



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 the feasibility study of agricultural projects, I -Utilization of the concept of (5200 ha) of New Land (UCNL), II - Watershed Management through Establishment of Almond Orchards, Cultivation of Saffron (WMEAOCs) and III - Almond Production, Processing, Packaging and Marketing (APPPM).

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The Islamic Republic of Afghanistan represented by the Ministry of Agriculture, Irrigation and Livestock received a 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 agricultural projects 1-Utilization Concept of (5200 ha) New Land (UCNL) 2- Watershed Management through Establishment of Almond Orchards and Cultivation of Saffron (WMEAOCs) and 3-Almond Production, Processing, Packaging and Marketing Project.

Background of the projects.

1-UTILIZATION CONCEPT OF (5200 ha) NEW LAND (UCNL)

MAIL has recently approved to undertake a feasibility study of UCNL project in Kunar province, in support of its strategic plan to enhance the sustainable agriculture in the country. Due to changes in the upper area and watersheds of Kunar province by various factors resulted in putting pressure on the lower watershed of Kunar River causing a big damage and continue land erosion along the river. To avoid this big damage and further land erosion, the government has been building protection walls and other structures which has generated a new land that could be used for agriculture purposes. The necessary of preparing this concept is to convert this new land into productive land and also keep it from grabbing. In addition, this is a necessary activity of resources management that built a vegetative cover on the mentioned land which help to reduce pressure on the natural forests, avoid cutting of the forests, and provide raw material for the available wood working factories in Kunar province, and provide necessary wood production. Also establishment of citrus orchards, agritourism area and fishery framings on a portion of the new land will generate enough revenue to the government of Afghanistan and economic growth. As mentioned under the goal and objectives of the UCNL project, the main purpose is utilization of land acquired along the Kunar River, agricultural extension and expansion development, establishment of a healthy environment, strengthening local people's economy, and sustainable use of resources and fighting against climate change.

This project will create job opportunities for 7,000 people directly and indirectly the entire province will get benefits from it. Also natural forests will be conserved, artificial forests will be established for the purpose of environment improving, provision of fuel material, reducing fish and citrus fruits imports, creating conditions for public investment and promotion of tourism in the country.

In addition, the goals of the UCNL project is directly associated with MAIL's national programs, natural resources management, and productivity programs, and allied with ANDF strategy.

The feasibility study will generally focus on utilization of the new land for establishment of artificial forests, fruits orchards (citrus) and vegetables, fish farming and agro-tourism area. In details, it will assess that how the land will be utilized considering all factors such as environmental, social, and economical. At the end the study will recommend which forest tree are more economic and suitable considering the land status and environment and will have a comparison analysis between the proposed forest trees in term of fast growing and high economic return. Similar analysis will be conducted for the orchard establishment to identify the most suitable and profitable fruit crops as well as for the fish farming in term of dimension and the fish variety. The study will also assess that which type of irrigation infrastructures are ideal to provide water for the land, its estimated cost (BoQ), and appropriate design. Identification and classifying of potential sites suitable for forest, orchard establishment, fish farming, and agro-tourism considering the thickness of topsoil availability.

2-WATERSHED MANAGEMENT THROUGH ESTABLISHMENT OF ALMOND ORCHARDS AND CULTIVATION OF SAFFRON (WMEAOCs)

MAIL has recently approved to undertake a feasibility study of WMEAOCs project in Pashtoon Zarghoon district of Herat province, in support of its strategic plan to enhance the sustainable agriculture in the country.

As stated under the project goal and objectives for Pashtoon Zarghoon, the overall purpose is the management of Watershed in Southern of Pashtoon Zarghoon for the well-growth of the country's economy and prevention of soil erosion and destruction from heavy rain falls. Managing small and medium-sized watersheds is one of the most important functions in comprehensive water management. This performance on groundwater nutrition is very useful, controlling water losses and soil erosion, whilst increasing vegetation diversity in the area.

Implementation of this concept will reduce the problems of air pollution caused by various factors and consequently improve the health of the residents of the area. Once the project is implemented, it contributes to production of 325,000 tons of oxygen per year, and absorption of 7.1 million tons of carbon dioxide, preventing wastage of 104 million cubic meters of rainwater.

Establishment of commercial almond orchards and cultivation of almond, on the one hand, creation of permanent and temporary employment for 55,000 workers and 300 technical staff highly contribute to improving the economic cycle for the 385,000 family members.

Establishment of commercial orchards creates and paves the way for investment opportunities in value chain which plays a key role in the sustainable growth of the country's economy.

The feasibility study will focus on the development of rainwater harvesting structures for raising the ground water table, operationalizing Qanats, controlling seasonal floods and surface run-off, and establishment of almond orchards and cultivation of almond for high economic return and rehabilitating soil with a total cumulative cultivated area of around 30,000 ha of land for Pashtoon Zarghoon project.

The extent of this area will depend mainly on water and soil availability as well as environmental constraints that will be identified through the feasibility study.

3-ALMOND PRODUCTION, PROCESSING, PACKAGING AND MARKETING PROJECT.

MAIL has recently approved to undertake a feasibility study of “Almond Production, Processing, Packaging and Marketing” project which is going to be implemented at national level.

The multipurpose of the project is to increase the productivity of through establishment of orchards in provinces including Kunduz, Zabul, Ghazni, Daikundi, Parwan, Samangan, Balkh, Urozgan, Badghis, Jawzjan, Baghlan, Sare-pol, Badakhshan and Takhar and improve the value chain of the product for increased export purposes at international level meeting the standards and demands internationally. Other benefits include food safety, ensured quality, job creation, awareness raising, and revenue generation of millions of dollars annually.

Considering 's adaption with the country's climate, is considered a strategic plant that plays a considerably remarkable role in the improvement of income generation, employment creation, economic growth and poverty reduction. According to a report from the Department of Agriculture Statistics, Ministry of Agriculture, Irrigation and Livestock, was exported to 15 countries in 2017; Afghanistan was ranked second as an exporter of the in the world.

Within the country, is planted in the southwest, north and northeast areas is determined as one of the key products by the Ministry of Agriculture, Irrigation and Livestock; is ranked the second export commodity. According to export statistics for 2016-2017, worth \$ 32 million for the value of exports was reported that was exported to international markets. High quality s are mainly produced in the aforementioned areas, which do not only meet the standards and demands at domestic markets, but also it addresses the requirements at foreign markets. The project focuses on the well-growth of the country's economy and placement of standardized mechanism for enhanced export.

Implementation of this concept will reduce the problems of air pollution caused by various factors and consequently improve and ensure food safety, quality, and standardization

Establishment of orchards at national level through implementation of this project will create employment for 4,296 individuals highly contribute to improving the economic cycle for the 4,296 family members.

Establishment of commercial orchards creates ad paves the way for investment opportunities in value chain which plays a key role in the sustainable growth of the country's economy.

The feasibility study will focus on the establishment of orchards with a great focus on its value chain improvement for export purposes will highly contribute to high economic return with a total cumulative cultivated area of around 2100 ha of land through establishment of almond orchards as well as establishment of four processing center having capacity of five MT in one shift in four provinces including Zabul, Samangan, Konduz and Daikundi.

The extent of this area will depend mainly on water and soil availability as well as environmental constraints that will be identified through the feasibility study.

Objectives of the projects.

1- UTILIZATION CONCEPT OF (5200 ha) NEW LAND (UCNL)

The goal and objectives of UCNL project are:

The main goal of the project is utilization of the new land along the Kunar River and converting it to a productive land.

Objectives:

- *Establishment of artificial forestry*
- *Establishment of orchards (citrus of other)*
- *Establishment of fishery farms*
- *Establishment of agri-tourism areas.*
- *Effective use of the country's natural resources (land and water) for economic growth and prosperity;*
- *Creating jobs*

2- WATERSHED MANAGEMENT THROUGH ESTABLISHMENT OF ALMOND ORCHARDS AND CULTIVATION OF SAFFRON (WMEAOCs)

The goal and objectives of WMEAOCs project are:

The project goal is the management of Watershed in Southern of Pashtun and Zarghoon for the well-growth of the country's economy and prevention of soil erosion and destruction from heavy rain falls.

Objectives:

- *Developing rainwater harvesting structures for irrigation orchards, recharging ground water table and operationalizing Qanats and controlling season floods and surface run-off*
- *Effective use of the country's natural resources (land and water) for economic growth and prosperity;*
- *Establishment of commercial almond orchards and extensive cultivation of almond for economic efficiency;*
- *Creating temporary and permanent job opportunities for a non-technical, technical workforce.*

- **3-ALMOND PRODUCTION, PROCESSING, PACKAGING AND MARKETING PROJECT.**

The objective of the assignment is to conduct a feasibility study to assess technical, commercial, economic, financial, environmental and social viability for development of the project on the basis of a PPP Structure and as well as to assess the bankability of the project from loan perspective. This TOR describes the tasks to be performed by the Expert Advisory Services Firm (EASF), and the expectations of client. The EASF shall bear in mind that the tasks and activities described cannot be considered as the complete and comprehensive description of the Consultant's duties.

During the EASF's assignment, other firms may provide services to MAIL and/or other authorities. It is the duty of the EASF to coordinate its activities with that of such other parties relevant to the project and ensure that the systems, standards, and methods of working and reporting are compatible as much as possible between such parties, in order to avoid duplication of efforts.

The strategic objectives of the project are:

- *Increased sustainable production and increased exports*
- *Mechanize the collection of products, processors, sorting, grading, packaging, storage and so on*
- *Reviving the business name in international markets*
- *Strengthen substantive, consensus and comparative research*
- *Capacity building*

Scope of Work / Components of the Feasibility Study

1-UTILIZATION CONCEPT OF (5200 ha) NEW LAND (UCNL)

The Feasibility Study must address the following:

- *Definition of the project's concept: a clear description of the project concept, including a description of the policy context;*
- *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 community's 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 will be required:*
 - *GIS analysis of the area.*
 - *Topographical survey*
 - *Hydrological investigations.*
 - *Soil analysis (Semi-detailed)*
 - *Classification of the land based on thickness of topsoil availability and its suitability for artificial forestry, orchard establishment, fishery farming, and agri-tourism area.*
 - *Irrigation structures supplying water to the command area, water demand analysis, its design and cost, and related technical issues.*
 - *Identify at least five optional fruit crops and their value-added elements that are best suited for the land considering the land status, and research their market potential locally and for export,*
 - *Identify at least five best suitable forest tree types that has high economic impact and suitable to the province climate as well as improve the environment.*
 - *Identify sources of procurement of improved planting material.*
- *Cost estimate: preliminary project costing, including expected capital outlays, environmental and social safeguards, 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, income statement, cost and revenue assumptions for various processing and value addition plants for forest trees, fruits orchards, fishery farm, and agri-tourism area and structures.*
- *Assessment of the social and environmental impacts of the project; Project impacts on environmental and social parameters including land reclamation, capacity of local communities, socio-economic situation, local institutions, etc. The preliminary assessment will also include the following:*
 - *Conducting social and environmental impact assessment study of the project to meet international standards (World Bank or Asian Development Bank and NEPA)*
 - *Assessing local communities level of interest, how they can be involved smoothly in the interventions, restoration and/or sustainable utilization.*

- *Assessing vulnerability of project against natural disasters e.g. climate change, drought, flash floods, landslides, etc.*
- *Assessing all relevant components of the project and their approaches whether they are suitable or in compliance with the proposed activities.*
- *Market analysis, demand assessment and revenue forecasting for the project including and conduct market supply and value chain analysis, identifying potential existing new markets, and suggesting measures to improve packing, marketing methods and establishing market linkages particularly for the orchard establishment activity.*
- *Suggest the modalities of investment by private sector, support from funding organizations and facilities provided by the Government in the shape of relief in import duty and other taxes.*
- *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 detail 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, risks 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.*

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), 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.

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 generation, regional development, betterment of people directly affected etc.;

- *The feasibility study should recommend 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 PPP (Best PPP Model), presentation of the range of technical, legal and financial options for structuring a PPP 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.*

2-WATERSHED MANAGEMENT THROUGH ESTABLISHMENT OF ALMOND ORCHARDS AND CULTIVATION OF SAFFRON (WMEAOCs)

The Feasibility Study must address the following:

- *Review of existing data and available studies. Preliminary work has been undertaken which includes a desk study, soil analysis, watershed analysis using GIS. The EASF will review 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;*
- *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 will be required:*
 - *GIS analysis of the area.*
 - *Topographical survey*
 - *Hydrological investigations.*
 - *Soil analysis (Semi-detailed)*
 - *Identifying locations for check-dams, water harvesting points and structures.*

- *Hydrological analysis of the watershed in whole and in small scale to provide understanding of irrigation needs, water supply, water harvesting and related technical issues.*
- *Water demand analysis and proposing the optimum irrigation system.*
- *Propose agronomic best practices for commercial cultivation from land preparation, harvesting and post harvesting techniques, market linkages, value chain development and processing.*
- *Propose measures to adopt internationally accepted practices to get the orchards certified under Global GAP and other international standards.*
- *Identify sources of procurement of improved planting material.*
- *Cost estimate: preliminary project costing, including expected capital outlays, environmental and social safeguards, 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, income statement, cost and revenue assumptions for various processing and value addition plants for almond and saffron.*
- *Assessment of the social and environmental impacts of the project; Project impacts on environmental and social parameters including soil fixation, water table enrichment, watershed management, capacity of local communities, socio-economic situation, local institutions, etc. The preliminary assessment will also include the following:*
 - *Conducting social and environmental impact assessment study of the project to meet international standards (World Bank or Asian Development Bank and NEPA)*
 - *Assessing local communities level of interest, how they can be involved smoothly in the interventions, and availability of lands for conservation, 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 almond and saffron (e.g. restoration toolkits, value addition toolkits, conservation toolkits and small project, restoration and conservation interventions).*
- *Market analysis, 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 packing, marketing methods and establishing market linkages.*

- *Identify processing machinery and suggest ways and means for setting up processing plants near plantation area, along with their financial proposals, their benefits to the processors. 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.*
- *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 detail 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, risks 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.*

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), 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.

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 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 PPP (Best PPP Model), presentation of the range of technical, legal and financial options for structuring a PPP 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-ALMOND PRODUCTION, PROCESSING, PACKAGING AND MARKETING PROJECT.

The Feasibility Study must address the following:

- *Review of existing data and available studies. Preliminary work has been undertaken which includes a desk study, soil analysis, watershed analysis using GIS. The EASF will review the background documentation and preparatory work conducted.*
- *Definition of the projects' concept: a clear description of the project concept, including a description of the policy context;*
- *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 will be required:*
 - *GIS analysis of the area.*
 - *Topographical survey*
 - *Hydrological investigations.*
 - *Soil analysis*
 - *Identifying locations for check-dams, water harvesting points and structures.*
 - *Hydrological analysis of the watershed in whole and in small scale to provide understanding of irrigation needs, water supply, water harvesting and related technical issues.*

- *Water demand analysis and proposing the optimum irrigation system.*
- *Propose agronomic best practices for commercial cultivation from land preparation, harvesting and post harvesting techniques, market linkages, value chain development and processing.*
- *Propose measures to adopt internationally accepted practices to get the orchards certified under Global GAP and other international standards.*
- *Identify sources of procurement of improved planting material.*
- *Cost estimate: preliminary project costing, including expected capital outlays, environmental and social safeguards, 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, income statement, cost and revenue assumptions for various processing and value addition plants for almond.*
- *Preliminary assessment of the social and environmental impacts of the project; Project impacts on environmental and social parameters including soil fixation, water table enrichment, watershed management, capacity of local communities, socio-economic situation, local institutions, etc. The preliminary assessment will also include the following:*
 - *Assessing local communities level of interest, how they can be involved smoothly in the interventions, and availability of lands for conservation, restoration and/or sustainable utilization.*
 - *Assessing vulnerability of almond farms 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 almond (e.g. restoration toolkits, value addition toolkits, conservation toolkits and small projects, restoration and conservation interventions).*
- *Market analysis, 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 packing, marketing methods and establishing market linkages.*
- *Identify processing machinery and suggest ways and means for setting up processing plants near plantation area, along with their financial proposals, their benefits to the processors. 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.*

- *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 detail to the legal design of the project*
 - *Review of project assumptions and whether they are practically and legally viable, e.g. management of staff rights and benefits and whether there might be legal limitations to how staff can be treated.*

- *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, risks 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.*

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), 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.

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 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 projects 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 and assess if the project is bankable from loan perspective.*
- *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 PPP, presentation of the range of technical, legal and financial options for structuring a PPP transaction for the project(s), including key contract terms for the recommended option (for example proposed payment mechanism to reflect recommended risk allocation). If it is found to be unsuitable, evaluation of alternative options for meeting project objectives;*
- *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.*

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 agricultural 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 agricultural projects:

| <i>S/N</i> | <i>Key personnel</i> | <i># of experts</i> | <i>Qualification & Experience</i> | <i># of working days for consultants involved</i> |
|------------|--|--------------------------|--|---|
| <i>1</i> | <i>Team Leader (PPP Expert)</i> | <i>1 (International)</i> | <i>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.</i> | <i>120</i> |
| <i>2</i> | <i>Deputy Team Leader (Horticulture Specialist)</i> | <i>1 (National)</i> | <i>Should at least hold a master degree in horticulture; the consultant should at least have 10 years of experience in horticulture.</i> | <i>120</i> |
| <i>3</i> | <i>Agronomist</i> | <i>1 (National)</i> | <i>The consultant should at least hold a bachelor degree in agriculture, while, preference will be given to the consultant holding master degree in agronomy focusing on soil and water analysis. The consultant should at least hold 5 years of experience in carrying soil and water analysis.</i> | <i>90</i> |
| <i>4</i> | <i>Agronomist</i> | <i>1 (National)</i> | <i>The consultant should at least hold a bachelor degree in agriculture, while, preference will be given to the consultant holding master degree in agronomy focusing on soil and water analysis. The consultant should at least hold 5 years of experience in carrying soil and water analysis.</i> | <i>90</i> |
| <i>5</i> | <i>Agribusiness and Agriculture</i> | <i>1(International)</i> | <i>The consultant should at least hold a master degree in agro-economics, economics, Business Administration, Agri-business,</i> | <i>90</i> |

| <i>S/N</i> | <i>Key personnel</i> | <i># of experts</i> | <i>Qualification & Experience</i> | <i># of working days for consultants involved</i> |
|------------|--|---------------------|--|---|
| | <i>Value Chain Specialist</i> | | <i>Value chain, Natural resources management (forest) 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.</i> | |
| 6 | <i>Agribusiness and Agriculture Value Chain Specialist</i> | <i>1 (National)</i> | <i>The consultant should at least hold a master degree in agro-economics, economics, Business Administration, Agri-business, Value chain, Natural resources management (forest) 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.</i> | 90 |
| 7 | <i>Water Resources & Irrigation Expert</i> | <i>1 (National)</i> | <i>The consultant should at least hold a master degree in water resource engineering, water resource engineering, water management or any other relevant field. The consultant should at least hold 10 years of relevant experience, while preference will be given to the consultant holding experience in water shed management.</i> | 90 |
| 8 | <i>Water Resources & Irrigation Expert</i> | <i>1 (National)</i> | <i>The consultant should at least hold a master degree in water resource engineering, water resource engineering, water management or any other relevant field. The consultant should at least hold 10 years of relevant experience, while preference will be given to the consultant holding experience in water shed management.</i> | 90 |
| 9 | <i>GIS Specialist</i> | <i>1 (National)</i> | <i>The consultant should at least hold bachelor degree in GIS, while, preference will be given to master degree holder. The consultant should at least have 7 years of relevant experience out of which at least 2 years should be in conducting feasibility studies.</i> | 90 |
| 10 | <i>GIS Specialist</i> | <i>1 (National)</i> | <i>The consultant should at least hold bachelor degree in GIS, while, preference will be given to master degree holder. The consultant should at least have 7 years of relevant experience out of which at least 2 years should be in conducting feasibility studies.</i> | 90 |
| 11 | | <i>1 (National)</i> | | 90 |

| <i>S/N</i> | <i>Key personnel</i> | <i># of experts</i> | <i>Qualification & Experience</i> | <i># of working days for consultants involved</i> |
|------------|---|---------------------|--|---|
| | <i>Agriculture Economist & Financial Expert</i> | | <i>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.</i> | |
| <i>12</i> | <i>Agriculture Economist & Financial Expert</i> | <i>1 (National)</i> | <i>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.</i> | <i>90</i> |
| <i>13</i> | <i>Environmental & Social Expert</i> | <i>1 (National)</i> | <i>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.</i> | <i>90</i> |
| <i>14</i> | <i>Environmental & Social Expert</i> | <i>1 (National)</i> | <i>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.</i> | <i>90</i> |
| <i>15</i> | <i>Legal Expert</i> | <i>1 (National)</i> | <i>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.</i> | <i>90</i> |
| <i>16</i> | <i>Survey Engineer</i> | <i>1 (National)</i> | <i>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.</i> | <i>90</i> |
| <i>17</i> | <i>Survey Engineer</i> | <i>1 (National)</i> | <i>The consultant should at least hold a bachelor degree in survey/ civil engineering.</i> | <i>90</i> |

| <i>S/N</i> | <i>Key personnel</i> | <i># of experts</i> | <i>Qualification & Experience</i> | <i># of working days for consultants involved</i> |
|------------|--|---------------------|---|---|
| | | | <i>The consultant should at least have 5 years of experience in conducting field surveys.</i> | |
| 18 | <i>Survey Engineer</i> | <i>1 (National)</i> | <i>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.</i> | 90 |
| 19 | <i>Survey Engineer</i> | <i>1 (National)</i> | <i>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.</i> | 90 |
| 20 | <i>Survey Engineer</i> | <i>1 (National)</i> | <i>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.</i> | 90 |
| 21 | <i>Survey Engineer</i> | <i>1 (National)</i> | <i>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.</i> | 90 |
| 22 | <i>Water Harvesting and Irrigation Design Engineer</i> | <i>1 (National)</i> | <i>The consultant should at least hold bachelor degree in irrigation engineering, water resource management, watershed management engineering, preference will be given to a master degree holder. The consultant should at least hold 5 years of experience in watershed management or water harvesting structure engineering.</i> | 90 |
| 23 | <i>Water Harvesting and Irrigation Design Engineer</i> | <i>1 (National)</i> | <i>The consultant should at least hold bachelor degree in irrigation engineering, water resource management, watershed management engineering, preference will be given to a master degree holder. The consultant should at least hold 5 years of experience in watershed management or water harvesting structure engineering.</i> | 90 |
| 24 | <i>Geo Technical Expert</i> | <i>1 (National)</i> | <i>The consultant should at least hold bachelor degree in geo technical engineering or other relevant field. The consultant should at least have five years' experience in geo technical engineering or any other relevant tasks.</i> | 90 |
| 25 | <i>Geo Technical Expert</i> | <i>1 (National)</i> | <i>The consultant should at least hold bachelor degree in geo technical engineering or other relevant field.</i> | 90 |

| <i>S/N</i> | <i>Key personnel</i> | <i># of experts</i> | <i>Qualification & Experience</i> | <i># of working days for consultants involved</i> |
|--------------|----------------------|---------------------|--|---|
| | | | <i>The consultant should at least have five years experience in geo technical engineering or any other relevant tasks.</i> | |
| Total | | 25 | | |

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.

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.

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 proven experience of having executed at least one contract of similar nature and complexity (The consultant should provide a copy of the accomplished contract in carrying feasibility study of agricultural crops; while, preference will be given to the consultant that has previously conducted feasibility study of horticultural crops production) during last 5 years with the minimum value of 20,483,110.00 Afs or its equivalent in any other currency, the consultants are required to provide copy of the contract with their EOI.*
- iv. The consultant should at least provide a copy of the annual turnover at least reflecting the amount of 44,380,072.00 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. Consultant having some regional experience is desirable*
- 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.*

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.

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 habib.rezazada@gmail.com, smoudodi@gmail.com; and copying mohammadullah.sahil@mail.gov.af, 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 9th, 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*