairy cooperative, clean milk production, better animal keeping and management, health and hygiene, literacy and numeracy.

In addition, the society also takes up many promotional activities for the members and the village.

4.5 Anand Pattern is a multi –tier vertically integrated cooperative structure which

- Is governed by the elected representatives of the milk producers and managed by Professionals.
- Ensures a direct linkage between milk producers and consumers through integration of production, procurement, processing and marketing of milk.
- The salient features of Anand pattern dairy cooperatives are:
- Effective governance by elected representative of farmers.
- Effective professional management.
- Availability of rounds the year market to the milk producers.
- Availability of inputs for enhancing milk production of animals of the members of dairy cooperatives
- Sharing of profits by members of the dairy cooperatives on equitable basis.

4.6 Function of a Dairy Cooperative Society (DCS)

The functions of a dairy cooperative society can be listed as follows:

- 1) Collection of milk twice a day from farmers.
- 2) Make regular payment to suppliers.
- 3) Dispatch the milk collected to Milk union.
- 4) Provide to members:
 - Balanced cattle feed.
 - Fodder seeds of improved variety.
 - Services for animal health care.
 - Services for breeding of milch animals.
 - Patronage based portion of the surplus.

- Contribute to village development.

Every morning and evening, the society buys the surplus milk from the member-producers. The producer is paid for the milk at an interval usually decided by the managing committee of the society. The payment is made on the basis of milk quality (fat, SNF, bacteriological) content of milk supplied by individual producer. The union's dairy plant organises the transport of milk from all its member-societies.

The producers in this system are not only assured of regular and remunerative payment for their milk but also benefit from the milk production enhancement inputs. The micro-level inputs such as veterinary first-aid and artificial insemination are organised by village societies with the support of the milk union. One staff member of the society is trained for carrying out these functions. In addition, the supply of balanced cattle feed and the sale of fodder seeds are also channelized through the societies. Society also organises other services such as cattle insurance, health insurance and promotional activities for the members and the village.

4.7 Functions of a Milk Producers' Cooperative Union:

The major functions of Milk Union are:

1. Procure, process and market milk and milk products.
2. Arrange/Provide macro level inputs like cattle-feed, animal health and breeding care, etc.
3. Arrange for training and education of managing committee members, staff, and members of dairy cooperative society and also for the Board members, managers and staff of the milk union.

In general, the Union carries out five important functions: procurement, processing and marketing of milk and milk products, providing technical inputs, institutional strengthening of

milk cooperatives, enhancing women involvement in dairy cooperatives, organisation of extension activities and rural development services. The union owns and operates dairy plant; cattle feed plant, fodder and bull mother farms, semen collection station etc. for animal husbandry activities.

In addition to the above, the milk union carries out research development and other promotional activities for the overall benefit of milk producers. The milk union organizes the macro-level inputs such as compounded cattle feed, fodder seeds, and various veterinary services for treatment of sick animals, all of which are made available to the milk producers through the dairy cooperative societies. Thus, it is at the Union level that professional skills are hired for specialized purposes, which individual producers cannot afford to do.

The union pays to the societies dividends on their shares and bonus in relation to the quantity of milk supplied by them during the year. The milk products processed by the union are also marketed through the State Milk Federation.

A special feature of the Anand Pattern is that the unions are under continuous and concurrent audit to maintain financial propriety.

CHAPTER V

SAMLESWARI MILK UNION

5.1 INTRODUCTION AND BACKGROUND

This Milk Union was established in 1976 as Sambalpur Dist. Co-op. Milk Supply Union Ltd., with a share capital of Rs.1.0 lakh from Govt. of Orissa. Starting with just on 12 DCS out of which nine were defunct about 200 litres of milk was procured daily without any chilling, processing and other facilities. The area of operation of Milk Union was erstwhile Sambalpur District. Due to want of milk processing and preservation facility, even mere procurement of milk 200 litres during 1976 could not be sold in time and about half of it was spoiled as the raw milk has a self-life for only four hours. Not only the Govt. share capital of Rs.1.0 lakh was wiped out due to spoilage of milk but by 1979 the Organisation owed to farmers to the tune of Rs.2.13 lakhs. Thereafter, conversion of the semi-govt milk supply union to farmers organisation was implemented. Subsequently it was named as Sambalpur Dist. Coop. Milk Producers' Union Ltd. and affiliated to OMFED and Union received assistance and guidance. Thereafter with the assistance of Govt & DRDA the first milk chilling plant 2000 litre/day was established near Chiplima in 1984. Second chilling plant of 2,000 litres/ day capacity was established at Jharsuguda in 1985 and the third Chilling Plant of 5,000 litre/day capacity was established in Baragarh in 1987. This improved facility of milk Chilling greatly helped the Milk Producers to take dairy as their secondary livelihood income generation and the viability of the Milk Union sustained. Within a short period, procurement and marketing exceeded 2,000 litre per day.

During this period all the milk procured was sent daily to Rourkela Dairy for processing and packaging on modern scientific Plant. Pasteurised milk packed in Poly packs were brought daily to Sambalpur from Rourkela for marketing from 1986 to 1990. In 1990 a full fledged Sambalpur Dairy with 10,000 litres per day was established with poly pack packaging system under Operation flood III Programme with financial assistance from NDDB. This boosted the milk marketing in the area with competitive edge over the private milk vendors selling loose milk in open cans. In 1995-96 the processing capacity of Sambalpur dairy was further expanded from 10,000 litres to 30,000 litres per day. During March 1998 the milk union name amended as Samaleswari Regional Co-op. Milk Producers' Union Ltd. During March 2005 the area of the Milk Union extended to Subarnapur district.

By March 2017 the milk union has 450 no. of functional societies and the present average milk procurement is 75,000litres Per day. The milk union has one no. of Chilling plants at Bargarh of 30,000 litres Capacity per day 28 no. Bulk Milk Coolers with capacity of 98,000 litre per day. At present the total nos. of farmer members is 30,450 out of which 15,945 constitute women members which account 52% of the total membership. There are 188 no. of A.I. Centres in the Milk Union out of which 18nos. are managed by women members. The procurement of the Milk Union increased from 23,000 litres per day in 2001-02 to 75,000litre per day during 2016-17. The payment to the producers increased from Rs. 8.04 crore to Rs. 70.09 crore during the year 2016-17. There has been a manifold increase also in other indicators like milk marketing, milk procurement, DCS covered under AI, Cattle feed sale etc. The milk union has been making profit continuously since 1995-96 till date. More importantly, contribution of farmer members to total share capital has increased from a meagre Rs.2,000/- in 1976-77 to Rs.2.94 crore in 2016-17. The asset of the Milk Union too witnessed a steady growth during the years.

Even after spreading the activities with the use of available resources, it was difficult to extend facilities to entire potential areas of the districts. Hence, the proposal is prepared to intensify within the existing block is and further extend to other blocks of these districts

5.2 MANAGEMENT

The Management of the Milk Union vests on 15 Nos. Committee of Management (Board of Directors) elected from the affiliated MPCs and 2 members are nominated as follows:- a. Collector, Sambalpur. b. Orissa State Co-operative Milk Producers' Federation Ltd., Bhubaneswar. The term of office of the elected members of Board of Management is for Five years and the present term of Committee of Management is up to March 2025. As per letter No P&I/UBL:12:2013:4376 Dt 05.10.2013 of Chairman-cum-Managing Director and Addl.R.C.S. Odisha The District Collector of the headquarter where District Milk Union is located to act as the Ex-Officio Chairman/Management In charge of the District Milk union. As per Memo No 1103 Dt 20.10.2013 Sri Balwant Singh IAS Collector and District Magistrate Sambalpur took over the charges of Ex-Officio Chairman of the Samaleswari Milk union. As per Govt. notification No. 388 Dt.03.02.2020 date has been fixed for the election of Committee of management for central co-op societies. In pursuance to election held on Dt 28.04.2020 Sri Satrughna Sahu assume the office of President of Samleswari Regional Co-op Milk Producers' Union Ltd, Sambalpur w.e.f. Dt. 08.05.2020 vide memo no 203 Dt. 08.05.2020 and continue till date.

5.3 AREA OF OPERATION

The area of operation of the Milk Union is Confined to the Revenue district of Sambalpur, Bargarh, Deogarh, Jharsuguda & Sonepur.

DISTRICT	Unit	Total Block	Operational Area (Block covered)
Sambalpur	Nos.	09	06
Bargarh	Nos.	12	12
Jharsuguda	Nos.	05	04
Sonepur	Nos.	06	06
Deogarh	Nos.	03	01
Boudh	Nos.	03	03
TOTAL	Nos.	38	32

5.4 MPCS (MILK PROCURING COOPERATIVE SOCIETY)/ DCS(DAIRY COOP SOCIETY)

District	Unit	Organised DCS	Functional DCS	Male DCS	Women DCS
Sambalpur	Nos.	90	87	50	37
Bargarh	Nos.	260	252	178	74
Jharsuguda	Nos.	43	43	30	13
Sonepur	Nos.	100	98	95	03
Deogarh	Nos.	06	04	-	04
Boudh	Nos.	39	39	39	-
Total	Nos.	538	523	392	131

DCS MAP



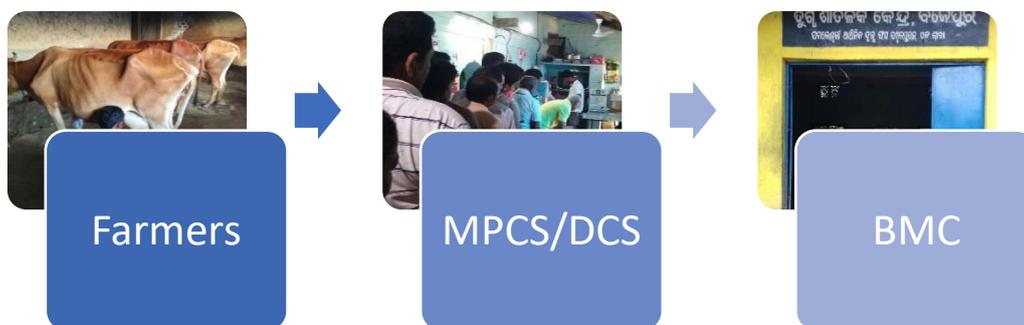
5.5 ACTIVITIES

- MILK PROCUREMENT
- MILK TESTING
- MILK CHILLING
- MILK TRANSPORTATION
- TRAINING & AWARENESS PROGRAMME

5.5.1 MILK PROCUREMENT

Milk is regularly collected and transported twice a day, morning and evening. The usual method of milk collection and reception is

- Milk procurement through individual producers: In this case, milk is brought to the nearby MPCS by the individual producers/farmers in their own vessels of any type.



District	Unit	Average Milk Procurement	Fat%	SNF%
Sambalpur	TKgPD	8.27	3.9	8.0
Bargarh	TKgPD	34.04	4.0	8.0
Jharsuguda	TKgPD	8.90	4.0	8.0
Sonepur	TKgPD	13.25	4.1	8.0
Deogarh	TKgPD	0.14	3.9	8.0
Boudh	TKgPD	6.33	3.9	8.0
Total	TKgPD	70.93	4.0	8.0

5.5.2 MILK TESTING

Where the Gerber Centrifuge/Electronic Milkotester is used for fat test of milk samples, once sufficient number of samples are collected these are tested as per laid down procedure. The test results are recorded against each sample number in the Fat Test Register. This ensures the confidentiality of the owners of the samples. After the testing is over, the records are compiled; the left-over sample milk is disposed of in a manner decided by the management committee. At pourers' request retesting is also carried out before the samples are disposed off and the changes if any, are recorded.

After the milk collection is over, a composite sample is drawn from the total quantity of milk collected observing the general procedure to draw the sample. This sample is tested for fat and lactometer reading is also noted in the test register. This is commonly known as General Test (GT) of milk collected by the society. All the accessories/equipment used in reception and testing of milk, are then cleaned thoroughly with warm water and or detergent solution.

5.5.3 MILK TRANSPORTATION

All the filled milk cans are loaded in the milk vehicle/truck as per the time schedule of a particular society. The staff of the truck deliver the fat slip of previous shift, letters from milk union, other materials as indented by the society. This is done quickly to avoid any stoppage of the vehicle more than the schedule.

SL NO	TYPE OF VEHICLE	CAPACITY	NOs	CAPACITY (Ltrs)
1	ROAD MILK TANKER	2KL	1	2000
2	ROAD MILK TANKER	5KL	5	20000
3	ROAD MILK TANKER	9KL	5	27000
4	ROAD MILK TANKER	15KL	1	15000
5	TATA 407	3MT	3	

5.5.4 BMC (BULK MILK COOLER)

There is around 37 BMCs are with the union having chilling capacity of 137 TLPD. One Chilling plant of 30 TLPD is present at Bargarh District.

District	No. of BMC	Total Chilling capacity	No. of Milk Chilling Plant	Total Chilling capacity
Unit	Nos.	TLPD	Nos.	TLPD
Sambalpur	06	14	-	-
Bargarh	18	73	01	30
Jharsuguda	03	16	-	-
Sonepur	06	28	-	-
Deogarh	-	-	-	-
Boudh	04	06	-	-
Total	37	137	01	30

BMC MAP



5.5.5 Training

The training centre is located at Goshala about 18 km from Sambalpur. It has a training capacity of 40 and the farmers are imparted different types of training on society and dairy development.

5.5.6 OTHER ACTIVITIES

The Milk Union organize & conduct various farmer oriented program for the benefit of milk producing farmers under technical input activities

- Supply of Cattle Feed,
- various Fodder development & cultivation program,
- AZOLA cultivation program,
- Milk testing equipment,
- Chemicals,
- DCS Stationeries,
- Vaccination,
- supply of Mineral Mixture,
- First Aid Medicine,
- De-warming of animals,
- Infertility Camp,
- Animal treatment Camp,
- Cattle Insurance,
- Member Insurance etc.

For Faster & easy testing of Milk at Society level Electronic Milk tester has been installed at 312 MPCS, AMCS Unit has been installed at 23 Nos MPCS & DPU machine has been installed at 15 Nos. of MPCS, DPMPCU has been installed at 105 Nos. of MPCS and also its regular maintenance and operational problem is looked upon by giving annual maintenance contract.

District wise cattle feed and mineral mixture

District	Cattle Feed	Mineral Mixture
	MT	MT
Sambalpur	337.50	4.20
Bargarh	944.99	9.40
Jharsuguda	131.0	3.40
Sonepur	330.00	5.50
Deogarh	-	-
Boudh	75.00	2.50
Total	1818.49	25.00

Artificial Insemination and number of calf born area wise

District	AI Centre	AI Done	Calf Born	
			Male	Female
	Nos	Nos		
Sambalpur	10	103	32	23
Bargarh	93	1213	311	304
Jharsuguda	13	240	45	63
Sonepur	36	434	71	70
Deogarh	-	-	-	-
Boudh	-	-	-	-
Total	152	1990	459	460

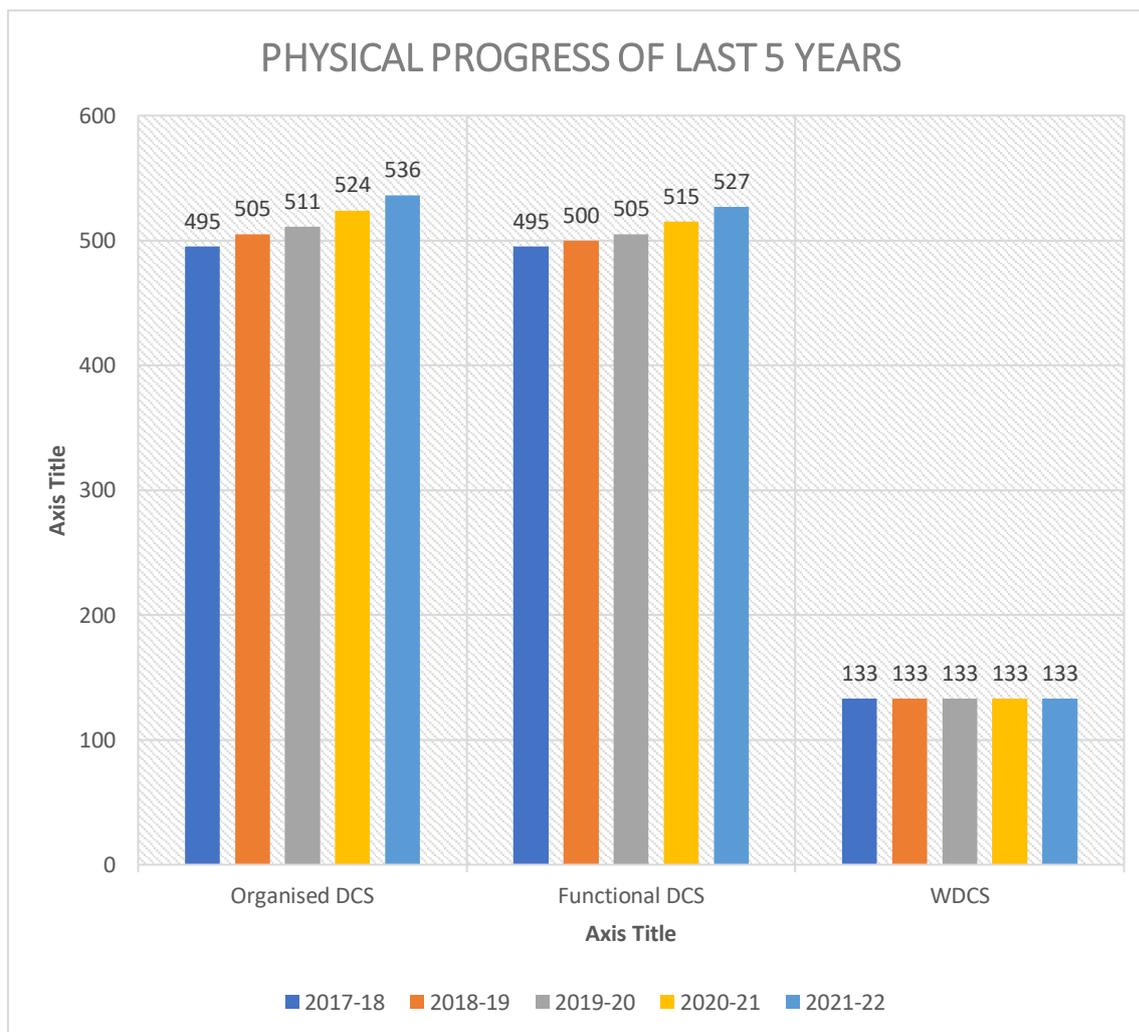
5.6 SOURCES OF FUNDS

The Union raise funds from one or more of the following sources such as Entrance Fees; Shares; Debentures; Deposits; Loans; Grants, Aids, Subsidies and Donations;.

The Union may accept funds from any development agency or any financial institutions by accepting loans, grants, advances etc.,as per the terms and conditions prescribed by such institutions as may be mutually agreed upon.

<i>I. OWN FUND</i>	
Share Capital Grant	100,000.00
Member	29,470,100.00
Reserve Fund	54,78,076.30
General Fund	155,77,546.09
Grants	293,81,246.91
<i>II. BORROWED FUND</i>	
Deposits	
Borrowing	3,050,000.00

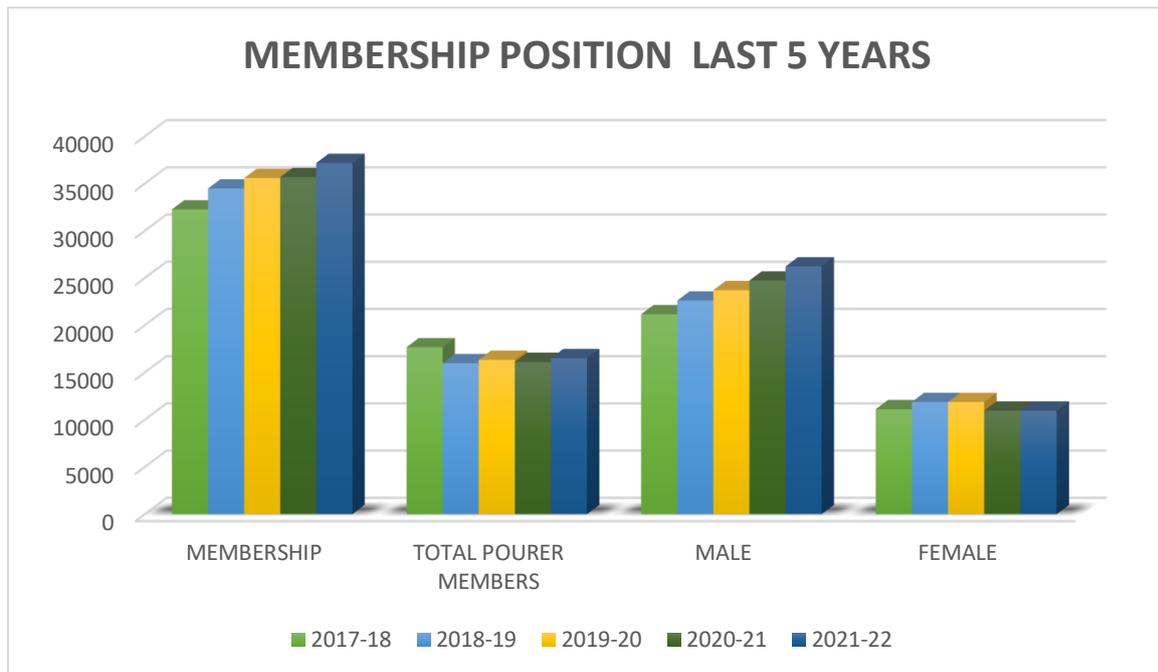
5.7 PHYSICAL PROGRESS OF LAST 5 YEARS



Analysis

The total number of DCS increased since last 5 years. Whereas the number of women DCS remained unchanged, no growth is observed.

5.8 MEMBERSHIP POSITION SINCE LAST 5 YEARS



Analysis

Total membership has been increased since last 5 years but the total pourer members decreased at the same time. New male members joined where as the number of new female members has not increased since last 2 years.

THE SAMALESHWARI REGIONAL COOPERATIVE MILK PRODUCERS' UNION LTD.
CHART OF PROVISIONAL MILK PRICE FOR THE MILK PRODUCERS w.e.f 21.04.2022

		Fat Cost/Kg: Rs. 331.57										SNF Cost/Kg: Rs. 221.05												
SNF	+/-	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0	5.1	5.2	5.3	5.4
8.0	-1.00	27.29	27.63	27.96	28.29	28.62	28.95	29.28	29.62	29.95	30.28	30.61	30.94	31.27	31.60	31.94	32.27	32.60	32.93	33.26	33.59	33.93	34.26	34.59
8.1	-0.50	28.02	28.35	28.68	29.01	29.34	29.67	30.00	30.34	30.67	31.00	31.33	31.66	31.99	32.33	32.66	32.99	33.32	33.65	33.98	34.32	34.65	34.98	35.31
8.2	0.00	28.74	29.07	29.40	29.73	30.06	30.39	30.73	31.06	31.39	31.72	32.05	32.38	32.72	33.05	33.38	33.71	34.04	34.37	34.70	35.04	35.37	35.70	36.03
8.3	0.00	28.96	29.29	29.62	29.95	30.28	30.62	30.95	31.28	31.61	31.94	32.27	32.60	32.94	33.27	33.60	33.93	34.26	34.59	34.93	35.26	35.59	35.92	36.25
8.4	0.00	29.18	29.51	29.84	30.17	30.50	30.84	31.17	31.50	31.83	32.16	32.49	32.83	33.16	33.49	33.82	34.15	34.48	34.82	35.15	35.48	35.81	36.14	36.47
8.5	0.00	29.40	29.73	30.06	30.39	30.73	31.06	31.39	31.72	32.05	32.38	32.72	33.05	33.38	33.71	34.04	34.37	34.70	35.04	35.37	35.70	36.03	36.36	36.69
8.6	0.00	29.62	29.95	30.28	30.62	30.95	31.28	31.61	31.94	32.27	32.60	32.94	33.27	33.60	33.93	34.26	34.59	34.93	35.26	35.59	35.92	36.25	36.58	36.92
8.7	0.00	29.84	30.17	30.50	30.84	31.17	31.50	31.83	32.16	32.49	32.83	33.16	33.49	33.82	34.15	34.48	34.82	35.15	35.48	35.81	36.14	36.47	36.80	37.14
8.8	0.00	30.06	30.39	30.73	31.06	31.39	31.72	32.05	32.38	32.72	33.05	33.38	33.71	34.04	34.37	34.70	35.04	35.37	35.70	36.03	36.36	36.69	37.03	37.36
8.9	0.00	30.28	30.62	30.95	31.28	31.61	31.94	32.27	32.60	32.94	33.27	33.60	33.93	34.26	34.59	34.93	35.26	35.59	35.92	36.25	36.58	36.92	37.25	37.58
9.0	0.00	30.50	30.84	31.17	31.50	31.83	32.16	32.49	32.83	33.16	33.49	33.82	34.15	34.48	34.82	35.15	35.48	35.81	36.14	36.47	36.80	37.14	37.47	37.80
9.1	0.00	30.73	31.06	31.39	31.72	32.05	32.38	32.72	33.05	33.38	33.71	34.04	34.37	34.70	35.04	35.37	35.70	36.03	36.36	36.69	37.03	37.36	37.69	38.02
9.2	0.00	30.95	31.28	31.61	31.94	32.27	32.60	32.94	33.27	33.60	33.93	34.26	34.59	34.93	35.26	35.59	35.92	36.25	36.58	36.92	37.25	37.58	37.91	38.24
9.3	0.00	31.17	31.50	31.83	32.16	32.49	32.83	33.16	33.49	33.82	34.15	34.48	34.82	35.15	35.48	35.81	36.14	36.47	36.80	37.14	37.47	37.80	38.13	38.46
9.4	0.00	31.39	31.72	32.05	32.38	32.72	33.05	33.38	33.71	34.04	34.37	34.70	35.04	35.37	35.70	36.03	36.36	36.69	37.03	37.36	37.69	38.02	38.35	38.68
9.5	0.00	31.61	31.94	32.27	32.60	32.94	33.27	33.60	33.93	34.26	34.59	34.93	35.26	35.59	35.92	36.25	36.58	36.92	37.25	37.58	37.91	38.24	38.57	38.90

Note : 1.No payment for milk having less than 3.2% Fat & Less than 8.0% S.N.F.
 Penalty @ Rs 1.00 paisa for 8.0% of SNF & Rs 0.50 paisa for 8.1%

GENERAL MANAGER

5.9 PHYSICAL PROGRESS IN DIFFERENT ACTIVITIES SINCE LAST 5 YEARS

Particular	Unit	2017-18	2018-19	2019-20	2020-21	2021-22
Average Milk Procurement	TkgPD	73.33	70.43	68.59	44.66	55.89
Total Cattle Feed Sales	MT	4286.15	4004.25	1725.50	1572.55	1818.49
Total Mineral Mixture Sales	MT	21.89	79.53	10.02	28.50	25.00
Total Fodder Seed distribution	KG	1,720	2,657	1,300	600	4,050

NB: 1. Due to Covid-19 the Milk Procurement restricted and not collected for 61 days during 2020-21 & 2021-22 Milk Collection stopped for 4 full days & 38 days evening Collection. So Procurement decreased.
 2. Due to non collection of Milk around 5,000 milch animals sold by farmers.
 3. The Milk Union is also not getting indented quantity of cattle feed since outbreak of Covid-19.
 4. During 2021-22 there is outbreak of FMD in the Milk shed area of SAMUL which is also vital factor in fall of Milk Collection. Vaccine neither supplied by Govt. Not OMFED nor available in market.

Analysis

Covid-19 outbreak has greatly impacted upon the milk procurement, due to continuous non procurement the farmers sold their milch animals. And hence the cattle feed, mineral mixture and fodder seed distribution decreased in the financial year 2020-21.

CHAPTER VI

6.1 FINDINGS

1. The union is the second largest milk provider to OMFED, the state marketing federation.
2. The union has a remarkable growth in terms of membership and share capital until 2020.
3. Due to Covid-19 the growth has been reduced in the year 2021.
4. The women participation has been reduced after Covid.
5. The number of pourer members has also been reduced due to the pandemic.
6. The rate for the produces is not reasonable for the farmers.
7. Many farmers sold their cows and became non pourer member.
8. The training programme and other activities for the farmers as well as for the staff couldn't be arranged due to insufficient fund .

6.2 CONCLUSION

SAMUL is a steadily growing organization of the milk producers in the Odisha and its growth in the last 5 years is noteworthy. It is the second largest union providing milk to the state milk federation OMFED. The expansion of milk sheds, number of cooperatives and their members during the same period is remarkable. These organizational expansion augmented services, such as, AI, vaccination and other treatment facilities, and cross breed cows which contributed in raising the quality of dairy cows improved the dairy cows keeping in the cooperative area.

At the same time, due to covid-19 milk production per cooperative member also has greatly affected. The procurement of milk has been reduced significantly in the year 2021, thus the farmers were bound to sell their cows/ cattle also the farmers didn't get the suitable price for their produces. To get into the suitable position and for the growth of union as well

as the farmer the union has to take some advance steps and need to prepare an action plan and should work on that.

Even after spreading the activities with the use of available resources, it was difficult to extend facilities to entire potential areas of the districts. Hence, the proposal has to be prepared to intensify within the existing block is and further extend to other blocks of these districts.

6.3 SUGGESTION/ ACTION PLAN

- Step to be taken to organise new MPCS / revive defunct MPCS for increase of milk procurement.
- The members need to be encouraged and motivated to pour milk at their nearby society.
- Induction of New member in existing MPCS.
- OMFED cattle feed and Mineral Mixture is to be provided to the farmers in regular process.
- Union should organise Animal health camp & Vaccination in the milk shed area of SAMUL with the help of veterinary personnel & OMFED
- Supply of fodder seed to farmers .
- Instructed route-in-charge to conduct motivation programme at society level and motivate the members to supply quality milk to the society.