



د کړهڼی، اوبولگولو او مالداري وزارت  
وزارت زراعت، آبیاری و مالداري

د افغانستان اسلامي جمهوریت  
جمهوری اسلامی افغانستان



**Islamic Republic of Afghanistan  
Ministry of Agriculture, Irrigation and Livestock**

**REQUEST FOR EXPRESSIONS OF INTEREST**

**For hiring of consultant to conduct feasibility, study of the I- Dairy industry development, II- fishery development program and III- small ruminant development program in all provinces of Afghanistan.**

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REOI No: MAIL/PD/ICB/QCBS112/99

The Islamic Republic of Afghanistan represented by the Ministry of Agriculture, Irrigation and Livestock has received grant/ fund, under grant number: AFG/ 390763 from the Islamic Republic of Afghanistan in 1398 and intends to apply part of the proceeds of this fund to implement the feasibility study of the following livestock projects: 1- dairy industry development in all provinces of Afghanistan, 2- fishery development program in all provinces of Afghanistan and 3- Small ruminant development program in all provinces of Afghanistan.

**1- Background of the projects.**

**1.1 Dairy industry development in all provinces of Afghanistan- project background**

Dairy is a key source of household income and quality nutrition. It involves more women than men and serves as an important source of income for rural women. In 2016, an estimated 1.35 million families had 2.1 million milking cows producing 1.936 million MT milk in lactation.<sup>1</sup> This represents about 85% of the total milk produced in the country. Off – farm employment is estimated at 0.044 Full Time Equivalent (FTE)<sup>2</sup> / liter of milk; on - farm employment is estimated at 0.222 FTE / liter of milk and the total FTE jobs in the intensive milk production sector is estimated at 335,160<sup>3</sup>. In 1395 (2016) CSO reported that, total 62.72 million Kg (US\$62.98 million) dairy products imported from Pakistan 58%, Iran 12%, Ireland 6%, Uzbekistan 5%, India 4% and 15% from other countries.

To improve the situation since 2005, FAO in collaboration with the Ministry of Agriculture, Irrigation and Livestock (MAIL), started integrated dairy development activities in Afghanistan. Drawing on the results of international experiences, a successful model for Integrated Dairy Schemes (IDS) was developed with participation of local communities and other stakeholders with

<sup>1</sup> CARD-F, 2017.

<sup>2</sup> FTE the number of working hours that represents one full-time employee during a fixed time period, such as one month or one year. FTE simplifies work measurement by converting work load hours into the number of people required to complete that work.

<sup>3</sup> World Bank., 2014. *Islamic State of Afghanistan Agricultural Sector Review: Revitalizing Agriculture for Economic Growth, Job Creation and Food Security*

an overall goal to improve food and nutrition security and reduce poverty in the rural areas. 82 village level Milk Producer Cooperatives and five provincial level Dairy Unions were developed with a total membership of 9 161 households. At the national level the Afghanistan Dairy Producers Association was established. The Association is an umbrella organization for all dairy sector processors including dairy unions, suppliers of dairy inputs and other stakeholders. These institutions were an important entry point to provide inputs and technical support to farmers; it is more efficient to deliver inputs and technical services to farmers when they are organized into producer cooperatives. 82 Milk Collection Centers were established at the village level and five milk processing plants were established, one each in Herat, Balkh, Nangarhar, Kabul, Logar, Parwan and Kunduz provinces. They are running by dairy unions on behalf of the cooperative's members. The plants together can process at least 27 MT of milk per day in a single 8-hour shift. This is a significant contribution towards import substitution as Afghanistan imports most of the milk and dairy products from abroad.

Totally collected 13.37 million liters fresh milk from cooperatives members and paid Afs 356.78 millions price of milk to farmers in 2019. In addition to advantage of being paid regularly (each week), the novel experience of a regular cash income over which they have control, makes it easier for them to manage their household budgets. 84.5 % of dairy cash income is provided directly to women and they have the full control and decision-making power on how to spend it. The IDS has resulted in the creation of 576 off – farm jobs in the areas of milk collection, transportation, processing, distribution and marketing by the 5 dairy unions. At the farm level, **9 161** households are engaged in dairy farming as an enterprise.

There are at least 30 private sector industrial milk processing plants with a total installed capacity of 160.5 MT / day single shift of which only 57.5 MT / day is utilized. There are about 753 small and medium commercial dairy farms. Many formal small to medium milk processing enterprises also exist, these process 200 – 2,500 L of milk / day each. Micro – scale milk processors (50 – 200L/day) produce yoghurt, dry yoghurt, cheese, quark and butter.

## **1.2 Fishery development program in all provinces of Afghanistan- project background**

Fish plays a vital role in human nutrition as a key source of protein. Compared to other animal sources of protein, fish has a much higher level of protein at 20-41% and a high percentage of fat at 31%. More than 90% of fish protein can be absorbed by the body which plays a key role in the body and mental growth particularly in children. This level is only surpassed by rabbit and cow meat. Fish can therefore fill in the gap in protein deficit in household diets across Afghanistan significantly contributing towards combating malnutrition especially among children less than 5 years of age, pregnant and lactating mothers. Even though per capita consumption of fish might be low, the little amounts consumed still an opportunity for diversification of diets and an important source of micronutrients including vitamins A, B and D, essential amino acids and fats that are scarce in vegetable based diets.

Afghanistan produces around 10000 MT fish meat annual and currently 2000 fisheries farms established in different side of country as well as the Qargha Dam (50 km<sup>2</sup>) trout fish hatchery project was established in 1965 across the Paghman river just outside Kabul. In the 1970s, the hatchery supplied about 30,000 trout fingerlings that were stocked into the Qargha dam and

Panjsher, Bamyan, Salang and Sarde rivers although the focus was mainly on licensed sport fishing. Another trout hatchery was located in Paghman town, west of Kabul. UNDP and FAO later worked on the rehabilitation of the Qargha Fish Farm but the efforts came to naught after the security situation deteriorated badly in 1990. Other reservoirs were also established around Kabul in Neghlo, Soroby, Arghandab and Kajaki.

According to the MAIL information 40 – 120 MT fish meat imported on daily basis from neighbor country especially in winter. It is estimated that Afghanistan can produce about 37,000 metric tons of fish / year from its 65 km<sup>3</sup>/year estimate of Annual Total Natural Renewable Freshwater resources.

Development of Fisheries industry faces major barriers throughout the value chains such as input, lack of technical capacity, not being Fisheries Hatchery, lack of access to enough land, diseases, lack of fish feed, production, processing, storage, packaging and marketing activities. Besides, lack of infrastructure, sustainable and quality production, consideration of standards and issuing certificates and marketing of livestock products are serious challenges.

There are 3 major river basins in Afghanistan. The Amu Darya with most diverse fauna on the northern border with Tajikistan, Uzbekistan and Turkmenistan, the Kabul in the northeast entering Pakistan in the east and the Helmand river basin (least diverse fauna) in the southwest. The water for these river basins is precipitation and snow melt over the mountain ranges that extend from the ranges of the Hazarajat to the Pamir mountain knot. Water flow greatly reduces after spring to late summer with many rivers eventually drying up or reducing to isolated pools. Irrigation schemes further interfere with the flow of water. However, rivers on the northeast border with Pakistan have maximum flows twice a year during July – September and during January – April due to the monsoon.

The main perennial rivers include the Kunduz, Logar, Kabul (dammed in several places), Helmand, Panjsher, Morghab, Hari Rud and Kunar among others. Few freshwater lakes exist, these include the Sistan (main part of which lies in Iran).

### **1.3 Small ruminant development program in all provinces of Afghanistan- project background**

According to Afghanistan land divisions, 46% of Afghanistan's area is natural pastures that provides livestock in the country and is one of the main reasons for people's interest in livestock. Livestock is a key component in the livelihoods of more than 80% of Afghanistan's largely rural population and livestock provide the majority of the draught power available for crop farming, egg, milk and meat for household consumption and sale, and manure used as a natural fertilizer as well as a fuel for cooking and heating.

The livestock sector is divided mainly into sedentary and nomadic production system. The sedentary farming system, which is practiced by the vast majority of settled farmers, who hold some sheep, goat, and most of cattle on small agricultural holdings. Any occasional surplus milk and of animals are available for sale.

The products were listed above are linked in production and growth, and no focus on a particular product has been done. Goats and sheep keeping in Afghanistan is generally free (Extensive) and Semi-intensive. So, considering Goats and sheep keeping goal, animal products way of life of Kuchies cannot be regarded to one province, one breed, one industry and one product.

About 75% of goats and sheep in the country are fed free of these pastures areas.<sup>4</sup> For this reason, the manner of sheep and goats keeping has been given a free and nomadic form. Kuchies keep about 75% of the sheep and 52% of the goats in the country. According to reports, in recent years, 65,491 families have grown to 16.5 million cattle's over 12.6 million hectares of summer pasture area, 2.4 million hectares of winter pastures area and 5.9 million hectares of spring pastures area.<sup>5</sup>

Kuchies are nomadic herders whose livelihood depends heavily on livestock and migratory grazing patterns. Because of conflict and insecurity, they have lost their livestock, migration routes and their access over traditional pasture areas and do not currently have the financial means to re-start their traditional productive livelihoods.

In recent years, in addition to successive droughts, the proportion of resident and Kuchi landlords has been more politically motivated than the pastures, especially in the central part of Afghanistan. These conflicts, in addition to harming sheep and goat keeping and malnutrition, may cause long-term food shortages and eradication of grasses and pasture areas for animals, and some pastures may become desolate, and we are witnessing the erosion of the country's agricultural soils. For example, The Lily Plain in Juzjan and Faryab, and Abadan Plain in Kunduz Province has been changed.

Karakul sheep production for pelts was in the past an economically very important livestock production in Afghanistan and is still practiced. Farmers reported lower sales in pelts and wool compared to the previous year, but expected to sell more the following year. Much, if not most of the Karakul output enters the international markets. More research on the international markets for Astrakhan pelts is needed to judge the potential future of Karakul sheep production in Afghanistan.

## 2- Objectives of projects

### 2.1 Dairy industry development in all provinces of Afghanistan- project objectives

The overall goal of the dairy industry development is to be sustainable and profitable dairy industry development through provision of all necessary services and infrastructure such as milk collection centers and dairy processing centers for improvement food security and reduce poverty in Afghanistan through the below objectives :

- ❖ Increase productivity and consumable, saleable and profitable milk production of the dairy animals,
- ❖ Develop sustainable organizational structures for the management ,
- ❖ Develop sustainable processing and marketing structures for dairy products,
- ❖ Upscale and develop the IDS approach to other areas and improve market access and processing facilities for milk and dairy products and animal feed,
- ❖ Enhance women involvement in public and private sector dairy institutions, and
- ❖ Assist in the development of policies and strategies for the dairy sector.

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<sup>4</sup> National Statistic Annual Report 2017

<sup>5</sup> Livestock production department of MAIL 2019

Whole ecosystem and dynamic system models, minimum realistic models, individual-based models (option analysis) is intended to be used as a model for future project development and will point out which model best work in Afghanistan. Conducting the detailed feasibility study is a major step towards achieving these project objectives.

## **2.2 Fisheries development program in all provinces of Afghanistan- project objectives**

The objectives of the fishery development project are:

- Develop human resource technical skills and capacities of fish farmers ensuring market oriented fish production and value addition.
- Develop, evaluate and disseminate appropriate aquaculture technologies through ensuring strong research – extension – fish farmer linkages.
- Coordination of all stakeholders involved in aquaculture in order to ensure integrated, efficient and effective service provision to fish farmers with their active participation at every level.
- Facilitate private sector investment in relevant infrastructure, inputs financing, value addition, marketing and extension service provision.
- Increase the capacity to produce fish fingerlings for supply to Grow out Fish Farms to support increased fish production and employment creation.
- Ensure conservation of biodiversity and indigenous fish species.

Whole ecosystem and dynamic system models, minimum realistic models, individual-based models (option analysis) is intended to be used as a model for future project development and will point out which model best work in Afghanistan. Conducting the detailed feasibility study is a major step towards achieving these project objectives.

## **2.3 Small ruminant development program in all 34 provinces of Afghanistan- project objectives**

The overall goal of project is to support the development of the livestock sector, and contribute to food security, poverty alleviation and gender equality in Afghanistan through the following objectives:

- Increase productivity and consumable, saleable and profitable production of small ruminates,
- Develop sustainable organizational structures for the management , and
- Develop sustainable processing and marketing structures for sheep and goats products

Whole ecosystem and dynamic system models, minimum realistic models, individual-based models (option analysis) is intended to be used as a model for future project development and will point out which model best work in Afghanistan. Conducting the detailed feasibility study is a major step towards achieving these project objectives.

### 3- Scope of work projects

#### 3.1 Dairy industry development in all provinces of Afghanistan- scope of work

The Feasibility Study must address the following:

- ✓ Review and study of existing data and available literature studies. The EASF will review and study the background documentation and preparatory work conducted.
- ✓ Definition of the project's concept: a clear description of the project concept, including a description of the policy context (draft);
- ✓ Needs analysis: High-level review of the project's commercial rationale and analysis of the demand for and desirability of the project; This should be consistent with international standards and out consider the following:
  - Situation and problem analysis
  - Project strategic objectives
  - Budget
  - Institutional analysis
  - Local communities capacity analysis
  - Output and impact specifications
  - Scope of the project
  - Existing financial forecasts, historical financial performance and technical operating history.

**Technical scope:** Description of the key technical parameters envisioned for the project. This will include identifying various technical options as well as evaluation and assessment of each option. In developing the technical scope of the project, the following activities/tasks will be required but should not be limited to:

- ✓ To review the law of livestock production, law of animal health, national livestock production and health policy and related assessment reports,
- ✓ To review the current dairy sector related data and ongoing activities – identification of priorities, gaps, and strengths.
- ✓ To identify the local livestock breeds including their locations and diseases at national level,
- ✓ A study will be conduct on status on number milking cows on breed differences (local, crossbred and exotic breeds), total milk production and milk /dairy product demand at national level.
- ✓ To identify mobility and mortality percentage rate of animal by breed and age,
- ✓ To identify common diseases of livestock ( infectious, non-infectious and zoonotic diseases)
- ✓ To identify adoptable breed for artificial insemination.

- ✓ To identify suitable location for establishment milk collection and chilling centers and dairy processing plants
- ✓ A study will be conducted on status of the fodder crop production for growth and development of livestock production at national level,
- ✓ Introduction of best dairy animal farming practices (such as design and farm mapping, diseases control and processing) to increase the level of productions,
- ✓ Provide scheme map and estimation for new dairy farms,
- ✓ Identification of number and location for establishment of reproduction and researching dairy farms in the country based on existing potential as per national and international standards (complete drawing and engineering package).
- ✓ The firm/Consultant should submit detailed information and SWOT analysis for the available animal feed processing plant, dairy products factories and dairy farms,
- ✓ Identification of required number and location for establishment of animal feed processing plant, UHT and Pasteurized dairy processing plant based on the demand and international standards (complete drawing and engineering package).
- ✓ The detailed feasibility study team should define:
  - Which services are provided by whom and where (private versus public sector),
  - Which are the major bottlenecks,
  - What services are requested by the farmers,
  - What knowledge is available with private sector regarding planting materials, commercial farm establishment,
  - How does the public sector see its role in the future?
- ✓ Suggest the modalities of investment by processors, support from funding organizations and facilities provided by the Government in the shape of relief in import duty and other taxes.
- ✓ Study the status of the relationship of producers/processors with the domestic and export markets for targeted high-value dairy products and red meat with a clear approach to strengthening the linkages of producers, processors, and exporters with national and international markets.
- ✓ Assessment of the social and environmental impacts of the project; Project impacts on environmental and social parameters. The preliminary assessment will also include the following:
  - Conducting social and environmental impact assessment study of the project to meet international standards.
  - Assessing local communities level of interest, how they can be involved smoothly in the interventions, and availability of lands for program development, restoration and/or sustainable utilization.
  - Assessing vulnerability of project against natural disasters e.g. climate change, drought, flash floods, cold winter, landslides, pest and diseases.
  - Assessing all relevant components of the project and their approaches whether they are suitable or in compliance with the selected species of goat and sheep for development.
- ✓ Market analysis:
  - National demand assessment and revenue forecasting for the project including and conduct market supply and value chain analysis,
  - Identifying potential existing new international markets, export potential and suggesting measures to improve sorting, packing, marketing methods and establishing market linkages.

- ✓ Legal due diligence:
  - Legal, institutional and regulatory frameworks review
  - Provide in the analysis an overview of any outstanding legal and regulatory issues that needs to be put in place including licensing and permits, land access/rights, regulatory matters, and approvals required.
  - Assess government, private sector and communities' role in the project.
  - Developing and providing details to the legal design of the project
  - Review of project assumptions, whether they are practically and legally viable.
  
- ✓ Financial and economic model to carry out the initial PPP screening to determine suitability for PPP procurement. The financial model will evaluate full project life costs, affordability limits, leverage cost ratio and their costs and optimal value-for-money methods of delivery, and include, at a minimum, the following inputs:
  - Income projections
  - Other sources of funds - concessionaire equity, debt financing, Viability Gap Funding (VGF) etc.
  
- ✓ Cost estimate: preliminary project costing, including expected capital outlays, operations and maintenance costs, as well as a discussion of non-quantifiable costs;
  - Prepare complete financial requirements and costs needed for the required infrastructures, machinery, utilities, staff, recurring expenses, revenue generation, cash flow statement, break-even analysis, income statement, cost and revenue assumptions for various processing and value addition plants for small ruminants' products.

The financial conclusions drawn from the financial model should be clearly articulated, and include sensitivity analysis and reporting of standard financial evaluation parameters including post-tax Internal Rates of Return (IRR), Net Present Value (NPV), Debt Service Coverage Ratio (DSCR), Investment Return Ratio, Profitability Ratio and Payback Period, etc. Economic model presented the results of the Cost Benefit Analysis and should report parameters including Economic Internal Rate of Return (EIRR), Benefit/Cost (B/C) Ratio, Discount Rate, etc.

The financial analysis will also include an assessment of the financial management and accounting structures proposed to identify efficiency gains available through other structural mechanisms, e.g. taxation of revenues or products and accounting methods for depreciation of assets.

- ✓ Bankability Analysis – The study should also look into the project from bankability for loan perspective and develop project bankability proposal.
  - Macroeconomic Impact:
    - The economic analysis should assess: (a) revenues that would accrue to the Government through (i) value added taxes; (ii) other taxes and levies as contributions to specific funds (e.g. Social Fund); (iii) customs duties and excise levies on equipment and services imported/ purchased; (b) employment and income generation, regional development, betterment of people directly affected etc.;
  
- ✓ The feasibility study should prescribe roles for different actors to optimize the value of the project and a methodology to differentiate fully self-supporting fee for service project from those likely to require subsidy (capital grant and/or availability payment/revenue guarantees) and those likely to be fully publicly financed and those likely to be fully privately financed.



- ✓ Affordability analysis - Where the PPP concession scheme is found to be viable, the EASF will provide indications of minimum VGF and/or operating subsidies, if appropriate, required to attract private sector participation, along with justifications for such indications;
- ✓ Bankability Analysis – The study should also look into the project from bankability for loan perspective and **develop project bankability proposal**.
- ✓ Risk analysis - preparation of risk register identifying all the reasonably foreseeable risks, the most significant risk to the project and possible mitigation measures, and preliminary risk allocation between the public and private sectors; The following are some of the risks that need to be considered (this is a non-exhaustive list): Technical risk, Market Risk, Counterparty risk, Completion risk, Operation Risk, Price and tariff risk, Political risk, Legal risks, Fiscal/macroeconomic risks, Regulatory risk, Environmental risks, Force Majeure risks, and Social risks.
  - The review should contain recommendations on the mitigation mechanisms for each of the identified risks to be implemented by the party identified to bear that risk. In doing so, assessment and applicability and economy of various risk mitigation mechanisms should be carried out. Any special mechanisms that have been developed or deployed around the world in a high risk context and their applicability and adaptation for the current context should be considered.
- ✓ Options analysis - If the project is found to be suitable for a Best Implementation Model, presentation of the range of technical, legal and financial options for structuring a best implementation model for transaction for the project, including key contract terms for the recommended option (for example proposed payment mechanism to reflect recommended risk allocation). Evaluation of one alternative option for meeting project objectives for a comparison to be considered;
- ✓ Market Sounding: The EASF will develop a tightly focused promotional campaign for the Project, including short press briefings, advertisement inserts to be published in international trade publications and business newspapers, followed up by the targeted marketing of the selected companies through organizing road shows and seminars for potential investors as well as initiating direct communications with them. The logistics costs will be borne by the Client.
- ✓ Implementation recommendations: preliminary recommendations on proposed approach to PPP tendering process, timetable, etc.

### **3.2 Fisheries development program in all provinces of Afghanistan- scope of work**

The Feasibility Study must address the following:

- Review and study of existing data and available literature studies. The EASF will review and study the background documentation and preparatory work conducted.
- Definition of the project’s concept: a clear description of the project concept, including a description of the policy context (draft);
- Needs analysis: high-level review of the project’s commercial rationale and analysis of the demand for and desirability of the project; This should be consistent with international standards and out consider the following:

- Situation and problem analysis
- Project strategic objectives
- Budget
- Institutional analysis
- Local communities capacity analysis
- Output and impact specifications
- Scope of the project
- Existing financial forecasts, historical financial performance and technical operating history.

Technical scope: description of the key technical parameters envisioned for the project. This will include identifying various technical options as well as evaluation and assessment of each option. In developing the technical scope of the project, the following activities/tasks will be required but should not be limited to:

- To undertake the studies and identification of the available water resource and water quality analysis for fishery.
- To undertake the studies and identification of the soil analysis and soil suitability for fishery.
- To identify the local fish breeds including their locations and diseases at national level
- Introduction of best fish farming practices (such as design and farm mapping, diseases control and processing) to increase the level of productions.
- Provide scheme map and estimation for new fish farms.
- Identification of number and location for establishment of Reproduction and Researching Fish Farms in the country based on existing potential and national and international standards (complete drawing and engineering package).
- Identification of number and location for establishment of hatchery in the country based on existing potential (complete drawing and engineering package).
- Identification of location for establishment of 35,000 grow out fish farms in the country based on existing potential and standard criteria (complete drawing and engineering package on the basis of typical model of small, medium and large scales).
- Identification of required number and location for establishment of Fish Feed Processing Plant based on the demand and international standards (complete drawing and engineering package).
- The firm/Consultant should submit detailed information and SWOT analysis for the available fishery farms and establishment of new fish farms
- The firm should conduct study on farm location, land size, fish type, land preparation practices, farm designing type (small, medium and large scale farms as per climate, water supply, demand and supply).
- The firm should study and recommend best subsidy models for fishery sector of Afghanistan based on the current situation.
- The detailed feasibility study team should define:
  - Which services are provided by whom and where (private versus public sector),
  - Which are the major bottlenecks,
  - What services are requested by the farmers,
  - What knowledge is available with private sector regarding planting materials, commercial farm establishment,

- How does the public sector see its role in the future.
- Identify the number and location of fishery product processing plant based on the existing potential (main and byproducts) along with the following information:
  - Identify appropriate and suitable processing machinery and suggest ways and means for setting up processing plants based on international engineering standards (complete drawing and engineering package).
  - Ready to tender documents (financial proposals with the economic and analysis and other).
- Suggest the modalities of investment by processors, support from funding organizations and facilities provided by the Government in the shape of relief in import duty and other taxes.
- Study the current status of the relationship of producers/processors with the domestic and export markets for targeted high-value fish meat with a clear approach to strengthening the linkages of producers, processors, and exporters with national and international markets.
- Assessment of the social and environmental impacts of the project; Project impacts on environmental and social parameters. The preliminary assessment will also include the following:
  - Conducting social and environmental impact assessment study of the project to meet international standards.
  - Assessing local communities level of interest, how they can be involved smoothly in the interventions, and availability of lands for program development, restoration and/or sustainable utilization.
  - Assessing vulnerability of project against natural disasters e.g. climate change, drought, flash floods, landslides, pest and diseases.
  - Assessing all relevant components of the project and their approaches whether they are suitable or in compliance with the selected species of Fishery Development Project.
- Market analysis:
  - National demand assessment and revenue forecasting for the project including and conduct market supply and value chain analysis,
  - Identifying potential existing new international markets, export potential and suggesting measures to improve sorting, packing, marketing methods and establishing market linkages.

- Legal due diligence:
  - Legal, institutional and regulatory frameworks review
  - Provide in the analysis an overview of any outstanding legal and regulatory issues that needs to be put in place including licensing and permits, land access/rights, regulatory matters, and approvals required.
  - Assess government, private sector and communities' role in the project.
  - Developing and providing details to the legal design of the project
  - Review of project assumptions and whether they are practically and legally viable.
  
- Financial and economic model to carry out the initial PPP screening to determine suitability for PPP procurement. The financial model will evaluate full project life costs, affordability limits, leverage cost ratio and their costs and optimal value-for-money methods of delivery, and include, at a minimum, the following inputs:
  - Income projections
  - Other sources of funds - concessionaire equity, debt financing, Viability Gap Funding (VGF) etc.
  
- Cost estimate: preliminary project costing, including expected capital outlays, operations and maintenance costs, as well as a discussion of non-quantifiable costs;
  - Prepare complete financial requirements and costs needed for the required infrastructures, machinery, utilities, staff, recurring expenses, revenue generation, cash flow statement, break-even analysis, income statement, cost and revenue assumptions for various processing and value addition plants for fishery

The financial conclusions drawn from the financial model should be clearly articulated, and include sensitivity analysis and reporting of standard financial evaluation parameters including post-tax Internal Rates of Return (IRR), Net Present Value (NPV), Debt Service Coverage Ratio (DSCR), Investment Return Ratio, Profitability Ratio and Payback Period, etc. Economic model presented the results of the Cost Benefit Analysis and should report parameters including Economic Internal Rate of Return (EIRR), Benefit/Cost (B/C) Ratio, Discount Rate, etc.

The financial analysis will also include an assessment of the financial management and accounting structures proposed to identify efficiency gains available through other structural mechanisms, e.g. taxation of revenues or products and accounting methods for depreciation of assets.

- Bankability Analysis – The study should also look into the project from bankability for loan perspective and develop project bankability proposal.

## Macroeconomic Impact:

The economic analysis should assess: (a) revenues that would accrue to the Government through (i) value added taxes; (ii) other taxes and levies as contributions to specific funds (e.g. Social Fund); (iii) customs duties and excise levies on equipment and services imported/ purchased; (b) employment and income generation, regional development, betterment of people directly affected etc.;

- The feasibility study should prescribe roles for different actors to optimize the value of the project and a methodology to differentiate fully self-supporting fee for service project from those likely to require subsidy (capital grant and/or availability payment/revenue guarantees) and those likely to be fully publicly financed and those likely to be fully privately financed.
- Affordability analysis - Where the PPP concession scheme is found to be viable, the EASF will provide indications of minimum VGF and/or operating subsidies, if appropriate, required to attract private sector participation, along with justifications for such indications;
- Bankability Analysis – The study should also look into the project from bankability for loan perspective and **develop project bankability proposal**.
- Risk analysis - preparation of risk register identifying all the reasonably foreseeable risks, the most significant risk to the project and possible mitigation measures, and preliminary risk allocation between the public and private sectors; The following are some of the risks that need to be considered (this is a non-exhaustive list): Technical risk, Market Risk, Counterparty risk, Completion risk, Operation Risk, Price and tariff risk, Political risk, Legal risks, Fiscal/macro-economic risks, Regulatory risk, Environmental risks, Force Majeure risks, and Social risks.

The review should contain recommendations on the mitigation mechanisms for each of the identified risks to be implemented by the party identified to bear that risk. In doing so, assessment and applicability and economy of various risk mitigation mechanisms should be carried out. Any special mechanisms that have been developed or deployed around the world in a high risk context and their applicability and adaptation for the current context should be considered.

- Options analysis - If the project is found to be suitable for a Best Implementation Model, presentation of the range of technical, legal and financial options for structuring a best implementation model for transaction for the project, including key contract terms for the recommended option (for example proposed payment mechanism to reflect recommended risk allocation). Evaluation of one alternative option for meeting project objectives for a comparison to be considered;

- **Market Sounding:** The EASF will develop a tightly focused promotional campaign for the Project, including short press briefings, advertisement inserts to be published in international trade publications and business newspapers, followed up by the targeted marketing of the selected companies through organizing road shows and seminars for potential investors as well as initiating direct communications with them. The logistics costs will be borne by the Client.
- **Implementation recommendations:** preliminary recommendations on proposed approach to PPP tendering process, timetable, etc.

### **3.3 Small ruminant development program in all 34 provinces of Afghanistan- scope of work**

The Feasibility Study must address the following:

- ✓ Review and study of existing data and available literature studies. The EASF will review and study the background documentation and preparatory work conducted.
- ✓ Definition of the project's concept: a clear description of the project concept, including a description of the policy context (draft);
- ✓ Needs analysis: high-level review of the project's commercial rationale and analysis of the demand for and desirability of the project; This should be consistent with international standards and out consider the following:
  - Situation and problem analysis
  - Project strategic objectives
  - Budget
  - Institutional analysis
  - Local communities capacity analysis
  - Output and impact specifications
  - Scope of the project
  - Existing financial forecasts, historical financial performance and technical operating history.

**Technical scope:** description of the key technical parameters envisioned for the project. This will include identifying various technical options as well as evaluation and assessment of each option. In developing the technical scope of the project, the following activities/tasks will be required but should not be limited to:

- ✓ To review the law of livestock production, law of animal health, national livestock production and health policy and related assessment reports,
- ✓ To review the current statistical system for livestock related data – identification of priorities, gaps, and strengths.
- ✓ To conduct survey of livestock census by species, breed, productions and age,
- ✓ Prepare census reports and disseminate results,
- ✓ Reconcile the data from the system of current statistics with the census data,
- ✓ To identify the local livestock breeds including their locations and diseases at national level,
- ✓ A survey of the entire range involving the agronomy, ecology, sociology and economy is a vast undertaking. Such survey progressively will be implemented over time and is recommended for serious consideration,

- ✓ A study will be conducted on status of the pastures for rehabilitation and increasing dry matter production capacity of the pasture areas,
- ✓ A study will be conducted on status of the animal production for growth and development of livestock production at national level,
- ✓ To identify mobility and mortality percentage rate of animal by species, breed and age,
- ✓ To identify common diseases of livestock (infectious, non-infectious and zoonotic diseases),
- ✓ Introduction of best goat and sheep farming practices (such as design and farm mapping, diseases control and processing) to increase the level of productions,
- ✓ Provide scheme map and estimation for new sheep and goat farms,
- ✓ Identification of number and location for establishment of reproduction and researching goat and sheep breeding farms in the country based on existing potential as per national and international standards (complete drawing and engineering package).
- ✓ The firm/Consultant should submit detailed information and SWOT analysis for the available animal feed processing plant, wool, skin and cashmere factories and slaughterhouses,
- ✓ Identification of required number and location for establishment of animal feed processing plant, wool, skin and cashmere factories, slaughterhouses and meat/by-products processing plant based on the demand and international standards (complete drawing and engineering package).
- ✓ To design and test the computer processing system, including data entry, editing and tabulation and electronic devices will be used for data collection.
- ✓ The detailed feasibility study team should define:
  - Which services are provided by whom and where (private versus public sector),
  - Which are the major bottlenecks,
  - What services are requested by the farmers,
  - What knowledge is available with private sector regarding planting materials, commercial farm establishment,
  - How does the public sector see its role in the future?
- ✓ Suggest the modalities of investment by processors, support from funding organizations and facilities provided by the Government in the shape of relief in import duty and other taxes.
- ✓ Study the status of the relationship of producers/processors with the domestic and export markets for targeted high-value red meat, wool, cashmere, skin and Karakul skin with a clear approach to strengthening the linkages of producers, processors, and exporters with national and international markets.
- ✓ Assessment of the social and environmental impacts of the project; Project impacts on environmental and social parameters. The preliminary assessment will also include the following:
  - Conducting social and environmental impact assessment study of the project to meet international standards.
  - Assessing local communities level of interest, how they can be involved smoothly in the interventions, and availability of lands for program development, restoration and/or sustainable utilization.
  - Assessing vulnerability of project against natural disasters e.g. climate change, drought, flash floods, cold winter, landslides, pest and diseases.
  - Assessing all relevant components of the project and their approaches whether they are suitable or in compliance with the selected species of goat and sheep for development.

- ✓ Market analysis:
  - National demand assessment and revenue forecasting for the project including and conduct market supply and value chain analysis,
  - Identifying potential existing new international markets, export potential and suggesting measures to improve sorting, packing, marketing methods and establishing market linkages.
  
- ✓ Legal due diligence:
  - Legal, institutional and regulatory frameworks review
  - Provide in the analysis an overview of any outstanding legal and regulatory issues that needs to be put in place including licensing and permits, land access/rights, regulatory matters, and approvals required.
  - Assess government, private sector and communities' role in the project.
  - Developing and providing details to the legal design of the project
  - Review of project assumptions, whether they are practically and legally viable.
  
- ✓ Financial and economic model to carry out the initial PPP screening to determine suitability for PPP procurement. The financial model will evaluate full project life costs, affordability limits, leverage cost ratio and their costs and optimal value-for-money methods of delivery, and include, at a minimum, the following inputs:
  - Income projections
  - Other sources of funds - concessionaire equity, debt financing, Viability Gap Funding (VGF) etc.
  
- ✓ Cost estimate: preliminary project costing, including expected capital outlays, operations and maintenance costs, as well as a discussion of non-quantifiable costs;
  - Prepare complete financial requirements and costs needed for the required infrastructures, machinery, utilities, staff, recurring expenses, revenue generation, cash flow statement, break-even analysis, income statement, cost and revenue assumptions for various processing and value addition plants for small ruminants' products.

The financial conclusions drawn from the financial model should be clearly articulated, and include sensitivity analysis and reporting of standard financial evaluation parameters including post-tax Internal Rates of Return (IRR), Net Present Value (NPV), Debt Service Coverage Ratio (DSCR), Investment Return Ratio, Profitability Ratio and Payback Period, etc. Economic model presented the results of the Cost Benefit Analysis and should report parameters including Economic Internal Rate of Return (EIRR), Benefit/Cost (B/C) Ratio, Discount Rate, etc.

The financial analysis will also include an assessment of the financial management and accounting structures proposed to identify efficiency gains available through other structural mechanisms, e.g. taxation of revenues or products and accounting methods for depreciation of assets.

- ✓ Bankability Analysis – The study should also look into the project from bankability for loan perspective and develop project bankability proposal.
  - Macroeconomic Impact:
    - The economic analysis should assess: (a) revenues that would accrue to the Government through (i) value added taxes; (ii) other taxes and levies as contributions to specific funds (e.g. Social Fund); (iii) customs duties and excise



levies on equipment and services imported/ purchased; (b) employment and income generation, regional development, betterment of people directly affected etc.;

- ✓ The feasibility study should prescribe roles for different actors to optimize the value of the project and a methodology to differentiate fully self-supporting fee for service project from those likely to require subsidy (capital grant and/or availability payment/revenue guarantees) and those likely to be fully publicly financed and those likely to be fully privately financed.
- ✓ Affordability analysis - Where the PPP concession scheme is found to be viable, the EASF will provide indications of minimum VGF and/or operating subsidies, if appropriate, required to attract private sector participation, along with justifications for such indications;
- ✓ Bankability Analysis – The study should also look into the project from bankability for loan perspective and **develop project bankability proposal**.
- ✓ Risk analysis - preparation of risk register identifying all the reasonably foreseeable risks, the most significant risk to the project and possible mitigation measures, and preliminary risk allocation between the public and private sectors; The following are some of the risks that need to be considered (this is a non-exhaustive list): Technical risk, Market Risk, Counterparty risk, Completion risk, Operation Risk, Price and tariff risk, Political risk, Legal risks, Fiscal/macro-economic risks, Regulatory risk, Environmental risks, Force Majeure risks, and Social risks.
  - The review should contain recommendations on the mitigation mechanisms for each of the identified risks to be implemented by the party identified to bear that risk. In doing so, assessment and applicability and economy of various risk mitigation mechanisms should be carried out. Any special mechanisms that have been developed or deployed around the world in a high risk context and their applicability and adaptation for the current context should be considered.
- ✓ Options analysis - If the project is found to be suitable for a Best Implementation Model, presentation of the range of technical, legal and financial options for structuring a best implementation model for transaction for the project, including key contract terms for the recommended option (for example proposed payment mechanism to reflect recommended risk allocation). Evaluation of one alternative option for meeting project objectives for a comparison to be considered;
- ✓ Market Sounding: The EASF will develop a tightly focused promotional campaign for the Project, including short press briefings, advertisement inserts to be published in international trade publications and business newspapers, followed up by the targeted marketing of the selected companies through organizing road shows and seminars for potential investors as well as initiating direct communications with them. The logistics costs will be borne by the Client.
- ✓ Implementation recommendations: preliminary recommendations on proposed approach to PPP tendering process, timetable, etc.

#### **4- EASF skill, experience, remuneration and management by the Ministry**

The EASF will comprise a team, managed by the firm/consortium. The members of the team will have the skill and experience necessary to undertake the range of tasks set out in the ToRs for the feasibility study of the three livestock projects. Each individual on the team must be personally available to do the work as and when required. It is anticipated that the team-leader or deputy team-leader of the EASF's team will be located in Kabul for the vast majority of the

duration of the contract. The firm will be held accountable, in terms of the contract, for ensuring project deliverables and for the professional conduct and integrity of the team.

The given number of personnel should be considered and appointed to conduct the feasibility study of the three livestock projects:

S/N	Key personnel	# of experts	Qualification & Experience	# of working days for consultants involved
1	Team Leader (PPP Expert)	1 (International)	The consultant should at least hold a master degree in economics, Business administration, agriculture, Engineering or any other relevant field, the consultant should at least hold 10 years of experience, in senior management out of which at least 8 years should be in PPP. Preference will be given to a consultant with experience of conducting feasibility studies.	120
2	Deputy Team Leader (Fishery Specialist)	1 (National)	Should at least hold a master degree in animal health/livestock; the consultant should at least have 10 years of experience in the relevant field.	120
3	Deputy Team Leader (Livestock Specialist)	1 (National)	Should at least hold a master degree in animal health/livestock; the consultant should at least have 10 years of experience in the relevant field.	120
4	Deputy Team Leader (Dairy Specialist)	1 (National)	Should at least hold a master degree in animal health/livestock; the consultant should at least have 10 years of experience in the relevant field.	120
5	Animal and fish feed specialist	1(National)	Should at least hold a master degree in animal health/livestock; the consultant should at least have 10 years of experience in the relevant field.	90
6	Animal and fish feed specialist	1(National)	Should at least hold a master degree in animal health/livestock; the consultant should at least have 10 years of experience in the relevant field.	90
7	Animal and Fish Health Specialist - DVM	1 (National)	Should at least hold a master degree in animal health/livestock/veterinary; the consultant should at least have 10 years of experience in the relevant field.	90
8	Animal and Fish Health Specialist - DVM	1 (National)	Should at least hold a master degree in animal health/livestock/veterinary; the consultant should at least have 10 years of experience in the relevant field.	90

S/N	Key personnel	# of experts	Qualification & Experience	# of working days for consultants involved
9	Livestock farming specialist	1 (National)	The consultant should at least hold a master degree in Livestock farming, agriculture, horticulture, land or animal-related subject with 10 years of relevant experience	90
10	Livestock Value Chain Specialist	1 (International)	The consultant should at least hold a master degree in Livestock, Value chain or any other relevant field. The consultant should at least hold 12 years of experience out of which at least 7 years should be in value chain.	90
11	Livestock Value Chain Specialist	1 (National )	The consultant should at least hold a master degree in Livestock, Value chain or any other relevant field. The consultant should at least hold 12 years of experience out of which at least 7 years should be in value chain.	90
12	Animal breeding Specialist	1 (National)	The consultant should at least hold a master degree in Livestock Breeding or any other relevant field. The consultant should at least hold 10 years of experience	90
13	Animal breeding Specialist	1 (National)	The consultant should at least hold a master degree in Livestock Breeding or any other relevant field. The consultant should at least hold 10 years of experience	90
14	Rangelands management specialist	1 (National)	Should at least hold a master degree in range management in the combination of plant, animal, and soil sciences and natural resources management; the consultant should at least have 10 years of experience in the relevant field.	90
15	Rangelands management specialist	1 (National)	Should at least hold a master degree in range management in the combination of plant, animal, and soil sciences and natural resources management; the consultant should at least have 10 years of experience in the relevant field.	90
16	Red and white meat Specialist	1 (National)	The consultant should at least hold a bachelor degree in livestock health or any other relevant field. The consultant should at least hold 5 years of relevant experience.	90

S/N	Key personnel	# of experts	Qualification & Experience	# of working days for consultants involved
17	Economist & Financial Expert	1 (National)	The consultant should at least hold a master degree in Agri-economics, Business Administration, Economics or any other relevant field. The consultant should at least hold 10 years of relevant experience out of which at least 5 years should be in conducting financial and economic analysis.	90
18	Economist & Financial Expert	1 (National)	The consultant should at least hold a master degree in Agri-economics, Business Administration, Economics or any other relevant field. The consultant should at least hold 10 years of relevant experience out of which at least 5 years should be in conducting financial and economic analysis.	90
19	Environmental & Social Expert	1 (National)	The consultant should at least hold a master degree in Environmental Engineering, Environmental Sciences, Natural Resource Management, Forestry, Social Sciences, or any other relevant field. The consultant should at least have 7 years of experience.	90
20	Environmental & Social Expert	1 (National)	The consultant should at least hold a master degree in Environmental Engineering, Environmental Sciences, Natural Resource Management, Forestry, Social Sciences, or any other relevant field. The consultant should at least have 7 years of experience.	90
21	Legal Expert	1 (National)	The consultant should at least hold a bachelor degree in legal law (LLB), while, preference will be given to the expert holding a master degree (LLM). The consultant should at least hold 10 years of experience relevant experience, preference will be given to the consultant holding experience of Land registry, land reform, forestry and natural resource laws.	90

S/N	Key personnel	# of experts	Qualification & Experience	# of working days for consultants involved
22	Survey Engineer	1 (National)	The consultant should at least hold a bachelor degree in survey/ civil engineering. The consultant should at least have 5 years of experience in conducting field surveys.	90
23	Survey Engineer	1 (National)	The consultant should at least hold a bachelor degree in survey/ civil engineering. The consultant should at least have 5 years of experience in conducting field surveys.	90
24	Survey Engineer	1 (National)	The consultant should at least hold a bachelor degree in survey/ civil engineering. The consultant should at least have 5 years of experience in conducting field surveys.	90
25	Survey Engineer	1 (National)	The consultant should at least hold a bachelor degree in survey/ civil engineering. The consultant should at least have 5 years of experience in conducting field surveys.	90
26	Survey Engineer	1 (National)	The consultant should at least hold a bachelor degree in survey/ civil engineering. The consultant should at least have 5 years of experience in conducting field surveys.	90
27	Survey Engineer	1 (National)	The consultant should at least hold a bachelor degree in survey/ civil engineering. The consultant should at least have 5 years of experience in conducting field surveys.	90
28	Dairy Specialist	1 (National)	The consultant should at least hold bachelor degree in business administration or a related field and experience working in the farming industry. The consultant should at least hold 5 years of experience in the relevant field.	90
<b>Total</b>		<b>28</b>		

The EASF should propose its team composition in its proposal which may vary from the above table. The EASF should identify additional expertise required to undertake the tasks in the TOR.

## 5- Contract Period

The duration of the assignment is for four months; starting from the day of the commencement during which the consultant shall be expected to complete all the transaction advisory assignment.

**6- The short listing criteria are:**

- i. The Consultant should be registered legal entity. The consultant should provide a copy of the business license with its EOI.
- ii. The consultant should not be in loss for the last 3 years. Consultant shall demonstrate having sound financial situation by submitting audited financial reports , bank statement or any other credible financial documents for last 3 years.
- iii. The consultant should provide copy of proven experiences of having executed at least one contract of similar nature and complexity, having carried feasibility study any of the following fields (Dairy industry development, Fisheries development and Small ruminant development; while, preference will be given to the consultant that has previously carried feasibility study of all above mentioned three assignments) during last 5 years, with minimum value of 22,173,275.00 Afs or its equivalent in any other currency.
- iv. The consultant should at least provide a copy of the annual turnover at least reflecting the amount of 48,042,096.00 Afs or its equivalent in any other convertible currency during last five years, in shape of financial audit report, M16 form or any other credible financial documents generated by a third independent party.
- v. Requirements for Consultants participating as Joint Venture, Consortium or Association:

Consultants may associate with other firms in the form of a joint venture or a sub-consultancy to enhance their qualifications. If consultants intend to associate with other firms, they are advised to clearly identify the lead partner and state the composition and nature of their association (JV/ sub-consultant) in their EOI.

In case of association between the firms are in the form of JV, the following requirements will also apply:

- Only the firm meeting not less (40) % of the shortlisting criteria shall act as the Lead Partner of the JV. The lead partner needs to be identified in JV agreement or intention of forming JV to be submitted with the EoI. Other member(s) of JV need to meeting not less (25) % of the shortlisting criteria. The figures for each of the partners of a JV shall be added together to determine the consultant's compliance with the shortlisting criteria.
- The variance in similarity and complexity could be acceptable.

vi. Consultant having some regional experience is desirable

vii. The consultant is not black-listed by Government of Afghanistan.

viii. Declaration by the Consultant that the consultant does not have any conflict of interest in terms of taking any assistance / support from individual / firm / consultants who have been part of the Project... .....consultancy or the procurement process.

ix. Declaration by the Consultant that the information furnished in EoI is correct and for any misrepresentation detected at any stage of selection process or during execution of the resultant contract if successful, the Consultant to be taken up under the Laws of Afghanistan.

**7- Method of Selection**

A Consultant will be selected in accordance with the *Quality & Cost Based selection (QCBS)* set out in Rule 59 of Procurement Procedures.

## 8- Submission of EOI

For receiving soft copy of the TOR, please contact procurement section of Ministry of Agriculture, Irrigation and Livestock at the address reflected below during office hours 08:30 to 15:30 hours. [Habib.rezazada@mail.gov.af](mailto:Habib.rezazada@mail.gov.af) [habib.rezazada@gmail.com](mailto:habib.rezazada@gmail.com)  
[smoudodi@gmail.com](mailto:smoudodi@gmail.com); and copying [mohammadullah.sahil@mail.gov.af](mailto:mohammadullah.sahil@mail.gov.af),  
[wkhawar@live.com](mailto:wkhawar@live.com)

The expressions of interest must be delivered to the address below or can be submitted (in person, by mail, or by e-mail) to the E-mail addresses reflected above no later than **(February 12<sup>th</sup>, 2020 at 13:30 Hrs. Kabul Afghanistan Local Time)**.

Consultancy Department  
Procurement Directorate  
Ministry of Agriculture, Irrigation and Livestock  
Jamal Mina Kabul University Road, Kabul, Afghanistan