

## Livestock and Dairy Development Project (LDDP)

### Terms of Reference (ToR)

for

### Feasibility Study on Establishment of Dairy Research Institute (DRI)

Reference No. Package #

Assignment Title	Feasibility Study on Establishment of Dairy Research Institute (DRI)
Assignment Duration	07 Months (From the date of Contract signing)
Assignment locations	Dhaka
Funding source (s)	RPA, IDA
Contracting entity	Project Director, LDDP, DLS.

#### 1.0 Background of livestock sector

Nodaway's dairy business is considered as one of the key components in the livestock sector that needs to be accounted to address SDG for achieving economic and human development in the country. The livestock and dairy sector play an important role in the food supply, food security, and livelihood security of the country's millions of smallholder livestock farmers and other stakeholders. Bangladesh is being popular for milk, meat and egg-based solutions to address malnutrition and hidden hunger, particularly among poor women and children in rural areas. The livestock and poultry (dairy and meat) sector is taking an increasingly major role in this performance, accounting for approximately 3.04% GDP growth rate of livestock that contributed 1.43% to the GDP where share of livestock in Agricultural GDP is 13.44% in 2019-2020. Despite its modest contribution to overall GDP, it has immense contribution towards meeting the requirements of daily essential animal protein (about 44% from meat) for human consumption. Milk, meat and egg provide 50% of all animal protein consumed in Bangladesh. Livestock and poultry also play a major role in employment: about 50% indirectly and 20% directly (of the total working population) are associated with the livestock sector.

Bangladesh Dairy Farmers Association (BDFA) has estimated the yearly demand of liquid milk to be 15,000,000 liters. Of the total, local farmers can produce only 9,400,000 liters of milk, or 62.67% of the total demand. The country has already attained self-sufficiency in the production of meat and tends to be self-sufficient in egg production, but milk production is still behind the sufficiency level (thereby encouraging the import of powdered milk). According to the Livestock Economy at a Glance published by Department of Livestock Services (DLS), the estimated production of fresh milk is about 106.80 Lakh Metric Tons against the demand of 152.02 Lakh Metric Tons (@ 250 ml/day/head) in the year of 2019-2020, corresponding to 175.63 ml/day/capita availability of milk. Reports indicate the increasing trend of milk production compared to preceding years. The domestic dairy industry is struggling amid the health safety concerns related to the presence of antibiotics and heavy metal (lead) in some samples of pasteurized and raw milk above acceptable limits; this has become a nationwide controversial issue, leading to rising imports.

Though private sector is an important part of dairy industry in Bangladesh, there is no documented research studies so far that investigated the role of private sectors in the development of dairy industry. So, a feasibility study is very important to examine the role of private sectors, NGOs,



conduct innovative research, value chain development, mechanization etc. for the development of dairy industry in Bangladesh. In order to establish future plan for the dairy development in the country, it is essential to establish a dedicated dairy research Institute.

Given increasing population pressure on land, the GOB has recognized that the expansion of dairy and meat and milk production, processing, value addition, marketing and consumption can offer an important pathway to sustainable economic development and future poverty reduction opportunities for Bangladesh. In view to build capacity, specifically for development in the dairy sector, a Dairy Researchers Institute (DRI) under the project has been considered.

## **2.0 Rationale of the assignment**

Consumption of milk is increasing both out of home and at home. Besides, with the rising affluence for economic growth and awareness building on immunity development, the demand for nutritious foods has increased and milk is one of the most valuable (protein rich) animal sourced food. The value chain of locally produced milk which is from farm to processing and up to marketing has not well developed yet to comply with local requirements, as well as to compete with global standards in the absence of support from the government that need to be strengthen and institutionalized. Given increasing population pressure on land, the GOB has recognized that the expansion of milk production, processing, value addition, marketing and consumption can offer an important pathway to sustainable economic development and future poverty reduction opportunities for Bangladesh. In view to build capacity, specifically for development in the dairy sector, Bangladesh Dairy Research Institute DRI under the project has been considered.

A feasibility study survey was conducted under the pilot project of “Dairy Research Management Project (DRMP)” which led to LDDP co-financed by World Bank. Numbers of recommendations made by the feasibility study. Bangladesh Dairy Development Board (BDDB), Dairy Research Institute (DRI), Bangladesh Poultry Development Board (BPDB), and Poultry Research Institute (PRI) are notably. All these recommendations are included in the LDDP to implement.

A policy decision meeting called “Scrutiny meeting” is mandatory to introduce/initiate a new project. All the project components/activates under LDDP are discussed in the scrutiny meeting and accepted to include the establishment of DRI and its implementation. Not only that, the DPP is approved by the ECNEC approved by Honorable Prime Minister.

To modernize and expand the dairy cattle industry, strengthening the capacity of this sector is imperative. The Dairy Development Board Act has already been approved by the cabinet. So, a Dairy Research Institute (DRI) is very essential for development and modernization of this sector. Although, Bangladesh Livestock Research Institute (BLRI) deals with all aspects of livestock research, due to shortage of scientist and technological support BLRI is not able to provide special focus or interventions for dairy research, mechanization, market linkage. BLRI also think that, separate DRI is very essential for the development of the dairy sector through innovative and modern research. DRI will serve as a platform for international liaison with other National Dairy Research Institute, Inter-professional Bodies and International Agencies, to facilitate the exchange of information. In this context, the feasibility of established a Dairy Research Institute (DRI) for the development of the dairy sector needs to be explored.



### **3.0 Description of the assignment in brief**

Establishment of the proposed Dairy Research Institute (DRI) would be a milestone in the field of dairy research, production and management in the present socio-economic condition of the country. Dairy sub-sector is approaching the huge employment generation through milk and diversification of milk product in the impending days. The growth rate of the livestock sector compared to the last decade is in increasing trend that proves the sectoral strength and potentials which is becoming somehow unmanageable with the present administrative, financial infrastructural and logistic support.

### **4.0 Objectives of the assignment**

#### **4.1 Overall objectives**

The overall objective of this assignment is to provide services to conduct a feasibility study for the establishment of Dairy Research Institute (DRI). The expert consulting agency/firm will have to work closely with the various divisions of the DLS under the Ministry of Fisheries and Livestock (MoFL), associate departments of other ministries as well as other allied organizations including academic, training and research institutes in addition to representatives of all respective stakeholders throughout the dairy value chain and dairy supply chain. Consultation of all partners should be carefully undertaken to make the DRI operational.

#### **4.2 Scope and Specific objectives**

- i. Study the feasibility of establishment of DRI as a national entity for the development and promoting the dairy sector through need-based technical research, mechanization and enterprise farming targeting vision-2041;
- ii. Design and propose an institutional framework for DRI with functional distribution; identify and plan operational governance and mechanisms;
- iii. Explore the potential for creating organizational support to finance, research, technology, innovation, knowledge enhancement through dairy producer/farmer owned institutions to improve productivity, international linkages, market access and resilience of small-holder farmers and agro-entrepreneurs operating in selected livestock systems and the dairy value chain;
- iv. Develop a framework for DRI to support national policies in the field of livestock for the favorable development of institutions required to support the sector;
  - v. Provision to offer consultancy services on dairy and allied operations in the field of planning and control (including quality control), research, organization and marketing; and
  - vi. Prepare a draft act on Dairy Research Institute (DRI).

### **5.0 Tasks to be performed by the consultancy firm.**

- i. The consulting agency/firm shall conduct a feasibility study for the establishment of DRI as a national-level body involved in representing the sector towards national authorities, promoting milk value chain development and sustainable prosperity, financing specific action to the common benefit of the value chain and its operators, and supporting milk and milk product



- distribution organizations in the country that are owned and controlled by the producers themselves;
- ii. The consulting agency/firm shall be responsible for suggesting approaches and strategies for the DRI to support the sustainable development of the dairy sub-sector in Bangladesh;
  - iii. Develop institutional framework of proposed DRI including representation of all professional families belonging to the milk value chain, research areas and governance structure;
  - iv. Suggest an organogram including manpower distribution for the milk value chain to contribute to national economy and sectoral growth;
  - v. Evaluate the social, technical, financial and organizational conditions conducive to the development of DRI;
  - vi. Review the existing Bangladesh Livestock Research Institute (BLRI), similar regional institution and subsequently take measures for final approval;
  - vii. Develop required rules in connection with DRI to expedite Institutional operational and proposed amendment of other relevant act/rules;
  - viii. Suggest strategic plan pertaining to how to foster an inclusive approach towards all relevant stakeholders along the dairy value chain consisting of representatives from the public and the private sector;
  - ix. Outline of an effective policy and regulatory framework for the dairy sub-sector identifying the policy and development gaps for managing pre-and post-harvest dairying in the perspective of food safety regulations;
  - x. Engagement of strategic partnership with public-private entities and relevant stakeholders including local and international partners for improving food security and food safety and market-oriented value chain development in dairy business;
  - xi. Analyze knowledge gaps and capacity development needs for relevant actors or stakeholders to strengthen linkages (Producers/farmers, upstream service providers, traders, collectors, processors, distributors etc.);
  - xii. Poverty analysis to identify poverty gaps to be assisted by dairy sub-sector through the development of agro-industrial and trade policies to promote inclusive and sustainable dairy value chain and market system;
  - xiii. Suggest developing gender-equitable and socially inclusive business relationships between suppliers/buyers and producer groups towards greater income and employment opportunities for youth and women; and
  - xiv. Suggest how DRI could contribute to the development of dairy sub-sector in respect to poverty reduction, social impact, livelihoods, nutritional support, food safety, local & global business to address SDG and visions of the country investment plan of the government.

#### **6.0 Technical approach and methodologies:**

The proposed assignment on support service to LDDP shall be provided in a consultative manner that will enable capacity building of the Livestock sector specially development of dairy sector. In addition, the assignment will be provided through a consultative process with a wide range of relevant stakeholders to ensure broad support for creation of DRI. Furthermore, the service provider shall demonstrate compliance with the World Bank Environmental and Social safeguard policies for the creation and functioning of the future institute.



## 7.0 Deliverables of the assignment and time frame:

For the above tasks, the deliverables are:

Deliverables	Key issues to address	Deadline
Inception Report	Inception report with time bound work plan	End of first month from the date of signing the contract
Draft report	i. Technical assessment report on the establishment of DRI; ii. Framework, Governance Mechanisms; iii. Financial and economic analysis for the establishment of DRI to be considered; iv. Develop required rules to facilitate formation and operationalization of DRI	End of 5 months from the date of contract signing
Draft Final Report	i. Final report shall be submitted furnishing all requirements of the feasibility study stated in the ToR at the end of assignment	End of 6 months from the date of signing the contract;
Final report	i. Receiving and consolidating comments on the draft additional one month. (A technical committee will be formed by DLS for reviewing the report. Stakeholder consultation workshop will be needed for finalization)	End of 7 months from the date of signing the contract;

## 08.0 Duration of the Assignment:

The assignment/study period shall be of in the framework of the LDDP program. A **seven (07) months duration** from the date of commencement of the contract signing is envisaged.

## 09.0 Expert team composition to accomplish the assignment

The assignment shall be carried out by multi-disciplinary experts supported by national experts, including but not limited to the following positions:

Sl. No.	Position and No.	Input (Man Month)	Intended Experience/Qualification	Expected areas of contribution/delivery of outputs
09.1	Team Leader (1) / (Institutional expert)	07	<ul style="list-style-type: none"> <li>Advanced degree in Agricultural Economics/Animal husbandry or related Agricultural subjects with 20 years of extensive experience related to sectoral development and policy framework in developing countries and developed countries;</li> </ul>	<ul style="list-style-type: none"> <li>Provide direction and guidance about overall tasks</li> <li>Understanding the strength and weakness of team members</li> </ul>

Sl. No.	Position and No.	Input (Man Month)	Intended Experience/Qualification	Expected areas of contribution/delivery of outputs
			<ul style="list-style-type: none"> <li>• Experience in leading teams of conducting human resource capacity assessments, Institutional capacity assessment, review of legal framework governing sector policies;</li> <li>• Experience in general management within multicultural organizations and/or international undertakings in institutional reform of public institutions;</li> <li>• Experience in developing agribusiness/livestock sector, sector evaluations, feasibility studies, and/or assessments, leading multi-disciplinary teams;</li> <li>• Should at least have a senior leadership/management position in related projects;</li> </ul>	<ul style="list-style-type: none"> <li>• Organizing tasks and setting goals</li> <li>• Upholding the vision of the group</li> <li>• Solving problems and resolving conflicts.</li> </ul>
09.2	International Livestock/ Dairy Research Expert (1)	07	<ul style="list-style-type: none"> <li>• Advanced degree in Animal Husbandry or Dairy Technology with 15 years of policy development experience in developing countries in research and development of agricultural/livestock related sectors;</li> <li>• Experience in general management within multicultural organizations and/or international undertakings in institutional reform of public institutions;</li> <li>• Experience in developing agribusiness/livestock sector, sector evaluations, feasibility studies, and/or assessments; leading multi-disciplinary teams;</li> <li>• Proven experience in technical evaluations on livestock/agribusiness in the national/international perspective;</li> <li>• Demonstrated knowledge and understanding of agribusiness/dairy/livestock related sectors in Bangladesh or the countries in the region.</li> </ul>	<ul style="list-style-type: none"> <li>• Provide technical advice on issues raised pertaining to livestock and dairy production, animal health, processing and marketing, taking into consideration impacts on environment, food safety and associated human health risks.</li> <li>• Recommend and determine the necessary intervention package including value addition to improve livelihood means through livestock and dairy production.</li> <li>• Provide technical input similar as same types of organization in abroad.</li> </ul>
09.3	National Livestock/ Dairy Expert (1)	07	<ul style="list-style-type: none"> <li>• Master's degree in Animal Husbandry or Dairy Science with 15 years of progressive experience in livestock/agribusiness research and development, policy design and management preferably in the field of livestock;</li> </ul>	<ul style="list-style-type: none"> <li>• Coordinate with relevant government agencies, development organizations, NGOs, and other stakeholders on the plan and</li> </ul>

Sl. No.	Position and No.	Input (Man Month)	Intended Experience/Qualification	Expected areas of contribution/delivery of outputs
			<ul style="list-style-type: none"> <li>• Proven experience in carrying out evaluation, assessments on livestock/agribusiness in the national/international scenario;</li> <li>• Demonstrated knowledge and understanding of agribusiness/dairy/livestock related sectors in Bangladesh;</li> </ul>	<ul style="list-style-type: none"> <li>• implementation of livestock and dairy production system.</li> <li>• Assess the technical soundness of production and business plans on livestock and dairy designed to improve livelihood of farmer-beneficiaries in the context</li> <li>• Develop practical and community-based animal health care and maintenance strategies to sustain livestock and dairy production.</li> <li>• Carry out any other relevant duties within his/her technical competence, as may be required for the feasibility report.</li> </ul>
09.4	Legal Expert (1)	03	<ul style="list-style-type: none"> <li>• Advanced university degree in Law or related disciplines with at least 05 years of involvement in Veterinary and Livestock and Environment related laws;</li> <li>• Proven experience in capacity building and supporting the implementation of food safety development projects;</li> <li>• Proven record of working similar type of evaluation assessments on livestock/agribusiness in the national/international scenario;</li> <li>• Demonstrated knowledge and understanding of agribusiness/dairy/livestock related sectors in Bangladesh;</li> </ul>	<ul style="list-style-type: none"> <li>• Provide legal assistance and advice.</li> <li>• Organize legal activities and draft legal documents.</li> </ul>
•09.5	•Risk based Inspection Expert (1)	•03	<ul style="list-style-type: none"> <li>• Advanced degree in Agricultural Sciences or related subject and have at least 10 year experience in risk based inspection in developing countries;</li> <li>• Have experience on related field based inspection and risk analysis;</li> <li>• Have experience on related field of risk based inspection;</li> </ul>	<ul style="list-style-type: none"> <li>• He or she will identify the various personnel required for the institute.</li> <li>• Analysis risk to established DRI</li> </ul>

#### •10.0 Working arrangement and reporting

The consulting firm will have following manpower/experts. The assignment of the consulting agency/firm will be regulated based on this TOR. The consulting agency/firm will work in close collaboration and regular coordination with the focal point of LDDP at DLS, the World Bank and other relevant project stakeholders. The consulting agency/firm is required to prepare reports on a regular basis as demanded by LDDP management and agreed upon at the beginning of the assignment. The reports will be prepared in English and draft report will be finalized upon receiving comments from DLS or LDDP. shall describe the key issues to be addressed, results and achievements against the LDDP requirements following the log-frame. The extensive feasibility report on the establishment of DRI will be submitted to the Project Director, LDDP, DLS within the stipulated time as per contract.

