

BUYERS' ASSESSMENT ON DAIRY SECTOR IN NLSIP WORKING DISTRICTS



FINAL REPORT

Government of Nepal
Ministry of Agriculture and Livestock Development
Nepal Livestock Sector Innovation Project

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FOREWORD

The Government of Nepal (GoN), Ministry of Agriculture and Livestock Development (MoALD) with assistance from the World Bank, is implementing **Nepal Livestock Sector Innovation Project (NLSIP)** in 28 districts, covering five provinces- province number-1, province number-2, Bagmati, Gandaki and province number-5. Given the importance of the livestock sector to rural livelihoods, food and nutrition security, as well as for growth of the national economy, this project is expected to be a "game changer" project in the livestock sub-sector. The project aims to raise the productivity, production and income and lead to further investment for the overall development of the sector by improving service delivery, access to information, technology, market, financial resources and environmental and social safeguards measures.

The component C *Promoting Inclusive Value Chains for Selected Livestock Commodities* of the project aims to develop productive alliance in selected livestock sub-sectors and to contribute to import substitution (for dairy products and goat meat) and export promotion (for Chyangra pashmina) by improving the productivity and value addition within the targeted value chains namely- milk, goat meat and Chyangra pashmina. This project component will directly contribute to the project development objectives by supporting the integration of smallholder livestock farmers in these value chains. This component will also facilitate formation of productive alliance to ensure active engagement of the various active value chain actors including the bank and financial institutions. The productive partnership will be supported through a 50% (maximum Rs. 10 million) matching grant where, 20% cash contribution by the respective producer's organization and 30% loan from a bank or financial institution is mandatory.

This dairy sector buyers' assessment report has been prepared by the project value chain specialists to identify the potential buyers of milk and milk products in the country in general, and in the project area in particular. This report includes general description of the dairy sector in the country and also most of the major buyers of milk and milk products operating currently in the 28 project districts. Also included in the report is information on the business and contact details of the potential buyers; especially the milk producers' cooperatives, private sector dairy industries, the government owned Dairy Development Corporation, and major dairy shops which are involved in the dairy business. This report is prepared in order to help the probable grant applicants develop value chain linkages and create productive alliance while preparing sub-project concept notes for the project matching grant.

I believe, the dairy related Producer Organizations, interested to participate in the project matching grant through a functional alliance will find this report useful. I also take this opportunity to thank Mr. Keshab Achhami, Dairy Value Chain Specialist and Dr. Amar Bahadur Shah, Team Leader, for their hard work in preparing this report.

Dr. Dilli Ram Sedai

Project Director

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Abbreviations	
ADS	Agriculture Development Strategy
AGDP	Agricultural Gross Domestic Product
BFI	Bank and Financial Institution
CBS	Central Bureau of Statics
CDCAN	Central Dairy Cooperative Association Nepal
DDC	Dairy Development Corporation
DIA	Dairy Industry Association
DLS	Department of Livestock Services
DLSU	Decentralized Livestock Service Units
DMPCU	District Milk Producer Cooperatives Union
ECOP	Environmental Code of Practices
FAO	Food and Agriculture Organization
FFS	Farmers Field School
FPP	Full Project Proposal
FY	Fiscal Year
GDP	Gross Domestic Product
GHG	Green House Gas
GR	Grant Recipient
GoN	Government of Nepal
HF	Holstein Friesian
LDP	Livestock Domestic Product
LGDP	Livestock Gross Domestic Product
LMIS	Livestock Management Information System
M&E	Monitoring and Evaluation
MG	Matching Grant
MoALD	Ministry of Agriculture and Livestock Development
MT	Metric Tons
MPA	Milk Producers' Association
MPCS	Milk Producers' Cooperative Society
MPSS	Milk Product Supply Scheme

Abbreviations	
MSS	Milk Supply Scheme
NDA	Nepal Dairy Association
NDDB	National Dairy Development Board
NEPC	Nepal Environment Protection Center
NLSIP	Nepal Livestock Sector Innovation Project
No	Number
PCN	Project Concept Note
PDO	Project Development Objective
PA	Productive Alliance
PAD	Project Appraisal Document
PIM	Project Implementation Manual
PMU	Project Management Unit
PO	Producer Organization
Rs	Rupees
SM	Social Mobilizer
VH&LSEC	Veterinary Hospital & Livestock Service Expert Center

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BUYER' ASSESSMENT ON DAIRY SECTOR IN NLSIP WORKING DISTRICTS

1. INTRODUCTION

1.1 The Report

This dairy sector buyers' assessment report has been prepared for Nepal Livestock Sector Innovation Project (NLSIP) to identify the potential buyers of milk and milk products in the country in general and in the project area in particular. Attempts have been made to cover all the major buyers of milk and milk products currently operating in the 28 project districts. Included in the report is the information on the business and contact details of the potential buyers; especially the milk producers' cooperatives, private sector dairy industries, the government owned Dairy Development Corporation (DDC), and major dairy/sweet shops who are involved in dairy business. This report is prepared in order to help identify the buyers engaged in dairy value chain and link them up with the producers to form an alliance so that the producers are able to supply the buyers with the dairy products (raw material or value added) at the quantity and quality desired by them. The producers in this partnership will be supported by the project through the provision of matching grants as articulated under Component C of the Project Appraisal Document (PAD) and the Project Implementation Manual (PIM).

This report is organized as per the following:

- I. Introduction.
- II. Objectives.
- III. Methodology.
- IV. Limitations.
- V. Dairy sector in Nepal.
- VI. Milk production and marketing in project districts.
- VII. Conclusions and recommendation.

1.2 The Project- NLSIP

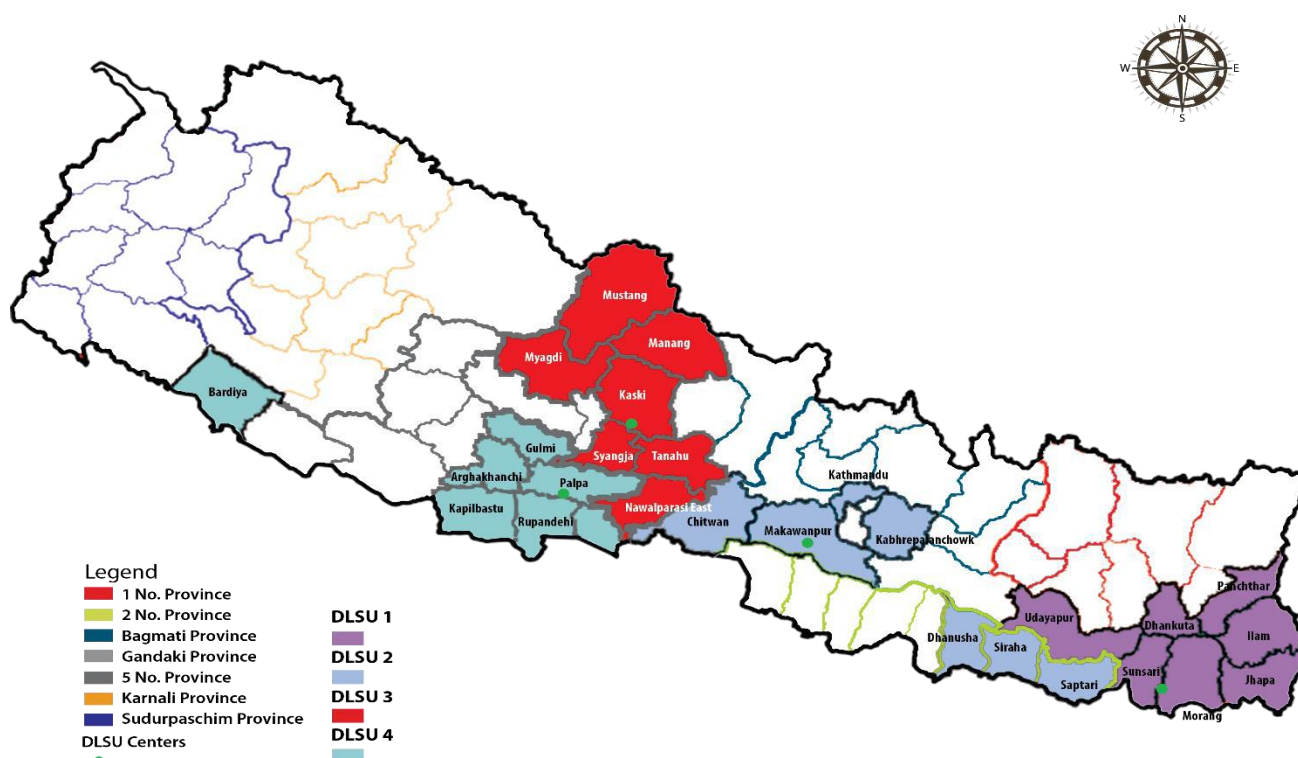
The Government of Nepal (GoN), Ministry of Agriculture and Livestock Development (MoALD) with assistance from the World Bank, is implementing Nepal Livestock Sector Innovation Project (NLSIP) in 28 districts, covering five provinces- province number-1, province number-2, Bagmati, Gandaki and province number-5. Given the importance of the livestock sector to rural livelihoods; food and nutrition security; as well as for growth of the national economy; this project is expected to be a "game changer" project in the livestock sub-sector. The project aims to raise the productivity, production and income and lead to further investment for the overall

development of the sector by improving service delivery, access to information, technology, market, financial resources and environmental and social safeguards measures.

NLSIP plans to adopt approach to respond to national demand for livestock and livestock products through a stronger and effective partnership between the buyers and producers. The project will also work to strengthen the dairy, goat meat and pashmina value chain linkages, and scale up improved farm technologies and practices. The project covers all three eco-zones (Tarai, Hill and Mountain) in four clusters, encompassing five provinces and commodity specific value chains - dairy, goat meat and Chyangra pashmina.

The Project is being managed by a Project Management Unit (PMU) at the center, led by a Project Director supported by Decentralized Level Support Units (DLSUs) at four different locations namely: Biratnagar, Hetauda, Pokhara and Butwal which are led by Senior Livestock/Veterinary Officers.

FIGURE 1: NLSIP PROJECT AREA



The project is being executed in 289 municipalities and rural municipalities of 28 districts covering five provinces (provinces number 1, 2, Bagmati, Gandaki & province number 5) of the

country, reaching to a population of 12.4 million (45% female). The project targeted primary beneficiaries are 200,000 people (45% female) who will be organized in 3,000 Producers' Organizations (POs) such as farmer groups and cooperatives.

1.2.1 Project Component

NLSIP has following four components:

Component-A: Strengthening Critical Regulatory and Institutional Capacity: This component has three sub-components: (i) policies and regulatory framework, (ii) institutional capacity strengthening, and (iii) establishment of a livestock management information system. These interventions are also expected to contribute to addressing climate change resilience building and mitigation objectives, by strengthening the institutional capacity of government agencies.

Component-B: Promoting Sector Innovation and Modernizing Service Delivery: This component will enhance livestock productivity and climate resilience. The component aims to develop the capacity of key stakeholders along the selected livestock supply chains to develop, disseminate, and adopt best practices. This component will also promote citizen engagement to ensure a demand-driven approach to livestock services. It will also contribute to environmental sustainability and particularly greenhouse gas (GHG) emission reduction through promoting climate-smart technology and practices to help achieve efficiency and increases in animal production, for example, through balanced animal nutrition, reduction in disease incidence and genetic improvement of animal stock.

Component includes the following three sub-components: (i) support to producer's organizations including farmers' groups and cooperatives (ii) modernizing animal health and breeding services, and (iii) strengthening farmers' training and extension services.

Component-C: Promoting Inclusive Value Chains for Selected Livestock Commodities: This component seeks to develop effective productive alliances in selected livestock value chains and contribute to import substitution (for dairy products and goat meat) and export promotion (for *Chyangra* Pashmina) by improving the productivity and value addition. The component directly contributes to the project development objectives (PDO) by supporting the integration of smallholder livestock producers in the value chains. The component focuses on improving smallholders' access to market and on strengthening the backward and forward linkages among value chain actors. The activities under this component target direct and indirect support to the actors involved in production, regulation and service delivery (including quality assurance and food safety), processing and marketing in the selected value chains, involving farmer groups, cooperatives, local service providers, traders, processors, and other private sector actors.

The component includes two subcomponents: (i) development of productive partnerships (productive alliance, dialogue platform, entrepreneurial skills development, and bankable business plans), and (ii) financing livestock value chains through a matching grant (MG) scheme, linking the POs/entrepreneurs with financing institutions and investments in market

infrastructure and benefiting from accredited training partners in Nepal to deliver customized training and relevant business advisory services.

Component-D: Project Management and Knowledge Generation: This component of the project supports all aspects of project management and implementation, including (i) strategic and operational planning, execution, and monitoring and evaluation (M&E) of project activities and the appropriate use and optimization of project resources; (ii) compliance to safeguard policies; (iii) implementation of public awareness and outreach campaigns; (iv) verification and reporting on project execution and impacts thereof; (v) establishment, operation and management of the project management unit (PMU) and decentralized livestock support units (DLSUs); and (vi) the preparation and commissioning of project-related studies, workshops, and seminars, generating knowledge derived from the project implementation experiences, including but not limited to mainstreaming climate-smart livestock practices, to be communicated to various public and private sector entities on time and effectively.

1.2.2 Productive Alliances and Promotion of Inclusive Value Chains

1.2.2.1 Development of Productive Alliance

The project, under component- C plans to support about 500 selected productive alliance (PA) based agro-enterprises of which 225 will be dairy enterprises (NLSIP 2020) through production and post-production value chain support. Salvo, C.P.D, (2010) defines the PA as a formal agreement between a group of organized farmers and a buyer, for the provision of a certain good, in a specified quantity and quality” (Salvo C P D 2010).

Thus, the PA will strengthen the linkages among the producers, buyers, and the project through the provision of inputs, productive investments, technical assistance, marketing and business development services. Furthermore, the horizontal alliance of smallholder producers such as groups and cooperatives will strengthen the alliance members and provide them an opportunity to opt for collective marketing while the vertical alliance between the POs (including groups and cooperatives) and the buyers will ensure fair price and market for the produce. The PA is also expected to help the project in making the project investment more effective and deliver other technical and business development services more efficiently.

1.2.2.2 Promotion of Inclusive Value Chains

The project plans to support the eligible business plans on selected livestock value chains, developed on productive alliance with 50% matching grant (maximum Rs 10,000,000) on the total investment. The remaining part of the investment will be from the contribution of the POs (minimum 20 % in cash), and loan (minimum 30% or more) from participating Banks and Financial Institutions (BFIs).

NLSIP investment support will be available to competitive eligible applicants, who will go through the process of submitting Project Concept Note (PCN) and Full Project Proposal (FPP) screening, including the field verifications. Since NLSIP will follow an output-based

financing, the grant installments will be released only upon field appraisal/verification of the performance against already agreed milestones. For example, the first installment grant transfer to the bank account of the Grant Recipient (GR) will be made subject to at least 50% investment by the GR in meeting agreed milestones from their equity and/or goods purchased on credit. As NLSIP will not provide grant to the proposals falling under negative list from the perspective of environment and social safeguards, it would be mandatory that the GR fully complies with environmental code of practices (ECOP) and bears all costs of implementing environment and social safeguard measures recommended by the project during the sub-project implementation.

The project has prepared a Grant Operating Guidelines to facilitate grant management where conditions for awarding grant are clearly explained. The project will follow these guidelines in implementing activities planned under component C

1.2.2.3 Dairy Value Chain

Dairy in Nepal is the most important sub-sector in livestock sector, which according to the MoALD (2019) contributes nearly 2/3rd (63%) of the livestock gross domestic product (LGDP) and 8% to the national agricultural gross domestic product (AGDP). There are about 500,000 milk producer farmers and about 1,800 dairy cooperatives involved in dairy sector in the country, generating employment and income in rural Nepal. The investment in dairy sector is said to be around Rs.30,000 million and the sub-sector provides direct employment to more than 20 thousand persons (NDDB 2017). The dairy sub-sector not only provides household nutrition but also ensures flow of money (Rs. 60 million daily) from urban consumers to rural producers (NDDB 2016)

Few of the major problems the dairy value chain actors are facing are:

- I. Majority of the Nepalese dairy industries are small and they operate in limited area only.
- II. Many districts and milk production areas in the hills and mountains are not connected to the national milk grid yet, and only 15-17% milk produced by the farmers is estimated to be reaching to the market through formal channels.
- III. There is seasonal fluctuation in milk production and farmers cannot sell the milk they produce during flush season (winter) while the industries do not get sufficient milk to run their industries during dry season (summer).
- IV. Often the milk processors and consumers in urban area do not get milk in sufficient quantity while the rural producers in many areas have no opportunity to sell their produce.

2. OBJECTIVES

Following are the objectives of this assignment:

1. To collect information on the existing buyers of milk and milk products in the country with focus on the buyers within the project districts.
2. To prepare an inventory of probable buyers to be linked to the producers supported by the project under component C engaged in dairy value chain to help form productive alliance.

3. METHODOLOGIES

Methodologies followed to complete this assignment include:

- 1. Desk Study-** review of the documents such as Dairy Sector Study of Nepal (FAO), Ten Year Dairy Development Plan (NDDB), Milk Marketing Strategy Study in Nepal (NEPC) etc. and publications of the public and private sector organizations, surfing through internet and websites etc.
- 2. Primary Data-** collected by Social Mobilizers (SMs) from the field and collected by specialists during their visits to markets, dairy/sweet shops, cooperatives, private dairy industries, DDC milk supply schemes, Veterinary Hospital & Livestock Service Expert Center (VH&LESC) and provincial Directorates of Animal Husbandry and Fishery Development.
- 3. Secondary data-** collected through publications of other organizations such as MoALD, Department of Livestock Services (DLS) and NDDB and personal communication with officials of Central Dairy Cooperative Association Limited Nepal (CDCAN), Nepal Dairy Association (NDA), Dairy Industries Association (DIA) and DDC.
- 4. Buyers' Roaster-** prepared by the DLSUs through a public call in newspapers few months back.

4. LIMITATIONS

1. The study is based on available limited data as previous publications were hardly available in the government offices, established recently after the state restructuring.
2. This study was completed during the nationwide lockdown (starting 23 March, 2020) declared after the outbreak of COVID -19 and it was not possible to visit markets and individual market players personally and interview them due to the ban on travel.

So data on milk production and marketing was collected from secondary sources and key informants were interviewed through telephone.

5. DAIRY SECTOR IN NEPAL

5.1 Background

Agriculture is the backbone of Nepalese national economy. The contribution of agricultural sector to national GDP is estimated to be 27 percent (CBS 2019), while the contribution of livestock sector in Agricultural GDP (AGDP) is around 28%. Dairy is the most important sub-sector in

livestock sector which contributes nearly 2/3rd (63%) of the livestock gross domestic product (LGDP) and 8% in AGDP (MoALD 2019). There are about 500,000 milk producer farmers and 1,800 dairy cooperatives involved in dairy sector in the country, generating employment and income in rural Nepal. The investment in dairy sector is said to be around Rs 30,000 million and the sub-sector provides direct employment to 20 thousand persons (NDDB 2017). The dairy sub-sector not only provides household nutrition but also ensures flow of money (Rs 60 million daily) from urban consumers to rural producers (NDDB 2016).

The dairy sector in Nepal, subsistence till few years back, is emerging as a semi commercial/commercial entity gradually. The history of dairy sector commercialization in Nepal is not that old. It is believed to have begun with the establishment of Yak Cheese production Centre in Lantang, Rasuwa with FAO support way back in 1952, followed by the establishment of a milk processing facility at Tusal, Kavre and formation of Dairy Development Commission in 1955 and Dairy Development Corporation in 1969 (NDDB 1990).

The involvement of private sector in dairy business in Nepal started only in early seventies. The DDC, owned by the government is the largest dairy industry with daily processing capacity of 225,000 liter while there are 4 other large private dairies with daily processing capacity of more than 50,000 liter and more than 670 small/medium and cottage dairies handling 500 to 50,000 liter of milk daily (NDDB, 2016)¹. The milk production in the country, according to the MoALD (2019) stands around 6,027 MT per day, of which only 15-17% is being marketed through formal sector and remaining is consumed at household level (Poudel 2019). On the other hand, the large milk processing plants are running in under capacity as they are facing daily shortage of about 400,000 liter of milk (Poudel 2019). According to Inlogas (2019) only 50.44% installed capacity is being utilized by the dairy industries in Nepal.

The cattle and buffaloes are the important dairy animals in the Terai and hills of Nepal. The Holstein Friesian (HF), Jersey and cross bred cattle and Murrah and cross bred buffaloes are the predominant dairy animal breeds. The milk is produced mostly in small family farms scattered all over the peri-urban and rural areas which increases both time and cost of milk collection.

5.2 Milk Production and Marketing

5.2.1 Dairy Animal Population

The number of milking cows and buffaloes in the country is estimated to be 1.04 and 1.53 million respectively (MoALD 2019). Of the total, about 15% cattle and about 35% buffaloes are estimated to be of improved breed (pure exotic or crosses of exotic breeds). Geographically, the Terai has the highest number of both cattle and buffalo (45% cattle and 48% buffalo) followed by the hills (43.5% cattle and 45.5% buffalo), while the mountain region has 11.5% cattle and 6.5% buffalo ((MoALD 2019).

5.2.2 Milk Production and Productivity

The per lactation milk production of native breeds of cows and buffaloes in Nepal is just 450 liters and 850 liters respectively, whereas the crossbred (F1) cows and buffalo produce 1650 and 1500 liter of milk per lactation (Poudel 2020). According to the MoALD (2019) the total milk production in the country is 2.2 million MT of which 40% comes from the cattle and 60% from the buffaloes

¹ Based on the quantity of the milk the dairies handle daily, the National Dairy Development Board in 2004 has classified the dairies as i) Cottage (handling less than 1000 liters), ii) Small (handling 1000-10000 liters) iii) Medium (handling 10,000-30000 liters and iv) Large (handling more than 30000 liters).

5.2.3 Milk Production and Marketing Systems

Following is the description of the existing milk production and marketing system in Nepal. A figure of the existing system developed by Pradhan et.al (2020) is presented in Fig-2.

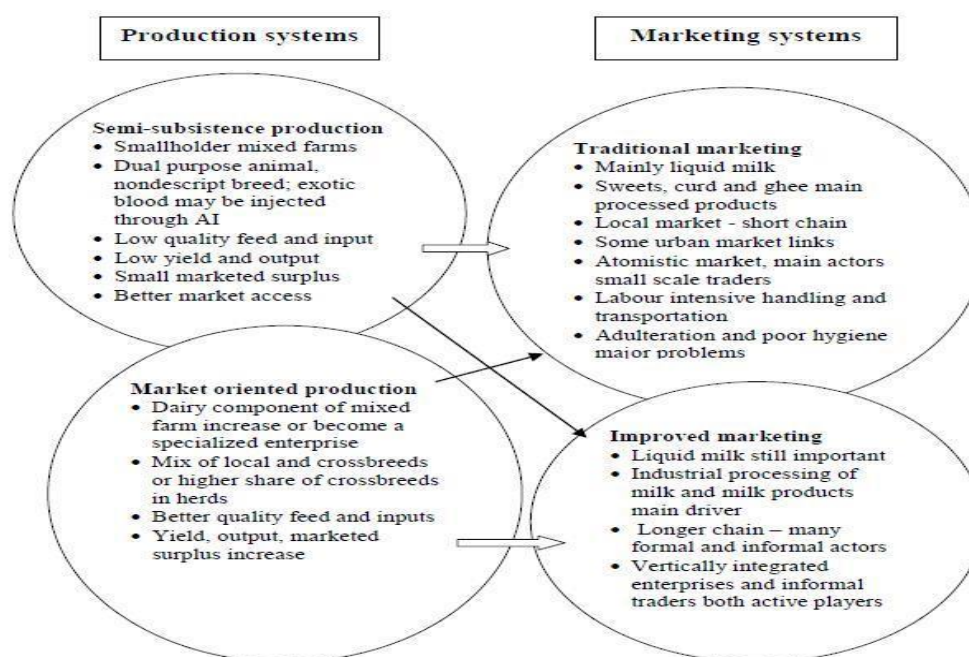
5.2.3.1 Production System

There exist mainly two dairy production systems in the country:

(a) Semi-subsistence / Traditional Subsistence Production: consisting of following characteristics-

- Largely in rural areas and smallholder mixed farms (1-3 milk animals).
- Mostly dairy animals are indigenous / non-descript breed, some improvement has been seen through cross breeding with improved cross bred. .
- Utilize natural resources – grazing.
- Minimal external inputs and minimum direct cost.
- Predominantly for house hold consumption.
- Low yield and surplus milk sold directly to consumer.

FIGURE 2: MILK PRODUCTION AND MARKETING SYSTEM



(Source: Pradhan et.al 2020)

(b) Commercial Production: The market oriented production system consisting of following characteristics-

- Mostly prevalent in peri-urban areas
- Mostly medium to large farms with mixed/specialized intensive farming system.
- Mostly crossbred animals in the herd.
- Purchase of compound feeds or ingredients

- Inputs / services and quality of feed is better.
- Farmers mostly involved in MPCs for marketing of milk.
- High milk yield and high opportunity to sell milk with good price.

5.2.3.2 Marketing System

Of the total milk produced in Nepal, around 50% is estimated as being consumed at household level while 33-35% is marketed as raw milk through informal markets and only 15-17% through formal market (Pradhan et.al 2020). The DDC with 38% of the market share, is the major market player, while the share of private dairies and dairy cooperatives in formal sector milk marketing is 57% and 5% respectively (NDDB 2017).

Similar to production system there exist two milk marketing systems in the country:

(a) Traditional Marketing: consisting of following characteristics-

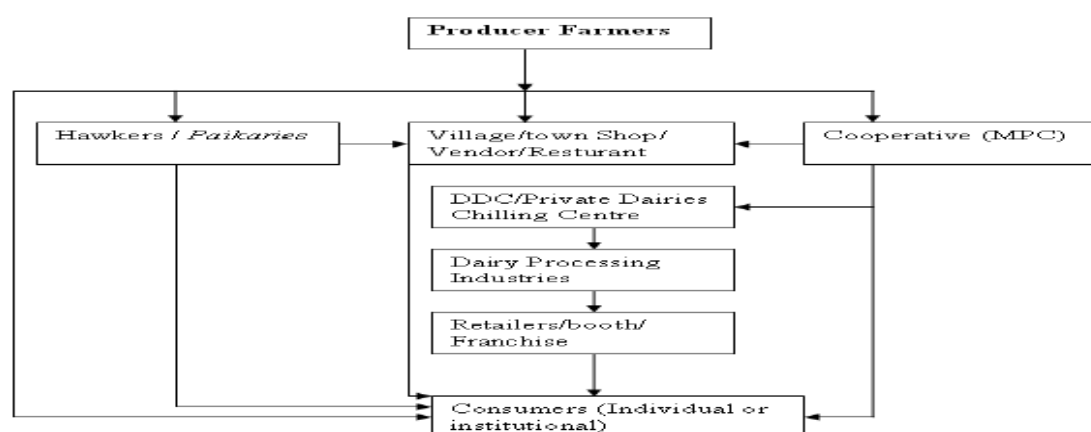
- Mainly whole milk rather than reconstituted processed fluid milk and products such as Curd, Paneer, Khowa, Chhurpi.
- Shorter marketing chain (farmers to consumers) and mainly local markets and also linked with some urban markets.
- Transportation and handling cost is high.
- Lack of quality control and the adulteration of milk with dirt particles –water.

(b) Improved Marketing: which consists of following characteristics-

- Processed liquid milk important product and occupies around 77% share of total marketed milk.
- Verities of processed milk products.
- Better quality control/quality assurance of milk and milk products.
- Formal and informal both actors are involved and the marketing chain is long.
- Enterprises and informal traders both are active market players.

The figure-3 below presents the existing milk marketing channel in Nepal:

FIGURE 3: MILK MARKETING CHANNEL IN NEPAL



(Source: NEPC 2017).

5.2.4 Major Actors in Milk Marketing

5.2.4.1 Dairy Cooperatives

The history of the dairying in Nepal dates back to first five-year plan (1956-1961) period when first dairy was established at Tusal village in Kavre. The DDC, a government owned corporation and the only milk processor in the country then, started organizing milk producer farmers into Milk Producers' Associations (MPAs) in 1981 (FAO 2010). These MPAs were converted into Milk Producers' Cooperative Societies (MPCS) with legal entity later. These MPCS are governed by Cooperative Act, 1992. Like the MPAs, majority of these MPCSs operate as single purpose primary cooperatives. Currently there are 1652 MPCSs registered in 63 districts. The main function of MPCSs is to support the member farmers in milk production and collective marketing of the produced milk. The dairy cooperatives enter into agreement with the buyers (mostly the DDC and occasionally private dairies) and supply milk to as per conditions of the agreement. The dairy cooperatives are the POs at community level and they mostly collect milk from the member farmers, test it for quality, transport it to the nearest milk chilling centers/milk processing plants of DDC and/or private dairies; receive payment for the milk from them; and distribute the payment to the individual milk supplier farmers. In addition to the collective milk marketing, some of the MPCSs have also started milk chilling centers, and milk processing plants producing various dairy products. According to the CDCAN there are 687 milk chilling centers and 25 milk processing plants currently in operation, managed by the cooperatives. Thus, the MPCSs as POs are one of the major actors in the dairy value chain which are handling about 900 thousand liter of milk daily (CDCAN, 2019).

These dairy cooperatives are further organized into District Milk Producers' Cooperative Unions (DMPCUs) at the district level and Central Dairy Cooperative Association Limited Nepal (CDCAN) at the national level. According to the information provided by CDCAN officials, presently there are 63 DMPCUs (CDCAN 2019) supporting rural farmers organized into the MPCs to increase milk production at the farm level and processing at the district level. The national level Central Dairy Cooperative Association Limited Nepal (CDCAN) was established in 1993 with an aim to support the milk producers and to contribute to make the country self-reliant in milk. The CDCAN represents the interest of member organizations and undertakes policy advocacy also at the central level.

5.2.4.2 Private Dairy Industries

The involvement of the private sector in dairy business started in 1970s with establishment of small-scale milk processing plant in Kathmandu. Now, there are many private dairies (including owned by the cooperatives) of various scale in the country. According to the DIA there are 4 large scale, 78 medium and small scale and more than 600 cottage scale dairies currently in operation in the country (DIA, 2019). These privately owned dairies produce pasteurized milk and milk products and hold 47% of formal milk market share. Thus, the private dairies are very important buyers of the dairy value chain.

The private dairy entrepreneurs are organized into two associations namely i) Nepal Dairy Association (NDA) formed in 1999, and Dairy Industries Association (DIA) formed in 2008. The NDA has 280 small, medium, and large scale dairy industries scattered throughout the country as its members, while the DIA has 37 large and medium scale dairy industries as its members. The main objectives of these associations is also to work for common causes of the sector.

5.2.4.3 Dairy Development Corporation (DDC)

DDC is a public sector entity, established in 1969, with an aim to ensure fair price and a guaranteed market to the milk produced by the thousands of the rural milk producers and to develop an organized marketing system for milk and milk products in urban areas. The DDC, with annual

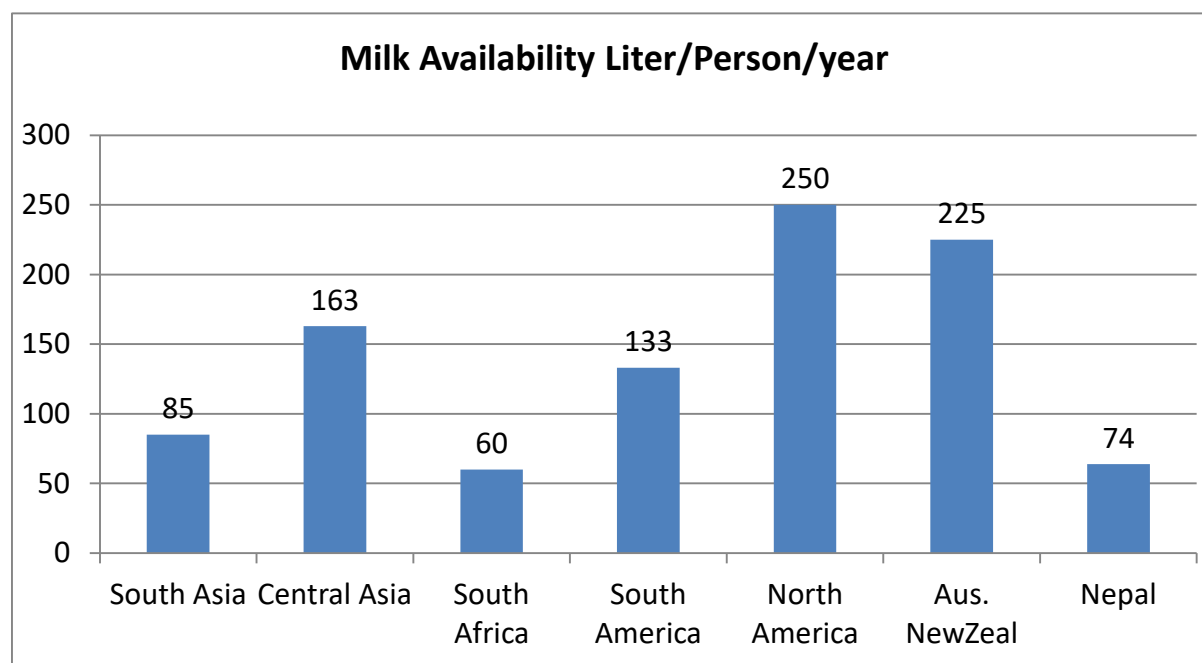
collection of 60 million liters of milk and 38% share of the country's formal milk market is the largest dairy and most important buyer of milk in the country. Presently, DDC operates 8 milk supply schemes across the country and a Milk Products Production and Supply Scheme (MPSS) in Kathmandu. The DDC has an established national milk grid where milk is collected from more than 200000 farmers in 45 districts through 66 milk chilling centers (MCCs) and about 1200 MPCSSs (DDC 2020).

6. DEMAND AND SUPPLY OF MILK AND MILK PRODUCTS

To predict demand for animal products such as milk and meat is difficult as the demand also depends on income of the consumers. According to the economic survey (2019/20) per-capita availability of milk in the country was 74 liters which has increased by 4.31% in last four years 2016-2020. This increase in percentage growth in milk consumption is expected to increase further if the increasing urban population and income of the people in the country is considered. Furthermore, following facts and arguments also indicate that there will be increase in demand for milk in the country and there will be market for additional milk if produced.

1. **Milk availability is less than recommended quantity:** The recommended per-capita daily requirement of milk for an individual is 250 ml (FAO 2003). According to the MoALD latest data (annual production of 2.2 million MT milk), the current per-capita availability of milk in Nepal is 200 ml/day. Thus, the country needs to produce nearly 20% additional milk (0.44 million MT.) per year in order to meet the recommended requirement and become self-reliant in milk. According to the available data, the current per capita availability of milk in Nepal is 74 lit, while the same is 250 liters in North America and 85 liters in South Asia (Fig-4).

FIGURE 4: AVAILABILITY OF MILK



(Source: Pradhan et.al 2020).

2. **Increase in demand exceeds production:** Different studies show annual demand of milk in Nepal increasing by 8%, whereas the milk production is increasing at the rate of 3-4% only. Realizing this fact, the ADS, the guiding document for agricultural sector has

given second top priority to the dairy sector and projects more than 6% annual growth in milk sub-sector (MoAD 2014).

3. **Opportunity to substitute the import:** Among dairy products, Nepal in FY 2019/20 has exported ghee worth Rs 83 million to India, while import of the dairy products including baby foods, during the same period is Rs 6676 million (Economic Survey 2020). Thus, there is opportunity to produce dairy products and substitute import.
4. **Industries running in under capacity:** Poudel (2019) found the large milk processing plants facing daily shortage of about 400,000 liter of milk and running in under capacity while Inlogas (2019) reported dairy industries in Nepal utilizing only 50.44% of their installed capacity. So, there is market available in the country if milk is produced and processed.

In this study also the authors found the dairy industries in the project districts using only 58.46% of the installed capacity (Table-1) details of which is presented in Annex-1.

TABLE 1: CAPACITY UTILIZATION OF DAIRIES

S.N.	Clusters	Number of dairies	Installed capacity (lit /day)	Milk processed (lit /day)	Capacity utilized (%)
1	Pokhara	28	235,000	168,700	71.78
2	Butwal	35	188,500	121,800	64.61
3	Biratnagar	31	270,200	176,700	65.39
4	Hetauda	73	919,000	473,300	51.50
Total		167	16,12,700	9,40,500	58.31

7. MILK PRODUCTION AND MARKETING IN PROJECT DISTRICTS

7.1 Milk Production in Project Districts

The NLSIP is working in selected 289 municipalities in 28 districts across five provinces of the country. An attempt was made to compile municipal level data on dairy animal numbers and milk production. However, only national and district level data was available. Since the municipalities are recently established, they are currently preparing their profiles and it is likely to take few more months before municipal level agricultural data would be available in public domain. However, the milking cattle/buffalo population and milk production in 28 districts in the project area compiled from secondary sources is presented in Table-1 below.

Total milk production in the project area in the year 2017/18 stands at 245621 MT with 8772 MT as average production of the 28 project district at (Table-2). The Table-2 also reveals Kavre (91,342 MT), Morang (76,066 MT) and Jhapa (65,325 MT) districts as the top three milk producing project districts, while Kavre (71,220 MT) produces highest quantity of buffalo milk followed by Syanja (45,440 MT). Similarly, Morang (38,964 MT) produces the highest quantity of cow milk followed by Jhapa (31,215 MT) district.

TABLE 2: MILKING ANIMAL POPULATION AND MILK PRODUCTION IN PROJECT DISTRICTS

Province	District	Milking Cows (No)	Milking Buff (No)	Cow Milk	Buffalo Milk (MT)	Total Milk (MT)
Province-1	Panchthar	12,728	12,720	9,855	10,918	20,773
Province-1	Ilam	22,995	7,901	22,180	13,575	35,755
Province-1	Dhankuta	13,271	5,691	9,253	5,630	14,883
Province-1	Udayapur	17,230	27,562	12,631	23,185	35,816
Province-1	Jhapa	33,952	19,815	31,215	34,110	65,325
Province-1	Morang	58,513	27,639	38,964	37,102	76,066
Province-1	Sunsari	41,532	45,579	20,451	29,756	50,207
	Sub-total	200,221	146,907	144,549	154,276	298,825
Province-2	Saptari	33,422	52,186	18,932	28,125	47,057
Province-2	Siraha	12,891	52,725	9,541	27,899	37,440
Province-2	Dhanusha	20,225	40,712	15,422	23,969	39,391
	Sub-total	66,538	145,623	43,895	79,993	123,888
Bagmati	Kavre	22,415	37,875	20,122	71,220	91,342
Bagmati	Kathmandu	6,625	8,577	5,056	11,287	16,343
Bagmati	Makawanpur	17,133	28,952	14,158	31,963	46,121
Bagmati	Chitawan	12,830	20,355	18,621	33,874	52,495
	Sub-total	59,003	95,759	57,957	148,344	206,301
Gandaki	Manang	445	-	261	-	261
Gandaki	Mustang	1,092	26	522	38	560
Gandaki	Tanahu	14,108	32,841	12,130	37,450	49,580
Gandaki	Kaski	6,102	44,336	10,990	41,203	52,193
Gandaki	Syanja	5,644	23,777	7,750	45,440	53,190
Gandaki	Myagdi	5,572	8,917	3,602	10,250	13,852
Gandaki	Nawalpur	7,145	14,225	8,891	16,547	25,438
	Sub-total	40,108	124,122	44,146	150,928	195,074
Province-5	Palpa	10,922	24,525	8,120	24,100	32,220
Province-5	Gulmi	6,319	14,511	5,617	15,810	21,427
Province-5	Arghakhanchi	6,411	27,114	4,512	27,002	31,514
Province-5	Parasi	12,113	17,021	13,155	18,222	31,377
Province-5	Rupandehi	13,995	36,201	14,958	32,146	47,104

Province	District	Milking Cows (No)	Milking Buff (No)	Cow Milk	Buffalo Milk (MT)	Total Milk (MT)
Province-5	Kapilvastu	21,438	45,254	11,624	28,458	40,082
Province-5	Bardiya	16,488	31,895	12,680	29,217	41,897
	Sub-total	87,686	196,521	70,666	174,955	245,621
Total 28 Districts		4,53,556	7,08,932	3,61,213	7,08,496	1,069,709

(Source: MoALD, 2019)

7. 2 Milk Buyers in Project Districts

The dairy farming is more commercialized in many of the NLSIP project districts such as Chitawan, Rupandehi, Morang, Makawanpur, Nawalparasi, Sunsari, Kavre etc while larger milk markets such as Kathmandu, Pokhara, Biratnagar etc also are in the project working area. So, there exist many dairy cooperatives and dairy industries operating in the project districts. These dairy cooperatives and industries, though differ in their function and capacity, are playing very important role in promotion of dairying in not only in the project districts but also in the country.

An attempt has been made to prepare an inventory of the major milk buyers operating in the project area. The available data on the milk buyers has been compiled and presented in Table-3 below while the details of the buyers is presented in Annex-1.

The Annex-1 contains details of the milk buyers on-

- 1) Name and contact of the probable buyers handling more than 1,000 liters daily.
- 2) Buyers' installed milk handling capacity and their annual turnover.
- 3) Type of the buyers – producer/collectors (mostly cooperatives) or processors (private dairies and cooperatives).
- 4) Category: large (Processing capacity/handling more than 30,000 liter of milk/day), medium (Processing capacity/handling 10,000-30,000 liters/day) and small (Processing capacity/handling 1000-10,000 liters/day).

Presented in the Table-3 below is DLSU wise number of large, medium and small dairies and dairy cooperatives operating in the project districts.

TABLE 3: MILK BUYERS IN PROJECT DISTRICTS

SN	DLSU	Private Dairy Industries			Dairy Co-ops	Total	Remarks
		Small (1000-10,000 Lit/day)	Medium (> 10,000 - 30,000 Lit/day)	Large (>30,000 Lit/day)			
1	Biratnagar	11	3	2	15	31	Cottage Dairies are not included.
2	Hetauda	31	16	11	15	73	
3	Pokhara	10	3	1	14	28	
4	Butawal	15	1	1	18	35	
	Total	40	22	15	57	167	

8. CONCLUSION AND RECOMMENDATION

Seasonal fluctuation in production, low productivity, scattered production sites, and buyers' limited capacity are few characteristics of Nepalese dairy sector. Despite these limitations, the dairy sector in Nepal has made significant progress within a short time span and is providing income, nutrition and food security to thousands of rural households in Nepal.

Only small share of the total milk produced is being marketed through formal channels in the country, while larger share of the production is marketed either as unprocessed milk through vendors or consumed at household level as fluid milk or traditional milk products. This situation is expected to change in future as urban population and consumers' income, awareness and preferences are changing and demand for value added dairy products is increasing. This will have impact on the milk processing and dairy product marketing as well. Though there are many active actors in formal and informal dairy markets in the project districts, the government owned DDC seems to be the major player and main buyer of the milk. Equally important buyers are the other milk processors operating in urban areas and the dairy cooperatives who are playing vital role in linking rural producers to larger buyers and urban consumers.

Based on the study following recommendations can be made to ensure effective implementation of the project component C intervention:

- a) As the 8% annual increase in demand for milk in the country exceeds average 4% increase in annual milk production, there exists opportunity for production and marketing of additional milk.
- b) Though Nepal seems self-sufficient in fluid milk, the country is spending large amount of money to import various dairy products (export Rs 83 million and import Rs. 6676 million in FY 2018/19). So, there is opportunity to produce dairy products in the country and substitute the import.
- c) The dairy cooperatives are very important actors of milk marketing in Nepal. So, the milk producer farmers, if organized in cooperatives for collective production and marketing, will have better access to market for the milk they produce.
- d) The DDC, with its nationwide network is not only the largest, but also seems the most reliable buyer of milk in Nepal. So, milk marketing will be ensured if the dairy cooperatives are linked to the DDC or other large dairies.
- e) The 167 small, medium and large dairies under this study were found utilizing only 58.31% of their installed present capacity with 71.78% in Pokhara cluster followed by Biratnagar cluster (65.39%), Butawal cluster (64.61%) and Hetauda cluster (51.50%). Thus, significant investment is not required even if these dairies go for expansion of their business.
- f) The dairy cooperatives located in smaller markets or nearby towns or cities have better opportunity to expand their business by initiating dairy product diversification.
- g) Processing of milk around production areas locally and transporting the products (Khuwa, Paneer etc) to far-off larger markets to be marketed by large dairies, instead of transporting fluid milk will open marketing opportunity and also reduce marketing cost of the milk.
- h) Product diversification and branding along with promotional work in urban areas will increase overall demand for milk and milk products.

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ANNEXES

ANNEX 1: NAME LIST OF PROBABLE MILK BUYERS IN THE PROJECT DISTRICTS.

1.1. DLSU Pokhara Working Districts

SN	Name of the Milk Collector/Processor	Address/Contact	Type	Installed Capacity (lit/day)	Milk handled (lit/day)	Annual Quantity handled (lit)	Annual turnover (Rs)	Remark
1	Nag Danda Milk Coop.	Syangja	Producer /Collector	2000	1100	385000	21175000	Coop
2	Bhirkot Milk Coop	Syangja	Producer /Collector	2000	1000	350000	19250000	Coop
3	Tindobate Milk Udhyog	Galyang-8, Baradi	Producer /Collector	2000	1200	420,000	23100000	Small
4	Tulasi Bhanjyang Small Farmer Agri. Coop	Galyang-3	Producer /Collector	2500	1100	385000	21175000	Coop
5	Gausudar Milk Coop	Galyang-8 Syanja	Producer /Collector	1500	1000	350000	19250000	Coop
6	Model Small Farmer Agri. Coop	Waling-6, Syanja	Producer /Collector	6000	3500	1225000	67375000	Coop
7	S & S Dairy Udhyog	Pokhara-17	Processor	3000	1800	540000	39960000	Small
8	Naubise Milk Coop	Pokhara	Producer /Collector	2000	1000	360000	19800000	Coop
9	Saptagan-daki Milk Coop	Pokhara-7, Kaski	Producer /Collector	2000	1500	5250000	28875000	Coop
10	Nagdada Milk Coop	Annapurna-7, Kaski 9846185205 (Fanindra)	Producer /Collector	4000	2000	700000	38500000	Coop

11	Sujal Dairy	Pokhara, Kaski 061-520355	Processor	100,000	70,000	21000000	1554000000	Large
12	Fish Tail Dairy Pvt. Ltd.	Suresh Dhoju, Pokhara 061-530440 9856026344	Processor	11,000	7000	5500000	1813000000	Medium
13	Panthi Dairy	Pokhara, Resam Panthi 061-521723 9856020318	Processor	12000	9000	27000000	2331000000	Medium
14	Krishna Dairy	Pokhara, Suresh Shrestha 061-525709 /9856020975	Processor	11000	9000	27000000	2331000000	Medium
15	Lava-Kush Dairy	Pokhara, Ramchandra Baral 9856021632	Processor	5000	3000	1050000	57750000	Small
16	Asal Dairy	Pokhara,	Proces- sor	3000	1500	450000		
17	Bajagai Dairy	Leknath, Pokhara,	Proces- sor	4000	2000	600000		
18	PanG Dairy	Pokhara,	Processor	4000	2000	600000		
19	District Milk Coop	Kaski	Producer /Collector	5000	3000	1050000	57750000	
20	Himal Dairy	Sivahari Acharya Kaski 9856021545	Processor	2000	1200	360000	26640000	Small
21	Gauri Shankar Dairy	Shankar Baral 9856027063	Processor	2000	1000	300000	22200000	Small

22	Byas Dairy Udhog	Damauli, Tanahu 065-560195	Processor	2000	1000	300000	22200000	Small
23	Tanahu District Milk Coop.	Damauli,-11 Tanahu	Producer /Collector	50,000	45,000	14,75000	79650000	Coop.
24	Baradi Milk Coop.	Tanahu	Producer /Collector	3000	1500	525000	28075000	Coop.
25	Byas Milk Coop.	Damauli, Tanahu	Producer /Collector	2000	1000	350000	19250000	Coop.
26	Yam-paphaant Milk Coop	Tanahu	Producer /Collector	2500	1000	350000	19250000	Coop.
27	Gaidakot Milk Coop.	Nawalpur (Nawalparasi)	Producer /Collector	4000	1800	630000	34650000	Coop.
28	Navajyoti Milk Coop.	Nawalpur, (Nawalparasi) 9855059693	Producer /Collector	2000	1000	350000	19250000	Coop.
Total				2,35,000	1,68,700			

1.2. DLSU Butawal Working Districts

SN	Name of the Milk Collector/ Processor	Address/ Contact	Type	Installed capacity (lit/day)	Milk handled (lit/day)	Annual quantity handled (Lit)	Annual turnover (Rs)	Re- marks
1	N. K. Dairy Supplier	Gairahawa-3, Rupandehi	Processor	2500	1000	350000	18550000	Small
2	Lumbini Milk Supply Scheme, Dairy Dev. Corporation (DDC)	Butwal 9851013641 071-540543	Processor	3000 Lit. / hour	35000	1050000 0	766500000	Large
3	Lumbini Dairy Udhog	Tilotoma-3, Rupandehi Bikram Rijal 9857025335	Processor	25000	16000	4800000	350400000	Medium
4	Siddhartha Dairy	Rupandehi Krishna Bhattarai 9857046784	Processor	1500	1000	350000	13515000	Small
5	Gayatri Dairy	Rupandehi Kul Pd. Neupane 9857026481	Processor	2000	1100	270000	14310000	Small
6	District Milk Cooperative Federation	Rupandehi	Producer /Collector	3000	1500	525000	27825000	Coop.
7	Tikuligadh Milk Coop.	Tikuligadh, Rupandehi	Producer /Collector	3000	1000	350000	18550000	Coop.
8	Pandav Dairy Udhog	Butawal	Processor	3500	1500	450000	32850000	Small
9	Sivaganga Dairy	Devdaha, Rupandehi	Processor	7000	6000	1800000		
10	Pabitra Dairy	Rupandehi	Processor	6000	4000	1200000		
11	Galdha Samajik Mahila Cooperative Ltd.	Jhirubaas-5, Palpa	Producer /Collector	3000	1300	390000	28470000	Small
12	Jay Kisan Dairy	Palpa Muktiram Bhusal 9857060847	Processor	2500	1200	360000	26280000	Small

SN	Name of the Milk Collector/ Processor	Address/ Contact	Type	Installed capacity (lit/day)	Milk handled (lit/day)	Annual quantity handled (Lit)	Annual turnover (Rs)	Re- marks
13	Shree Dumre Milk Coop.	Masyam, Palpa	Producer /Collector	3000	1300	455000	24115000	Coop.
14	Himali Milk Coop.	Palpa 9847398421	Producer /Collector	2000	1100	385000	20405000	Coop.
15	Chandika Agri. Mul- tipurpose Coop	Rampur, Palpa 9847028456	Producer /Collector	3000	1000	350000	13515000	Coop.
16	Palpa Dairy	Tansen, Palpa 9857520465	Procesor	2500	1500	450000	32850000	Small
17	Bhairav Dairy	Palpa Rames Godar 9847099239	Processor	1500	1000	350000	13515000	Small
18	Maitri Dairy	Tamghaas, Gulmi, Navaraj Vusal 9857064833	Processor	3000	1500	450000	32850000	Small
19	Satyabati Dairy	Ridi, Gulmi Narayan Khanal 9857063166	Producer /Collector	3000	1300	390000	20670000	Small
20	Devasthan Milk Coop.	Jaisithok, Gulmi 9747039936	Producer /Collector	2000	1000	350000	18550000	Coop.
21	Pourakhi Milk Coop.	9857064117 Kharjyang, Gulmi	Producer /Collector	3000	1000	350000	18550000	Coop.
22	Sandhi-kharka Milk Coop.	Sandhikharka, Argakhanchi Chandra Banjade 9857063141	Producer /Collector	5000	2500	875000	46375000	Coop.

SN	Name of the Milk Collector/ Processor	Address/ Contact	Type	Installed capacity (lit/day)	Milk handled (lit/day)	Annual quantity handled (Lit)	Annual turnover (Rs)	Re- marks
23	Durgaphaant Milk Coop.	Argakhanchi, Krishna Ghimire 9840966591, 9840966591	Producer /Collector	3000	1100	385000	20405000	Coop.
24	Badganga Milk Coop.	Botgaun-14, Kapilvastu Keshab Kunwar 9857050432	Producer /Collector	6000	2000	700000	95400000	Coop.
25	Lumbini Dugdha Supply Aayojana	Chandrauta, Kapilbastu	Processor	5000	2500	750000	39750000	Small
26	Gahrau Kalika Mahila Milk Cooperative	Ahadod, Kapilvastu	Producer /Collector	2000	1000	350000	1 8550000	Coop.
27	Panchamirit Milk Coop.	Tillotama 6 Rupendehe 9857016760	Producer /Collector	2000	1000	400000	24000000	Coop.
28	Bihani Samajik Mahila Sahakari	Banganga- 2 Kpilbastu ,9867159415	Producer /Collector	2000	1500	1500	15440000	Coop.
29	Saljhandi Dugdha Sahakari	Sainamaina- 4 Rupendehe 9857072326	Producer /Collector	10000	4500	1300000	15000000	Coop.
30	Shivaganga Dairy Udhog	Devddaha 9, Rupendehe Hira KC 9857020134	Processor	15000	10000	1000000	50000000	Small
31	Sana Kisan Krisi Sahakari Sanstha	Butwal-15, Semlar ,Rupendehe, 9867881485	Producer /Collector	10000	5500	1000000	70000000	Coop
32	Bolbam Mahila Dugdha Utpadak Sahakari Sanstha	Sainamaina-1, Rupendehe Gita Ghimire 9857060297	Producer /Collector	2500	1200	400000	22000000	Coop

SN	Name of the Milk Collector/ Processor	Address/ Contact	Type	Installed capacity (lit/day)	Milk handled (lit/day)	Annual quantity handled (Lit)	Annual turnover (Rs)	Re-marks
33	Chandrodaya Multi-purpose Dugdha Utpaadak Sahakari Sanstha, Nawalparasi (Paschim)	Bardaght : 14 chaupatta Poorna Timilsina 9857080527	Producer /Collector	20,000	10000	2200000	116600000	Coop
34	Gyanodaya Dairy	Sunwol ,Nawal-parasi (Paschim)	Processor	5000	4000	1200000		Small
35	Bhagawati Dairy Utpadak Sahakari Sanstha, Bardiya	Badhayatal 7 Bardiya Indra Luitel 9848051443	Producer /Collector	20,000	8000	2400000	127200000	Coop
Total				1,88,500	1,21,800			

1.3. DLSU Biratnagar Working Districts

SN	Name of the Milk Collector/ Processor	Address/ Contact	Type	Installed Capacity (lit/day)	Milk Handled (lit/day)	Annual Quantity Handled (lit)	Annual Turnover (Rs)	Remarks
1	Jiban Bikas Dairy Product Pvt.	Biratnagar-1, Morang	Processor	2000	1200	360000	25560000	Small
2	Nobal Dairy Product	Bargachhi, Morang 021-534170	Processor	5000	3500	1050000	74550000	Small
3	Shreekrishna Gausadan Dairy	Biratnagar, Morang 021-525093	Processor	5000	2000	600000	42600000	Small
4	Kasturi Dairy	Salakpur, Morang 021-539720	Processor	2000	1000	300000	15300000	Small
5	Seetaula Dairy	Tankisirubari, Morang 021-527704	Processor	5000	2000	600000	42600000	Small
6	Kamadhenu Dairy Coop	Tarahara, Sunsari Tek pd Ojha 9852146005	Producer /Collector	20,000	17,000	595,0000	303450000	Coop.
7	Dharan Dairy Products	Industrial Zone Dharan 025-531175	Processor	3000	2000	600000	42600000	Small
8	Naya Kamdhenu Dairy	Itahari, Sunsari 025-580110	Processor	2000	2000	60000	42600000	Small
9	Ram-Janaki Dairy Udhog	Duhabi, Sunsari 025-540559	Processor	3000	1500	450000	22950000	Small
10	Anmol Agri. Coop.	Triyuga-2, Udayapur	Collector	10000	8000	2400000	122400000	Coop.

SN	Name of the Milk Collector/ Processor	Address/ Contact	Type	Installed Capacity (lit/day)	Milk Handled (lit/day)	Annual Quantity Handled (lit)	Annual Turnover (Rs)	Re- marks
11	Himali Agri. Coop.	Katari-5, Udayapur	Producer /Collector	15,000	10000	3500000	18500000	Coop.
12	Raanke Milk Cooperative	Pauwasartap, Panchthar Santiram Aacharya 9842746625	Producer /Collector	2000	1000	350000	17850000	Coop.
13	Laligurans Milk Coop.	Ranitaar, Panchthar Pratap Rai 9552681004	Producer /Collector	1200	1000	350000	17850000	Coop.
14	Pathivara Milk Coop.	Dhankuta-1 9852050385	Processor	20,000	12000	3600000	183600000	Coop.
15	Salleri Milk Coop.	Hatikharka, Dhankuta	Producer /Collector	2000	1000	350000	17850000	Coop.
16	Deaurali Milk Coop	Murtidhunga Dhankuta,	Producer /Collector	7000	2000	700000	35700000	Coop.
17	Dharmashala Milk Coop	Chunbang, Dhankuta	Producer /Collector	6000	2000	700000	35700000	Coop.
18	Amrit Milk Coop.	Surunga-6, Jhapa	Producer /Collector	10,000	4,000	1400000	71400000	Coop.
19	Ritika Dairy	Jhapa 9851144099	Processor	35,000	30000	9000000	45900000	Large
20	NMC Dairy Co. Ltd.	Mechi, Jhapa Shyam Mishra 9842082258	Processor	10,000	6000	1800000	127800000	Medium
21	Suryodaya Milk Coop.	Jhapa 9804998870	Producer /Collector	2000	1000	350000	17850000	C oop.

SN	Name of the Milk Collector/ Processor	Address/ Contact	Type	Installed Capacity (lit/day)	Milk Handled (lit/day)	Annual Quantity Handled (lit)	Annual Turnover (Rs)	Remarks
22	Saranamati Milk Coop.	Saranamati, Jhapa	Producer /Collector	7000	5000	1750000	99250000	Coop.
23	Nepal Milk Coop.	Topganchhi, Jhapa	Producer /Collector	5000	2000	700000	35700000	Coop.
24	Kachanjanga Dairy	Sakhejung, Ilam 9814040450	Processor	11,000	10000	30000000	15300000	Medium
25	Ilameli Dairy	Sakhejung, 9851063073	Producer /Collector	5000	4500	1350000	68850000	Small
26	Anmol Dairy	Pasupatinagar, Ilam 9742648772	Producer /Collector	2000	1000	300000	15300000	Small
27	Pandav Dairy	Bagkhor, Ilam 9842644073	Producer /Collector	2000	1000	350000	17850000	Small
28	Panchami Agri. Coop.	Pyang-7, Ilam	Producer /Collector	5000	2,000	700000	35700000	Coop.
29	District Milk Coop	Ilam	Producer /Collector	5000	2000	700000	35700000	Coop.
30	Rokse Cheese Udh-yog, DDC	Ilam 027-550042	Processor	11,000	4000	1200000	85200000	Medium
31	DDC, Biratnagar	Biratnagar 021-420236	Processor	5000 lit./Hr	35000	10500000	745500000	Large
Total				2,70,200	1,76,700			

1.4. DLSU Hetuda Working Districts

SN	Name of the Milk Collector/Processor	Address/ Contact	Type	Installed Capacity (lit/day)	Milk Handled (lit/day)	Annual Quantity Handled (lit)	Annual Turnover (Rs)	Remarks
1	Milan Dairy Pvt. Ltd.	Milan Kumar Singh Saptari-6 Rajbiraj 9852821900	Processor	11,000	3000	900000	64800000	Medium
2	Adarsha Multipurpose Milk Coop.	Mahuli, Saptari	Collector	5000	1500	525000	27300000	Coop.
3	Everest Milk Processing Center Pvt. Ltd.	Lahan-3, Siraha 033-561811	Processor	5000	2800	740000	53280000	Small
4	Krishna Balaram Dairy	Sukhapur, Siraha 033-561811	Processor	4000	1000	300000	21600000	Small
5	Milk Industry	Siraha	Processor	2000	1500	450000		
6	MA Bhawani Dairy	Dhangadi, Siraha	Processor	2000	1000	300000		
7	Siraha Dairy Centre	Siraha 033-520599	Collector	2000	1000	300000	21600000	Small
8	Ram Janaki Dairy	Janakpur-2, 9844027854	Processor	5000	2000	600000	43200000	Small
9	Radha Krishna Dairy	Dhanusa, 9819809568	Processor	2000	1000	300000	15600000	Small
10	Kanhaiya Dairy Industry	Dhanusadhaam 522734	Processor	5000	1800	540000	38880000	Small

SN	Name of the Milk Collector/Processor	Address/ Contact	Type	Installed Capacity (lit/day)	Milk Handled (lit/day)	Annual Quantity Handled (lit)	Annual Turnover (Rs)	Re- marks
11	Chitawan Dairy	Ratnanagar, Chitawan 560883	Processor	50,000	45,000	13500000	972000000	Large
12	Jaya Ganesh Dairy	Chitawan 560224	Processor	11000	3500	1050000	75600000	Medium
13	District Milk Coop.	Chitawan 523530	Collector	5000	2000	700000	36400000	Small
14	Manakamana Dairy Coop	Bharatpur 523530, 9855080829	Processor	3000	1600	480000	34560000	Coop.
15	Kalpana Dairy	Bharatpur 521400	Collector	3000	1500	450000	23400000	Small
16	Mahalaxmi Dairy	Kalyanpur, Chitawan 522555	Collector	3000	2000	600000	31200000	Small
17	Ganganagar Milk Coop.	Bharatpur-22, Chitawan	Producer /Collector	6000	5000	1750000	91000000	Coop.
18	Annapurna Milk Coop.	Bharatpur-6, Chitawan	Producer /Collector	10,000	8000	2800000	145600000	Coop.
19	Nandini Milk Coop.	Khairani-10, Chitawan	Producer /Collector	5000	3000	1050000	54600000	Coop.
20	Paban Dairy	Chitawan	Processor	5000	2000	600000	43200000	Small
21	Narayani Milk	Hetauda Arjun Pd Neupane 9855022473	Collector	15000	3500	1050000	54600000	Medium

SN	Name of the Milk Collector/Processor	Address/ Contact	Type	Installed Capacity (lit/day)	Milk Handled (lit/day)	Annual Quantity Handled (lit)	Annual Turnover (Rs)	Remarks
22	Hetauda Dairy Udh-yog	Basamadi, Hetauda, Surendra Sah 985509398	Producer /Collector	3000	1000	300000	15600000	Small
23	Hetauda Dairy Pvt. Ltd.	Industrial Zone Hetauda Prashanta Ghimire 9802070501	Processor	31000	10,000	3000000	216000000	Large
24	Suva Dairy	Hetauda	Processor	3000	2000	600000	43200000	Small
25	Gokul Dairy	Hetauda	Processor	3000	1500	450000		Small
26	Gyatri Dairy	Hetauda	Processor	3000	2000	600000	43200000	Small
27	District Milk Coop.9(Federation of 53 coops of the district) Hetauda	Basu Dev Adhikari (9855069776) Narayan Dekota (9802070501)	Producer /Collector	50000	35,000	10500000	546000000	.Coop.
28	Aadhunik Dairy Pvt. Ltd.	Nayabazar Kathmandu Bisoraj Basnet 9851024538	Processor	20,000	12,000	3600000	259200000	Medium
29	Puspa Dairy Udh-yog	Balaju, KTM Pusparaj Basnet 9851040572	Processor	20000	11,000	3300000	237600000	Medium
30	Kathmandu Dairy Pvt. Ltd.	Babarmal KTM Pradip Mharjan 9851035447	Processor	15000	9,000	2700000	140400000	Medium

SN	Name of the Milk Collector/Processor	Address/ Contact	Type	Installed Capacity (lit/day)	Milk Handled (lit/day)	Annual Quantity Handled (lit)	Annual Turnover (Rs)	Re- marks
31	Bhaktapur Dairy Pvt. Ltd.	Industrial Zone Bhaktapur Pusparam Sainju 9851035177	Processor	11000	4500	1350000	97200000	Medium
32	Kharipati Dairy Pvt. Ltd.	Changu-8 Bhaktapur Vishworam Khadka 9851045562	Processor	15000	3000	900000	64800000	Medium
33	Nepal Dairy Pvt. Ltd.	Lalitpur Araniko Rajbhandari 9851040572	Processor	50000	20000	6000000	432000000	Large
34	Rajdhani Dairy Pvt. Ltd.	Patan Industrial Zone Raj Kumar Dahal 9851073098	Processor	31000	12000	3600000	259200000	Large
35	Himalayan Dairy Pvt. Ltd.	Lagankhel Lalitpur Raj Bhai Khadki 9851021910	Processor	31000	15,000	4500000	324000000	Large
36	Shreeram Dairy Farm	Sanepa, Lalitpur Raj Kumar Dahal 9851008372	Processor	15000	7000	2100000	151200000	Medium
37	Laxmi Dairy	(Harihar Tandukar) Kopundol, Lalitpur 9851068202	processor	15000	7000	2100000	151200000	Medium
38	Tulsa Dairy Pvt. Ltd.	Mulpani-KTM, Ramchandra Thapa 9851041949	processor	11000	3000	900000	64800000	Medium
39	Sitaram Gokul Dairy	Kathmandu, Sumit Kedia 9851034781	Processor	100,000	40000	12000000	864000000	Large

SN	Name of the Milk Collector/Processor	Address/ Contact	Type	Installed Capacity (lit/day)	Milk Handled (lit/day)	Annual Quantity Handled (lit)	Annual Turnover (Rs)	Re- marks
40	Integrated Dairy & Agro Products Ltd.	Subagaun, Panauti Kavre, Amit Agrawal 9802923166	Processor	35000	22,000	6600000	475200000	Large
41	H D Dairy	Kathmandu,	Processor	5000	4,000	1200000		Small
42	Prasidda prasanta Diry	Kathmandu,	Processor	4000	3,000	900000		Small
43	Dhamala Dairy	Kathmandu, Ghate- kulo	Processor	5000	4,000	1200000		Small
44	Ugrchandi Dairy	Kathmandu,	Processor	3000	1200	360000		Small
45	Kritika Dairy & sweet shop	Kathmandu,	Processor	3000	2000	600000		Small
46	Palanchock Dairy	Kathmandu,	Processor	3000	1500	300000		Small
47	Anup(Royal) Dairy	Kathmandu,	Processor	3000	1500	300000		Small
48	Ujjal Dairy	Kathmandu,	Processor	3000	2000	600000		Small
49	Parasi Devi Dairy	Jorpati, Kathmandu,	Processor	6000	4000	120000		Small
50	Prasidda Prasanta Dairy	Kathmandu,	Processor	6000	3000	90000		Small
51	Alisaj Dairy	Banasthali, Kath- mandu,	Processor	5000	2500	750000		Small
52	Bindabasini Dairy	Budanilkantha, Kath- mandu,	Processor	5000	2500	750000		Small
53	Sangam Dairy	Kotesor, Kathmandu,	Processor	4000	2500	750000		Small
54	Jays Shree Krishna Dairy	Panchakhal Kavre Radaha Krishna Sapkota 9851079454	Processor	35000	20,000	6000000	432000000	Large
55	Umadevi Milk Coop.	Kunta, Kavre Binod Poudel 9741246223	Producer /Collector	5000	2000	700000	36400000	Coop.

SN	Name of the Milk Collector/Processor	Address/ Contact	Type	Installed Capacity (lit/day)	Milk Handled (lit/day)	Annual Quantity Handled (lit)	Annual Turnover (Rs)	Re-marks
56	Ranitaar Milk Coop.	Madandeupur-7 Kunta, Kavre Singh Tiwari 9851159262	Producer /Collector	5000	2000	700000	36400000	Coop.
57	Devi Panchakrishana Milk Coop.	Madandeupur-8 Kunta, Kavre Devendra Tiwari 9851070519	Producer /Collector	2000	1000	350000	18200000	Coop.
58	Thuldibesi Milk Coop.	Madandeupur-12 Jyamdi, Kavre Sivaram Parajuli	Producer /Collector	3000	1500	525000	27300000	Coop.
59	Sipaghaat Milk Coop.	Madandeupur-6 Sipaghat, Kavre Amda Dhakal 9860840141	Producer /Collector	6000	2000	700000	36400000	Coop.
60	Setidevi Milk Coop	Rabiopi, Dhulikhel-2, Kavre Hariram Dhital 9849841777	Producer /Collector	6000	3500	1225000	63700000	Coop.
61	Deurali Milk Coop.	Kavre Siva Koirala 9841109082	Producer /Collector	3000	1500	525000	27300000	Coop.
62	Rayale Milk Coop.	Rayale, Panauti, Kavre 9849690204	Producer /Collector	3000	1000	350000	18200000	Coop.
63	Kalika Milk Coop.	Methinkot, Namobudha, Kavre Narayan Badal 9841271954	Producer /Collector	3000	1500	525000	27300000	Coop.

SN	Name of the Milk Collector/Processor	Address/ Contact	Type	Installed Capacity (lit/day)	Milk Handled (lit/day)	Annual Quantity Handled (lit)	Annual Turnover (Rs)	Re- marks
64	B. P. Dairy	Panauti-5 Bisnu Lamsal 9851107681	Processor	25000	10000	3000000	216000000	Medium
65	Suvaramba Dairy & Agro Vet Research Centre	Banepa-Nalaroad Raghunath Ghimire	Processor	35000	15000	4500000	324000000	Large
66	Himalayan Dairy & Agro Vet Research Centre.	Kusadevi, Panuti-2 Rabindra P Humagain 9851018261	Processor	12000	7600	2280000	164160000	Medium
67	Sarbahitaisi Dairy	Banepa, Kavre 011-661921	Processor	2000	1000	300000	21600000	Small
68	D.D.C., Janakpur	MSS, Janakpur 041-560116	Processor	2000 lit./hour (Plant capacity)	3000	900000	64800000	Medium
69	DDC,Hetauda	MSS Hetauda Hetauda 057-412812	processor	5000 lit./hour (Plant capacity)	25,000	7500000	540000000	Large
70	DDC, Balaju	MSS, Balaju, KTM. 01-4350039	Processor	15000 lit./hour	65,000	19500000	1404000000	Large
71	DDC, Lainchaur	MPSS, Lainchaur, KTM 01-4432624	Processor	5000 lit./hour	7,000	2100000	151200000	Medium
72	DDC, Kohalpur, Banke	MPSS, Kohalpur, Banke	Processor	1000 lit./hour	12000	3600000	259200000	Meddium
73	DDC, Dhangadi,, Kailali	MPSS, Dhangadi	Processor	1000 lit./hour	6000	1800000	127800000	Small
Total				9,19,000	4,73,300			
Grand total (all the four cluster)				1612700	940500			