   

 Democratic Socialist Republic of Sri Lanka

**Ministry of Agriculture and Plantation Industries**

Agriculture Sector Modernization Project (ASMP)

**TERMS OF REFERENCE (TOR)**

**Hiring of a research company / team of consultants to conduct Technical and Economic Evaluation of New Technologies introduced by the International Service Provider for fruit and vegetable crop sectors (Banana, Chilli , Potato & Red Onion) under the ASMP against the Existing Technologies**

**Procurement No LK-MOA-PMU-397461-CS-CQS**

# Brief Description of the Project:

# The Agriculture Sector Modernization Project (ASMP) is implemented in Sri Lanka with the following Project Development Objectives:

* To support increasing agriculture productivity,
* Improving market access and
* Enhancing value addition of smallholder farmers and agribusinesses in the project areas.

The Project is comprised of three components.

The Component-1, Agriculture Value Chain Development, seeks to promote commercial and export-oriented agriculture.

The Component-2 aims at supporting smallholder farmers to produce competitive and marketable commodities, improve their ability to respond to market requirements and move towards increased commercialization.

The Component-3 focuses on human resource management, and capacity building, logistic requirements, monitoring and evaluation, communication and coordination of the overall Project.

Implementation of the component 2 undertaken by the Ministry of Agriculture, started in the year 2017 with the funding of WB, USD 64.23 mn to implement the project in 7 districts (Jaffna, Mullative, Anuradhapura, Polonnaruwa, Batticaloa, Monaragala and Matale) of five provinces namely Northern, North Central, Eastern, Uva and Central. In the year 2021, the component 2 further supported with co-financing from the European Union, USD 23.3 mn, to implement the same project concept in 5 additional districts (Kilinochchi, Vavuniya, Ampara, Badulla and Kandy) in the same provinces selected before.

Listed below are the sub-components of the Component-2 of the ASMP:

* 1. **Farmer Training and Capacity Building:** Under this Sub-component, institutional development and related capacity building activities are carried out in order to establish and empower Farmer Companies (FC) in each crop cluster established by the project.
	2. **Agriculture Technology Demonstration Parks (ATDPs):** This is the main sub-component of the Component-2 of ASMP. Selection of all crop clusters (minimum of 3 clusters per each district), design, establishment and continuity of crop clusters is ensured under this sub-component. Each individual member farmer of the crop clusters will be a member of the FC there, will receive a technology package as a grant under this Sub-component. In addition, farming related collective assets, certain technical exposure visits, technical training and awareness, specific technical consultancies will be delivered under this Sub-component.

* 1. **Production and Market Infrastructure:** Under this Sub-component, Cluster / ATDP specific market infrastructures such as cluster specific common Agro Processing /collection centers identified market access roads and Compost Making Units, required irrigation infrastructures, any other specific supportive infrastructures will be established.
	2. **Analytical and Policy Advisory Support:** Related policy studies as well as required analytical studies are to be carried out under this particular sub-component. In addition, conducting certain related assessments / evaluations, organizing of Techno Forums, Policy Forums, formulation Policy / Strategy briefs / guidelines will be carried out.

This particular consultancy assignment instigates under the sub-component (d) of the Component-2.

1. **Project Management:**

Ministry of Agriculture and Plantation Industries implement and manage the project[[1]](#footnote-1) activities through the Project Management Unit (PMU) of the ASMP in Colombo together with the Provincial Project Management Units (PPMUs) with the support and guidance of the Provincial Ministries of Agriculture and other relevant stakeholders.

The Project is technically steered, and monitored by the National Project Steering Committee headed by the Secretary to the Ministry of Agriculture and Plantation Industries. Respective Provincial Steering Committees are headed by the Chief Secretary of each Province.

1. **Background for the Assignment**

Agriculture Sector Modernization Project has employed an International Service Provider (ISP) to implement Agriculture Technology Demonstration Parks (ATDPs) with modern technology, the major subcomponent of the project as explained in the section 1.b.

The ISP (FCG New Zealand- {FCG-ANZDEC Ltd}) is given the assignment to establish, operate and handover ATDPs in all 7 project districts. Each ATDP should consist of minimum three crop clusters with necessary infrastructure facilities. The ISP has selected high value fruit and vegetable crops with potential export & domestic markets, to be grown in these crop clusters with modern technology. The crop clusters are either Fruits or Vegetables or some high value crops with short to medium- & long-term cropping cycles. In some of these crop clusters complete technology package has been implemented by the ISP and the farmers have completed harvesting one or two crop cycles whereas in other crop clusters technology packages are not completely implemented yet.

One of the focuses of the ASMP is to introduce new technology packages to the agriculture sector with the objective of introducing marketable high value crops and improving their productivity by using modern technology.

Therefore, it is necessary evaluate technical superiority and economic viability of the new technology packages introduced by the ISP.

1. **Objectives of the Assignment**

Objective of this assignment is to carry out in-depth technical and economic evaluation of completely implemented new technology packages, introduced by the ISP under the ASMP, in order to make recommendations to promote these technology packages beyond the ASMP crop clusters, based on their technical and economic superiority over the existing technologies with the objective of improving productivity and profitability of the agriculture sector of Sri Lanka.

1. **Scope of the consultancy**

Proposed evaluation assignment is to be carried out for crops, namely Banana (Anuradhapura, Jaffna & Moneragala) Chili for Dry Chili Production (in Anuradhapura & Pollonnaruwa) and Potato with Red Onion in Jaffna district, where the complete technology package is being implemented and the cropping cycle is completed. The evaluation should be conducted;

* To identify the technical superiority of the new technology packages over the existing technologies
* To analyze financial gains to the farmers and economic gain to the country by adopting the new technology packages
* To identify any policy and regulatory gaps need to be addressed in order to promote new technology packages beyond the ASMP crop clusters.
1. **Tasks of the Assignment**
* Detail analysis of technical superiority and financial profitability of the new technologies introduced by the ISP for cultivation of Banana (Anuradhapura, Jaffna & Moneragala) by comparing with the existing technology used by farmers.
* Detail analysis of technical superiority and financial profitability of the new technologies introduced by the ISP for cultivation of Chili for Dry Chili (Anuradhapura, & Pollonnaruwa) and processing dry chili, by comparing with the existing technology used by farmers.
* Detail analysis of technical superiority and financial profitability of the new technologies introduced by the ISP for cultivation of Red Onion and Potato in Jaffna by comparing with the existing technology used by farmers.
* Undertake comprehensive Cost Benefit Analysis of each crop production system if farmers to adopt the new technology without project support.
* Critically review, awareness among farmers on specific requirements of new technology packages and their applicability.
* Identify policy and regulatory gaps need to be fulfilled, enabling farmers to adopt new technology packages
* Recommend appropriate policy instruments that the Government could be used to implement proposed policy changes to improve productivity and sustainability of proposed crop sectors.
1. **Total due payment for the assignment:**

The total value of the proposed consultancy assignment is Rs.2.5 million (Rupees two and half million).

1. **Duration of the assignment:**

The total duration of the assignment is 3 months commencing from the date of signing the contract.

1. **Qualification & Experience of the Consultants:**

The team of consultants should consist of appropriate combination of consultants essentially with an Agriculture Scientist together with an Agriculture Economist/ Agriculture Business Management Expert

Table-(1): Expected qualifications and experience of consultants

|  |  |
| --- | --- |
| **Area of qualification / experience** | **Expected level of qualification / experience** |
| 1. **Agriculture Scientist**
 |  |
| **Education:** |
|  Degree | BSc. Agriculture. Specialized in Crop Science. |
| Postgraduate qualification. | PhD or Master’s Degree qualification in Agriculture Specialized in crop science, crop physiology, cropping systems, soil, water & plant relationships or any other related field |
| Other Qualifications | Any Professional Qualifications, Training received in Agriculture technology transfer, cropping systems or any other related fields |
| **Working experience:** |
| Agriculture Development related working experience. | At least 10 years of post-qualifying experience related to the areas mentioned here, as a Consultant, a Researcher or Manager of a research team, a university academic with research experience. |
| Specific Research Experience  | Minimum of 5 research projects / related assignments undertaken over the last 5 years  |
| Working experience in a research team | She / He needs to have provable experience as a team player in a research team or managing a team of researchers. |
| **2. Agriculture Economist / Agriculture Business Management Expert.**  |
| **Education:** |
|  Degree | BSc. Agriculture or BA. Specialized in Agriculture Economics  |
| Postgraduate qualification. | PhD or Master Degree qualification in Agric. Business Management / Agriculture Value Chain Development/ Agricultural policy analysis /Agriculture Economics or any other related field.  |
| Other Qualifications | Any Professional Qualifications, Training received in Value Chain Development, Quality Management, International Trade or any other related fields |
| **Working experience:** |
| Agribusiness Management / Agriculture Development or related field | At least 10 years of post-qualifying experience related to the areas mentioned here, as Consultant, Researcher or Manager of a research team, a university academic with research experience. |
| Specific Research Experience  | Minimum of 5 research projects / similar assignments undertaken over the last 5 years  |
| Working experience in a research team | She / He needs to have provable experience as a team player in a research team or managing a team of researchers. |

Including any other relevant consultants in the research team will be positively considered

in the evaluation of the research team.

1. **Working involvement & payment:**

This is a performance-based assignments. Payment will be based on the submission

of the deliverables as given in the Table 2

Key deliverables, the respective deadlines and the payment schedule related to these three (3) months assignment are included in the Table- (2) below:

Table-(2): Expected deliverables, deadlines, and payment schedule.

|  |  |  |
| --- | --- | --- |
| **Deliverable (Result)** | **Deadline** | **Payment schedule** |
| 1. Inception Report - A presentation has to be made with the details of the work plan and the methodology of the study.
 | Within 10 working days after signing the contract Agreement. | 20% of the contract value will be paid after submitting the Deliverable 1. |
| 1. Progress report with a presentation
 | End of the 1 st month after signing the contract Agreement. | 25% of the contract value will be paid after submitting the Deliverable 2. |
| 1. Submit the Draft final report & presentation.
 | End of the 2nd month after signing the contract Agreement. | 20% of the contract value will be paid after submitting the Deliverable 3. |
| 1. Final Report (03 Copies) with a presentation, Research Article (s) and a Policy Note for submission to MOA/National Policies.
2. Soft copies of data collected, data analysis undertaken and final results of the analysis.
3. Soft/hard copies of the key literature reviewed for the study.
 | End of the 3rd month after signing the contract Agreement. | 35% of the contract value will be paid after submitting the Deliverables 4, 5 & 6 |

1. **Expected contribution from ASMP:**

ASMP will provide technical feedback and directions on time.

1. **Method of selection:**

Procurement method of **Selection of Consultant’s Qualification** (**CQS**) is applied for choosing the qualified Consultants.

1. **Review Committee:**

The key deliverables especially the Inception Report, Progress Reports and the Final Report will be reviewed by Review Committee appointed by the MOA.

1. **Contract Management:**

The Contract Management will be done by the Policy Specialist of Project Management Unit (PMU) of ASMP with the guidance and supervision of the Project Director, ASMP.

1. Since October 2023, the project is implement and managed by the Ministry of Agriculture and Plantation Industries. [↑](#footnote-ref-1)