Investment for Buffalo Rearing for Sustainable Milk and Meat Production in Nepal

1. Background

Himalayan Food International Pvt. Ltd. has entered into an agreement with a Chinese company to export buffalo meat, with an estimated annual export value of USD 1.9 billion. In line with this, Krishoni Agri Company Pvt. Ltd.—the project executing agency—has signed a supply agreement with Himalayan Food International to deliver 200,000 fattening buffaloes each year. To achieve this target, Krishoni Agri Company has developed a business model project being implemented across 11 districts of Nepal. This business model ensures active participation of all key actors in the milk and meat value chain—including input suppliers, producers, processors, and exporters—working collaboratively while each focus on their individual enterprises.

The project aims to establish a scalable and sustainable buffalo farming system across 11 districts from Bagmati and Gandaki Provinces in Nepal. The project will engage 10,000 smallholder producers and 20 private sector investors to enhance the production of high-quality milk and meat through improved genetics, modern farming practices, and effective market linkages. With a strong focus on climate-smart agriculture, rural employment generation, and food security, this initiative aligns with Nepal's national goals of agricultural transformation and economic development. The project emphasizes cooperative models and private-public partnerships to mobilize resources and ensure sustainability.

2. Project Summary

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3. Goal

To establish a sustainable, large-scale buffalo farming enterprise that produces high-quality milk and meat, contributes to Nepal's food and nutritional security, enhances rural livelihoods, generates employment, and enables export to international markets.

4. Project Location

The project will be implemented across 11 strategically selected districts within two provinces of Nepal—Bagmati and Gandaki. These locations have been chosen based on their proven

suitability for buffalo farming, access to feed resources, and strong participation of local communities in livestock-based livelihoods. Spread across 40 municipalities and organized into 80 production clusters, the selected areas include hills and mid-hill regions (around 4000 feet's altitude), ensuring geographic diversity and wide participation as well as premium price of the meat and milk products. This coverage will enable the project to harness region-specific advantages while promoting inclusive growth and rural economic transformation.

- Provinces: Bagmati and Gandaki
- **Districts:** Nuwakot, Dhading, Rasuwa, Makwanpur, Gorkha, Lamjung, Tanahu, Baglung, Myagdi, Kaski, and Parbat (11 districts)
- Municipalities: 44 municipalities 4 from each district to implement the project
- Clusters: 80 clusters will be developed for milk and meat production

These locations have been selected based on their agro-climatic suitability, availability of pastureland, existing dairy infrastructure, and potential for meat and milk products export.

5. Beneficiaries

The project will directly benefit 10,000 smallholder buffalo producers organized into 400 producer organizations (cooperatives) and 20 commercial private producers across 80 clusters in 11 districts. These beneficiaries will receive support in establishing and managing scientifically designed buffalo farms, improving access to quality breeds, feed resources, and veterinary services. The initiative will particularly focus on empowering rural women and youth by creating sustainable employment and enterprise opportunities within the buffalo value chain. Indirectly, the project is expected to benefit thousands more through improved food security, knowledge transfer, and service delivery ecosystems.

- **Direct Beneficiaries:** 10,000 smallholder farmers organized into 400 producer cooperatives. Each farmer will rear 5 milking buffaloes and 5 fattening calves.
- **Private Sector:** 20 commercial private producers/farms with 50 milking buffaloes and 50 fattening calves each.
- Indirect Beneficiaries: Rural youth, women, agricultural technicians, transporters, feed producers, processors, and exporters.

6. Objectives

This project aims to establish a robust and sustainable buffalo farming model by enhancing productivity, ensuring value addition, and creating market linkages. Key objectives include mobilizing 10,000 smallholder farmers and 20 private producers to rear milking and fattening

buffaloes, expanding high-quality milk and meat production for domestic and export markets, and promoting self-sufficiency in feed and fodder production. Additionally, the project seeks to generate rural employment, empower women and youth, adopt climate-smart livestock practices, and contribute to national economic growth and food security.

- **Farm Establishment:** Mobilize 10,000 smallholder farmers and 20 commercial farms to establish scientifically managed buffalo farms.
- Production Enhancement: Increase buffalo productivity through improved breeds, feed, and management practices.
- Strengthening Extension Service: Strengthen the extensive service: technical, vaccination, artificial insemination, from the private sectors expanding volume of business covering 10,020 buffalo producers and periphery producers.
- Availability of Farm yard manure: Each households produce farm yard manure which is sufficient them for other regular crops then increase the productivity.
- Market Expansion: Develop strong market linkages for milk and meat locally and internationally.
- Fodder Security: Cultivate 13,973 hectares of fodder to ensure feed self-sufficiency.
- **Employment and Income:** Generate employment for 11,000 individuals and increase incomes through value-added processing.
- Climate Resilience: Integrate biogas, solar energy, and waste recycling into buffalo farms.
- Nutrition and Food Security: Enhance nutritional outcomes for farming families.
- Economic Contribution: Strengthen Nepal's agro-economy through import substitution and export revenue.
- Project Activities

7. Project Activities:

The project comprises six interlinked activities that together form a comprehensive value chain approach. These include (1) Identification and orientation to farmers (2) Strengthen Extension Service (3) **Buffalo Rearing and Shed** Construction to support high-quality milk and

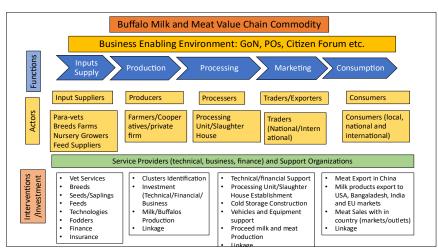


Figure 1: Milk and Meat Value Chain Actors and Activities

meat production; (4) Fodder and Feed Production for self-sufficiency in animal nutrition; (5) Milk and Meat Production & link with processors and exporters; (6) Market Infrastructure Development (7) Project Operation; and (8) Monitoring, Evaluation and Learning. Each activity is designed to enhance productivity, sustainability, and profitability at both smallholder and commercial levels. The project supports to producers and collectors as a grant which is 50% of the total sub-project.

8. Estimated Budget (Summary)

The total estimated budget for the project is approximately NRs. 2.89 billion (US\$ 21.426 @ NRs. 135). This investment covers key activities including farmer capacity building, buffalo rearing and infrastructure development, fodder cultivation, market establishment, project management, and monitoring. The budget is designed to ensure comprehensive support across all components for sustainable buffalo milk and meat production and market development. Brief is given in below table where the detail is given in Annex 1.

SN	COMPONENTS	COST (NRS.)	COST US\$
1	Capacity Building and Extension Service to Farmers	400000.00	2,962.96
2	Support for Value Chain Establishment (50% Grant)	2,863,435,000.00	21,210,629.63
3	Project Management & M&E	28,640,000.00	212,148.15
	Total Project Cost	2,892,475,000.00	21,425,740.74
US\$ 1-NRs 135			

USS 1-NRs 135

9. Expected Outcomes

The project is expected to significantly boost buffalo milk and meat production, with an annual yield of around 400 million liters of milk and 35,000 metric tons of meat. It will directly create employment opportunities for approximately 81,000 people, including farmers, laborers, and service providers, fostering rural economic development. Participating families are projected to generate an average annual income of NRs. 1,037,500 through milk and meat sales, while private enterprises will benefit from increased profitability. Additionally, the project will enhance food and nutrition security for thousands of households, stimulate export revenues through access to international markets, and promote sustainable farming practices that contribute to climate resilience and environmental conservation.

- Milk Production: 80 million liters annually
- Meat Production: 8,750 metric tons annually
- Employment: 10,100 direct jobs created
- Income Generation: NRs. 1,037,500 per household annually for 10,000 farmers; NRs. 10.38 million per private producer
- Export Revenue: Significant forex inflow from China, India, USA, Bangladesh, and Europe