

# CHAPTER - ONE

## INTRODUCTION

### 1.1 Background of the Study

Co-operative organization is the voluntary association of persons having limited means and common economic ends. It is based on the principle of self help through mutual help. All the members have equal shares and status. "Unity in Diversity" is the main motto of co-operative societies. The philosophy behind co-operative movement is "all for each and each for all". According to International Labour Organization, "A co-operative organization is an association of persons, usually of limited means who are voluntarily joined together to achieve a common economic end through the formation of a democratically controlled business organization, making equitable contributions to the capital required and accepting a fair share of risks and benefits of the undertakings." It is a business organization owned and operated by a group of individuals for their mutual benefit. A co-operative may also be defined as a business owned and controlled equally by the people who use its services or who work at it. There are different types of co-operatives on the basis of working nature.

A dairy co-operative business is owned, operated, and controlled by the dairy farmers who get benefits from its services. Members finance the co-operative and share in profits it earns in proportion to the volume of milk they market through the co-operative. Dairy co-operatives are found everywhere in both developed and developing countries. In developing countries, it is one of the income sources of their rural economy whereas in developed countries it takes as a sustainable business. These countries face different types of problems. The developing countries focus on the increment production, the volume of milk and milk product, and the developed countries do on enhancement of milk product, brand, and merger of dairy co-operatives.

Dairy co-operatives have been getting various opportunities as well as facing different challenges. They are going to formulate different types of strategic planning to cope with these challenges and to get success. The strategic plans of dairy co-operatives in developing countries are, generally to increase production the volume of milk and bring the different from that of developed countries. Their strategic plans are to merge different dairy co-operative societies / institutions into a dairy co-operative, and compete in the global market with quality of products. Dairy co-operative is a very popular business not only in developing countries but also in developed countries like the America, Germany etc. The develop countries produce cow milk and developing countries like Nepal produce buffalo milk. These countries produce different types of dairy product like cheese, ghee, whey product, cream, solid milk, milk powder etc. The developed countries focus on quality of products but the developing countries often focus on quantities/volume of production. Live stock farming is an important economic activity since the commencement of human civilization. In the early stage of civilization when agriculture was not properly known, the cattle rearing formed the principle property of the people. Thus, the history of dairy co-operative is related with the history of civilization.

Livestock farming being a major component of Nepalese farming system is becoming one of the important occupations in the rural areas of Nepal. It is an integral part of Nepalese agriculture since these are used for labor (bullock) production, manure production, religious purpose and milk and meat production. Dairy farming has been helping the farmers to earn cash income to fulfill their basic needs, at the same time they can get manure as by-product and draft power for agricultural production. One of the other important aspects of dairy farming is to generate energy in household level for cooking and heating in terms of biogas, which is produced by decomposition of animal dung into an airtight digester. Major dairying animals in Nepal are cows and buffaloes. These are reared in the mountain and the terai regions of country whereas yaks are other dairying animals of the sub Himalayan regions. Out of

the total milk produced in Nepal, the share of buffalo milk is higher, which is around 70% of the total milk production. A 20 years long Agricultural Prospective Plan (APP) has been effective in the country since 1997/98 which targets an annual growth rate in Agricultural Gross Domestic Production (AGDP) of 5 %. Livestock sector has been taken as one of the most potential sectors with an expected average annual growth rate at 5.5% as a whole in livestock sector and 6.1% in the dairy sector. However, the social exclusion of some of the ethnic groups, especially the scheduled castes, in the dairy co-operatives in rural areas has been seen as one of the constraints to achieve the targets. Still now, milk produced by some of the scheduled castes of the country has not been bought by the dairy co-operatives in the rural areas of the country.

Small holder dairy sector is playing critical role in generating cash income in the hills of Nepal. In fact, the programmes of the government programmed have pushed for the crossbreed cows as dairy animals. Nevertheless, improved buffaloes are becoming popular among small farmers as dairy animals because of their adoptability to local feeding resources and high milk fat content and salvage value especially in the hills of Nepal. Initially, smallholder dairy farming was promoted through marketing arrangement of parasitical government organizations such as the dairy Development Co-operation (DDC) Nepal. These organizations have milk chilling and processing facilities and they have organized farmers groups or co-operatives to collect farmer's milk to be taken to chilling and then to processing centers. Nevertheless, these systems are presently collecting hardly one-fourth of total marketable milk. Still a lot of milk is being cannoned through the informal sector and now private dairies with their own chilling and processing plants are becoming common thing in Nepal. Producer's share in consumer price is lowest with the sale of milk to the parasitical organizations. The problem of smallholder diary in Nepal has been exacerbated due to the import of cheap powder milk and the government's lack of monitoring in assuring quality of pastured milk of consumption. The parasitical organizations, which are heavily subsidized with government or

donor's aid money, could not contribute to dairy sector development to the extent as they were expected to. Animal feeding, breeding, marketing and processing and its policies are critical issues across in Nepal for promoting smallholder dairy in the mixed mountain farming systems areas. The shortage of feeding during the dry period and the winter is serious problem affecting the milk productivity of dairy animals. Commonly, breed is of local type and milk productivity is low compared to the crossbred animals. The product diversification appears to be a key issue in terms of low income from milk marketing and processing.

In Nepal, dairy development activities began in 1952 with the establishment of a small-scale milk processing plant on an experimental basis in Tusal, a village in the Kavreplanchok district. According to the annual report 2066 of the co-operative Board In Nepal, there are 1861 dairy co-operatives.

## **1.2 Statement of the Problem**

Milk is an essential liquid for humankind. It needs to human from birthday to old ages. It has so many ingredients which we can use for making others groceries/edible items as well as use in some types of medicine. It has great demand in market but production and marketing of milk functions are not easy task. Milk producers as well as marketers have been faced so many problems and challenges. Different countries have different types of problems. In Nepal, especially in the hills and high hills where suitable climate, pasture land, fodder as well as unemployed wages labor forces are available. Dairy co-operatives can be well developed as an industry. Agriculture is the primary occupation of people. The economic condition of people is low. In such a case, the dairy co-operative is one measure to ease and lower the blow of the poverty and under development to the state and people. Therefore the dairy co-operative are established and managed to solve the problems of mass rural people.

The co-operative definitely helps the poor people. But this studies also focuses on to reflect the present situation of dairy farmer like socio-economic condition

and the problem related to the farmer and working pattern of the dairy co-operatives and the other management system of the co-operatives. In Nepal, dairy co-operatives are not working satisfactorily. Lack of adequate supports from the government lead dairy co-operative societies to become inactive that is why the dairy farmers are unable to produce more milk products in the state.

### **1.3 Objectives of the Study**

The general objective of this studies is to analyze the socio-economic impact of the dairy co-operatives to the people, their problem and necessary measures for overcoming the problems. However; the specific objectives include:

1. To find out the socio economic impact of dairy co-operative
2. To identify the challenges and opportunities of dairy co-operative

### **1.4 Significance of the Study**

In Nepal, nearly eighty percent of the population depends on agriculture for their livelihood. The country as a whole has had a food deficit for the last 27 years, mainly due to subsistence farming, small and fragmented land holding size, low agriculture input and productivity, uneconomical farming units, and lack of decentralized grassroots-based agricultural developmental policies and programs. Widespread poverty, malnutrition, political instability, resource degradation, and a serious food deficit have become major national problems. Agricultural policies and actions for raising farmers' living standards, achieving food security, and enhancing the natural resource base are urgently needed.

Dairy co-operatives which are formed by the farmers, governed by the farmers, and run by the farmers in a democratic fashion are an ideal mechanism to increase livestock and agricultural production and farm income, enhance agricultural sustainability and food self-sufficiency, while promoting Nepal's socio-economic development. Through co-operatives, farmers are empowered and economic growth is stimulated. Appropriate governmental policies,

programs, rules/regulations, and support systems are essential for the success of Dairy Co-operatives.

This study is concerned with the importance of dairy co-operative and its socio-economic impact in rural farmers. It also highlights the related problems and socio-economic condition of farmers of the studies areas. This studies is purely a micro level study because no such study has been done in the past to cover the entire aspect. By the way, the studies tries to fulfill the gaps of knowledge about various aspects like production, management, marketing and socio-economic condition of farmers of studies area. The studies aims to present information about the socio-economic condition to the dairy co-operative. The studies tries to find out the impact of dairy co-operative of the general life of the farmers. Likewise, it will present the problems of dairy co-operative and recommends. Farmers are still facing milk holidays and not getting real price of the milk. To sustain and improve the dairy processing industry in Nepal, it must become competitive in terms of cost production and quality. The trained manpower should be available to the private sector; raw milk pricing should be based on the quality and fixed by a free market system with little intervention from the government. Extension services should be backed up with more research and animals and product quality.

For its sound development this study will provide guidelines to construct dairy development policies and plan for the policy makers, development workers, rural farmers and it will fruitful for further study regarding this topics.

### **1.5 Organization of the study**

This dissertation has been divided into Six different chapters. The first chapter includes introduction, the second chapter includes reviews of studies related to the concept, the history of co-operative, co-operative in Nepal and dairy co-operative. Besides, this chapter also deals with the empirical study regarding co-operative and dairy co-operative. The third chapter presents research methodology. This section deals with rationale for the selection of study area,

Population and sampling, tools and techniques of data collection, household survey, key informant interviews, observation, interview, focus group discussions and data presentation at the end. The chapter four is concerned with the introduction of the study area and the characteristics of the sample respondents. The chapter five is concerned with the analysis and discussion about the study. The chapter six deals with the conclusion and recommendation.

## **CHAPTER - TWO**

### **LITERATURE REVIEW**

#### **2.1 Concept of Co-operative**

A co-operative is defined by the International Co-operative Alliance's Statement on the Co-operative Identity as an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly-owned and democratically-controlled enterprise. It is a business organization owned and operated by a group of individuals for their mutual benefit. A co-operative may also be defined as a business owned and controlled equally by the people who use its services or who work at it.

Co-operative is a user - owned and user-controlled business that distributes benefits on the basis of use. According to patronage proportionality – ‘a co-operative is a private business organized and joined by members to fulfill their mutual economic needs as patron of the business, with the key control, ownership, and the income distribution decision based on patronage proportions; namely, member voting, equity capital investment by patrons, and the distribution of net income to patrons are proportional to use of the co-operative. The terminology used to describe co-operative and other forms differs widely. Co-operatives are also commonly called non-profit corporations or patron- owned corporations. The distinction between co-operative and other businesses is that co-operatives return net income to the users or to patrons, while other business forms return net income to users or to investment (Cobia, 1989).

Although co-operation as a form of individual and societal behavior is intrinsic to human organization, the history of modern co-operative forms of organizing dates back to the Agricultural and Industrial Revolutions of the 18th and 19th centuries. The 'first co-operative' is under some dispute, but there were various milestones.

In 1761, the Fenwick Weavers' Society was formed in Fenwick, East Ayrshire, and Scotland to sell discounted oatmeal to local workers. Its services expanded to include assistance with savings and loans, emigration and education. In 1810, social reformer Robert Owen and his partners purchased New Lanark mill from Owen's father-in-law and proceeded to introduce better labor standards including discounted retail shops where profits were passed on to his employees. Owen left New Lanark to pursue other forms of co-operative organization and develop co-op ideas through writing and lecture. Co-operative communities were set up in Glasgow, Indiana and Hampshire, although ultimately unsuccessful. In 1828, William King set up a newspaper, *The Cooperator*, to promote Owens's thinking, having already set up a co-operative store in Brighton.

The Rochdale Society of Equitable Pioneers, founded in 1844, is usually considered the first successful co-operative enterprise, used as a model for modern co-ops, following the 'Rochdale Principles'. A group of 28 weavers and other artisans in Rochdale, England set up the society to open their own store selling food items they could not otherwise afford. Within ten years there were over 1,000 co-operative societies in the United Kingdom.

The Rochdale Principles are a set of ideals for the operation of co-operatives. They were first set out by the Rochdale Society of Equitable Pioneers in Rochdale, England, in 1844, and have formed the basis for the principles on which co-operatives around the world operate to this day. The implications of the Rochdale Principles are a focus of study in co-operative economics. The original Rochdale Principles were officially adopted by the International Co-operative Alliance (ICA). The Rochdale Principles of co-operative according to the 1996 ICA revision are detailed below.

1. Voluntary and open membership
2. Democratic member control
3. Member economic participation

4. Autonomy and independence
5. Education, training, and information
6. Cooperation among co-operatives
7. Concern for community

## **2.2 Co-operatives as Legal Entities**

Although the term may be used loosely to describe a way of working, a co-operative properly so-called is a legal entity owned and democratically controlled equally by its members. A defining point of a co-operative is that the members have a close association with the enterprise as producers or consumers of its products or services, or as its employees.

In some countries, there are specific forms of incorporation for co-operatives. Co-operatives may take the form of companies limited by shares or by guarantee, partnerships or unincorporated associations.

## **2.3 Identity**

Co-operatives are based on the values of self-help, self-responsibility, democracy and equality. In the tradition of their founders, co-operative members believe in the ethical values of honesty, openness, social responsibility and caring for others. Such legal entities have a range of unique social characteristics. Membership is open. It means that anyone who satisfies certain non-discriminatory conditions may join. The economic benefits are distributed proportionally according to each member's level of participation in the co-operative, for instance by a dividing on sales or purchases, rather than dividing according to capital invested. Co-operatives may be generally classified as either consumer co-operatives or producer co-operatives. Co-operatives are closely related to collectives, which differ only in that profit-making or economic stability is placed secondary to adherence to social-justice principles.

## **2.4 Background of dairy co-operatives**

Dairy farming was first introduced in Indonesia on the island of Java during the Dutch colonial era, when small herds of Holstein-Friesian cattle were kept close to the cities of Jakarta and Surabaya and in the highlands where the climate suited this temperate breed. After this nation gained independence, the herds were broken up and smallholder dairying emerged. Each farmer owned one or two cows and raw milk was sold in urban areas through a system of private collectors who acted as middlemen; the farmers were paid about 25 percent of the retail price.

As is generally well known, land is perhaps the most important income-generating asset in the rural economies of Asia. Yet, scarcity of land and its skewed distribution are two of the major constraints of the rural Asian landscape. Close to 60 percent of the world's agricultural population lives in the villages of Asia, but its share of the world's agricultural land is only about 28 percent. This is much lower than in other developing regions. Furthermore, of this limited available land, a very large portion is comprised of holdings other than small farmers' holdings. While the conditions vary from country to country, small farmers in Asia, although accounting for more than two-thirds of the rural households, have access to only about 20 percent of the arable land. Against this background, economic activities that are not essentially land-based, such as dairying, have become crucial for small farmers and landless laborers. While farmers' co-operatives of various types play a useful role in promoting rural development, dairy co-operatives have special attributes that make them particularly suitable. Among these, they can facilitate the development of remote rural economies, thus upgrading the standard of living of the poor.

The main constraint that milk producers seek to overcome by acting collectively is the marketing of their product. The need to be assured of a secure market is a real one. It can be met by dairy farmers co-operatively establishing their own collection system and milk treatment facility in order to

convert their perishable primary produce, which requires special and timely attention, into products with longer-keeping quality for marketing purposes.

Most dairy co-operatives adopt either a two - or three - tier system. One village or a group of two or three villages forms the basic unit of the primary co-operative. Only dairy farmers are allowed to enroll as members and they must commit to supplying milk exclusively to the co-operative. While the day-to-day functioning of the co-operative is managed by full-time salaried employees, the committee or board of the co-operative, consisting of only elected members, makes the decisions on the affairs of the co-operative. Primary-level co-operatives bring together members with similar interests at village level to work towards common goals. This system can also identify good leadership talent that would be given a chance to develop through interaction with other community leaders.

A group of primary-level co-operatives forms a union, which can be for a district, region or milk shed area. This is the second tier. The third tier is the unions joining up to form a federation at state or national level, depending on the size and system of administration in the country. The federation has the power to act on such issues as pricing policies, extension, training, control of milk and milk product imports, subsidies and credit.

## **2.5 The Co-operative Movement in Nepal**

Co-operative activities have been existing in Nepal since traditional times. The co-operative movement of Nepal can be divided into the three types.

### **1. Traditional Co-operatives**

Since ancient times in Nepal there were saving and credit associations popularly known as Dhukuti, and grains saving and credit saving known as Parma that had worked for long periods of time. Similarly, Guthi provided a forum to work together for smoothly running different socio-cultural practices in the different communities of the country which are still in practice.

## **2. Early Co-operative Movement**

Modern co-operative initiative date back to 1956 with the establishment of thirteen credit co-operatives in Chitwan District to assist flood victims. Establishment of the Co-operative Bank in 1963 that was converted into the Agricultural Development Bank in 1968 and the formation of the Land Reform Savings Corporation in 1966 can be cited as the major co-operative ventures in the early era of the co-operative movement in Nepal (NCFN, 2007). It appears that until 1990 most co-operative ventures were limited to credit and finance and were controlled by the government

## **3. After 1990's**

The Co-operative Act 1992 provided a liberal and democratic framework for co-operatives societies. There were 33 district co-operative unions upto 1990 and no national and central federations. After 1992, the mushroom growth took place not only in co-operative societies at the grassroots level, but also in secondary level and central level.

In 1990's National Co-operative Development Board and National Co-operatives Federation jointly took the initiative to distribute monetary benefits to the co-operative staffs established before 1991. Yet another achievement was made in 1997. National co-operative Federation was conferred with the International Co-operative Alliance (ICA) membership. Similarly, Ministry of Agricultural and Co-operatives and Co-operative Act, 1992 first amendment was enforced in 2000. Co-operatives are also found in the areas of transportation, vegetable production, coffee and tea production, wood carving, furniture, the cottage industry, carpet industry, and in ginger production. Even though governmental agencies, international institutions, Non-Governmental Organizations, and other stakeholders have put some effort into the co-operative movement in Nepal, the results are far from satisfactory. Most profitable co-operatives are urban-based, and except for finance, credit, and dairy co-operatives, the rural sector has not felt the presence of the co-operative

movement in the country. Co-operative movements have to strive for the inclusion of women, dalits, poor people, and other oppressed classes of society. Some of the reasons identified for failure of the co-operative movement in the country include: lack of national vision for the co-operative movement, lack of adequate monitoring, lack of inclusion of every sector of society in the co-operative movement, lack of managerial skills and professionalism, lack of working capital, lack of technological support and development, and lack of credibility (Mali, 2005). As of 2065 B.S., the total number of co-operatives in Nepal is following below:

## **2.6 Dairy Co-operative in Nepal**

Dairy Co-operative is enhancing the socio-economic condition of the poor farmer so it is regarded as complementary agents to change the agrarian structure and removing socio-economic inequalities through progressive change. Dairy Co-operative brings all small milk producers in one group and help in solving their existing problems regarding their dairy farming. The principal organization for dairy development in Nepal has been the Dairy Development Corporation (DDC) established under the Corporation Act in 1969. Most milk-producing farmers are small landholders who have been organized to form producers' associations, which channel milk to DDC-run cooling centers. Under the new Co-operative Act, passed in 1992, the National Co-operative Development Board has been established to strengthen the co-operative movement in the country.

DDC has been collecting cow, buffalo and chauri milk from 29 districts. Milk is collected through the farmers owned, Milk producers Co-operative Societies (MPCS). Its present milk collection network has spread from Panchthar in the East to Surkhet in the West. Hetauda Milk Supply Scheme also supports KMSS and BMSS by supplying excess milk above their local requirement. Biratnagar Milk Supply Scheme manufactures skimmed milk powder from its excess milk and milk excess from other supply schemes. DDC has been playing a special role in contributing to uplift the economic status of rural farmers. Thus dairy

has been recognized as an effective tool for poverty alleviation. In the Fiscal Year 2064/2065 (2007/2008) DDC purchased about 1, 50,000 liters of milk per day from the farmers.

With GON announcement of the policy of privatizing DDC in early 1990, private sector grew at faster rate. The private sector involvement is mostly in the Katmandu Valley where large private dairies are located. Its significant growth was seen only after the implementation and approval of "Ten Year Dairy Development Plan" by GON in 1990; the poverty reduction. Likewise, the dairy farmers in many districts have organized themselves in milk producers' co-operatives and milk producers associations. These associations collect the milk from individual farmers and supply it to nearby chilling center or processing plant. Some of these co-operatives have also started processing and marketing of milk from their own initiatives.

In order to coordinate private - and public-sector dairy development, the National Dairy Development Board (NDDDB) has been constituted. The board will initiate intensive training of MPA farmers and committee members at the field level so that they fully understand their rights, obligations and management discipline. A progressive transfer of MPAs to co-operatives will be encouraged through necessary activities coordinated by the NDDDB, which will facilitate the participation of individual milk-producing farmers in the ownership of milk-processing plants.

## **2.7 Review of Empirical Studies**

The livestock sector is very complex with many crosscutting issues and interrelationship with other sectors, it is a very important part of the agriculture sector and key role to play in the country's development and poverty reduction (Report, ADB 2001)

According to agriculture perspective plan in the sector will rise from 2.9% to 5.5% by the end of the plan period. Dairy accounted for about two-last decades was about two-third of the livestock sectors. The average growth of milk

production over the last decade was about 2.6% per year (Pardhan et al. 2003). In 1995-96 Nepal introduced agro-led economic growth and rural poverty alleviation by implementing the 20 year APP which envisages researching and annual growth rate of 5.5% (Chapagain, 1995)

The demand for livestock in developing countries is predicated to double over the next 20 years due to human population growth, increasing urbanization and rising incomes more than 81% of the population of Nepal relies on the agriculture sector for employment and income generation. But agriculture development has been sluggish and most importantly has failed to keep the place with population growth. Nevertheless, contrary to the relative decline of agriculture the live stock production index has continuously been increasing over the last decades (FAO, 2003).

Policies and strategies to promote milk production in developing countries often don't address the key issues of small scale milk collection and processing and these acts as a limiting success. For the growth and development of small scale sector can best be achieved through local level organization of small scale productions into working groups and associations or co-operatives. The main driving force to attract small holders into this supply cycle is to provide increased returns to stimulate production and encourage uptake of improved technologies (FAO, 2001).

The primary benefit to be derived from increase in livestock productivity is sustainable produce, many with whom resources are poor, many of these being women and some of whom are landless. (PPLPI, 2004).

Dairy has been recognized as an improvement tool for development and poverty reduction and is today accorded to status of a thrust area by the government. DDC, an undertaking of Government of Nepal has made significant contribution in bridging the gap between urban consumers and the rural milk producers. It has provided it's valued services to the farmers as their door steps sizeable increases to the farmers as their door steps sizeable

increases in milk production has forced DDC to utilize milk in best possible ways and in recent times, massive diversification of dairy product has not only benefited the urban consumer's but has helped in the economic development of the rural mass milk producers (DDC, 2006).

Dupire (1962) explains that in the case of West African woman receive cattle from their families either s gifts or through inheritance. The cattle belong to the woman in that they control milk, keep animals of case of divorce and bequeath them to their children (FAO, 1997).

Lindegaard (1993) in his research shows that when a household has a lactating cow, they meet their own demand for milk products and afterward they sell milk if they have any surplus. Then even though milk sales provide a reasonable possibility for cash income, the household requirements for the milk products is given high priority.

Development planners ignorance of the economic roles of women in pastoral societies indeed ignorance of pastoral socio-economic contributed to the relatively poor performance of "livestock projects" (Hurowitz, Jowkar, 1992).

Like Dairy Co-operative other types of co-operatives also grow quality and quantity if they receive fair government support capacity building assistance from within the outside the co-operative movement, (CICTAB, Pune, 2005)

Poverty in Nepal is mainly a rural phenomenon where households mostly land and livestock. Majority are dependent on agriculture for household income and livestock for petty cash. So it very necessary to realize the major benefits in livestock farming (PPLIP, 2004).

Milk Development Co-operation is going to get set up 250 milk producers' co-operatives societies in the Mid Western region to encourage the milk production in the various parts of the region. A meeting sat to plan out a powder milk factory at Banke district assumed that the Co-operative society will benefit to some so thousand farmers in the region (Kathmandu Post, 2003).

The milk holiday was coined in 1991 when the DDC could not buy all the milk offered and refers to days in the week when public or private dairy organization don't buy milk their regular suppliers (Dairy farmers) (Upadhaya et al, 2000).

Milk holidays are becoming an annual phenomenon in Nepal. The available evidence indicates that this is mainly a result of the inability of the formal dairy organization to sell milk and milk products (Upadhaya et al, 2000).

Milk holiday is largely a phenomenon of the flush season (September to March) during which the supply of milk is four times greater than in the lean season (Upadhaya et al., 2005).

The Tenth Year Dairy Development Plan (TYDDP) 1990-2000 proposes that the DDC set its own price for milk based on commercial considerations, this has not yet materialized. Although the DDC has been responsible for formulating and executing pricing policy in practice it has to obtain government approval before implementing any price change.

According to Department of livestock services under the Ministry of Agriculture and Co-operatives of GON aims of developing the livestock sector by diversification and commercialization as an income generating and prosperous farming. The objectives of DLS in dairy sector include increasing production of milk, assisting in quality improvement of milk, helping in market identification and management, encouraging livestock based industries and developing human resource in the sector. In Nepal, women are actively involved in livestock production. Fodder collection, grazing and milking are generally performed by both woman and man, whereas activities like feed preparation, feeding, cleaning sheds and preparing milk products are women's domain (Acharya and Bennet, 1981; Katual, 1990). Women have a crucial role in detecting illness of the animal because of their close and frequent contact with them. Marketing of livestock is mainly done by men, but in consultation with women have the right to own livestock in Nepal. Girl children also share the responsibilities.

The milk put on the market is generally adulterated. Enquiries show that adulteration by producers is much less when compared with that practiced by collectors, distributors, etc. Producers are however primarily responsible for the initial contamination of milk as they pay little or no attention to clean production or proper handling of the milk. The most common adulterants used are water and skimmed milk. The water added may be dirty and contaminated. Cane sugar and flour are also added to foil detection by lactometers or by the 'Khoa' test. Similarly they have discussed about the co-operative marketing of milk. Almost all the milk societies and milk Unions have been organized with the primary object of improving the quality of milk supplied to towns and cities (Mamoria and Joshi, 1968).

In Nepal, a nationwide network of Department of Livestock services is working on improved buffalo production. External funding from the Asia Development Bank and the European Union has greatly strengthened its research and implementing activities. (Rasali, 2000).

Rural co-operative service provides research management, and educational assistance to co-operatives to strengthen economic position of farmers and other rural residents. The main motto is to work with co-operative leaders to improve organization, leadership, fixing prices, identifying market, to guidance to further development (Charles, 1996).

As envisioned by the Interim Constitution of Nepal, the co-operative sector has been recognized as one of the three pillars of development along with the public and private sectors. Various policies and programs mentioned in the approach paper of the Interim plan have considered co-operative as the medium of economic, social and cultural development through saving mobilization and increment in investments to restructure and strengthen the co-operative software, aimed at rural development. At present, Nepal has 9720 primary co-operatives, 5 central federations, one national co-operative bank and 133 district and the sector federations. Altogether 1 million and 251 thousand members are associated with those co-operatives and their association,

including 33 percent women members. Annual transaction of the co-operative sectors amounts to approximately about Rs. 50 billion. The share capital of the co-operatives societies amount to Rs. 1040 Million whereas balance of savings and investments amounts to Rs. 20 billion and Rs. 24 billion respectively. According to an estimate, the transaction of these co-operative has a contribution of approximately 1 percent in the GDP. Some 15 thousand people are directly employed in this sectors (NPC, Three Year Interim Plan 2064 - 2067)

## **2.8 Dairy Co-operative in Sindhupalchok district**

In Sindhupalchok district there are 239 co-operatives. Out of the total of 239, there are 140 dairy co-operatives. It shows that this district is highly potential for the dairy farming. The dairy development corporation declares that it is the pocket area for dairy products.

The history of dairy co-operatives begins in Sindhupalchok from 2042 B.S. establishing the Milk Chilling Center in Sipaghat by DDC. Now there are 8 Chilling Center in the district, the details are below:

Balephi Chilling Center by DDC

Melamchi Chilling Center by DDC

Sipaghat Chilling Center by DDC

Sankhu Chilling Center by DDC

Sangachowk Chilling Center by private Sector

Andheri Chilling Center by district milk production Co-operative association

Sipaghat Chilling Center by private sector

Naubise Chilling Center by Sukute Dairy Production Co-operative, etc.

The above mentioned literature is focused mainly on the development of dairy livestock, production economic status of dairy farmers and also about the problems of dairy co-operatives societies. It is the first attempt to study about the dairy farming through co-operatives and this study is carried out to find out the current situation or the condition of above unstudied topic of the study area.



## **CHAPTER - THREE**

### **RESEARCH METHODOLOGY**

"Research Methodology is the Scientific method is a systematic step-by- step procedure following the logical processes of reasoning". This section deals with rationale for the selection of study area, Population and sampling, tools and techniques of data collection, household survey, key informant interviews, observation, interview, focus group discussions and at last data presentation.

#### **3.1. Rationale of the Selection of Study Area**

Dairy Co-operative is one of the main sources of earning in the rural communities. This study was done in the Sukute VDC of Sindhupalchok district. Dairy Development Corporation declares that Sindhupalchok is one of the potential districts for dairy farming. Dairy has playing crucial role to improve socio economic condition of the rural people of the district.

This study is intended to find the role of dairy co-operative to change the socio economic condition of the people living in the study area. It is seen that the main occupation of the district are agriculture and livestock so the study may find out the problem and solution of the dairy co-operative. And the study of the dairy co-operative in the study area provides the clue for developing other small income generating activities and enterprises associated with it.

#### **3.2 Research Design**

The design of the research is a case study research design since it assesses the past performance, current status and situation and the future trends and prediction of the dairy co-operative in the study area. The research portrays the accurate profile of how dairy co-operative developed among the other co-operative in study area. And, how the dairy co-operative is progressing in the present context, what are the driving force behind its development are the other facets of study. The study also assesses how the dairy is helping to uplift the livelihood of the dairy farmers.

### **3.3 Nature and Source of Data**

This study has been conducted by using both the primary as well as secondary data. The secondary data were from the records of VDCs, District Development Committees, Dairy Development Cooperation and CBS, Co-operative Organization, District co-operative office. And, the data from published /unpublished journals, books, articles and research reports were also agglomerated as secondary data for the study.

The study mainly adopts the primary data collected by conducting intensive field works in Sukute VDC of Sindhupalchok district from Jan 2010 to February 2010. The sources of primary data are sample respondents, key informant interviews, FGDs, and field observations. On the basis of nature both qualitative and quantitative data were collected in this research.

### **3.4 Universe and Sampling procedure**

The total population of the study area is the farmers having milk production at their homes which is 163 households. Among those households 40 samples were drawn by using simple random sampling. The strata were made on the basis of caste i.e. Dalit, Janajati, Brahman/Chhetri and on the basis of gender; Male and female.

### **3.5 Techniques of Data Collection**

The primary data were collected by using different techniques such as household survey, interview, observation, focus group discussion, and key informant interview etc.

#### **3.5.1 Schedule**

Informal Interviews of the qualitative nature were conducted in the study areas. The interview were directive one and probed the different dimensions of how dairy should be advance in the present context. The interview also assessed on how to convert the existing subsistence level of dairy farming to

commercialization of it. The training regarding livestock farming, the veterinary services available in the region and the possible strategy of increment of dairy co-operative, problem of dairy farming, possible of market and how the member were satisfied with the dairy services were probed on the interview.

### **3.5.2 Observation**

The management and operation of dairy farming shed management, sanitation maintained, the effect of benefits by dairy income at their homes i.e. life standard, etiquette, gadgets, infrastructure developed and quality of milk produced were observed during the field visits.

### **3.5.3 Focus Group Discussion**

Eight FGDs were conducted in the study area of which each of 2 FGDs in each of the 4 wards of the Sukute VDC. With the participation of both men and women among the dairy farmers who are also the members of the co-operative, the discussion were focused more on the problems they were facing regarding dairy farming, its management, market of dairy products were discussed. The focus group discussions were conducted in the study areas by using checklist.

## **3.6 Data Processing, Editing, Presenting and Interpretation**

In this study, the optimum primary data were collected from the sample respondents of Sukute VDC. Most of the primary data were collected through face to face interviews and interaction with the sample respondents. The semi-structured interview schedule were prepared and administered in the field visit to collect information as per the objective of the study. The informations covered in the schedule were personal and family characteristics along with the dairy production, animal details, income and expenditure of dairy farming, role of co-operative for their socioeconomic change.

The data collected from FGDs, Observations and interviews were the abstract and combination of verbal and emotional expressions, trail and trace evidences and visual impressions.

The data collected through semi-structured interviews were processed manually. They have been edited and coded and computerized for further analysis in MS Excel.

The data collected from qualitative way (case studies, FGDs, Observation and interviews) have been analyzed through qualitative content analysis to dissect the issues and dimensions of market, success, livelihood by dairy, problems and prospects of dairy co-operative.

### **3.7 Limitation of the Study**

This research is conducted only with limited objectives for the partial fulfilment of Master Degree in Sociology/Anthropology considering the time and budget limitation. This study is only confined to the farmer of Sukute VDC who sell their milk to the dairy co-operative. Since the research is limited to a particular locality of Sindhupalchowk district and also in a particular VDC of Sukute, the findings and the conclusions drawn with this research may not be generalized.

## **CHAPTER - FOUR**

### **INTRODUCTION OF THE STUDY AREA**

#### **4.1 Physical Location and Geographical Characteristics**

Sindhupalchowk district is located in Bagmati Zone in Central Development Region of Nepal. Geographically, it has an area of 2542 Sq. Km. and surrounded by Rasuwa and Nuwakot districts in the West, Rasuwa district and Tibet of China in North, Kavrepalanchok, Kathmandu and Ramechhap district in the south and Dolakha, Ramechhap district and Tibet of China in the east border of the district. The district headquarter is Chautara, located at an altitude of 1450 m. Geopolitically, Sindhupalchowk district is divided into 3 electoral constituencies, 13 Ilakas and 79 Village Development Committees (VDCs)

##### **4.1.1 Demographic Features**

The total population of Sindhupalchowk district is 305857 (CBS, 2001) comprising of males 152012 (49.70 %) and females 160001 (51.30 %) inhabit in 57649 households within the seventy nine VDCs of the district. Population density of the district is 120 per square kilometer, while average HH size is recorded 5.06 (C.B.S., 2001).

##### **4.1.2 Land Use Pattern**

Analysing the Annual Report of the fiscal year 063/64 of Sindhupalchowk, the land use pattern of the district is as follows:

Out of total land of 2542 square kilometer (Sq.Km), 737.10 Sq.km land is used as agricultural land in Sindhupalchowk. 775.67 Sq.Km is forest land and 118.23 is pasture land.47 Sq.Km is the snow land, however, 322.53 Sq.Km is covered by bush. Landslide has damaged 2.62 Sq.Km of the total land and 456.15 Sq.Km has been wasted as *parti*. 82.70 Sq.Km has been used for other purposes.

Looking at the percentage wise, 29 percent of the total land is used as agricultural land, 30.51 percent as forest land, 4.65 percent as pasture land and 1.85 percent as snow land. 12.69 percent of total land is used as bush land. While 0.10 percent of the land is landslide, 17.94 percent is *parti* and 3.26 percent is used for various other purposes.

**The land use pattern of the district is as follows**

**Table:1 Land Use pattern**

SN	Land Use	Area (Sq.Km)	Percentage (%)
1	Agricultural land	737.10	29.00
2	Forest land	775.67	30.51
3	Pasture land	118.23	4.65
4	Snow	47.00	1.85
5	Bush	322.53	12.69
6	Landslide	2.62	0.10
4	Parti	456.15	17.94
5	Others	82.70	3.26
	<b>Total</b>	<b>2542</b>	<b>100</b>

*Source: DDC Annual Report 068/69, Sindhupalchowk*

The land use pattern of the district according to DDC Annual Report 068/069 only 29% land is agricultural and the forest land is 30.5% which is highest in percentage. The rest of the land is pasture land, show, Bush, land slide parti and others kind of land.

## 4.2 Livestock Production

Livestock is an important component of farming system in Sindhupalchowk district. Livestocks are regarded as one of the major assets of farm household. Cattle and buffaloes are primarily reared for draught power cultivation and transport, with the latter also providing milk and meat for on-farm consumption and opportunity sales. The livestock's population and their production are presented in table below.

**Table 2: Livestock Population**

SN	Livestock	Livestock Population	Percentage %
1	Cattle	78110	14.45
2	Buffaloes	41357	7.64
3	Sheep	15042	2.78
4	Goat	127444	23.56
5	Pig	8684	1.61
6	Fowl	269729	49.88
7	Duck	438	0.08
	<b>Total</b>	<b>540804</b>	<b>100</b>

*Source: Nepal District Profile, CBS, 2012*

Referring to the data of Nepal District Profile (CBS, 2012), livestock population of Sindhupalchowk district is mainly dominated by cattle, buffaloes, goat and fowl. There are 78110 numbers of cattle, 41357 numbers of buffaloes, 127444 numbers of goat and 269729 numbers of fowl. Also, there are 15042 numbers of sheep, 8684 numbers of pig and 438 numbers of duck.

**Table 3: Livestock Production**

SN	Livestock Product	Unit	Annual Production
1	Milk	MT	12712
2	Meat	MT	2053
3	Egg (hen)	Thousand	7291
4	Wool	Kg	10680
5	Fish	MT	900

*Source: Nepal District Profile, CBS, 2012*

As of Nepal District Profile (CBS, 2012), the major livestock production of Sindhupalchowk district is milk which accounts 12712 MT. Also, 2053 MT of meat is produced and 7291 thousand eggs, 10680 Kg of wool and 900 MT of fish is produced in the district.

### **4.3 Brief Introduction of Study Area (Sukute VDC)**

Among the 79 VDCs, of the district, Sukute is one. The main inhabitants of these VDCs are Brahman, Chheatri, Dalit and Janajati. The main occupation of the villagers are agriculture and livestock. There is a great potentiality for dairy farming, vegetable farming in these areas such as potato, tomato, cucumber, beans and other off seasonal vegetables, if irrigation could be managed. The livelihood practices in the VDCs are buffalo, goat, and poultry farming. There are two milk co-operative in the study area. According to the VDC office the population of the VDC is about 6 thousand.

#### **4.3.1 Brief introduction of dairy co-operative**

The Sukute dairy co-operative was established in 2049 BS and registered as an institution in 2050 BS. It is situated in ward-7 of Sukute VDC, Sindhupalchowk. It has two milk collection centers. The average milk

collection per day is eight hundred litres. Recently, this organization has established one chilling center in Naubise of Fulpingdanda VDC. It covers farmers of ward 1-8 of Sukute and some wards of Batase, Fulpingdanda and Fulpingkot VDCs. It started the saving and credit facilities from 2056 BS. Till now, it collects 36 lakhs savings out of which 35 lakhs is circulated among the farmers as loan without any securities. Initially the co-operative members were 39 and the capital share was 3900. They have set certain criteria to be a shareholder of this co-operative such as farmers should be from the catchment area of the co-operative. In the dated 2066 Chaitra there were 412 co-operative members.

Daily the milk is collected from 163 farmers in an average. Its another collection centre collects the milk of 45 Household. Most of the farmers are Chhettri / Brahmins and Janajati. There are also few dalits in the community and only one dalit brings milk to the co-operative. There is no discrimination towards the Dalit. But the involvement of the dalit in the dairy co-operative is very less.

### **4.3.2 Saving and Credit System**

The farmers can save their money with interest rate 8% per annum while they can take loan with interest rate 14%. The co-operative members need to collect at least Rs 50 per month. The farmers can get loan 3 times of their savings. But the upper limit of loan at a time is Rs 25,000/- and the time duration is 6 month. Co-operative provides loan to its members for domestic purpose and buffalo farming only.

## **4.4 Characteristics of Sample Respondents**

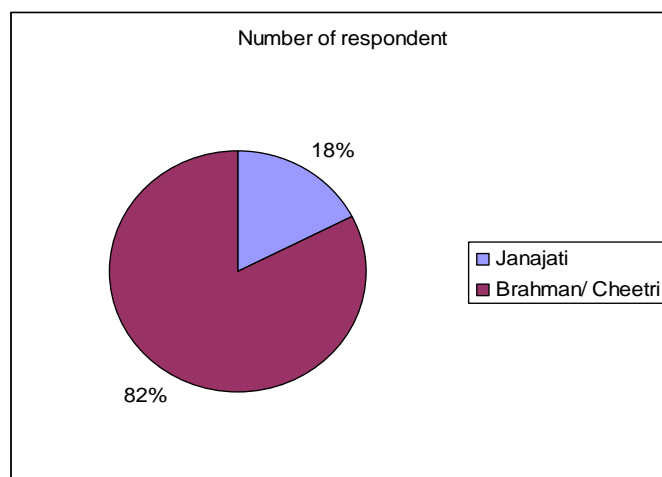
### **4.4.1 Cast/Ethnicity**

The main inhabitant of the study area is Brahman/Chhettri. They are involved in the livestock farming so the economic condition of the Brahman/Chhetri is quite good then other caste like dalit, Janajati. Out of 163 milk Sheller farmer

total respondents are 40. Among them 7 respondent are Janajati and 33 are Brahman/ Chhetri.

**Figure 1: Caste and Ethnic composition of respondents**

According to the Field Survey, 2012, caste and ethnic composition of respondents was 82 percent Brahmin/Chhetri and 18 percent were *Janajati*.



*Source: Field Survey, 2012*

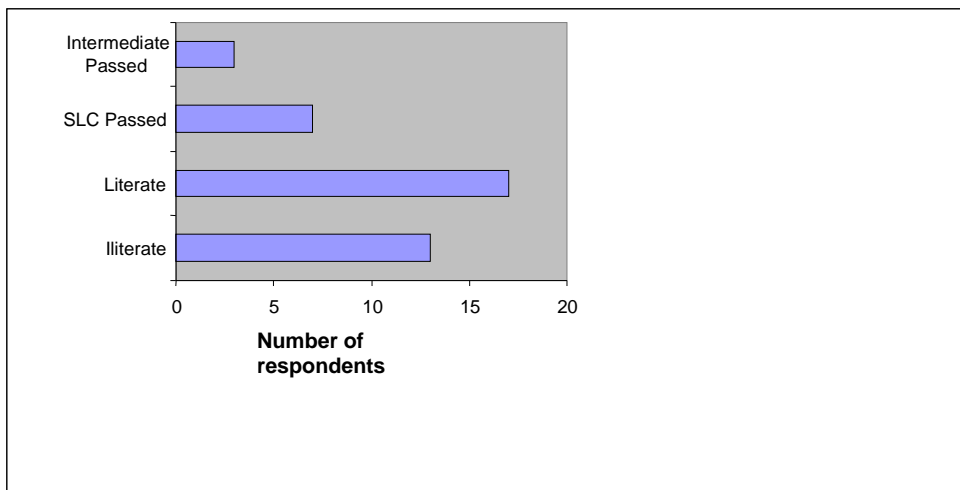
The Brahmans/Chhetries are involved highly in livestock farming. They are in high percentage in total 82% were Brahman/Chhetri and rest 18% were Janajati this figure indicates the good control of higher caste people over livestock farming.

**4.4.2 Education**

In the field visit, out of forty respondents, 13 are illiterate, 17 could do general reading and writing, 7 were SLC passed and 3 are intermediate passed. Please see the chart below for detail.

**Figure 2: Education of respondents**

According to the Field Survey, 2012, caste and ethnic composition of respondents was 82 percent Brahmin/Chhetri and 18 percent were *Janajati*.



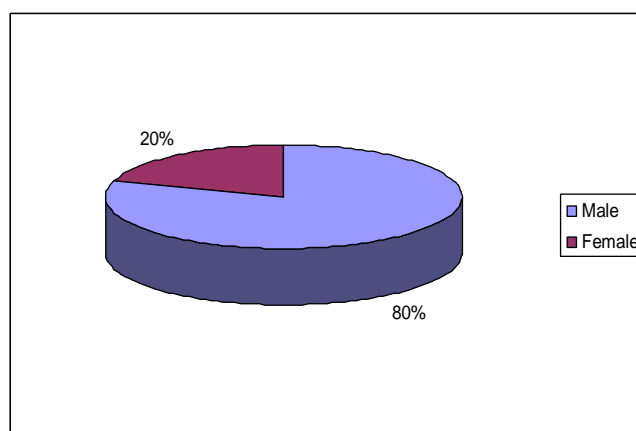
*Source: Field Survey, 2012*

According to field Survey, 2012 in the study area 82% respondents were Brahmin/Chhetri Among them, the large population of the respondents seems literate only few respondents illiterate.

#### **4.4.3 Gender**

Male and female both are active in livestock farming but in the study area most of the house led by male some house is led by female also. Out of 40 respondents, 32 are male and 8 are female. The composition of the respondent by the gender in detail is given below.

**Figure 3: Gender Composition of the Respondent**



*Source: Field Survey, 2012*

According to field survey, 2012 male percentage in live stock farming is higher than female percentage that's why, males have hegemony over the income and leadership in household activity.

#### 4.4.4 Age

The milk Sheller farmers were surveyed during the study. In the study area age groups were found from 30 years to as much as 64 years. The age group of the respondents is detail below.

**Table 4: Age Composition of Respondents**

Age of Respondent	Number	Percentage %
20 - 30	1	2.5
31- 40	15	37.5
41 - 50	17	42.5
51 and above	7	17.5
<b>Total</b>	<b>40</b>	<b>100</b>

*Source: Field Survey, 2012*

The milk selling farmers were also surveyed during the study. The age group of milk selling farmers varies from 30 to 64. Out of the total number of respondents of 40 people from the age group of 20-30, 1 were involved in milk selling. From the age group of 31-40, 15 were involved and from the age group of 41-50 17 were involved. However, from the age group of 51 and above 7 people were the milk selling farmer.

#### 4.4.5 Land Holding

Most of the families of the study area are medium level and they have Up land (Bari) and lowland (Khet). Some farmers have grazing land also but it is very less. The landholdings of the respondents are detail below:

**Table 5: Landholding pattern of respondents**

<b>Land Holding of the Farmer in Ropani</b>	<b>Bari Holding HH</b>	<b>Khet Holding HH</b>
0 - 5	16	17
5 - 10	11	12
10 -15	5	7
15 and above	8	4

Source: Field Survey, 2012

According to the field survey, amongst the respondents, most of the families of the study area are middle class and hold both Up Land (*Bari*) and Low Land (*Khet*). Only few farmers have the grazing land. Out of the total respondents who have hold the *Bari* and *Khet* of 0-5 *Ropanis*, 16 respondents have hold *Bari* and 17 hold *Khet*. There were 11 and 12 who hold *Bari* and *Khet* respectively in the group of the respondents who have hold 5-10 *Ropanis*. In the group of holding 10-15 *Ropanis*, there are 5 and 7 respondents who hold *Bari* and *Khet* respectively. The respondents who hold 15 and above *Ropanis* of *Bari* and *Khet* are 8 and 4 respectively.

## **CHAPTER - FIVE**

### **IMPACT OF CO-OPERATIVE ON SOCIO-ECONOMIC STATUS**

#### **5.1 Social Aspects**

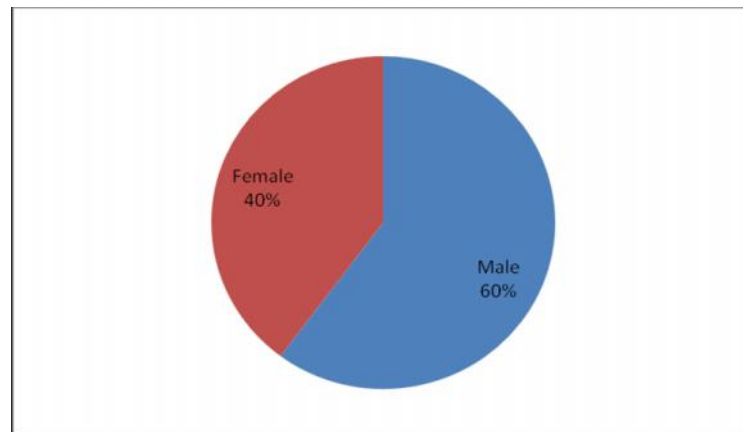
The dairy co-operative is providing facilities for the people of Sukute VDC ward 1 – 8, Fulpingdanda, 3 – 4, Fulpingkot 4 – 5 and Batase – 3 . The involvement in the co-operative are Brahman, cheetri, Janajati and Dalit. Any one from the above said territory people can be the member of the co-operative. Co-operative shares its profit to the shareholder every year. There in not any discrimination towards dalit, janajati and other ethnic caste. In the co-operative the majority is Brahman/ Cheetri. Caste wise milk seller in the dairy co-operative.

In the study area, most of Brahman/ Cheetri are involved in the dairy farming then dalit and Janajati. Dalit cast Damai, Kami and Sarki are economically poor and deprived in the society. They have not enough land so they work as daily wages. Because of low income and little agricultural land they don't get assess for the livestock farming. The old generation of the Dalit is still continuing their traditional skill and technology but the young generation is working as daily wages, wood works and other alternative job. The condition of Janajti in the dairy farming also less. Co-operative provides equal facilities to its all member.

##### **5.1.1 Gender Participation**

Both male and female are active in he livestock farming. They are active in the co-operative. The participation of the women in the co-operative is increasing. Out of 412 co-operative members the women were 164 and male were 248.

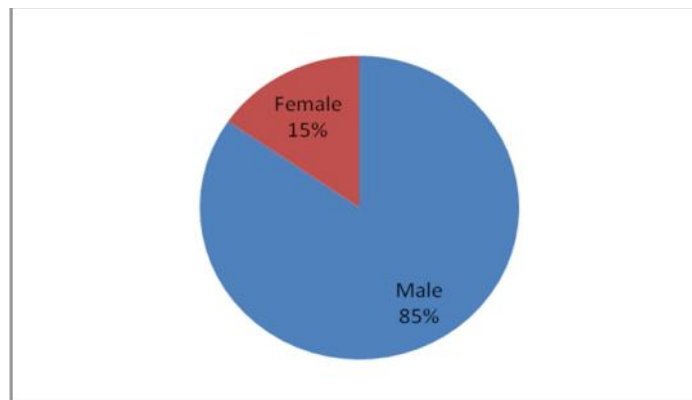
**Figure 4 : Gender in Co-operative**



*Source: Field Survey, 2012*

But in the decision making process of the co-operative, the participation of the female is very little then male. There is one executive committee to run the co-operative smoothly and under the main committee there are two subcommittee, one is loan committee and another is account committee. The participation of the women in the executive committee:

**Figure 5: Gender wise members in executive committee in Co-operative**



*Source: Field Survey, 2012*

It shows that out of 40 % member of the co-operative women only 15% is in decision making process. It clearly shows that clearly there is gender discrimination for the women. It is because of the male dominated society.

## 5.2 Economic Aspect

### 5.2.1 Food Availability

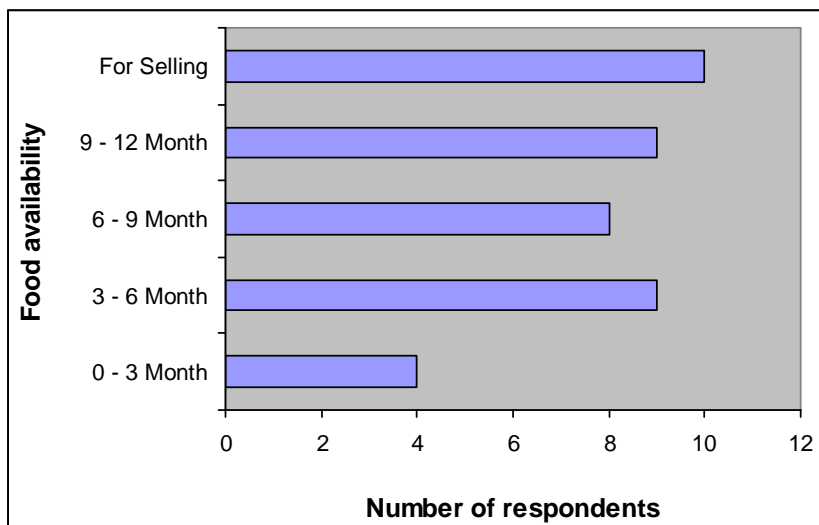
The main crops of the study area are rice, wheat, maize; potato etc. In the study area most of the people depend on agriculture so out of 40 respondent 10 were sold their agricultural product. Most of the farmer could not get food for the whole year the food availability of the farmer is detail below:

**Table 6: Food availability of the people**

<b>Food Availability</b>	<b>Number of HH</b>
0 - 3 Month	4
3 - 6 Month	9
6 - 9 Month	8
9 - 12 Month	9
For Selling	10
<b>Total</b>	<b>40</b>

*Source: Field Survey, 2012*

**Figure 6: Food availability of the people**



*Source: Field Survey, 2012*

As per the field survey, there is no sufficient availability of food in most of the households. Out of the total of 40 households, only 10 could sell their agricultural products. Most of the farmer could not get food for the whole year. The food availability of the households for 0-3 months numbered 4, 3-6 month was 9 and 6-9 months was 8. Similarly, food availability for 9-12 months prevailed only in 9 households.

### **5.2.2 Animal Holding**

Farmers have been keeping livestock for many years. Buffalo, Goat, Ox, , Cow and hens are major source of income from livestock in this area. Almost all the farmers have kept buffalo for the dairy purpose. After the establishment of dairy co-operatives farmer's have started keeping more buffaloes because now they have realized that dairy farming is an important source of earning.

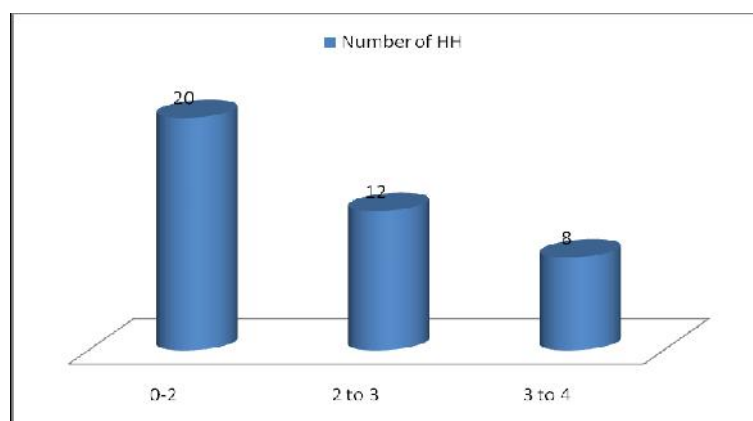
**Table 7: Number of Buffalo per household**

Number of Buffalo	Number of HH
1 -2	20
2 - 3	12
3 - 4	8
<b>Total</b>	<b>40</b>

*Source: Field Survey, 2012*

Almost all the farmers have kept buffalo for the dairy purpose. After the establishment of dairy co-operatives, farmers have started keeping more buffaloes and have realized that dairy farming is an important source of earning. According to the field survey, out of 40 households, 20 households had 1-2 number of buffaloes, 12 households has 2-3 number of buffaloes and 8 had 3-4 number of buffaloes.

**Figure 7: Number of Buffalo per household**

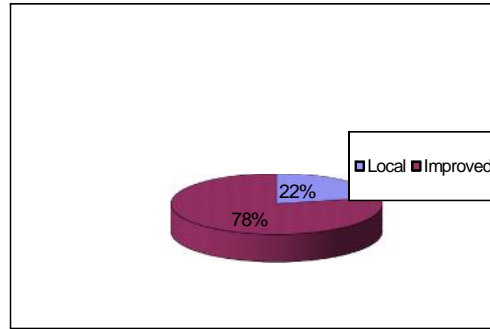


*Source: Field Survey, 2012*

Based on the above figure, maximum household keep 1-2 buffaloes and only few keep more than three buffalos. It shows that still the farmers have not practiced the farming in commercial purpose.

**Figure 8: Types of Buffalos**

According to the field survey, 78 percent of the total number of buffaloes were improved ones while 22 percent of them were local.



*Source: Field Survey, 2012*

Most of the farmers have kept the improved buffalos because they can give more milk than the local buffalo. Their's cost high. The farmers who cannot afford the improved buffalos, they are keeping the local oncs.

### **5.2.3 Milk Production**

The total milk production was less in liters before the involvement of the rural farmers in daily co-operation because milk was produced for consumption purpose and selling nearby market Only few farmers have been selling their milk in the near by market like Chautara district headquarter and the market center Balaphi and Jalbire. All farmers have not got the chance to sell their market because they have to walk more then 2 hours to reach the market centre. But after the involvement in co-operatives the milk production has been drastically increased because they have found the marketing facilities. Before people used to kept more local Buffalos. But, now people prefer to keep an improved dairy buffalo because the total amount of milk production of local dairy animal is less in comparison to improved Buffalos.

### **5.2.4 Utilization of Milk**

Before the involvement of people in dairy co-operatives, it was difficult to find the marketing facilities. So milk was processed locally into ghee and other products. But with an establishment of dairy co-operatives people only focus

their attention on selling raw milk because it is easier and less time consuming, so they use the produced milk for consumption purpose and selling purpose.

### 5.2.5 Period of Selling Milk

All the farmers don't sell milk throughout the year. They sell more milk in summer season than in the dry season. Farmers who have more than two milking buffaloes sell milk throughout the year But farmers who have only one or two milking cows or buffaloes can sell milk for 7 months only. The average month of milk selling in the study area is 9 months.

### 5.2.6 Income Earned from Selling Milk

Before the involvement of people in dairy co-operative most of the farmers used to keep local dairy buffaloes because dairy animals were kept for milk and consumption and left over were sold in nearby market. Dairy farming was for substantial purpose. But after the involvement in dairy co-operative people started to keep improved dairy cattle's as these cattle provide more milk in comparison to local buffaloes. Now people have started taking dairy farming as little commercialization.

**Table 8: Annual income in NRS thousands from milk selling**

<b>Income from Milk Selling(In Thousands)</b>	<b>Number of Respondent</b>
5 - 20	5
20 - 40	17
40 - 60	13
60 Above	5
<b>Total</b>	<b>40</b>

*Source: Field Survey, 2012*

Most of the farmers are earning 20 to 40 thousand per year by selling the milk. The farmers who have more than 3 buffalo could earn more than 60 thousand per month. Some farmers have been earning eighty thousand by selling the milk. It shows that farmers who reared more buffalos could earn more money.

### 5.2.7 Income from Non Dairy Animals

Most of the farmers have been keeping improved buffalos after involvement in dairy co-operatives. To buy those buffalos, loan is provided by co-operatives in minimum interest rate i.e. annually 14%. Besides selling milk, farmers earn by selling of the goat, calf and poultry. The following figure indicates the income from the non dairy animals.

**Table 9: Income in NRS thousands from Non-dairy animals**

<b>Income from Non dairy animal (In Thousands)</b>	<b>Number of respondent</b>	<b>Percentage %</b>
1 - 10	12	30
10 - 20	22	55
20 - 30	6	15
<b>Total</b>	<b>40</b>	<b>100</b>

*Source: Field Survey, 2012*

Besides selling the milk, farmers also earn by selling goat, calf and poultry. Out of 40 respondents, 12 respondents earned between 1-10 thousands from non dairy animals. While 22 respondents earned between 10-20 thousands, 6 respondents earned 20-30 thousands from non dairy animals.

### 5.2.8 Expenditure for Dairy Animals

In this section the researcher includes the total expenditure for the dairy animals which farmer take from other or buying from other. It is not included

the cost of farmer's own product and invest. It is the sum of veterinary services and fodder material for the animals.

**Table 10: Expenses for the dairy animal (in thousands)**

<b>Expenses for the dairy animal (in thousands)</b>	<b>Number of Respondent</b>	<b>Percentage %</b>
1- 10	13	32.5
10 - 20	16	40
20 - 30	11	27.5
<b>Total</b>	<b>40</b>	<b>100</b>

*Source: Field Survey, 2012*

Out of 40 respondents, 13 respondents spent 1-10 thousands for the dairy animals, 16 spent 10-20 thousand and 11 respondents had the expenditure of 20-30 thousands.

### **5.2.9 Uses of Dairy Income**

The earned income from selling milk is spent in various household purposes. Mostly the earned income is spend for the cattle itself and left over is spent for domestic purpose, education purpose, to purchase property etc. Most of the members of co-operatives spend their dairy income on domestic purpose and to purchase property, education purpose and in other sectors like to add up in improved cattle.

**Table:11 Utilization of earning from the milk selling**

<b>Topic</b>	<b>Number of Milk Sheller Farmer</b>	<b>Percentage %</b>
Domestic Consumption	15	37.5
Education	9	22.5
Purchase Property	14	35
Business	2	5
<b>Total</b>	<b>40</b>	<b>100</b>

*Source: Field Survey, 2012*

Farmers spend the earnings from selling the milk in various purposes. The most income is spent for the cattle itself while the remaining is spent for household purposes such as education, purchase of property. As per the field survey, out of the 40 milk seller farmers, 15 farmers use the earnings for domestic consumption, 9 for the education purpose, 14 uses the income for purchase of property and 2 for business.

### **5.3 Major Causes for Preferring Dairy Farming**

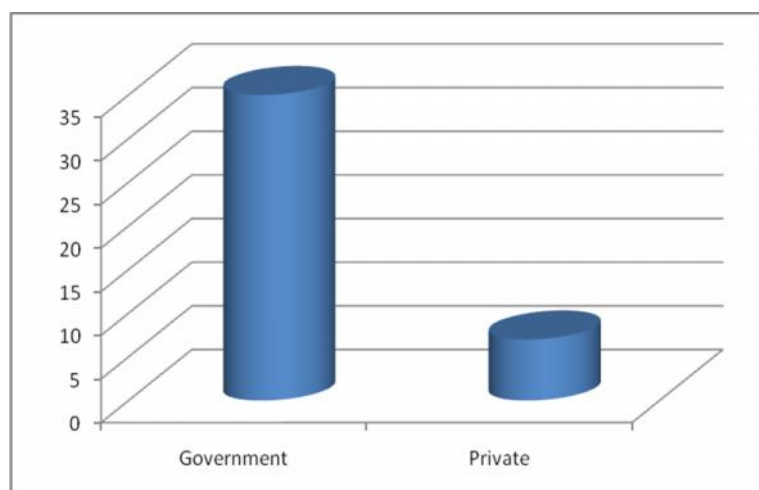
Needless to say, agricultural and dairy farming are interrelated to each other. For the dairy farming, it is needed grass and other fodder which people can get from the agricultural products and waste. The dairy farming has been developing as an easier mean to obtain regular cash income than food and cash crops. This sector is also less affected by climatic variation. Food and cash crops depend on nature and prices of such products do not remain stable. When the price of food and cash crops fall, it cannot cover the cost of production. So, there are various reasons for preferring this dairy sector by farmers. The main cause to focus in this dairy sector is regular earning income. So people who are depend on agriculture are involved in the livestock farming.

## 5.4 Dairy co-operative and Living Standard of the people

### 5.4.1 Schooling of Children

All co-operatives people have realized the importance of education. They feel that without education they have not increased their social status. The researcher found that every farmer send their children to school. The numbers of students have slightly increased than in the past. There is only government school so farmers send their children to the government school but few farmers send their children to the town for the quality education to near by district headquarter and capital Kathmandu. Only few farmers who can afford have sent their children to the private school. It is seen that most farmers send only sons to the private school. But with the increasing in income the farmers prefer to send their children to the private boarding schools than the government schools if the private school is near. The schooling pattern of the farmer can predicts in the following chart.

**Figure 9: Schooling of Children**



*Source: Field Survey, 2012*

In above figure we can see most of co-operative people send their child to government school only few people send in private schools.

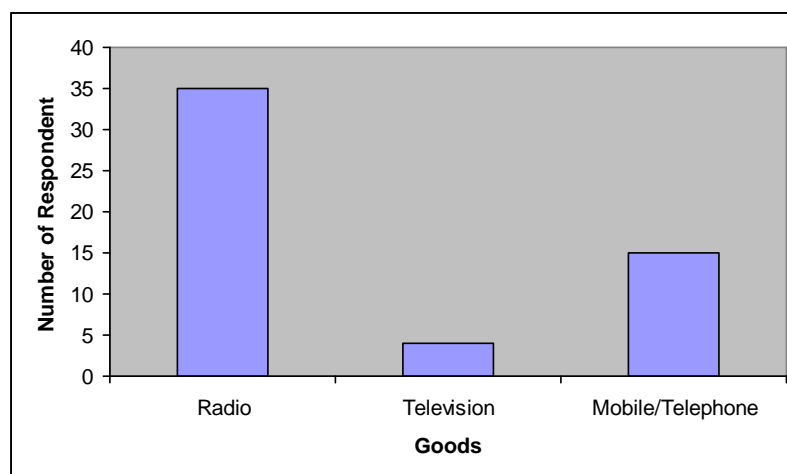
### 5.4.2 Toilet

Toilet is necessary in every house because it helps to decrease the possibilities of infectious diseases. It is also a sign of consciousness. Most of the surveyed farmers have built toilets. But till some houses have not access the toilet, the farmers who don't have toilet, they either use the toilet of neighbors or in open place. The toilet of the farmers is not hygienic. They use pit toilet. 36 respondents said that they have toilets while other use open toilet or neighbor's toilet. They are planning to build toilet of their own.

### 5.4.3 Luxury Goods

The farmers have spent dairy income in luxurious goods such as radio, mobile, television. Before all co-operatives they had less luxury goods, they had only Radio. But, after all co-operatives in their income level has increased they are able to buy luxury/necessary goods like television, mobile, telephone etc. The rare of luxurious goods has been increasing with the increase in their income level. Because of the technical problem there is no access of television facilities in the study area. So the farmers have started to buy antenna disk and television for the news and entrainment. This shows that everyone needs entertainment besides work. Radio and TV at home helps rural farmers to be more conscious about the various national and international issues.

**Figure 10 : Farmers having luxurious goods**



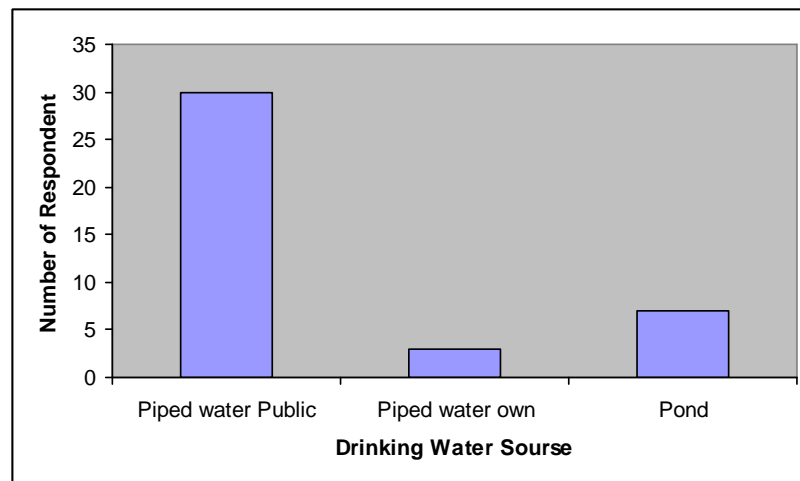
*Source: Field Survey, 2012*

In the above figure it shows that most of the farmers have radio and only few have television but mobiles and telephones are largely used than television.

#### 5.4.4 Drinking Water

Water is necessity of human being. Before, most of the farmer of all co-operatives have been using water from public tap. Besides this, they are also using pond, local recourses also. The study found that there is still problem of drinking water.

**Figure 11: Drinking water supply**



*Source: Field Survey, 2012*

According to field survey 2012, most of the co-operative farmers have got get their drinking water from piped water, public drinking water from piped water public and another major source is pond and only few farmers have their own piped water facility.

#### 5.4.5 Fuel Consumption for Cooking Purpose

Firewood is the major sources of fuel in the study area. People can get firewood from the nearby community forestry. So most of the farmer uses the firewood. Some households have started bio gas but now almost bio gases are not running. Farmers need more awareness about bio – gas. Only few houses they are cooking food in rice cooker; out of 40 respondent only three

households are using the rice cooker for cooking food and the rest households are using firewood.

## 5.5 Awareness building

### 5.5.1 Sources of Loan

Loan is the major source of rural poverty because the low level of income results in taking loan but the high interest rate makes rural people unable pay back in the mentioned time. This results in indebttness. Before, many farmers used to take loan from, the village money lenders where interest rate is high (24%) due to which rural people are getting poor day to day. But the involvement in co-operatives many farmers are given loan in low interest rate of 14%. This has resulted into farmers investment in new field and earning income. As the co-operative provids loan to their members only, there is gradual growth of membership in the co-operative. This has also helped farmers in saving their money. The following table shows the increase of members in the co-operatives in past ten years.

**Table 12: Increasing ratio of the co-operative members**

Year	Shareholders
2056	112
2057	160
2058	200
2059	250
2060	280
2061	306
2062	325
2063	350
2064	364
2065	412
2066	462
2067	488
2068	516

*Source: Field Survey, 2012*

Most of the respondents were satisfied with the interest rate of the co-operative (Saving = 8% and Credit 14% per year). Only few respondents were not satisfied with its rate.

### **5.5.2 Involvement in Dairy Farming**

The major activities of dairy farming are cutting grass, feeding, cattle, cleaning and caring and at last marketing. Generally cutting grass feeding cattle and cleaning are the work of female and marketing is done by male. Before, there was work division between male and female. Women were bounded in household work and male at the outside the household. But during the study the researcher found that in the study area, there was no such division of work. The people have realized that their aim is to earn money so they perform any of the activities when ever anyone is free. This shows gender equality. Now male also goes for cutting grass and feed the cattle's if the women are busy in other work the perception of male and female and their work division has been changed into "WE' and "OUR".

### **5.5.3 Animal Health**

In the study area the people and the co-operatives are also not so much conscious about the animal health. Co-operative had given the training to the farmers sometimes but it was not enough to manage their shed and the related for livestock farming. Co-operative had sent a person for the veterinary training. Now he has established one veterinary shop near by the co-operative building but farmer need more facilities besides this. The quality of veterinary should be increase there is not any regular check up and vaccination for animal. The researcher found during the field survey the shed for the animal is not managed and there is not enough care for the animal health.

### **5.5.4 Feeds and Fodder**

Ground grass, tree fodder crop by products of rice plant and maize plant are the main feed stuffs for the dairy animals in the study area. Before the farmers

were not so conscious about feeding for cattle. But now, they have realized that if they could feed more improved green grass to cattle, then this results into increase in production of milk and milk fat percentage on which basis the payment is done by dairy development industries either government or private.

## **5.6 Problems and Prospects of Dairy Farming**

### **5.6.1 Dairy co-operatives**

Dairy co-operatives have lot of potentialities if the proper attention is given from concern sectors. These co-operatives, not only provide saving and credit facilities, but also provide loans, marketing facilities to the rural poor farmer and make them secure. And the advices make farmers more aware of the problems and prospects of this sector.

### **5.6.2 Problems of Dairy Farming**

- High cost of milk production because of subsistence level of farming:

Dairy farming in the study area is still dominated by non-commercial farmers, so the production cost of milk is generally higher. So it is needed to produce milk at a competitive price. Even commercial farmers are rearing more than three buffaloes are producing milk at a lower cost than the farmers rearing a single animal. It is possible to reduce production cost by improving management through better feeding, breeding and health care.

- Low price of Milk

Farmers always demand for increasing the price of milk. According to them water is more expensive than milk. The price of milk is very less in comparison to their expenditure for their animals. The people of the study area have got 25 rupees/liter milk in average. It is very cheapest. If the condition will not improve farmers get affected badly.

- Lack of diversification

Product diversification has been very limited in Nepal. Less than 5 percent of milk collected is converted to other dairy products and most of them are for consumption purpose. And even farmers prefer to sell raw milk rather than selling milk products because they feel that time is also saved and it is easy too. There is also problem of animal diversification. Farmers only rear buffalos, very few farmers have kept the local cows for the religious purpose.

➤ Lack of Insurance Facilities

Most of the farmers complain about the lack of insurance of animals. Farmers buy improved breeds taking loan from different sources but if the animals die or become sick, then there is no facility of repaying.

➤ Veterinary services

The proper veterinary services and facilities are not available in the villages. There is lack of trained veterinary doctors and technicians. Thus most of the problems of dairy farming is due to lack of veterinary facilities. And they also have to come to main city to buy medicine and if they prefer to call them in village's then the heavy amount has to be paid. So, the farmers fear of keeping improved cattles because if they die because of lack of treatment then the farmers have to bear heavy loss. And, sometimes the farmers buy veterinary drugs from shops and feed their animals, sometimes these impact negatively to their animals.

➤ Lack of new technology:

The co-operative is not using the proper new technology. There is need of computer and other new equipment to taste the milk. There is the problem of milk damage because there is only one time collection, if the collecting time is changed morning and night, it will be less. Because people have to sell both morning and evening time.

➤ Milk Holidays

It is the major problem of dairy farming, but since last two years, this milk co-operative has not been facing the milk holidays it must be continued in the future.

### **5.6.3 Prospects of Dairy Farming/ Co-operative**

Beside these problems this dairy sector has lot of prospects in future. Farmers have been keeping dairy animals since long and they will continue to do in future also. There are lots of potentialities in this sector for raising the living standard of rural farmers. This sector can be strong means for rural development. The major reason is that agriculture and dairy farming are complementary to each other. Animal manure is useful in agriculture. It helps to produce more crops and the diversity the crop as animal manure makes soil more fertile. If more animals are kept more dung is produced which results in more production. If more crops are produced then farmers will have more crop-residue and grain to feed animals. Due to more fertile land improved grass and other feeding materials are likely be grown in this area. If the private sectors are encouraged in this field to keep the milk power plant, or to diversify the product then it can be competitive with international market and reduce the import of dairy product. Then the problem of milk holidays can be solved and the secured marketing facilities can be provided to the rural farmers. The availability of marketing facilities means rapid growth of dairy development.

- The climactic condition of the area is pleasant. It is neither too cold not too hot. The suitable climate helps for the quick development of dairy farming. Both the breed either local or improved, breed can be reared in this area. Similarly, the varieties of improved grass and fodder can be grown in the study area.
- There is not proper availability of road networks. To reach its own chilling centre porters have to carry the milk for 20 minutes. There is not proper facilities of transportation

- Dairy farming is less affected by climactic variation than agriculture field. So many farmers are attracted towards this sector which is positive sign for healthy competition. Rural milk producers. Produce good quality and hygienic milk as a result it will have positive effect on human health and as well product can be diversified and can compete with international market.
- This co-operative established its own chilling centre where daily 2200 (In average) liter milk is collected from the different dairy co-operatives. It provides facilities for the other dairy co-operatives also. So it may produce the different items of dairy which can be sold sell in the near market and it will get market of Tibet of China because it is near by the co-operative.
- Till date, the repayment of the co-operative is found very well where some of the clients who repay late are charged the fine as per the rules of the co-operative. It should be continued in the future.
- Saving and credit system of the co-operatives are also remarkable. It is seen that there are duplication of membership within the own family. It is needed to make criteria to be a co-operative member.

## **CHAPTER - SIX**

### **SUMMARY, CONCLUSION AND RECOMENDATION**

#### **6.1 Summary**

Dairy product is one of the main income sources of Nepalese farmers. Co-operatives are the vital institution for the development of dairy, farmers and their economic status. In Sindupalchil district there are 239 co-operatives. Out of which 140 co-operatives are dairy co-operatives. It shows this district is highly potential for dairy farming, Sukute Dairy production co-operative Limited, is one of vital co-operatives among 140 dairy co-operatives. The co-operative plays vital role for the improvement of the socio-economic condition of the people. Firstly, fostering we feeling among rural farmers Secondly, providing marketing facilities to rural milk producers. And thirdly providing saving and credit facilities to the rural poor farmers. Dairy co-operatives have made the farmers to unite themselves in groups and they have feeling of togetherness. This sector has significant impact on the quality of life. Numbers of people have changed their patterns of life as well as their mode of living. This has been measured during study by analyzing their socio-economic status, and their awareness level. Through the study the researcher has found that this dairy farming has lot of potentiality instead of having lot of problems in this sector, like-lack of institutional facilities, veterinary facilities, animals health, insurance low price of milk, milk holidays, subsistence level of farming etc. These problems hinder in development of this sector. But these problems have solution. Problems lie in every sector but if we can solve through the involvement of government and private sector in this field then this sector has lots of capacities and it can be a means of socio-economic development.

From the above analysis, the following points can be summarized:

In the study area, Sukute, the main inhabitants are Brahman, Chhetri, Dalit and Janajati

Among the 79 VDCs of the district Sukute is one .The main inhabitants of these VDCs are Brahman, Chheatri ,Dalit and Janajati. The main occupation of the villagers are Agriculture and livestock. There is a great potentiality for dairy farming, vegetable farming in these areas such as potato, tomato, cucumber, beans and other off seasonal vegetables, if irrigation could be managed. The livelihood practices in the VDCs are buffalo, goat, and poultry framing. There are two milk co-operatives in the study area. According to the VDC office the population of the VDC is about 6 thousands.

Sukute dairy was established in 2049 B.S. out of 163 milk sheller farmers total respondents are 40 among them 7 were from Janajati and 33 were from upper caste.

Most of the respondents were literate and only few were illiterate.

20% respondents were female and 80% were male.

41-50 age group was highly involved in milk selling business.

78% of the total numbers of buffaloes were improved ones while 22% of them were local.

The huge amount from milk selling goes into domestic consumption most of the farmer send their child into the government School.

Every farmer has radio in the home and most of the farmer get their drinking water from public piped water service.

Every year shareholder numbers are in increasing order there were only 112 members in year 2056 but it turned 462 members in year 2066.

The interest rate in saving is 8% and credit 14% per year. It provides easy loan to its shareholders.

## **6.2 Conclusion**

Based on the successful experience from field study of the Sukute Dairy Production Co-operative Limited, the researcher has found that dairy farming is integral component of livestock farming. People of this area are more involved in dairy farming. But with the development of dairy co-operatives, participation of poor and marginal farmers is not in high rate.

The co-operative plays vital role for the improvement of the socio-economic condition of the people. Firstly, fostering we feeling among rural farmers; Secondly, providing marketing facilities to rural milk producers, and thirdly, providing saving and credit facilities to the rural poor farmers. Dairy co-operatives have made the farmers to unite themselves in groups and they have feeling of togetherness. This sector has significant impact on the quality of life. Numbers of people have changed their patterns of life as well as their mode of living. This has been measured during study by analyzing their socio-economic status, and their awareness level. Through the study, the researcher has found that this dairy farming has lot of potentiality instead of having lot of problems in this sector, like-lack of institutional facilities, veterinary facilities, animals health, insurance low price of milk, milk holidays, subsistence level of farming etc. these problems hinder in development of this sector but these problems have solution. Problems lie in every sector. If we are able to solve these problems through the involvement of government and private sectors, then this sector has lot of capacities and it can be a means of, socio-economic development.

## **6.2 Recommendations**

Dairy farming plays an important role to uplift the standard of the rural farmers. Still, there are lots of problems. It needs improvements. Sustainable and commercialization of dairy farming is necessary to reinforce its role in socio-economic development. Recommendation for its improvement is as follows:

1. Subsistence versus Commercialization: Most of the farmer rearing 1 to 2 buffalo per household. Co-operative should encourage the farmer providing different facilities to farm more buffalos. It is the subsistence level farming it must transfer to the commercial scale.
2. Need of diversification: The livestock pattern of the study area is only rearing buffalos. Co-operative should encourage farmer to farm the different dairy animals like cow.
3. Co-operatives should encourage farmers to keep improved animals whose productivity is higher than that of local ones. Co-operatives should provide breed of animals on subsidy prices.
4. Animal insurance: There are not facilities of animal insurance Co-operative should give much attention for the animal insurance. Farmers should organize and give pressure to the concern agency to insurance of their cattle's because in case of their loss they may receive its claim.
5. Trainings / Exposure visit should be given to farmers for quality production of milk, animal health and diseases and shed management. Farmer should be aware of animal health regular checkups of the animals also.

## References

- ADB (2003) *Report and Recommendation of the President of the Board of Directors on a Proposed Loan to the Kingdom of Nepal for the Community Livestock Development Project*. ADB, Nepal.
- Bataille-Chedotel, F. and F. Huntzinger, (2004). *Faces of governance of production co-operatives*. *Annals of Public & Co-operative Economics*, Vol. 75, pp. 89-111:  
<http://ssrn.com/abstract=522007>
- Chitrakar, P.L. 1997. *Balancing food and population in Nepal in the next millennium*. *Nepal Popul Dev J. (Spec No.):*58-65.
- Cobia, David.W (Ed), 1989. *Co-operatives in Agriculture*. Englewood Cliffs, New Jersey: Prentice Hall.
- Dairy Development Corporation, 2064. *Annual Report of Fiscal Year 2062/63*, DDC Central Office, Lainchour, Kathmandu.
- Dhakal, Krishna Hari, (1994) *Development of Dairy Farming: A Case Study of Gitanagar VDC*. An Unpublished Dissertation, Central Department of Geography, T.U. Kathmandu.
- District Milk Production Co-operative Association Sindhupalchok, (2065). *Annual Report*
- DOA, (1991) *Ten year Dairy Development Plan (TYDP - 1990-2000), Vol-1*, Kathmandu: DOA.
- District Development Committee, (2006). *Sidhupalchowk District Profile*. Sindhupalchowk.
- ESSA, 2004. FAOSTAT 2004. *World Development Indicators, Nepal*. ESSA. Gill, G.J. 1996.  
<http://www.odi.org.uk/publications/working-papers/wp231-references.pdf>.
- FAO/PPLPI Pro-poor Livestock Policy Initiative, (2004). *Livestock Sector Policy Brief: Nepal*. FAO, Rome.

- Government of Nepal, Central Bureau of Statistics, (2008) *Statistical Pocket Book of Nepal*, Kathmandu
- K. Charles Ling, (1996). *Dairy Co-operatives Role in managing price Risks*
- Karki, Bir Bahadur, (2005). *The Journal of Nepalese Business Studies*. Vol. II  
No. 1 Dec.  
2005
- LRMP. 1986. *Land Systems, Land Capability, Land Utilization, Economics, and Summary Reports*. Ottawa: Kenting Earth Sciences Limited for Land Resources Mapping Project.
- Mali, P.M. 2005. *Co-operative movement in Nepal and its role in rural development: Innovations and challenges*. A paper presented on “Program on Development of Rural Financing Institutions and Co-operatives”, organized by CITAB in Kathmandu, August 16,2005:  
<http://www.cmfnepal.org/Paper%20for%20CICTAB%20on%20coop%20movement.doc>
- NCFN, 2007. *Important events of co-operative movement in Nepal. National Co-operative Federation of Nepal:*
- NPC, (2008). *Three years interim Plan, Government of Nepal: Kathmandu , National Planning Commission*
- Press Information Bureau, 2007. *Evolution of Co-operatives in India*. Government of India.
- Sharma, Prem, (2002). *A Handbook of Social Science Research Methodology*, Kathmandu Kshitiz Prakashan.
- Torgerson, R.E., B.J. Reynolds, and T.W. Gray. 1997. *Evolution of co-operative thought, theory and purpose*. University of Wisconsin Center of Co-operatives:  
<http://www.uwcc.wisc.edu/info/torg.html>

- Upadhaya, Ram Milan; Joshi Durga Datta and Thapa Tek Bahadur, (2001)  
*History of Dairy Development in Nepal*, Lalitpur: National Dairy  
Development Board, Danida Support Project.
- USDA, 2007. *Farmer Co-operative Statistics, 2005*. USDA RD Service Report  
65  
<http://www.rurdev.usda.gov/rbs/pub/sr65.pdf>
- Verma, S.K. 2005. *Co-operatives and tourism: An Asian perspective*. A paper  
presented  
in TICA 2005 General Meeting in Cartagena (Colombia) on 20  
September:  
[www.ica.coop/tica/cartagenaverma.pdf](http://www.ica.coop/tica/cartagenaverma.pdf)
- Wiskerke, J.S.C., B.B. Bock, M. Stuver, and H. Renting. 2003. *Environmental  
co-operatives as a new mode of rural governance*. NJAS 51-1/2.  
<http://library.wur.nl/ojs/index.php/njas/article/view/374>

## ANNEX A: CHECKLISTS

### Impact of Co-operative on Socio-economic Status

#### *A Sociological Study on Member of Dairy Production Co-operative Limited of Sukute VDC, Sindhupalchok*

Check list to collect Information from the Sukute Dairy Production Co-operative Limited, Sindhupalchok

Q. No.	Question	Answer
1	Date of establishment of Co-operative	
2	Date of registered of the institution as co - operative	
3	Average Number of milk Sheller farmer	
4	Number of Share holder members of Milk producer co – operatives (Male, Female, Dalit, Janajati)	
5	Average daily collection of milk(In liter)	
6	Number of staff in collection centre(Position, Part-time, Full time)	
7	Means of transportation of milk to the chilling centre	
8	Transportation cost of milk/liter	
9	Average price of per liter milk	
10	Paying duration of farmers	
11	David and credit system of co-operative(Intrest%, Time Duration)	
12	Saving Schemes (At Least How Much Per Head)	
13	For what purpose dairy give the loan to farmer?	
14	To Whom dairy provide loan? Shareholder/ milk Sheller farmer?	
15	Facilities given by the co-operative to the farmer/Share holder	
16	Major Achievements of the co-operatives for the socio economic change of the farmers	
17	Progress report of the co-operative	
18	Problems that co-operative faces during collection and marketing of the milk and from the farmer	
19	Future Plan of the co-operative	

## ANNEX B: Interview Schedule

# Impact of Co-operative on Socio-economic Status

*A Sociological Study on Member of Dairy Production  
Co-operative Limited of Sukute VDC, Sindhupalchok*

### A. General Information

1. Name of the farmer: .....
2. Address: ..... Ward/ village. ....
3. Age..... 4. Sex.....
5. Member of co-operative a) Yes.....b) No .....
- If yes from which year:.....
6. Education of Farmer:
7. Detail of house hold:

Particular	0-14	14-59	60-
Male			
Female			
Total			

### 8. Level of Education of the Household:

Sex	Illiterate	Literate	Primary to class ten	SLC	IA	BA	MA
Male							
Female							

### 9. Land of Farmer and the production

Land Type	Ropani	Self Cultivate	Rented out	Rented In
Bari (Upland)				
Khet (Lowland)				
Forest/ Grazing land				

### 10. Food Availability of the farmer by their own product:

Up to 3 months	3 -6 months	6-12 months	For Selling

**11. Major crops of the farmer:**

.....

**12. Detail list of animal:**

Animal	Number		
	Local	Improved	Total
Buffalo			
Cow			
Goat			
Ox			
Pig			
Other			

**13. Please provide the following information about Milk Production of dairy cow and dairy buffalo (In Liter).**

Animal		Annual Production(Liter)			Utilization of Milk		
	Number	Local	Improved	Total Liter	Domestic Consumption(Liter)	Processed	Sale(Liter)
Buffalo							
Cow							

**14. Income from selling milk and milk product (Annual):**

Income from	Annual Income
Selling Milk	
Selling other dairy product like ghee and other	

**15. Income from non dairy animal (annually):**

<b>Animals</b>	<b>Income</b>
Buffalo calf	
Cow Calf	
Male Buffalo	
Ox	
Goat	
Pig	
Others	
Total	

**16. Where do you sell milk and why?**

I) To Dairy Co-operative II) To direct consumer III) To near market

**17. How much price do you get per liter?.....**

**18. How many month in a year do you sale milk**

**regularly?.....**

**19. Source of income apart from Milk selling:**

<b>S.No.</b>	<b>Member Engaged (Male/Female)</b>	<b>Annual Income</b>
Service Employee(Government)		
Service Private		
Business		
Labor wages		
Livestock(Non Dairy Product)		
Other		

**20. Provide information about quantity and price of feeding materials you used for animal? Per Day.**

<b>Feeding Material</b>	<b>Quantity</b>	<b>Total Price</b>	<b>Remarks</b>
Grass			
Dhuto			
Maize			
Other			

**21. Which of the following work you prefer most? Why?**

- A) Food Crops                      B) Dairy Farming                      C) Labor
- D) Services                      E) Livestock and other agricultural production
- F) Other

**22. How do you utilize the income earned from dairy farming?**

- A) Domestic Expenses                      B) Education
- C) To purchase property                      D) Other

**23. Is there any veterinary services provide by co-operative? How much you expenses for per year for the veterinary?**

.....  
.....

**24. Have you taken any loan from the co-operative? If yes what purpose?**

- 1) For dairy animal purchase                      4) Domestic Purpose
- 2) Education                      5) Marriage and other ceremony
- 3) Business                      6)To purchase Property

**25. What is your loan source before?**

- 1) Dairy co-operative                      2) Relatives/ Friends
- 3) Bank                      4) Local money leader
- 4) Other If any

**26. How much you pay interest rate for the co-operative?**

.....

**27. Are you satisfied with the dairy interest rate? If No Give your comment.**

.....

**28. Means of Measuring Living Standard:**

- A) Luxury goods: i) Radio      ii) Television      iii) Vehicle
- iv) Refrigerator      v) Others
- B) Drinking Water: i) local source      ii) Piped water own      iii) river
- iv)Piped water public (Time takes to go the water resource(In Minute)
- C) Toilet: i) No toilet      ii) local toilet      iii) Hygienic toilet      iv) others

D) Fuel consumption: i) Fire wood ii) firewood + Electricity iii) Biogas iv) LP Gas v) Other

E) Schooling: i) Government school ii) Boarding school

**29. Is dairy co-operatives support following topic of the societal development?**

S.No	Support by Dairy co-operative
Drinking water	
School	
Scholarship for student	
Road/ Goreto Bato	
Health	
Other	

**30. Is dairy co-operatives providing any training regarding livestock farming and other if so mentioned?**

.....

**31. What is the problem of diary farming?**

.....

**32. What do you suggest for improvement?**

.....

Thank you for your informative answer!