

**Terms of Reference**  
**Provincial Irrigation Survey and Design Engineer**  
**Package No. MAF/IC-29**

Position: Provincial Irrigation Survey and Design Engineer.  
Contracting Authority: MAF- DoPF  
Location: Based in Provincial Office of LACP at the Provincial Agriculture and Forestry Department.  
Duration: Full time assignment with a 12 months contract, subject to satisfactory performance for extension to a total of 39 months over a 4-year period.

**1. Introduction**

The ACP comprises the following four components: (a) Improved Agricultural Efficiency and Sustainability, (b) Enhanced Agricultural Commercialization, (c) Project Management, and (d) Contingent Emergency Response.

**Component A** - Improved Agricultural Efficiency and Sustainability (est. US\$ 18.2 million, of which International Development Association (IDA) would finance around US\$ 16.3 million). This component will support: (a) the increased adoption of improved varieties and high-quality seeds, (b) the increased application of good agricultural practices, (c) the provision of critical productive infrastructure, and (d) the strengthening of public services delivery.

*Subcomponent A1: Promoting Adoption of Good Varieties and Quality Seeds (estimated US\$2.5 million, of which IDA would finance around US\$2.3 million)*

This subcomponent will support activities to promote the adoption of good varieties and quality seeds, including the provision of (a) technical assistance (TA) for the establishment of seed multiplication groups (SMGs) and building their capacity to adopt good varieties and quality seeds (including ones resistant to climate variability such as floods and drought) ; (b) Matching Grants to selected SMGs to carry out Sub-projects (i.e., small works, goods, equipment, and so on) for improving the production and postharvest handling, packaging, and storage of quality seeds; (c) technical and material assistance (i.e., small works, goods, equipment, training, and so on) to build the capacity of Provincial Agricultural and Forestry Offices (PAFOs), District Agricultural and Forestry Offices (DAFOs), MAF technical departments, and research institutions to conduct training for SMGs and to carry out seed quality monitoring and certification; and (d) TA to link SMGs with Farmer Production Groups (FPGs) and agribusinesses in marketing certified seeds.

*Subcomponent A2: Promoting Good Agricultural Practices (estimated US\$7.4 million, of which IDA would finance around US\$6.2 million)*

This subcomponent will support activities to promote Good Agricultural Practices (GAP) , including the provision of (a) TA for the establishment of FPGs and building their capacity to adopt GAP; (b) Matching Grants to selected FPGs to carry out Sub-projects that implement GAP; (c) TA and material assistance (i.e., small works, goods, equipment, training, and so on) to build the capacity of PAFOs, DAFOs, and MAF technical departments to conduct training for FPGs on

GAP and to carry out related extension and certification activities including soil analysis, organic fertilizer production, and organic farming; and (d) TA to link FPGs with agribusinesses in marketing farm produce.

*Subcomponent A3: Providing Critical Productive Infrastructure (estimated US\$6.2 million, of which IDA would finance around US\$5.7 million)*

This subcomponent will support activities to improve critical irrigation infrastructure and water use practices, including (a) rehabilitation of selected irrigation schemes and (b) provision of TA to establish water user groups and to build their capacity to adopt improved water use models. Through improving water use, management, and productivity of existing irrigation schemes, it is expected to enhance their resilience to impacts of climate change.

*Subcomponent A4: Strengthening Public Services Delivery (estimated US\$2.1 million, of which IDA would finance US\$2.1 million)*

This subcomponent supports activities to strengthen agricultural and nutrition service delivery, including the provision of technical and material assistance (i.e., small works, goods, equipment, training, and so on) to (a) improve the overall extension service capacity of the PAFOs, DAFOs, and MAF technical departments to deliver better quality services to farmers to promote GAP adoption and enhance resilience to climate change; (b) develop and implement mapping and demarcation pilots for agricultural land in irrigated areas; and (c) conduct studies on integrated farming systems and diversification for nutrition, and carry out social behavioral change communication (SBCC) activities related to dietary diversity, adequate care practices, and processing and cooking for improved nutrition

**Component B** - Enhanced Agricultural Commercialization (est. US\$ 7.2 million, of which IDA would finance around US\$ 4.8 million). The project will support: (a) establishing an Agriculture Value Chain Facility (AVCF), (b) measures to better link farmers to markets, and (c) studies to improve the enabling environment for agro-enterprise and value chain development.

*Subcomponent B1: Establishing an Agricultural Value Chain Facility (estimated US\$5.3 million, of which IDA would finance around US\$2.9 million)*

This subcomponent will support the establishment and operation of an AVCF for the purpose of extending technical and financial services to agribusinesses, including the provision of (a) TA to establish and operate the facility and provide advisory and Subproject implementation support to agribusinesses; and (b) Matching Grants to selected agribusinesses to carry out Subprojects for upgrading their processing and postharvest handling facilities and their management capacities to improve product quality, increase operational efficiency (including improved energy efficiency), reduce physical losses, and link with FPGs to improve marketing of the farm produce.

*Subcomponent B2: Linking Farmers to Markets (estimated US\$1.4 million, of which IDA would finance US\$1.4 million)*

This subcomponent will support activities designed to link farmers to markets, including the provision of TA to (a) strengthen the horizontal links of farmers within FPGs for implementing procurement, marketing, and other collective actions, and the vertical links of FPGs and agribusinesses in productive partnerships to undertake further processing and marketing of the produce; and (b) develop an improved agriculture market information system to provide reliable

market information for productive partnerships. Through strengthening the market linkages, it is expected to make farmers more resilient to climate change.

*Subcomponent B3: Improving the Enabling Environment (estimated US\$0.5 million, of which IDA would finance US\$0.5 million)*

This subcomponent will support activities by MAF technical departments, MOIC and other relevant agencies to improve the enabling legal, policy and institutional environment for supporting agribusiness investment and agricultural trade policies, including the development of improved sanitary and phytosanitary standards, rice standards and rice export policies, and improved import and export legislation focusing on agriculture inputs and farm machinery

Component C - Project Management (est. US\$ 2.9 million, of which IDA would finance US\$ 2.9 million). The component will support (a) project management; and (b) monitoring and evaluation.

*Subcomponent C1: Project Management (estimated US\$2.4 million, of which IDA would finance US\$2.4 million)*

This subcomponent will support the day-to-day implementation, coordination, and management of project activities including planning and execution, financial management (FM), procurement, internal and external audits, and environmental and social safeguards management.

*Subcomponent C2: Monitoring and Evaluation (estimated US\$0.5 million, of which IDA would finance US\$0.5 million)*

This subcomponent will support the day-to-day monitoring, reporting, and evaluation of project activities.

#### **Component D: Contingent Emergency Response (US\$0 million)**

This component with a provisional allocation of zero dollars is included under the project in accordance with OP10.00, paragraphs 12 and 13, for projects in situations of urgent need of assistance or capacity constraints. This will allow for rapid allocation of project proceeds in the event of the Government declaring that a crisis or emergency has occurred and the World Bank Group agreeing with such determination. This component would finance public and private sector expenditures on a positive list of goods and/or specific works, goods, services, and emergency operation costs required for emergency recovery. An Emergency Response Manual (ERM) will apply to this component, detailing FM, procurement, safeguards, and any other necessary implementation arrangements.

The project's implementing agency is the Ministry of Agriculture and Forestry, with its Department of Planning and Finance (DPF) as the main implementing agency. Other implementation partners include technical departments in MAF and Ministry of Industry and Commerce. At provincial level, the department of Agriculture and Forestry (PAFO) will implement project activities in the five following provinces: Khammouane, Bolikhamxay, Xayabury, Vientiane province, and Vientiane Capital. PAFO will also coordinate with the provincial department of industry and commerce (PICO) as well as district offices. The project implementation timeframe is tentatively from June 2018 to 2024.

The DPF will select a qualified national consultant to provide technical support in managing and implementing Subcomponent A1-Promoting Adoption of Good Varieties and Quality Seeds and A2-Promoting Good Agriculture Practices under Component A-Improved Agricultural Efficiency and Sustainability and in close coordination with project activities under Component B- Enhanced Agricultural Commercialization. The consultant(s) will be recruited through a competitive selection process in accordance with the World Bank Procurement Regulations for IPF Borrowers: Procurement in Investment Project Financing dated July 1, 2016, revised November 2017.

## **2. Scope of the Assignment**

---

The consultant will work to expedite implementation of Subcomponent A3 (Upgrading of critical productive infrastructure) of the LACP by (a) providing technical guidance to the National Project Management Office (NPMO) and Provincial and District Agriculture and Forestry Offices (PAFO and DAFO); (b) strengthening quality control, oversight and finalization of Technical Assessments Reports, Feasibility Studies and Detailed Designs; and (c) provide on-the-job training.

## **3. Scope of the assignment**

---

The Provincial Irrigation Design Engineer will be under the overall supervision and guidance of **Local Consultant on Survey-Design of Irrigation Systems**, and is expected to undertake the following tasks:

- Support the irrigation engineers in the irrigation Division of PAFO and in DAFO to survey, design and supervise the rehabilitation of selected irrigation schemes
- Collaborate with PAFO/DAFO to ensure proper irrigation water service quality improvements for beneficiaries
- Support PAFO/DAFO to ensure proper maintenance of various water schemes implemented under the program
- Assist Local Consultant on Construction Supervision works for each rehabilitation scheme. Provide assistance to the Panel of Expert for Dam safety assessment in the 5 selected reservoir schemes
- Other related duties that may be assigned by the NPD of LACP project (if any concerning)

## **4. Assignment Task:**

---

Specific tasks of the assignment will include:

### **Batch 1A**

- Review Batch 1A feasibility studies and detail designs.
- Provide guidance on technical surveys and design work.
- Follow-up with PAFO, DAFO and local consultants on progress and technical challenges in carrying out technical studies and propose remedial measures.
- Review draft feasibility studies and detail designs prepared by PAFO/DAFO with the support of local irrigation consultants.
- Support the NPMO with quality control and guide finalization of documents.
- Support preparation of bidding documents, as required.

### **Batch 1B and Batch 2**

- Review TARs for Batch 1B and recommend required technical analysis as part of the preparation of Feasibility Studies and Detailed Designs.
- Follow-up with PAFO, DAFO and local consultants on progress and technical challenges in carrying out technical studies and propose remedial measures.
- Support the NPMO with quality control and guide finalization of documents

- Support the incorporation of comments/recommendations received from the Department of Irrigation and the World bank
- Support finalization of TARs.

#### **Other tasks**

- Assist to **Local Consultant on Survey-Design of Irrigation Systems** for Review, update Survey and Detailed Design for each irrigation scheme.
- Support the development of a roadmap for more expedient implementation of technical studies for Batch 1B and Batch 2.

### **5. Reporting**

---

The Provincial Irrigation Survey and Design Engineer will report to the Local Consultant on Survey-Design of Irrigation Systems and will work in coordination with the focal point in the Provincial Irrigation Service of PAFO.

### **6. Duration of the National Consultant Assignment**

---

This assignment will last for a minimum of 3 years and is expected to be a total 39 of man months over 3 years. The contract will need to be reconfirmed annually as recommended by the Project Director. There will be a 3-month probation period beginning at the commencement of the position.

### **7. Experience and qualifications of the national consultant**

---

- At least Bachelor degree in engineering, irrigation survey and design, water and drainage design, or related field.
- At least 5 years of professional experience in Irrigation System Design and development sector, International Organization/NGO/donor-financed projects.
- Sound knowledge of World Bank safeguards procedures is required
- Good command in English and Lao languages, with strong report-writing and oral presentation ability.
- Capability to work successfully in a multi-disciplinary and cross-cultural environment with a large, diverse team.

### **8. Source of information**

---

*Department of Planning and Finance, Ministry of Agriculture and Forestry  
Project Management Unit,  
Tel: +856 21 410074 Fax: +856 21 410073*