

# **ANALYSIS OF DAIRY COOPERATIVE IN HIMACHAL PRADESH: A CASE STUDY OF MILCH LIVESTOCK IMPROVEMENT SOCIETY**

Project Report

by

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(H-2019-30-ABM)

submitted to



**Dr. YASHWANT SINGH PARMAR UNIVERSITY OF  
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### **CERTIFICATE-I**

This is to certify that the project report titled “**Analysis of Dairy Cooperative in Himachal Pradesh: A Case Study of Milch Livestock Improvement Society**” submitted in partial fulfilment of the requirements for the award of the degree of Master of Business Administration (Agribusiness) in the discipline of **Agribusiness Management** of Dr. Yashwant Singh Parmar University of Horticulture & Forestry, (Nauni) Solan (HP) – 173 230 is a bonafide research work carried out by **Sujata Thakur (H-2019-30-ABM)** daughter of Shri Harinder Thakur under my supervision and that no part of this project report has been submitted for any other degree or diploma.

The assistance and help received during the course of this investigation have been fully acknowledged.

**(Dr. Rashmi Chaudhary)**

**Place: Nauni, Solan**  
**Date:**

## **CERTIFICATE-II**

This is to certify that the project report titled, “**Analysis of Dairy Cooperative in Himachal Pradesh: A Case Study of Milch Livestock Improvement Society**” submitted by **Sujata Thakur** (H-2019-30-ABM) daughter of Shri Harinder Thakur to the Dr. Yashwant Singh Parmar University of Horticulture & Forestry, (Nauni) Solan (HP) – 173 230 India in partial fulfilment of the requirements for the degree of Master of Business Administration (Agribusiness) in the discipline of **Agribusiness Management** has been approved by the Advisory Committee after an oral examination of the student in collaboration with an External Examiner.

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**Date:**

**(Sujata Thakur)**

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## ABBREVIATIONS USED

%	:	per cent
&	:	and
<i>et al.</i>	:	and others
H.P	:	Himachal Pradesh
<i>viz.,</i>	:	Videlicet

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## *Chapter-1*

### **INTRODUCTION**

#### **1.1. Background**

Co-operative is the vicinity in which humans work together for mutual benefits and have restricted assets to create large-scale monetary possibilities. Cooperatives play a very critical position when it comes to bloom and improvement as well as allows the rural people in growing the profits. The mutual owners of a dairy corporative society are the dairy milk manufacturers that supply milk to it. Dairy corporative society works to ensure that its member farmers get hold of and get a fair price. A dairy co-operative is a very fruitful and coherent employer because it handles the procurement and transportation system.

In India, the majority of the population lives in villages where agriculture is the primary source of income. Domesticated animals have been a feature of the farming system since the dawn of time. Dairy farming is a significant part of India's rural economy. For millions of Indian rural homes, it is a centuries-old ritual. The introduction of the Green Revolution, as well as other modern agricultural practices, has reduced livestock's significance in agriculture. Nevertheless, in India, livestock is linked to agriculture and social practices. Dairy farming plays a significant part in the village economy, providing food for landless and disadvantaged people. The Indian government has launched "Operation Flood" to ensure that milk and milk products are properly counted. Various projects for the development of dairy cooperatives were also implemented. In India, dairy cooperatives are organized into three levels: state level federations, district milk unions, and dairy cooperative societies at the village level. As a result, dairy co-operative organizations have been found to address local milk demand and to eliminate existing milk marketing malpractices. A significant sum of money has been invested on the establishment of dairy cooperatives and the infrastructure that supports them. The emergence of dairy cooperatives has fueled rural people's empowerment and promoted rural development (Khan *et al.*, 2014).

Milk production remains a small-scale farm activity in India. Our rural milk producers are mostly small-scale farmers and landless laborers. India has surpassed the United States and European countries as the world's greatest producer of milk. India's dairy industry has been changed by our rural milk farmers. They have shown that if they are allowed control over the resources they create; they can and will perform marvels. The first attempt at dairy

development in India dates from British control, when the defense department developed military dairy farms to assure the colonial army's supply of milk and butter. The first of these farms opened in Allahabad in 1913, followed by facilities in Bangalore, Ootacamund, and Karnal. In addition, the Second World War boosted the number of private dairies with improved processing facilities (Selvaraj and Kumar, 2015).

Dairy production is a traditional source of income for India's rural inhabitants and an important component of the crop-livestock production system. Cattles and buffalos are fed by-products of agricultural production and produce dung to boost field fertility while also serving as a source of draught power. Milk, butter, and ghee produced in the home are vital sources of nourishment for families, and increased market access allows for consistent financial flow. As a result, dairy production improves the family and farming system's viability (Dohmwirth and Carla, 2014). The dairy industry has a lot of potential to help with poverty reduction and rural livelihoods (Ramadanti *et al.*, 2017).

Himachal Pradesh is very stunning and mountainous state with predominantly hilly terrain and terraced agriculture. Agriculture/horticulture is important since it employs around 62 percent of the state's overall workforce. Agriculture and related activities are the people's primary source of income in the state's rural areas. For farmers, it gets harder to do cropping because of the mountainous terrain. From time to time they face poor crop manufacturing, water keeping ability is negative due to slopping areas, much less knowledge about farm activities/operations, the younger generation distracted from traditional agriculture due to toiling nature & non-viability and absence of different profit era activities. Due to this rearing dairy animals have picked up as a prime economic pastime in H.P. It gives an opportunity like self-employment constant source of profits and a powerful device in upgrading the monetary repute of farmers and additionally facilitates earning coins for families within the rural areas. Almost all the families have subsistence landholding. Dairy farming no longer only rises the call for milk however the spectrum of essential wishes of the farmers is nice. Dairy farming stays an essential measurement of diverse agricultural practices and the most attractive economic measures for the farmers in the state.

## **1.2. Importance of dairy cooperative**

- i) Within the case of member families, dairy co-operatives have a good impact on milk production, consumption, and market surplus of milk.

- ii) Offers a remarkable ability for self-employment.
- iii) A tremendous source of profits and a device for farmers to enhance their financial state of affairs.
- iv) Dairy co-operatives can assist and decorate rural girls' improvement (Dogra, 2016).

Village-level Dairy Cooperative Societies (DCSs) are well-known as successful models of collective activity. The DCSs were created to eliminate intermediaries in the milk supply chain who would extract huge profits from dairy farmers without providing them with any incentives. The DCSs are designed not just to help dairy farmers earn more money, but also to envision a democratic system that allows farmers to make decisions on their own without allowing for particular privileges or power. As a result, a DCS has social significance. It allows members to connect more often on topics other than their daily life, such as information exchange on many areas of dairying and animal health. Such engagements not only assist the DCS in running its operations democratically, but they also aid in the generation of 'bonding capital,' which is responsible for bringing people from various social groups, classes, and castes together (Singh and Christie, 2018).

### **1.3. Need of the study**

This study will be helpful to know about the socio-economic conditions of the members, especially in the areas of income, employment, and profit through dairy co-operatives. This study analyses the production and marketing of milk through dairy cooperatives. This study specially focused on benefit of cooperative among its co-operative members, member's knowledge about dairy co-operatives, problems of beneficiaries and suggestion of dairy cooperative for good performance and dairy co-operative beneficiaries for better economic status.

### **1.4. Objectives of the study**

Present study was conducted with the selected following objectives

- i) To analyse the socio-economic background of the milk producers of dairy cooperative.
- ii) To study perception of the members towards working and performance of the cooperative.
- iii) To study the problem of milk producers under dairy cooperative societies and to suggest the suitable remedies to overcome them.

## ***Chapter-2***

### **REVIEW OF LITERATURE**

Literature reviews form part of research studies to bring out the gaps in the previous studies and also for critically understanding the different perspectives employed in the reviewed literature and analysing their findings. Following studies have been reviewed for the present study and findings are summarized as under:

Taseev and Seifu (2009) conducted a study on “The Emergence of a Dairy Cooperative in Bahir Dar Zuria and Mecha Woredas, North-Western Ethiopia”. The data was collected from 150 households using a single-visit-multiple-subject formal survey methodology (75 from each district). The dominant farming system in the study area was found to be mixed crop-livestock production. Local cattle breeds were the most common among farmers in the study region. The study reported that feed shortages, disease prevalence, and low milk yield of local cows were the major constraints to milk production in the study region. Dairy cooperatives face a number of challenges, including a lack of market, a low commodity price, and lower demand for dairy products, especially during fasting periods. As a result, strong extension work is needed to educate farmers in the region and raise awareness about the importance of the dairy sector's growth. Furthermore, the emerging dairy cooperatives in the area should be supported and funding from the regional government or other concerned bodies should be given to cooperative members.

Nishi *et al.* (2011) conducted a survey on the satisfaction of milk producers with the Dairy Cooperative Societies (DCSs). The study was carried out in Uttar Pradesh, Pradeshik Cooperative Dairy Federation (PCDF) on eight selected DCSs. The average number of dairy animals per household among the respondents in the study region was seven. The high volume of milk produced and sold to the societies by member farmers demonstrates the commercial viability of dairy farming in the region. Around a third of those polled were satisfied with the way societies were run. The study put forth that farmers satisfaction with the functioning of DCSs was found to be strongly influenced by organizational engagement, business potential, and economic motivation; however, the prevailing constraints had a negative impact on farmers' satisfaction. The study concludes that as farmers become more driven to achieve economic success; they can use society's resources to a greater degree for their own economic gain.

Anbu and Kumar (2012) conducted a study on dairy cooperative societies which satisfy the dairy farmer in Tamil Nadu Cooperative Dairy Federation (TCDF) covering eight selected DCSs. The average number of dairy animals per household among respondents in the study region was seven. Researchers discovered that roughly one-third of respondents were satisfied with society's work. Farmer's satisfaction was found to be strongly influenced by organizational participation, demand opportunity, and economic motivation. However, the existing constraints had a negative impact on farmers' satisfaction with the DCSs' results. It was concluded that the influence of important milk marketing networks serving smallholders in terms of economic efficiency and outreach needed to be investigated in order to develop strategies and policy initiatives to increase the overall performance of markets serving smallholders.

Nayak *et al.* (2012) conducted a study on dairy farming activities in Goa, as well as an overview of the dairy farming constraints. A total of 66 farmers were chosen at random from various Talukas in Goa, covering approximately 1,170 dairy animals. The study found that only 8% of farmers' primary occupation was dairying, while the majority (74%) of farmers' primary occupation was agriculture or horticulture. The study reported that during the rainy season, most dairy farmers used naturally grown Karad grasses. Spent brewer's grains were the most popular non-traditional feed. To make dairy farming a more profitable venture, it is concluded that awareness programs on scientific feeding practices are needed, as well as interventions in conventional dairy animal feeding practices.

Tanwar and Kumar (2014) conducted a study on socio-economic characteristics of dairy cooperative member and non-member families in semi-arid Rajasthan. The research was focused on primary cross-section data obtained by the survey from 120 dairy cooperative members and non-member families using the personal interview process. The researcher discovered that member families had a better socioeconomic profile than non-members, resulting in higher animal quality and acceptance of scientific management methods for their livestock, as well as higher income from dairy farming.

Rathod *et al.* (2014) conducted a study on farmer's perceptions of livestock breeding services provided by dairy cooperatives in Western Maharashtra and to learn about farmer's perceptions of livestock breeding services provided by Gokul Dairy Cooperative. According to the findings, 76.66 percent of farmers believe breeding services are available on time,

while 23.34 percent believe services are late. In the study area, 37.34 percent of respondents were satisfied with the breeding service delivery, while 46.0 percent of farmers were partially satisfied. According to the findings, Gokul Dairy Cooperative offered various livestock breeding services to farmers on a timely basis for free or at a low cost. Since the majority of farmers were only partially satisfied with breeding services, there is an immediate need to increase breeding service efficiency so that farmers are more fulfilled and satisfied with dairy cooperative services.

Khan *et al.* (2014) conducted a study to analyze the role of dairy cooperative societies in the socio-economic development of dairy farmers. The research was carried out in the district of Moradabad. Based on the findings of a primary field survey, a village was chosen for further investigation. According to the report, the dairy cooperative in the sampled village manages about 60% of the total milk production. Regular remuneration, required medical assistance, and a high demand for milk have all led to the socioeconomic growth of dairy farmers. As a result of the research, it was discovered that dairy cooperatives play a critical role in milk marketing and providing required support to dairy farmers for their socioeconomic growth.

Singh and Chauhan (2015) conducted a study on dairy cooperatives' impact on rural Meghalaya's income and employment. Primary data was collected from 100 members of the Dairy Cooperative Society and an equal number of non-member households. Findings of the study put forth that member households earned an average net return of Rs. 18,515 per year from dairy farming; nearly double that of non-member households who earned just Rs. 9,071. The Gini-concentration ratios for members and non-members were calculated to be 0.58 and 0.68, respectively, meaning that incomes in the member group were more evenly distributed than in the non-member group. The study concludes that members who invest more in the dairy industry and maintain higher-quality crossbred animals produce more milk and thus earn more money. Members of DCS are able to sustain a larger herd size with more care and management than non-members due to strong backward linkages, benefits, and facilities offered to DCS, resulting in more jobs.

Prabakaran (2015) did a study on rural development and milk cooperatives in India. The primary goal is to examine the phenomenal growth of milk producer's socioeconomics by encouraging dairy farmers to hold more livestock, moving procurement and input systems,

and establishing supportive federal structures. As a result, dairy production has a lot of potential for creating jobs, which is something that our country desperately needs. As a result, there is no question that increased dairy production activities result in several "bonus" benefits in addition to the primary benefits of regular cash income to farmers or their families, manure and fertilizer benefits to farmers' property, and improved labour and time utilization etc.

Tanwar *et al.* (2015) try to find the input-output relationship and assess the resource efficiency for various milk productions by members and non-members of the Jaipur District Dairy Cooperative in Rajasthan. The data pertaining to milk yield and value of milk, quantities of dry fodder, green fodder, and concentrate fed to each buffalo along with price were collected from a total of 240 households (120 member and 120 non-member families) selected on the basis of probability proportionate random sampling technique by personal interview method with the help of pre-tested schedules. The study concluded that in order to get a higher return from buffalo milk production, it is suggested that the use of concentrate and green fodder by all categories of member and non-member should be increased and dry fodder in most of the categories must be reduced as its use was found excessive except small categories in member.

Selvaraj and Kumar (2015) assessed the attitudes of the members toward Dairy Co-Operative Performance in Tamil Nadu, India. The study aids in understanding the members' socio-economic conditions, especially in the areas of income, work, and benefit through dairy cooperatives. The realization that dairying's vital importance lies not only in the production of milk but also in its role in bringing about far-reaching changes in the socio-economic dimensions of rural life, is the driving force behind this study. Dairy farming and related practices, if properly nourished and nurtured, could turn out to be veritable gold mines, perpetually unearthing employment and opportunities in rural areas. The Indian dairy industry is currently poised in terms of milk production. The vast vistas of the limitless possibilities of the dairying revolution can be seen transforming rural India of the future in a magical way.

Ricalde *et al.* (2015) conducted a study on measuring the efficiency of the primary cooperatives in the Federation of Davao Dairy Farmers Cooperatives. The Federation of Davao Dairy Farmers Cooperative (FEDDAFC) considered all eight dairy cooperatives:

Calinan Dairy Farmers Cooperative (CDFC), Malagos Dairy Cooperative (MDC), Wangan Dairy Cooperative (WDC), Aklat Dairy Cooperative (ADC), Tacunam Dairy Farmers Cooperative (TADAFCO), Riverside Dairy Farmers Cooperative (RIDAFCO), Cadalian Dairy Farmers Cooperative (CADAFCO), and Biao Joaquin Dairy Farmers Cooperative (BJDAFCO). The aim of this study was to determine the technical efficiency of the primary cooperatives under FEDDAFC, determine which cooperatives are the most and least technically efficient, analyze the potential of milk production if dairy farms operate efficiently, and make recommendations to increase each cooperative's production. The technical efficiency was determined using an output-oriented model and the Data Envelopment Analysis Program (DEAP) determined the most productive cooperative using the inputs of grass, cow, farmer, and water, as well as the output (milk) in liters. FEDDAFC was running inefficiently, with a mean technical performance of 0.855. In a comparison of the eight dairy cooperatives CDFC, MDC, ADC, and RIDAFCO are the most productive than WDC, TADAFCO, CADAFCO, and BJDAFCO. To function efficiently within the FEDDAFC, WDC should imitate CDFC and ADC practices; BJDAFCO and TADAFCO should imitate CDFC, ADC, and RIDAFCO practices; and CADAFCO should imitate CDFC, MDC, and RIDAFCO practices. These inefficient cooperatives' outputs would rise from 11 to 37 percent if they incorporate these improvements. These improvements in cooperative outputs would undoubtedly favor not only FEDDAFC but also the milk products and by-products consumers in Davao City.

Samal *et al.* (2016) examined AMUL's inclusive strategy for reaching the bottom of the pyramid and encouraging social upliftment. The paper emphasizes Amul's position as a role model in empowering and improving the social status of dairy cooperative members, and thus data on Amul is gathered from the Amul and Gujarat Co-operative Milk Marketing Federation (GCMMF) official websites. Secondary data is used to describe AMUL's economic performance as well as its commitment to sustainable growth and social upliftment. It was concluded that they should serve as an example to other dairy cooperatives by strengthening them at the grassroots level, allowing them to play a key role in the socio-economic development of their respective regions.

Dogra (2016) a research was performed on dairy development in Himachal Pradesh. The paper aims to understand the state of dairy farming, as well as the numerous issues and problems that had a negative impact on farmer's motivation to pursue dairy farming as a

career and source of income in Himachal Pradesh. The author found that farmers faced a variety of issues, including a scarcity of high-yielding milch cattle, a lack of feed and green fodder, inactive veterinary and diagnostic facilities, and a lack of scientific knowledge. To raise the economic status and social identity of the citizens in the state, people's diligence and institutional efforts were needed. For rapid promotion in the state, the government and farmers must work together. It was concluded that a shortage of high-breed dairy cattle, green fodder, inactive veterinary services, and lack of farmer training were the major issues that stood in the way of farmers expanding the reach of dairy farming in Himachal Pradesh. As a result of these issues, they enabled to keep their dairy farming at a subsistence pace, prevented them from improving their economic status. While the government helped farmers in all ways by resolving their issues.

Liketha *et al.* (2017) assessed that the empowerment of dairy women was evaluated using a comprehensive process that included selecting 7 dimensions under women empowerment: social, economic, psychological, cultural, political, legal, and technical empowerment. The scale value was determined using the Normalised Rank Order Method. To determine the level of empowerment out of 71 indicators under each dimension, 61 were held for item analysis based on the ratings of 30 judges, and mean relevancy and overall mean relevancy scores were calculated. As a result, all seven dimensions were found to be extremely significant in empowering dairy women. Dairy women participants, on the other hand, were less technologically motivated because the dimension is complex and needs substantial effort on a daily basis for a longer period of time. Furthermore, other aspects of empowerment seem to be less complicated. As a result, empowerment was discovered to be more.

Niketha *et al.* (2017) conducted a study on Women's Empowerment through Dairy Cooperatives that was undertaken in Karnataka, India. They chose 3 districts using a proportionate random sampling process. The research sample consisted of 6 WDCs (Women Dairy Cooperatives) and 240 WDC participants. Social engagement, preparation, and knowledge gathering activity all played a role in women's empowerment, according to the report. The majority of respondents had a medium level of social empowerment, cultural empowerment, psychological empowerment, economic empowerment, and technical empowerment, but a low level of legal and political empowerment. Empowerment was found to be highest in the psychological dimension, but lowest in the political component. As a

result, it is recommended that these factors be considered when developing policies and programs for women's empowerment. Therefore it was concluded that WDCs should allow women to participate in political activities, according to the findings. Future strategies must place a greater emphasis on member preparation and capacity building, as well as ensuring sufficient linkage support, in order to accelerate the rate of empowerment.

Haddad *et al.* (2017) conducted study on Organisational Challenges of Moroccan dairy cooperatives and the institutional environment. The study found that increasing the quality of the goods provided by their members, financial stability and, deciding whether to pay out a surplus of members or keep them in the organization were the challenges faced. They do this by looking at the systemic climate, and these concerns aren't limited to one company. In-depth semi-structured interviews with six dairy cooperatives were used to achieve this. The study concludes that internal regulations on quality standards and measurement may solve the collective action problem.

Tanwar *et al.* (2018) conducted a study on the Economics of Milk Production among Member and Non-Member Families of Dairy Cooperatives in Jaipur (Rajasthan) using the personal interview process. The average gross care cost per animal per year in member families was higher (Rs. 21532.81) than in non-members families (Rs. 19768.30), according to an analysis of data from 240 families (120 households in each category). It was concluded that the net return per buffalo per year be higher in member families than in non-member families. This indicates that members of dairy cooperative societies not only held superior buffalo breeds but also adopted better feeding and management practices than non-member families, thus increasing their benefit through higher buffalo productivity. Furthermore, the presence of dairy cooperatives that provided high-priced milk to their members thus increases their profits. Finally, it is proposed that non-members join dairy cooperatives in order to help milk producers boost their economic situation.

Muthuaraj (2018) conducted a study on the marketing of milk through dairy cooperatives. Primary and secondary data were used to assess the output of dairy cooperative farmers in Akkarapalayam Panchayat. Secondary data was gathered from the audited annual reports of the selected societies. The researcher shed light on how communities work and the difficulties dairy farmers face when selling their products. Lack of professionalism and low leadership efficiency, archaic cooperative law and improper government regulation, small

size of the company and therefore inability to afford the services of a competent manager, and internal work culture were the major constraints that were faced. The researcher found that more attention should be paid to dairy farmers in dairy cooperatives, such as scientific management, value addition for dairy products, customer service, financial sustainability, and farmer welfare, among other things, so that the success of milk cooperatives in rural India can contribute to inclusive growth in the Indian economy.

Mahida *et al.* (2018) conducted a study to determine the factors affecting dairy farmer's technical efficiency in Gujarat, with a focus on milk cooperative's position. To arrive at appropriate conclusions, they used multiple regression analysis and the regression tree method. The study found that dairy cooperative member farmers were more technically productive than non-members, suggesting that supporting dairy cooperatives in cooperatively deficient areas could result in more efficient and sustainable resource use and also with policy prescriptions for enhancing milk production and shift towards sustainable dairying helps to gain more people towards dairy cooperatives.

Singh and Christie (2018) conducted a study on Social Network Analysis of a Dairy Cooperative Society in Gujarat. The aim of the analysis is to see whether the dairy relation networks of dairy co-op participants overlap with their social relation networks. They do so by looking at how people exchange knowledge in dairy and social networks. They evaluate network data obtained from a five-decade-old dairy co-operative society in Gujarat's Anand district using social network research. Both knowledge networks were found to be very different, according to the researchers. The DCS under investigation has managed to retain separate networks even after 53 years of existence. The findings also show that the DCS ability to maintain independent networks protects it from social tensions and complexities.

Tripathi *et al.* (2019) conducted a study on economics of dairy farms in village cooperatives and it was undertaken on randomly basis in selected village dairy cooperatives (V DC's) in Tarai area of Uttaranchal Himalayas. Dairying would be much more profitable than it is now if milk prices were set based on production costs, according to the report. An ecological economics analysis of a dairy farm will be helpful in better understanding dairy farming system linkages and improving agro-ecosystem sustainability. Dairy cooperatives provide farmers with a range of services, including dairying equipment and technical knowledge, which has a major impact on their production. The study concludes that policy

prescriptions for increasing milk production and shifting to sustainable dairying should be implemented.

Bezus *et al.* (2020) carried out research on Financing Challenges for Ukrainian dairy cooperatives. The researcher's aim was to gain a better understanding of the capital components of agricultural dairy cooperatives in Ukraine, as well as their finding options, and to make policy recommendations for supporting cooperatives as a possible means of agricultural production. According to the survey, participants, administrators, and presidents of studies cooperatives agree that the key obstacles in funding Ukrainian dairy cooperatives are costly credit resources, a lack of liquidity in cooperative funds, and restricted access to better cooperative finance education for both members and administration classes. The author concluded that it was for increasing the number of successful dairies in Ukraine, both public and private institutions have to pay more attention to the development of such matters as extension services or similar agencies because rural dairy farmers need modern education in this sphere.

Faustin and Rusibana (2020) examined the impact of Business Development services on the financial performance of dairy cooperatives using a case study of selected dairy cooperatives from the Musanze district. A survey of 77 respondents was chosen using simple random probability sampling techniques from a target population of 339 members and employees of selected Dairy Cooperatives. The study used both quantitative and qualitative research methods and used a descriptive research design with a case study area. Primary and secondary sources of information were used to compile this report. SPSS and statistical methods such as numbers, frequencies, and tables were used to analyse the data collected. The developed model was found to be statistically relevant at a significance level of 0.05. The findings revealed that the research variables have positive and meaningful associations. The  $R^2$  0.763 found that input services, training and technical assistance, infrastructure support, and market access services offered by BDS have a 76.3 percent impact on the financial output of the selected dairy cooperative. To improve efficiency, the researcher suggests that the milk supply chain from the farmers to the final market be improved.

Ghanchi (2021) conducted a study on financial performance of selected dairy sector of Gujarat. The study explores the performance of Gujarat's cooperative dairy industry, which is involved in the production and sale of milk and milk products. Nine leading co-operative dairy units affiliated with GCMMF were chosen. Data from all nine district co-operative

dairy units in Gujarat was collected for the past ten years, from 2009-10 to 2019-20, in order to analyse the output of dairy units in the state. It was concluded that cooperative milk dairies can increase market volume, would enable storing and processing plants to run at or near full capacity, reducing the proportion of unutilized or spare capacity and lowering per unit fixed costs.

## *Chapter-3*

### **MATERIALS AND METHODS**

In this chapter, the methodological framework of the study, the process of questionnaire development, the sampling technique and the interview strategy as well as the applied tools and techniques are described in details.

The research methodology for the present study is as follows:

#### **3.1. Study Area:**

The area of the study is that area where the study is being conducted. The present research study has been conducted among the members of the Milch Livestock Improvement Society (HPMLIS) located at Dhenu Complex, Jaunaji Road Solan District of Himachal Pradesh. MLIS is a Non-Governmental organization, registered under Societies Registration Act-1860 in January, 2000 under Regd.No.Peshi/16-442/2000 with its headquartering at Jaunaji Road, Solan (H.P.).

#### **3.2. Population:**

All the members of the cooperative constitute the population for the present study.

#### **3.3. Sampling and Sample Size:**

Sample size means the number of observation used for calculating estimate of the members. Total 60 respondent members are selected conveniently from the MLIS of Solan District.

#### **3.4. Data Collection:**

The study was carried out on the basis of data and information generated from primary source.

Primary Data was collected through structured questionnaire method from the respondent member.

- Part I of the questionnaire contains the general information and socio-economic background of the milk producer.
- Part II covers the perception of the members towards working, performance of the cooperative and
- Part III: covers the perceived problems of milk producers under dairy cooperative society.

Questionnaire was prepared by keeping in mind the objectives of the study. The survey is done telephonically and by visiting respondent's native house.

### **3.5. Measurement of variables**

After completing data collection, the data was coded and entered into Statistical Package for Social Science (SPSS) computer program for their analysis. Data was analyzed by use of qualitative and quantitative statistical procedures and methods. Descriptive statistical tools like percentage, mean, frequency, standard deviation and total weightage score were used for analyzing quantitative data. Qualitative data was analyzed by the use of interpretation and explanation of various respondent's opinions, concepts and views through summarizing, categorizing and their presentation in convenient form.

### **3.6. Methods of data analysis**

The following tools were used:

#### **Percentage Analysis**

Percentage method refers to special kind of ratio which is used in making comparison between two or more series of data. The formula refers for percentage method is:

$$P = X/Y * 100$$

Where,

X = Number of Respondents falling in specific category to be measured

Y = Total Number of Respondents

#### **Mean**

The arithmetic mean has been applied to study the opinion of sample respondents on 5-point Likert scale for different statements. The arithmetic mean has been calculated by assigning numerical value to the quantitative statements. These values has been assigned for the qualitative respondents as one for Strongly disagree, two for Disagree, three for neutral, four for Agree and five for Strongly Agree.

$$X = \sum X / N$$

Where

X = Arithmetic Mean

$\sum X$  = Sum of the value of observations on the variables

N = Number of observations.

### **Standard Deviation (SD):-**

The standard deviation concept was introduced by Karl Pearson in 1823. The standard deviation measures the absolute dispersion (or variability of distribution; the greater the amount of dispersion or variability), the greater the standard deviation, the greater will be the magnitude of the deviation of the values from their mean. A small standard deviation means a high degree of uniformity of the observation as well as homogeneity of the series: a large standard deviation means just the opposite. The formula used for standard deviation is:

$$(S.D) = \left( \frac{\sqrt{\sum x^2}}{N} \right)$$

Where

$$x = (X - \bar{X})$$

N=Number of observations

### **Total Weighted Score Method TWS (LIKERT SCALE)**

A Likert scale is a type of rating scale used to measure attitudes or opinions. With this scale respondents are asked to rate items on a level of agreement. Likert scale is a summated scale based on the item analysis approach. In this each statement is evaluated on its ability to discriminate between respondents with high and low scores. This method is also known as Total Weighted Score method.

### **Diagrammatic Representation:**

A diagram is a pictorial representation of data and is frequently used by researcher to present his / her results in an attractive manner. There is a large variety of diagrams that are used, however that most commonly used diagrams are the bar graphs, pie diagram and pictorial or cartograms.

## Chapter-4

### RESULTS AND DISCUSSION

#### Introduction

The present chapter deals with the analysis and interpretation of collected data. The chapter is divided into 3 parts. Part-A deals with the respondent's profile of dairy members, Part-B deals with the perception of the members towards working, performance of the dairy cooperative and Part-C deals with the problems of the milk producer under dairy cooperative society.

#### PART- A

##### Respondent profile of dairy members:

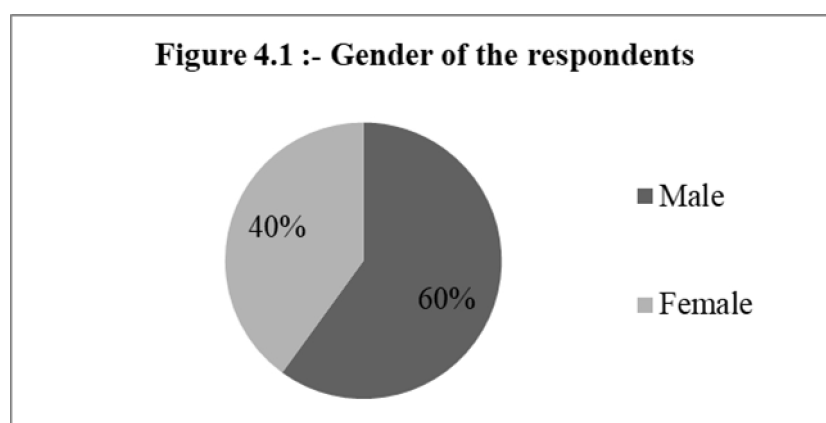
The results on the socio-economic profile of the members of dairy farmers are presented in the form of tables and figures and are discussed as below.

#### 4.1 Gender-wise distribution

Table 4.1 and figure 4.1 depicts the gender wise classification of the respondents. Analysis of data reveals that out of the total 60 respondents, 36 (60.0 per cent) are males and 24 (40.0 per cent) are females.

**Table 4.1: Gender wise classification of the respondents**

Gender	Number of Members	Percentage
Male	36	60.0
Female	24	40.0
<b>Total</b>	<b>60</b>	<b>100.0</b>

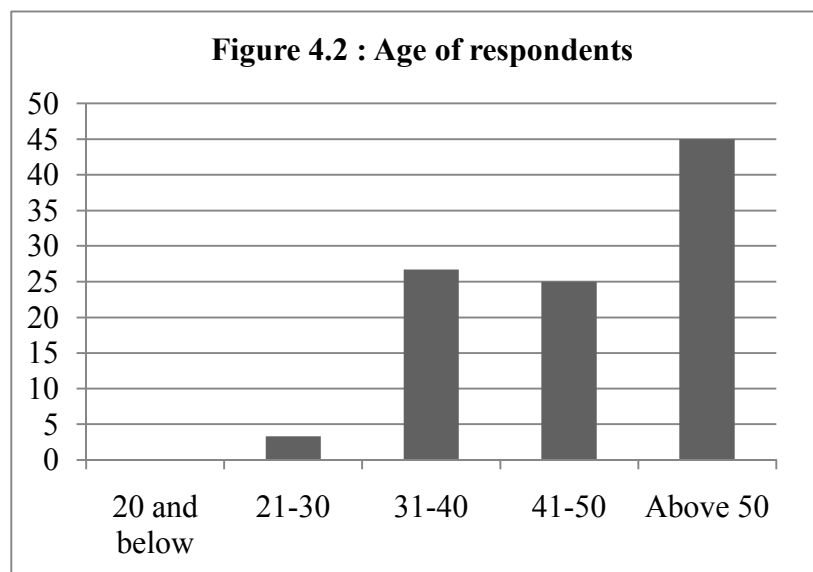


#### 4.2 Age-wise classification of the respondents

Table 4.2 and figure 4.2 shows the age wise classification of the respondents. The data shows that 45.0 per cent of the respondents are above 50 years, 26.7 percent of the respondent's age lies between 31-40 year, 25.0 per cent of the respondent's age lies between 41-50 years and 3.3 percent of the respondent's age lies between 21-30 years.

**Table 4.2: Age of respondents**

Age (in years)	Number of Members	Percentage
20 and below	0	0.00
21-30	2	3.3
31-40	16	26.7
41-50	15	25.0
Above 50	27	45.0
<b>Total</b>	<b>60</b>	<b>100.0</b>

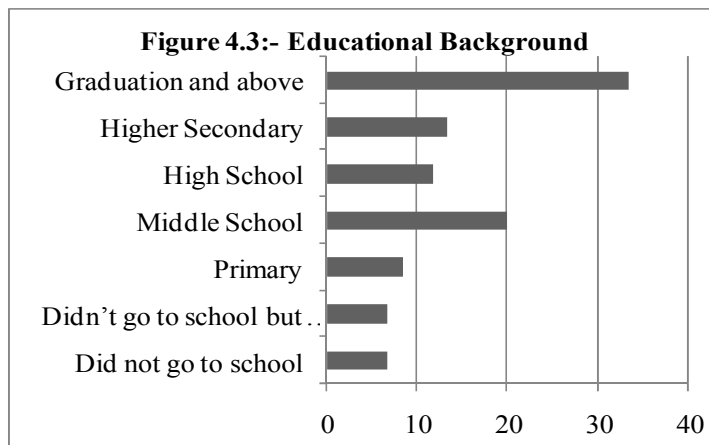


#### 4.3 Educational status of the respondents

Table 4.3 and figure 4.3 illustrate the level of education among the members. About 33.3 per cent of the respondents have education up to graduation and above, 20.0 per cent of the respondents have education up to middle school, 13.3, 11.7, 8.3 per cent of the respondents have education up to higher secondary, high school and primary school, 6.7 percent of the respondent's did not go to school and 6.7 percent of the respondent's did not go to school but read and write.

**Table 4.3:- Educational status of the respondents**

<b>Educational Qualification</b>	<b>Number of Members</b>	<b>Percentage</b>
Did not go to school	4	6.7
Did not go to school but can read and write	4	6.7
Primary	5	8.3
Middle School	12	20.0
High School	7	11.7
Higher Secondary	8	13.3
Graduation and above	20	33.3
<b>Total</b>	<b>60</b>	<b>100.0</b>

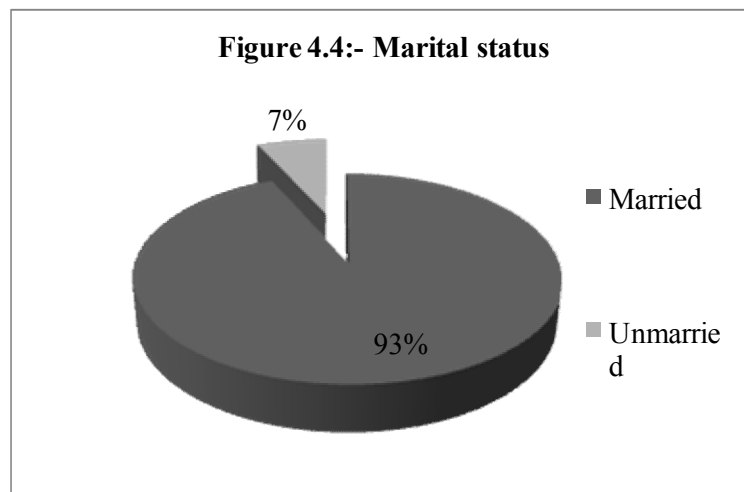


#### 4.4 Marital status of respondents

Table 4.4 and figure 4.4 depicts marital status of the respondents. About 93.3 percent of the respondents were married while 6.7 percent of the respondents were unmarried.

**Table 4.4:- Marital status of the members**

<b>Marital Status</b>	<b>Number of Members</b>	<b>Percentage</b>
Married	56	93.3
Unmarried	4	6.7
Divorced	0	0.0
<b>Total</b>	<b>60</b>	<b>100</b>

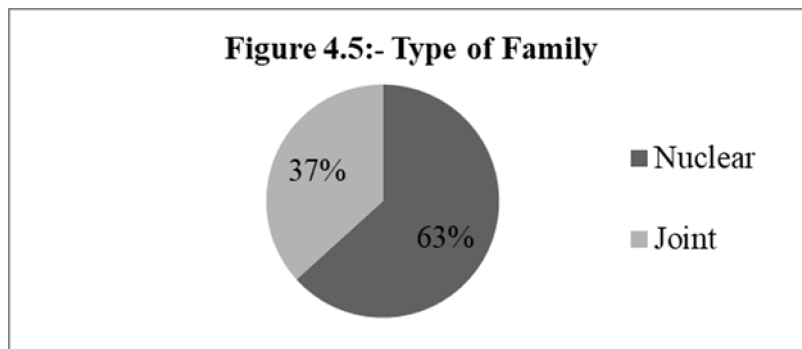


#### 4.5 Type of family

Table 4.5 and figure 4.5 shows the distribution of the members according to their type of family. In total, 63.3 per cent of the members belong to the nuclear family system and the remaining 36.7 per cent of the members belong to the joint family system.

**Table 4.5:- Type of family of the respondents**

Type of Family	Number of Members	Percentage
Nuclear	38	63.3
Joint	22	36.7
<b>Total</b>	<b>60</b>	<b>100.0</b>

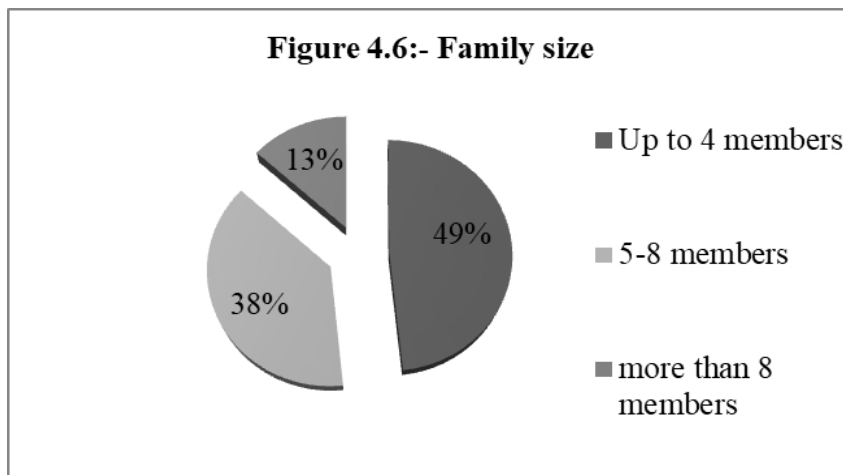


#### 4.6 Family size

Table 4.6 and figure 4.6 presents family size. About 48.3 per cent of the households have the family size of up to 4 members, 38.3 per cent have family members up to 5 to 8 and 13.3 per cent have family size of more than 8 members.

**Table 4.6:- Family size of the respondents**

Members	Frequency	Percentage
Up to 4 members	29	48.3
5-8 members	23	38.3
more than 8 members	8	13.3
<b>Total</b>	<b>60</b>	<b>100.0</b>

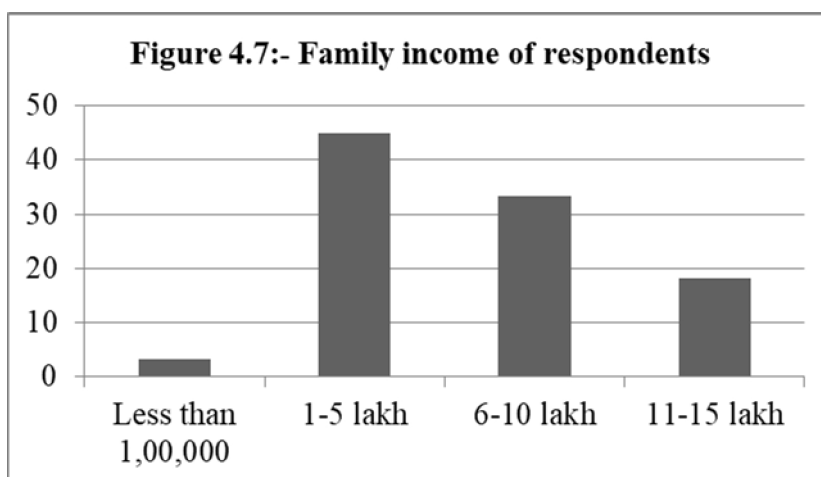


#### 4.7 Annual family income of the respondents

Table 4.7 and figure 4.7 depicts the annual family income of the respondents. The data shows 45.0 per cent have 1-5 lakh annual family income, 33.3 per cent have 6-10 lakh annual family income, 18.3 per cent have 11-15 lakh annual family income and 3.3 per cent respondents have less than 1 lakh annual family income.

**Table 4.7:- Annual family income**

<b>Annual Income (in Rs.)</b>	<b>Number of Members</b>	<b>Percentage</b>
Less than 1,00,000	2	3.3
1-5 lakh	27	45.0
6-10 lakh	20	33.3
11-15 lakh	11	18.3
<b>Total</b>	<b>60</b>	<b>100.0</b>

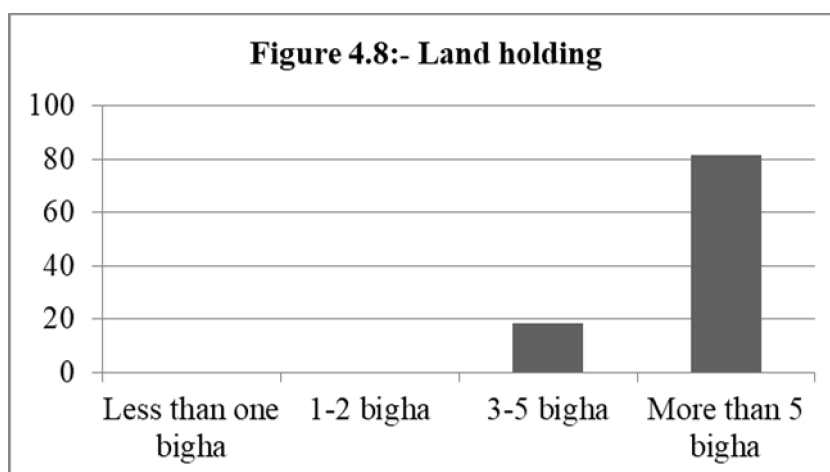


#### 4.8 Land holding status of respondents

Table 4.8 and figure 4.8 depicts total size of the land owned in bigha by the respondent's household. About 81.7 per cent of the respondents own more than 5 bigha land and 18.3 per cent of the respondents own 3-5 bigha land. Persual of the data reveals that all the respondents own land in which they can grow fodder or graze animals.

**Table 4.8:- Total size land owned in bigha**

<b>Total size of land (in bigha)</b>	<b>Number of Members</b>	<b>Percentage</b>
Less than one bigha	0	00.0
1-2 bigha	0	00.0
3-5 bigha	11	18.3
More than 5 bigha	49	81.7
<b>Total</b>	<b>60</b>	<b>100.0</b>

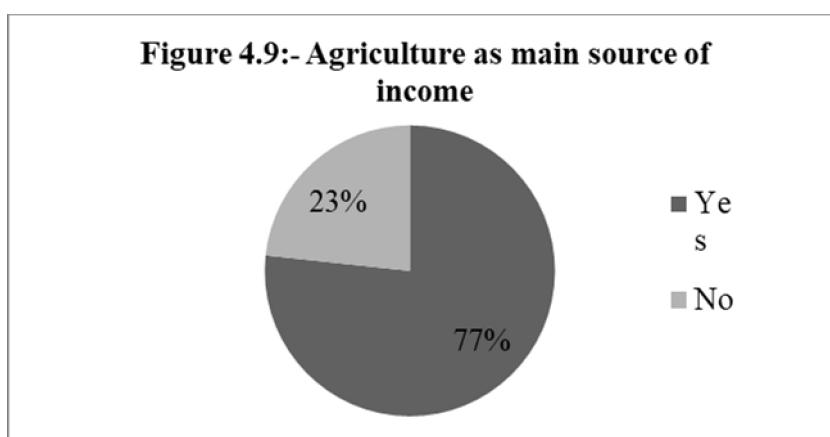


#### 4.9 Agriculture main source of income

Table 4.9 and figure 4.9 shows agriculture as the main source of income. About 76.7 per cent of the respondents were indulged in the agriculture activities and have agriculture as main source of income while 23.3 percent were indulged in other sectors.

**Table 4.9:- Agriculture as main source of income**

Agriculture main source of income	Number of Members	Percentage
Yes	46	76.7
No	14	23.3
<b>Total</b>	<b>60</b>	<b>100.0</b>

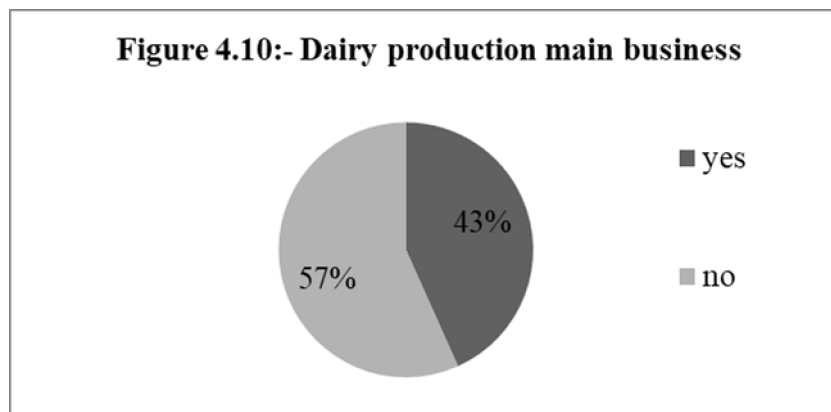


#### 4.10 Dairy production as main source of income

Table 4.10 and figure 4.10 shows dairy production as the main business of respondent. About 56.7 per cent of the respondents have other main source of business while 43.3 per cent of the respondents have dairy production as their main business.

**Table 4.10:- Dairy production as main business**

Dairy production main business	Number of members	Percentage
Yes	26	43.3
No	34	56.7
<b>Total</b>	<b>60</b>	<b>100.0</b>



#### 4.11 Other source of income

Table 4.11 presents the other sources of income of respondents. Out of total respondents 14 members are indulged in other sectors in which 8.3 per cent of the respondents have their own business followed by the same percentage (8.3) are indulged in service while 6.7 per cent of the respondents are indulged in other sectors.

**Table 4.11:- Other source of income**

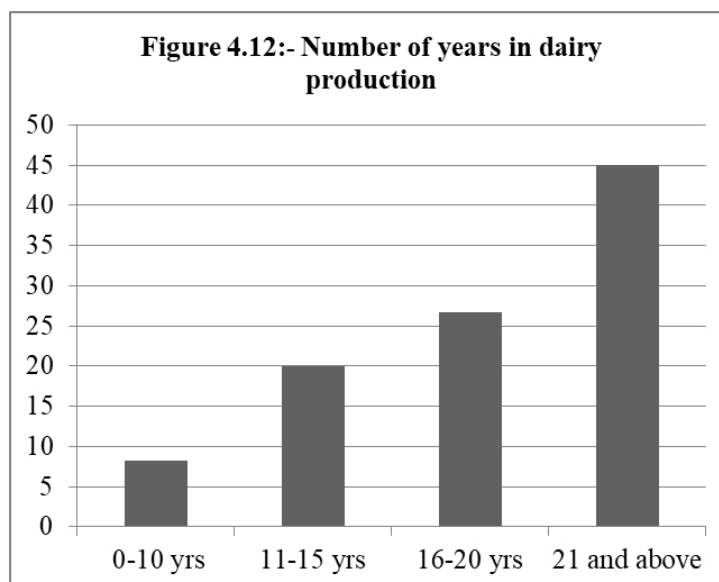
Source of income	Number of members	Percentage
Business	5	8.3
Service	5	8.3
Other sector	4	6.7
<b>Total</b>	<b>14</b>	<b>23.3</b>

#### 4.12 Number of years in dairy production

Table 4.12 and figure 4.12 shows number of year's respondents are engaged in dairy production. About 45.0 percent of the respondents are engaged in dairy production for more than 21 years, 26.7 spent 16-20 years, 20.0 per cent spent 11-15 years in dairy production and 8.3 per cent of the respondents are engaged in dairy production for 0-10 years.

**Table 4.12:- Number of years in dairy production**

Number of Years	Number of Members	Percentage
0-10	5	8.3
11-15	12	20.0
16-20	16	26.7
21 and above	27	45.0
<b>Total</b>	<b>60</b>	<b>100.0</b>

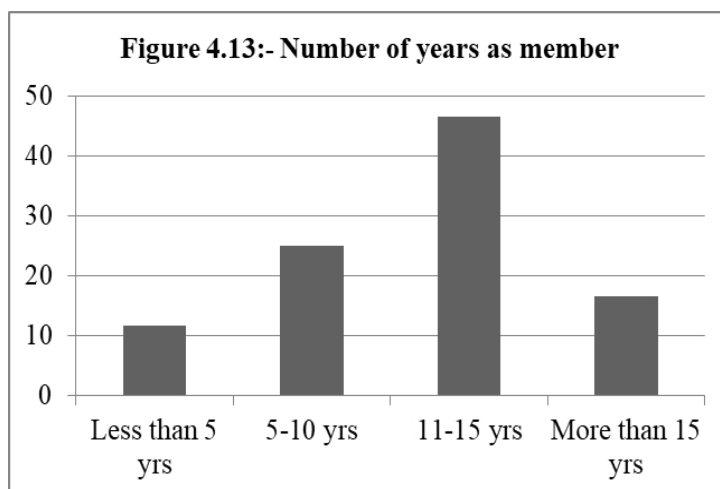


#### 4.13 Number of years as members of cooperative

Table 4.13 and figure 4.13 presents the data for the dairying number of year respondents has been member of cooperative. About 46.7 per cent of respondents are part of cooperative for 11-15 years, 25.0 per cent of respondents are part of cooperative for 5-10 years, 16.7 per cent of respondents are part of cooperative for more than 15 years and 11.7 per cent of the respondents are part of cooperative for less than 5 years.

**Table 4.13:- Number of years as members of cooperative**

Number of Years	Number of Members	Percentage
Less than 5	7	11.7
5-10	15	25.0
11-15	28	46.7
More than 15	10	16.7
<b>Total</b>	<b>60</b>	<b>100.0</b>

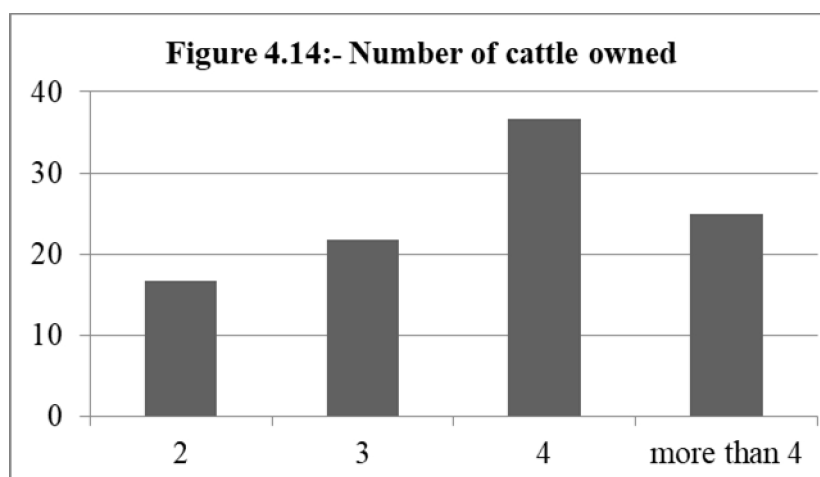


#### 4.14 Number of Dairy cattle owned

Table 4.14 and figure 4.14 shows the number of dairy cattle owned by the respondents. About 36.7 per cent have 4 numbers of cattle, 25.0 per cent have more than 4 numbers of dairy cattle, 21.7 per cent have 3 numbers of cattle and 16.7 per cent have 2 numbers of dairy cattle.

**Table 4.14:- Number of cattle owned**

Number of Dairy cattle	Number of Members	Percentage
2	10	16.7
3	13	21.7
4	22	36.7
more than 4	15	25.0
<b>Total</b>	<b>60</b>	<b>100.0</b>

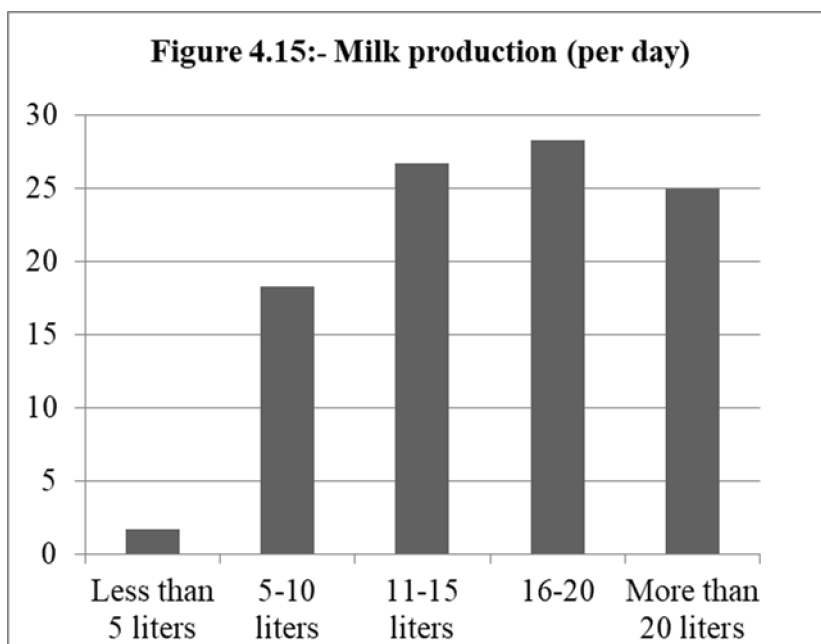


#### 4.15 Milk production per day

Table 4.15 and figure 4.15 presents milk production per day in the respondent household. Analysis of the data reveals that 28.3 per cent of the respondents collect between 16-20 liters of milk per day followed by 26.7 and 25.0 per cent of respondents collect between 11-15 liters and more than 20 liters of milk per day, 18.3 per cent of the respondents collect between 5-10 liters of milk per day and 1.7 per cent of the respondents collect less than 5 liters of milk per day.

**Table 4.15:- Milk production (per day)**

Milk Production (per day)	Number of Members	Percentage
Less than 5 liters	1	1.7
5-10 liters	11	18.3
11-15 liters	16	26.7
16-20	17	28.3
More than 20 liters	15	25.0
<b>Total</b>	<b>60</b>	<b>100.0</b>

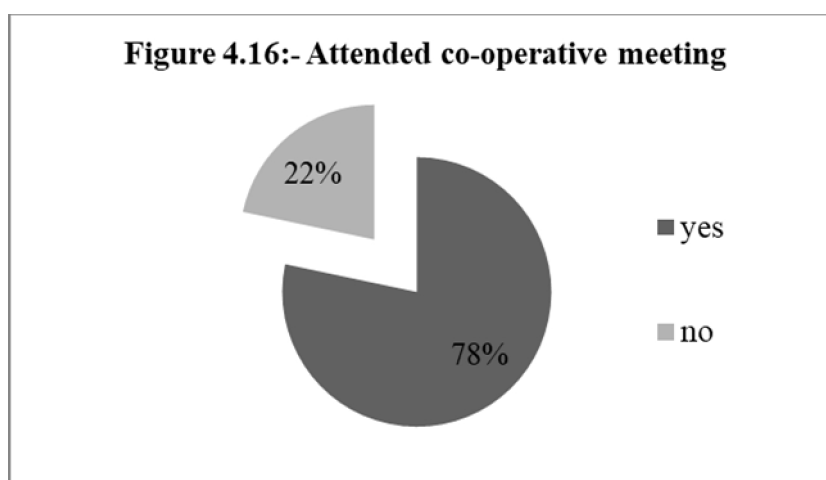


#### 4.16 Attended any dairy co-operative meeting

Table 4.16 and figure 4.16 presents if the respondent attended any dairy co-operative meeting or not. The analysis shows that 78.3 per cent of the respondents attended dairy co-operative meeting while 21.7 per cent of the respondents do not attended any dairy co-operative meeting.

**Table 4.16:- Attended co-operative meeting**

Attended co-operative meeting	Number of members	Percentage
Yes	47	78.3
No	13	21.7
<b>Total</b>	<b>60</b>	<b>100.0</b>



**PART-B**

#### **4.17 Perception of members towards working and performance of dairy cooperative society:**

Table 4.17 shows the respondents perception towards the working and performance of the dairy co-operative society.

##### **Pays fair prices**

The perception of the members regarding the statement that the cooperative pays fair prices for milk is presented in table 4.17. About 58.3 per cent of the respondents disagree with the statement followed by 25.0 per cent of them who agreed. Mean and standard deviation score of the aggregate responses is (M= 2.67 and SD = 0.857).

##### **More concerned about functioning of the co-operative rather than about its members**

Out of the total number of respondents, 80 per cent of the respondents disagreed with the statement while 16.7 per cent of the respondents were unsure. Mean and standard deviation score of the responses is (M= 2.23 and SD = 0.500).

##### **Provides secure market for milk**

Significantly majority (93.3 per cent) of the respondents agrees with the statement, 3.3 per cent of the respondents were unsure and disagree with the statement. Mean and standard deviation score of the responses is (M= 3.90 and SD = 0.399).

##### **Provides market information**

Out of total respondents 61.7 per cent disagree with the statement that cooperative provide market information followed by 30 per cent of the respondents were unsure and 6.7 per cent of the respondents agree with the statement. Mean and standard deviation score of the e responses is (M= 2.42 and SD = 0.645).

##### **Provides information regarding schemes/programs**

The perception of the members regarding the statement that co-operative provides information regarding schemes/ programs shows that about 58.3 per cent of the respondents disagree with the statement while 28.3 per cent of the respondents were unsure and 3.3 per cent of the respondents agreed with the statement. Mean and standard deviation score of the responses is (M= 2.25 and SD = 0.680).

### Not functioning well

About half of the respondents (51.7 per cent) agreed with the statement, 25 per cent were unsure, 18.3 per cent of the respondents disagreed with the statement and 5 per cent of the respondents strongly agreed with the statement. Mean and standard deviation score of the responses is (M= 3.43 and SD = 0.851).

### Incentives were lacking

The statement that incentives for work are lacking in table 4.17 shows that 56.7 per cent agreed that incentives were not given as followed by 31.7 per cent were unsure while 6.7 per cent were dissatisfied with the statement. Mean and standard deviation score of the responses is (M= 3.60 and SD = 0.694).

**Table 4.17:- Perception of members**

Perception	SDA	DA	N	A	SA	M	SD
Cooperative pays fair prices for milk.	0 (0)	35 (58.3)	10 (16.7)	15 (25.0)	0 (0)	2.67	0.857
Co-op is more concerned about functioning than about its members.	0 (0)	48 (80.0)	10 (16.7)	2 (3.3)	0 (0)	2.23	0.500
Provides secure market for milk.	0 (0)	2 (3.3)	2 (3.3)	56 (93.3)	0 (0)	3.90	0.399
Provides market information.	1 (1.7)	37 (61.7)	18 (30.0)	4 (6.7)	0 (0)	2.42	0.645
Provide information regarding dairy development schemes/ programs.	6 (10.0)	35 (58.3)	17 (28.3)	2 (3.3)	0 (0)	2.25	0.680
Dairy society is not functioning in the way as they should do.	0 (0)	11 (18.3)	15 (25.0)	31 (51.7)	3 (5.0)	3.43	0.851
Incentives for work are lacking.	0 (0)	4 (6.7)	19 (31.7)	34 (56.7)	3 (5.0)	3.60	0.694
Dairy occupation is helpful in generating additional income.	0 (0)	0 (0)	0 (0)	56 (93.3)	4 (6.7)	4.07	0.252
Facilitates equal opportunities to all the members.	0 (0)	0 (0)	4 (6.7)	54 (90.0)	2 (3.3)	3.97	0.317

Note: The value in the bracket is in percentage  
 SDA- Strongly Disagree, DA- Disagree, N- Unsure, A- Agree, SA- Strongly Agree, M-Mean, SD- Standard Deviation

### Helpful in generating additional income

All the respondents either strongly agreed or agree with the statement that dairy occupation is helpful in generating additional income. Mean and standard deviation score of the aggregate responses is (M= 4.07 and SD = 0.252).

### Facilitates equal opportunity

Majority of the respondents (90 per cent) agreed with the statement while 6.7 per cent of the respondents were unsure. Mean and standard deviation score of the responses is (M= 3.97 and SD = 0.317).

## PART- C

### 4.18 Problems of milk producers under dairy cooperative society

As illustrated in the table 4.18, the Total Weightage Score (TWS) method was applied, resulting that largely respondent's perceived major problems like improper veterinary services and livestock extension (234), unavailability of high yielding fodder seeds

**Table 4.18:- Problems of milk producers**

Statements	SDA	DA	N	A	SA	TWS
Not getting fair prices	0	15	12	33	0	198
Poor quality milk due to poor feed	0	2	18	40	0	218
Lack of resources	0	7	14	39	0	212
Insufficient supply of fodder and roughage	0	2	8	49	1	226
Insufficient supply of concentrated feed	0	1	8	50	1	231
Lack of supply of medical facilities	0	1	7	52	0	231
Concentrated feed provided is of low quality	0	4	19	37	0	213
Fodder roughage is of low quality	0	5	17	38	0	213
Inadequate transport facilities	0	33	1	36	0	213
Unavailability of high yielding fodder seeds	0	1	7	52	0	231
Delay in payments	0	25	1	33	1	190
Lack of required training programs	0	8	20	31	1	205
Take a lot of time during milk procurement	1	56	2	1	0	123
Incentive payments are not transparent	0	0	32	28	0	208
Proper market information is not available	0	6	17	37	0	211
Improper veterinary services and livestock extension	0	0	6	54	0	234
Supply of artificial insemination for exotic breed in not timely	0	6	6	48	0	222
Lack of credit.	0	2	19	39	0	217
Faced any problem from dairy cooperative membership	0	60	0	0	0	120

SDA- Strongly Disagree, DA- Disagree, N- Unsure, A- Agree, SA- Strongly Agree, TWS- total weightage score

(231), lack of supply of medical facilities (231), insufficient supply of concentrated feed, fodder and roughage (231), supply of artificial insemination for exotic breed is not timely (222), poor quality of milk due to poor feed (218), lack of credit (217), inadequate transport facilities (213), low quality of concentrated feed and fodder roughage (213), lack of resources (212), proper market information is not available (211), incentive payments are not transparent (208), lack of required training programs (205) and the problems that are not affecting much are not getting fair price (198), delay in payments (190), take lot of time during milk procurement (123).

#### 4.19 Level of satisfaction

Table 4.19 reveals that 61.7% of the respondents were dissatisfied with the performance of dairy cooperative societies in which they are members followed by 30.0 per cent of them were satisfied with the performance where as 5 percent were highly dissatisfied. The mean and standard deviation percentage score was 3.42 and 0.979.

**Table 4.19:- Satisfaction of the respondents with overall working of the co-operative**

<b>Levels</b>	<b>No. of Members</b>	<b>Percentage</b>
Highly Satisfied	0	0.00
Satisfied	18	30.0
Unsure	2	3.3
Dissatisfied	37	61.7
Highly Dissatisfied	3	5.0
<b>Total</b>	<b>60</b>	<b>100.0</b>
<b>Mean</b>	<b>3.42</b>	
<b>Standard Deviation</b>	<b>0.979</b>	

## *Chapter-5*

### **SUMMARY AND CONCLUSIONS**

The present study entitled “Analysis of Dairy Cooperatives in Himachal Pradesh: A Case Study of Milch Livestock Improvement Society”. The main objective of the study was to analyze socio-economic background of milk producers of the dairy cooperative society, to analyze the perception of the members towards working and performance of the Dairy Cooperative society and the problems that they are facing from that cooperative. The study was conducted with the sample size of 60 respondents. Data was analyzed by applying percentage method, mean, standard deviation and total weightage score method. The findings and conclusion are discussed below:

In the socio-economic background of the respondents it is observed that about 60.0 per cent of respondents were males. The study further put out that most of the respondents (45.0 per cent) belongs to age group of (above 50 years), followed by (26.7 per cent) age group lies between (31-40 years). The study revealed that most of the members were graduate and has done higher studies and rests of the respondents has education higher secondary, middle school, and primary. Also the majority of the members had marital status as married. Study revealed that 63.3 per cent of the members live in nuclear family and rest 36.7 per cent lives in joint family. Most of the members (48.3 per cent) have family members up to 4 members. And most of the family annual income (45 per cent) lies between 1-5 lakh. And majority of the members (81.7 per cent) have land holding up to more than 5 bigha. The study analysed that 43.3 per cent of the members have dairy as a main source of income and 46.7 % of the members were the members that was the part of dairy cooperative for about 11-15 years.

Most of the respondents had the perception that dairy occupation is helpful in generating additional income, facilitates equal opportunity to all the members, provide secure market for milk and concerned about its members than only functioning but they also had perception that cooperative do not provide fair prices for the milk, incentives were lacking and do not provide information regarding market and also the dairy development schemes/programs to the members.

The major problems that the respondents were facing were the improper veterinary services, livestock extension, lack of medical facilities, insufficient supply of concentrated feed, fodder and roughage and supply of artificial insemination is not timely. Also, poor quality of feed, fodder roughage degrading the quality of milk and due to this people are getting low prices for the milk they were collecting from dairy animals. Improper transport facilities, lack of credit, lack of resources, not getting proper market information, incentives payments were not transparent and improper training were also a major issue faced by respondents.

**Suggestions:**

- a. It is suggested that better results could be obtained if arrangements are made for the regular supply of green fodder and concentrates at cheaper rates. It is desirable that the government should distribute animal feeds at cheaper rates and fodder subsidy may be provided to milk producers through the Animal Husbandry Divisions (AHD).
- b. It is suggested that banks should give more loans and subsidies to the people who are involving in dairy activities especially for the purchase of milch animals.
- c. The dairy owners can be given necessary education and training by the Government departments to understand and practice more advanced techniques and scientific methods in milk production.
- d. They should organize veterinary medical camps for the benefit of farmers periodically in rural parts.
- e. Market research is to be conducted to find the demand for milk and explore the marketing potentialities for milk.
- f. The cooperative should ensure that the milk producers are assured of better procurement price.
- g. All these steps shall pave the way for the greater success of dairy sector.

The study shows that dairy co-operatives have brought significant changes in dairy enterprise in the state. Higher investment in dairy enterprise followed by maintaining better quality crossbred animals by members leads to higher milk production and thereby higher income. Further, the incomes from dairying are more uniformly distributed among the members of dairy co-operatives compared to non-members. With good backward linkages, incentives and facilities provided to DCS, members are able to maintain a greater herd size with more care and management as compared to nonmembers, thereby generating more

employment. There is a scope of increasing income and employment by creating more dairy co-operative societies and extending this programme to the remaining districts of the state.

The vital significance of dairying lies not only in the production of milk but also in being instrumental for introducing far-reaching changes in the socio-economic dimensions of rural life. Dairying and its related activities, properly nourished and nurtured, could turn out to be veritable mines perpetually unearthing jobs and opportunities in the rural areas in particular.

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## APPENDIX

### **Questionnaire on “Analysis of Dairy Co-operatives in Himachal Pradesh: A Case Study of Milch Livestock Improvement Society”**

Respected sir/madam

I am Sujata Thakur student of Agribusiness Management from Dr. Yashwant Singh Parmar University of Horticulture and Forestry, Nauni, Solan. I am conducting a survey on “Analysis of Dairy Cooperatives in Himachal Pradesh: A Case Study of Milch Livestock Improvement Society”. The aim of this study is to understand the socio-economic background of the milk producers, perception of the members towards working, performance and problems of milk producers under dairy cooperative societies of Solan district. General conclusions of the study would help in improving dairy production.

All the specific information related to you will be treated confidential and no part of the study will be used for any other purpose except academics.

**Date of Data collection:**

#### **PART – I**

<b>Respondent’s Name</b> .....	<b>Age</b> .....
<b>Gender</b> .....	<b>Block</b> .....
<b>Village</b> .....	<b>Panchayat</b> .....

#### **General Information**

#### **Socio Economic Information**

##### **Educational Background**

- |                                               |                                                                    |
|-----------------------------------------------|--------------------------------------------------------------------|
| <input type="checkbox"/> Did not go to school | <input type="checkbox"/> Did not go to school but can read & write |
| <input type="checkbox"/> Primary              | <input type="checkbox"/> Middle School                             |
| <input type="checkbox"/> High School          | <input type="checkbox"/> Higher Secondary                          |
| <input type="checkbox"/> Graduation and above |                                                                    |

##### **Family Type**

- |                                  |                                |
|----------------------------------|--------------------------------|
| <input type="checkbox"/> Nuclear | <input type="checkbox"/> Joint |
|----------------------------------|--------------------------------|

**Number of family members**

- Up to 4 member's                       5-8 members  
 more than 8 members

**Marital status**

- Married                                       Unmarried  
 Others

**Age group**

- 20 and below                               21-30  
 31-40                                         41-50  
 50 and above

**Do you own any land**

- Yes                                               No

**If yes, what is the total size of the land in bigha**

- Less than one bigha                       1-2 bigha  
 3-5 bigha                                       More than 5 bigha

**Annual Family Income**

- Less than 1, 00,000                       1-5 lakh  
 6-10 lakh                                       11-15 lakh  
 More than 15 lakh

**Is agriculture your main source of income?**

- Yes                                                 No

**If no, what is your main source of income?**

- Business                                         Service  
 Others

**Number of years of dairy production**

- 0-10
- 10-15
- 16-20
- 20 and above

**From how many years you are member of the cooperative**

- Less than 5
- 5-10
- 11-15
- more than 15

**Number of dairy cattle owned**

	Type of animals	Local breed	Cross breed	Pure breed
		Number of animals	Number of animals	Number of animals
1.	Lactating (milking) cows			
2.	Dry cows (pregnant)			
3.	Dry cows (not pregnant)			
4.	Heifers (more than 1 year old)			
5.	Female calves (less than 1 year old)			
6.	Buffaloes			
7.	Other			

**Milk production per day**

- Less 5 liters
- 5-10 liters
- 10-15 liters
- 15-20 liters
- more than 20 liters

## PART-2

### Source of information regarding perception of members towards working and performance of the cooperative

Kindly read the following statement and give your valuable opinions by putting (✓).

Sr. no	Statement	Yes	No
1.	Is dairy production your main business?		
2.	Did you ever attend a Dairy co-operative meeting?		
3.	Did you ever get benefits from co-operative membership?		
4.	Did you ever face any problem regarding your cooperative membership?		

Kindly read the following statements and give your valuable opinions by putting (✓).

Sr. No	Statement	SD	D	U	A	SA
1.	Cooperative pays fair prices for milk.					
2.	Co-op is more concerned about functioning than about its members.					
3.	Provides secure market for milk.					
4.	Provides market information.					
5.	Provide information regarding dairy development schemes/ programs.					
6.	Dairy society is not functioning in the way as they should do.					
7.	Incentives for work are lacking.					
8.	Dairy occupation is helpful in generating additional income.					
9.	Facilitates equal opportunities to all the members.					

SD- Strongly disagree, D- disagree, U- Unsure, A- Agree & SA-Strongly agree

### PART-3

Kindly read the following statement and give your valuable opinions by putting (✓).

<b>Sr. No.</b>	<b>Statements</b>	<b>Strongly disagree</b>	<b>Disagree</b>	<b>Unsure</b>	<b>Agree</b>	<b>Strongly agree</b>
1.	Not getting fair price					
2.	Poor quality milk due to poor feed					
3.	Lack of resources					
4.	Insufficient supply of fodder and roughage					
5.	Insufficient supply of concentrated feed					
6.	Lack of supply of medical facilities					
7.	Concentrated feed provided is of low quality					
8.	Fodder roughage is of low quality					
9.	Inadequate transport facilities					
10.	Unavailability of high yielding fodder seeds					
11.	Delay in payments					
12.	Lack of required training programs					
13.	Take a lot of time during milk procurement					
14.	Incentive payments are not transparent					
15.	Proper market information is not available					
16.	Improper veterinary services and livestock extension.					
17.	Supply of artificial insemination for exotic breed in not timely					
18.	Lack of credit.					

**Please mention additional problems, if any?**

<b>1.</b>
<b>2.</b>
<b>3.</b>

**Overall View**

**Are you satisfied with the working of the cooperative?**

<b>Highly Satisfied</b>	<b>Satisfied</b>	<b>Unsure</b>	<b>Dissatisfied</b>	<b>Highly Satisfied</b>

**Signature of the student**

**Signature of respondent**

**Department of Business Management**  
**Dr. Yashwant Singh Parmar University of**  
**Horticulture & Forestry**  
**(Nauni) Solan (HP)-173 230 India**

Title of the Project : Analysis of Dairy Cooperative in Himachal Pradesh: A Case Study of Milch Livestock Improvement Society  
Name of the Student : Sujata Thakur  
Admission Number : H-2019-30-ABM  
Major Discipline : Agricultural Marketing Management  
Minor Discipline : Farm Business Management  
Date of Project Submission :  
Total Pages of the Project : 33+xi  
Major Advisor : Dr. Rashmi Chaudhary

**Abstract**

Co-operatives is a form of business organisation that play a meaningful role in the uplifting the socio-economic conditions of their members and their local communities. Dairy farming has emerged as an important source of livelihood, particularly on small holder household. The present study was done by three main objectives viz., to study socio-economic background of the respondents, to study the perception of the respondents towards working and performance of the co-operative and lastly to study the perceived problems of milk producers under dairy co-operative society. The study was carried out on the basis of data and information generated from primary source, employing questionnaire method. Total 60 respondent members were chosen as per the convenience. Data was analysed by using tools like percentage, mean, frequency standard deviation and total weightage score method. The study depicted that 61.7 per cent of the respondents were dissatisfied with the working and performance of the dairy co-operative society and 30 per cent of the respondents were satisfied with the working and performance of the co-operative.

**Signature of Student**  
**Sujata Thakur**  
**Date**

**Signature of the Major Advisor**  
**Dr. Rashmi Chaudhary**  
**Date**

**Prof. & Head**  
**Department of Business Management**

## Brief Bio-data of the Student

Name : Sujata Thakur  
Father's Name : Sh. Harinder Thakur  
Mother's Name : Smt. Santosh Thakur  
Date of Birth : 9<sup>th</sup> March 1997  
Permanent Address : Vill. Sirinagar P/o & Teh. Kandaghat Distt. Solan (HP)  
173215.

### Academic Qualifications

	<b>Month &amp; Year</b>	<b>School</b>	<b>Board / University</b>	<b>Marks (%)</b>
10 <sup>th</sup> Class	March (2012)	MRA DAV Public School, Anand Complex, Solan (HP)	CBSE	7.4 CGPA
12 <sup>th</sup> Class	March (2015)	Government Senior Secondary School, Kandaghat	HPBOSE	64.4%
B.Tech (Food Technology)	July (2019)	Shoolini University of Biotechnology and Management Sciences, Solan (HP)	Shoolini University	7.30 CGPA
MBA (Agribusiness)	August (2021)	Dr. Yashwant Singh Parmar University of Horticulture & Forestry (Nauni) Solan	Dr. Yashwant Singh Parmar University of Horticulture & Forestry (Nauni) Solan	

### Interpersonal Skills

- Good listener
- Adaptability
- Leadership quality
- Empathy
- Positive attitude

**(Sujata Thakur)**