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MINISTRY OF AGRICULTURE & FORESTS
DEPARTMENT OF LIVESTOCK
NATIONAL DAIRY RESEARCH AND DEVELOPMENT CENTRE
YUSIPANG, THIMPHU



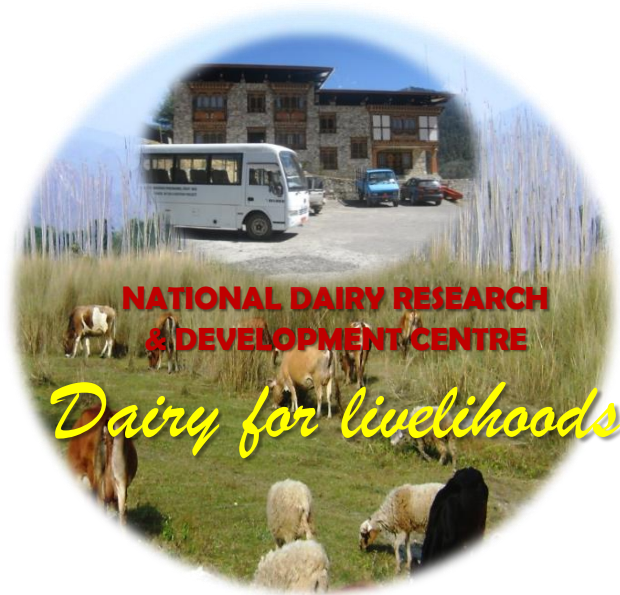
GUIDELINES FOR ESTABLISHMENT, OPERATION AND MANAGEMENT OF DAIRY ENTERPRISE IN BHUTAN



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GUIDELINES FOR ESTABLISHMENT, OPERATION AND MANAGEMENT OF DAIRY ENTERPRISE IN BHUTAN

Scope

Bhutanese dairy farmers shall be facilitated to operate dairy farming on business mode as “Dairy Enterprise” for environment friendly operation and sustainable socio-economic development while investing in dairy sector towards achieving overwhelming demand of heifers in the country. The Enterprise can be taken up by an individual or a group of individuals in own registered land or on leased land.

1. Eligibility

- 1.1 Any Bhutanese above 18 years of age and having capacity to maintain required no. breedable crossbred cows and heifers (min. 50% exotic blood inheritance: Jersey and Holstein-Friesian) at all times individually or in a group to produce 10 marketable heifers annually.
- 1.2 An individual having undergone Comprehensive Entrepreneurship Course (40 days training) or at least Basic Entrepreneurship Course (30 days training) provided by competent agency shall be given preference.

2. Registration

- 2.1 The eligible proponent(s) upon fulfillment of the requirements outlined below, verified by the Dzongkhag Livestock Sector, shall be registered with the National Dairy Research & Development Centre (NDRDC), Department of Livestock (DoL).
- 2.2 The NDRDC, DoL shall issue Certificate with registration no. for the Entrepreneurship [*Yr. of registration (4 digits), Dzo. Code (2 digits), Geog code (2 digits) & Sl no (2 digits)*].
- 2.3 Individual household(s) that qualify for membership under Dairy Enterprise shall register their animals via ear-tagging or any other suitable identification medium applying National Cattle Identification System under the umbrella of National Dairy Information System (NDIS).

3. Criteria for selection of potential proponent(s)

- 3.1 Youth or individual(s) with keen interest on dairy farming.
- 3.2 Farmers with existing stock of animals as required, land (preferably dry), water and other basic resources/ facilities.
- 3.3 Experience in dairy farming and interest to expand existing farm to enterprise mode.
- 3.4 Members of dairy groups interested to diversify business through heifer production.

3.5 Consent from the local extension agent (LEA) and local government (LG).

3.6 Matrix ranking shall be applied while selecting the potential proponents as in the format below;

Matrix ranking (100 score)

Proponent(s)	Interest (20)	Experience (20)	Animal (15)	Land/ water (15)	LEA/ LG Consent (15)	Finance (15)	Total Score	Remarks
Example: A							80	Selected
B							60	Selected
C							40	not selected

4. General requirements

4.1 *Operation type*

The proponent(s) shall specify the whether the operation is at individual level or in a group.

4.2 *Business proposal*

The proponent(s) shall submit business proposal (Annexure 1) indicating the location of enterprise, scale of operation, employment generation, marketing and management plan in the project proposal.

4.3 *Clearances*

4.3.1 The proponent shall obtain all necessary clearances where necessary from the respective competent authority.

4.3.2 The proponent shall obtain lease agreement document if the enterprise is established/ proposed for establishment in leased land.

4.4 *Socio-economic development*

4.4.1 The Enterprise shall gear towards income and employment generation.

4.4.2 The Enterprise shall pay taxes to the Royal Govt. where applicable.

5. Technical requirements

5.1 *Animal housing*

Animal shed(s) shall be of permanent type and constructed as per specification provided by the National Dairy Research and Development Centre (NDRDC), Yusipang or requirement based on agro-climatic condition in view of animal welfare and management ease.

5.2 *Animal feeding*

The farmer(s) shall adopt stall feeding practices with zero forest grazing. Feed and fodder requirement shall be calculated on Dry Matter (DM) basis @ 2.5kg DM for 100kg live body weight as per standard outlined in Dairy Production Manual, 2021(15). Farmer(s) may adopt other appropriate technologies in case the pasture development area is not sufficient, and ensure access to clean water *ad-libitum*.

5.3 *Hygiene and sanitation*

The animal(s) and animal shed(s) shall be kept clean all time. While milking the animals standard operating procedure (SoP) for clean milk production shall be followed strictly as highlighted in Dairy Production Manual, 2021 (15).

5.4 *Farm bio-security*

Visit to animal farm(s) shall be restricted to visitors or unauthorized personnel, which may be notified by means of a sign board at the entry point to the farm premises as highlighted in Dairy Production Manual, 2021 (15).

5.5 *Manure management*

The provision of slurry pit connected to the animal shed(s) is mandatory to reduce methane gas emission from free flowing urine and dung in the environment. Adoption of bio-gas technology is encouraged.

6. Operation and Management of Enterprise

6.1 *General*

- 6.1.1 The proponent(s) shall have basic knowledge on dairy management (produce certificate from any recognized institution viz. RDTC, Zhemgang).
- 6.1.2 The enterprise shall make arrangement for uninterrupted AI services.
- 6.1.3 The enterprise shall be operated as per technical requirements in sl. no. 4.
- 6.1.4 The transportation of live animals for establishment/ operation of dairy enterprise shall adhere to Standard for Transport of Animals prescribed under Bhutan Standards, Bhutan Standard Bureau.

6.2 *Marketing of live animals*

- 6.2.1 The Enterprise shall identify market and carryout marketing of animals on its own.
- 6.2.2 While selling heifers from the enterprise, priority shall be provided to the local community.
- 6.2.3 When transportation of live animals is involved in marketing, the enterprise shall respect 6.1.4 section of this guideline.

6.3 *Record keeping*

- 6.3.1 The enterprise shall maintain physical and financial records of the enterprise including animal stock inventory, health and breeding records.
- 6.3.2 The records should be analyzed periodically for decision support system.

7. Breeding support and facilities

- 7.1 The enterprises shall be supported with AI services to promote the enterprise.
- 7.2 The Enterprise shall be provided with sexed semen of Jersey and Holstein-Friesian.
- 7.3 The usage of sexed semen shall be in accordance with the Heifer Production Scheme implementation modalities.

8. Credit facilities

- 8.1 The Dzongkhag Livestock Sector shall give priority to the potential proponents in availing loan liaising with financial institutions for establishment of dairy enterprise or expansion of the business.

9. Progress reporting

- 9.1 The Geog and Dzongkhag livestock sectors shall follow the reporting channel and frequency as approved by the DoL until NDIS is launched officially.
- 9.2 The performance of the enterprise shall be reported through NDIS, wherein information shall be updated by the Geog Livestock Officer as per their areas of intervention.

10. Monitoring and Evaluation

- 10.1 The geog livestock officer shall monitor the regular functioning of the Enterprise and provide technical backstopping where required.
- 10.2 The NDRDC in collaboration with Dzongkhag livestock sector and RLDC shall monitor and evaluate the Enterprise on annual basis.

Annexure 1: BUSINESS PROPOSAL

(Establishment, Operation and Management of Dairy Enterprise)

1. Details of proponent(s)
 - 1.1 Identity: Name:, CID #:
 - 1.2 Address: Village:....., Gewog:, Dzongkhag:
2. Location:
(where the enterprise is proposed for establishment)
3. Scale of operation: (proposed no. of cattle heads in the enterprise).
4. Operation type: *(Individual/ Group of Individuals)*
5. Prepare detail project report (DPR) on operation and management of the enterprise including proper feasibility study, infrastructure and equipment, animal stock, feed & fodder resources, human resource and detail financial analysis.