# Establish Bulk Cold Storage





### **Background**

The dairy industry in Nepal, producing approximately 8,194 metric tons of butter annually, confronts a critical challenge in storage, with around 4,000 metric tons annually becoming surplus. As of April 1, 2024, significant butter stocks are inadequately stored in rented facilities, underscoring the urgent need for specialized cold storage solutions. The Establishment of Bulk Cold Storage project aims to address this gap by proposing the development of two 500 metric ton capacity cold storage units in proposed locations, selected for their strategic relevance. This initiative seeks to enhance the dairy industry's efficiency by ensuring optimal storage conditions for butter, thereby reducing spoilage, lowering post-harvest losses, and improving product marketability. By enhancing the infrastructure for butter storage, the project is positioned to significantly contribute to the sustainable development of Nepal's dairy sector.





#### **Proposed Locations**

Biratnagar, Morang District Khumaltar, Lalitpur District Hetauda, Makwanpur District

(Selection can be made from these districts based on need and suitability)

#### **Salient Features**



Two Bulk Storage Facility Construction (Each with capacity of 500 Mt.)



Efficiency



Value Added Services



Multipurpose Storage Capabilities



Modern Infrastructure

### **Project Rationale**



Equip dairy industries with advanced cold storage facilities



Provides optimal storage conditions for butter



Addresses butter surplus storage needs



Reduces spoilage and financial losses due to inadequate storage

### **Project Outcomes**



Reduction in Post Harvest Losses and improve market prices



Extend Shelf Life



Improved Quality with controlled environment



Enhanced Market Access for Dairy Products



Stabilization of Milk Prices



Increased Profits and Employment Opportunities

### **Financial Indicators**

Estimated Project Cost NPR 85.1 million USD 0.64 million



Project IRR 35%



NPV 115.08 Million NPR



Pay-back period 2 Years

(1 USD = 132.99 NPR, as of 2023)

# **Project Implementation Modality**



Public Private Partnership (PPP)

Lease, Build, Operate & Transfer (LBOT)

# **Project Implementation Timeline**



Project Ideation

Desk Study Pre-feasibility Study Feasibility Study Solicitation

### **Some Statistics**

Annual butter production in Nepal: Approximately 8,194 metric tons

- From standard milk production: About 3,060 metric tons/year
- From skim milk powder production: About 2,250 metric tons/year
- From chhurpi production: About 2,884 metric tons/year

Annual consumption by dairy industries: About 4,677.78 metric tons

Annual surplus: Approximately 4,000 metric tons

Dairy Industry Association butter stock as of April 1, 2024: 3,950 metric tons

Stored in rented private cold storage: About 2,750 metric tons (70%)

Nepal Dairy Association (NDA) butter stock: 1,650 metric tons

• Stored in rented private cold storage: About 825 metric tons (50%)

Dairy Development Corporation (DDC) butter stock: 845 metric tons

• Stored in rented private cold storage: About 200 metric tons (24%)

Mandatory storage standard for butter: -18°C

## **Relevant Agencies**

- Ministry of Agriculture and Livestock Development (MoALD)
- Department of Livestock Services (DLS)
- · National Dairy development Board Nepal (NDDB), Harihar Bhawan, Lalitpur
- · Dairy Development corporation (DDC), Lainchour, Kathmandu
- Central Dairy cooperative association limited (CDCAN)
- Dairy industry Association (DIA)
- Nepal dairy Association (NDA)
- National Agricultural research council (NARC)

## **About the Agency**

### **Ministry of Agriculture and Livestock Development**

The Ministry of Agriculture and Livestock Development (MoALD) is a governmental body of Nepal responsible for the growth and development of the agriculture sector in the country and making the country self-reliant in agricultural production. The Ministry began its operation institutionally in 1978 with the primary objective of translating policies and implementing programs related to agriculture development according to the country's needs and potential. Focused on achieving food security and poverty alleviation through a commercial and competitive agriculture system, the Ministry aims for high and sustainable growth by modernizing and diversifying agricultural production.

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