Terms of Reference for Consultants
Subproject for Indonesia
Inclusive, Sustainable, and Connected Coffee Value Chain
Performance-Based Terms of Reference
For Output-based Contract

Background:

Coffee is an important sector in Timor-Leste, Indonesia, Viet Nam, and PNG, but primarily characterized by unorganized, small-scale farming. While coffee is Timor-Leste’s largest non-oil export and is grown by 38% of all Timorese households, more than half of the coffee planted area consists of unproductive old trees resulting in low yields. Coffee production in Timor-Leste is de-facto organic, but only around 25% of exports have certification. Several companies and NGO-supported programs have established systems that ensure some degree of traceability of coffees from farm-gate to export. However, most coffee exports pass through trader networks and are not traceable to the farm level. In PNG, coffee production is also the backbone of the rural economy and accounts for 30% of the total labor force. The vast majority of coffee produced in Indonesia and Viet Nam, the second and third largest coffee producing countries, is grown by smallholders on farms averaging around one hectare whose livelihoods depend on a successful coffee crop.

Smallholder coffee farmers across these countries face common challenges that include lack of access to finance and quality inputs, low yields, lack of storage and market infrastructure, limited local value addition, and dependence on middlemen. Coffee production in Timor-Leste, despite having one of the lowest yields in the world (150-200 kg per ha), is de-facto organic, but only around 25% of exports have certification. In PNG, the quality and productivity of coffee has been declining and smallholder farmers’ yields are 50-60% below their potential. In Viet Nam, the consequences of heavy use of fertilizer and other agro-chemicals range from deforestation and fishery resource depletion, to a growing incidence of land degradation and water pollution. In Indonesia, low yields (three times lower than that of Viet Nam) are due to the penetration rate of extension services and better technologies being very low among smallholder coffee farmers.

Climate change is a serious threat to countries in Southeast Asia and the Pacific, especially in the agriculture sector. Timor-Leste and PNG are the two most vulnerable countries to climate change in the Pacific with economic losses from climate change expected to reach 15% of PNG’s annual gross domestic product and 10% of Timor-Leste’s by 2100. Both countries are expected to experience a temperature increase of more than 2.5°C on average by 2070 (footnote 3). Viet Nam has been listed by the World Bank as one of the five countries that will be worst-affected by climate change given its high exposure to floods and storms, and the fact that two of its most important economic sectors – industry and agriculture – are located in coastal lowlands and deltas. Indonesia, the third largest emitter of greenhouse gases in the developing world after

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China and India, will see temperature increase up to 3.9°C and precipitation decrease up to twelve percent by 2100 according to the Intergovernmental Panel on Climate Change.

The TA will provide support to the smallholder coffee farmers that Olam sources from through training and agricultural extension services that improve productivity, reduce environmental impacts and improve livelihoods. Certification may be a suitable tool to achieve this in some cases. A holistic climate-smart agriculture training program including training sessions, field trials, and demonstration farms will ensure that farmers better cope with the negative consequences of climate change. The TA will build on the mobile technology platform that Olam is building (OFIS) to ensure that it directly benefits farmers by personalized assessment (annual), training, planning and better access to market information. The TA will also encourage implementation of coffee grading and quality based pricing among the farmer groups. The TA will help connect farmers directly to potential customers of certified conventional and specialty coffees which should help farmers realize better value just because of the premiums involved. The use of OFIS improves information on (potential) farmer production and assists with traceability, allowing Olam to offer larger, more secure coffee volumes to customers – which in turn results in coffee sales becoming a more secure and lucrative livelihood option for farmers.

The TA will also encourage institution building and establishment of industry standards in select countries through the development of coffee grading systems and unified information management system. The TA is a piggyback TA which will help realize the projected impact of the financing project. The TA will help farmers be included in the global coffee supply chain by helping them adopt sustainable farming practices and increasing their production and quality, and ultimately, income.

A. **Scope of Service**

The project will be designed around the registration of 20,000 new farmers (including 6,000 in Indonesia) into the Olam Farmer Information System (OFIS). This requires building on-the-ground relationships with farmers and collecting data through a baseline and annual surveys. Information collected should be used to design training programs including Good Agricultural Practices, Integrated Pest Management, and Climate Smart Agriculture. The setting up and running of a series of coffee demo plots will provide accurate information on local coffee growing conditions, thus informing training content and providing training sites for farmers.

Farm level demonstration plots will be broadly modelled a World Coffee Research methodology being used locally, with the following characteristics:

(i) Located on individual farmers’ land and broadly representative of size / growing conditions faced by other farmers in the immediate vicinity;

(ii) Managed according to a design that is centrally coordinated and that involves ‘side-by-side’ application of different treatments / practices.

(iii) Supported by careful data collection and monitoring to enable clear evaluation of the economic returns of different ‘improvements’ or changes in farming practices.

(iv) Providing clear visual evidence to nearby farmers, and micro-data for more aggregated analysis.

OFIS will be used to generate individual farm management plans and the project will supply inputs and advice to implement these effectively. Improvements in productivity, coffee quality and farmer livelihoods are key measures of success. (Organic) certification and/or OLC certification may be useful tools for delivering/measuring these. Each project country (i.e., Timor-Leste, PNG, Viet Nam, Indonesia) will have a separate contract. For efficiency, consulting firms are encouraged to bid for more than one of the four contacts.
The firm will report to the ADB project officer through the assignment team leader and will perform the following (figures for Timor-Leste, Viet Nam and PNG are reference purpose only):

1. **Output 1: Inclusive coffee supply chain established**
   (i) Support quality improvements and market linkages (certification if appropriate) leading to livelihood improvements of new farmers: 6,500 in Timor-Leste; 6,000 in Indonesia; 4,500 in Viet Nam; and 3,000 in PNG.
   (ii) Training of farmers on gender inclusion and elimination of child labor: 6,500 in Timor-Leste; 6,000 in Indonesia; 4,500 in Viet Nam; and 3,000 in PNG.
   (iii) Training of farmers in financial literacy: 6,500 in Timor-Leste; 6,000 in Indonesia; 4,500 in Viet Nam; and 3,000 in PNG.\(^8\)
   (iv) Pilot smallholder specialty coffee traceability program in 10 cooperatives in Timor-Leste and 10 cooperatives in Indonesia.
   (v) Farmer-to-farmer best practice exchanges facilitated by training farmer-instructors: 400 in Timor-Leste; 400 in Indonesia; 200 in Viet Nam; and 200 in PNG.
   (vi) Conduct assessment of impact of project on the income and livelihood of the target households leveraging OFIS and other primary/secondary data.

2. **Output 2: Environmentally sustainable and climate resilient supply chain established**
   (i) Training in climate smart agriculture\(^9\) to farmers, including (i) adaptation strategy for temperature increase and precipitation change, (ii) water harvesting and drip irrigation, and (iii) conservation agriculture: 6,500 in Timor-Leste; 6,000 in Indonesia; 4,500 in Viet Nam; and 3,000 in PNG.
   (ii) Training in good agricultural practices to farmers, including (i) replanting/rejuvenation, (ii) pruning, (iii) integrated pest management, (iv) intercropping, and (v) harvest and post-harvest solutions: 6,500 in Timor-Leste; 6,000 in Indonesia; 4,500 in Viet Nam; and 3,000 in PNG.
   (iii) Network of trial demonstration plots for rehabilitation, renovation, and replanting including soil management at central, district, and village levels to design, implement and propagate the appropriate methodologies: 50 in Timor-Leste; 40 in Indonesia; 30 in Viet Nam; and 20 in PNG.
   (iv) Pilot organic coffee farming program designed and delivered to farmers: 1,000 in Timor-Leste; 500 in Indonesia; 400 in Viet Nam; and 200 in PNG.
   (v) Training for 2,000 farmers in Viet Nam in: (i) innovative technologies for resources conservation, (ii) use of agri-chemicals and organic inputs, (iii) pollution control.

3. **Output 3: Smallholder coffee farmer access to information and services expanded coffee**
   (i) Roll out Olam Farmer Information System (OFIS) to farmers across Viet Nam, Indonesia, Timor-Leste and PNG and provide personalized farm management plans: 6,500 in Timor-Leste; 6,000 in Indonesia; 4,500 in Viet Nam; and 3,000 in PNG.
   (ii) Provide ‘OFIS Window’ a data platform giving transparency on project activities and progress.
   (iii) Conduct feasibility study and pilot the use of OFIS as a tool for the wider coffee sector renovation program in Timor-Leste and PNG.

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\(^8\) At least 50% women.
\(^9\) Identification of current and projected climate risks for smallholder coffee farmers and mapping of risks to proposed adaptation strategy and training is part of this output.
(iv) Pilot financial inclusion program by using OFIS to connect farmers to formal financial institutions: 400 in Timor-Leste; 500 in Indonesia.

This assignment is for Indonesia only. However, under the Project, three similar assignments are expected. The start dates of a subproject for each country as follows: December 2017 in Indonesia; April 2018 in Timor-Leste; October 2018 in Viet Nam; and April 2019 in PNG.

B. Key Expertise Required

Proposing entities are provided with the flexibility to structure and organize the project team, and determine the number and nature of any additional team members required to deliver the project objectives and outputs. However, while maintaining flexibility for the proposing entities in determining team composition and individual inputs, ADB requires, a minimum of two international key experts, one of which will be expected to act as Team Leader responsible for overall delivery of project including management of project staff, impact assessment, advising and reporting to Olam management and ADB:

- **Assignment team leader**: responsible for the overall delivery of the project including management of project staff, coordination between the different outputs, impact assessment, and advising and reporting to Olam management and ADB.
- **Senior agronomist**: responsible for the design, establishment and ongoing management of TA supported demonstration plots to test and demonstrate relevant technologies and management systems and provide locally relevant agro-economic advice, training and demonstration to farmers.
- **Training and extension manager**: responsible for the initial enrollment of farmers into OFIS, the design and delivery of training support, and assisting with implementation of individual farm management plans. The training and extension manager would also be responsible for overseeing the preparation, dissemination, and ongoing dissemination of locally appropriate training materials and would work with selected external partners to design and implement a series of differentiated training ‘treatments’ to enable systematic evaluation of the cost effectiveness of different approaches and training methodologies in the local context.

**Key personnel required qualifications**

**Assignment Team Leader**

(i) At least 10 years of international or national experience in agricultural development;

(ii) Demonstrated track record of successful project management.

**Senior Agronomist**

(i) A master’s degree in the relevant or a related discipline, such as agricultural economics, agronomy, environmental management;

(ii) Proven experience and familiarity with smallholder agroforestry and coffee production;

(iii) Track record demonstrating success in designing, setting up and running agricultural research and demonstration plots;

(iv) Extensive work experience in Southeast Asia and Pacific under climate change would be preferable;

(v) Familiarity with ADB or other MDB ANR operations would be desirable;

(vi) Strong verbal and written communication skill in English;
(vii) Experience with organizing training program in farming management / water resource management under climate change would be added advantage;
(viii) Experience with scaling up of prototype applications and organizing training program on it would be added advantage.

**Training and extension manager**

(i) A master’s degree in a relevant discipline;
(ii) At least 10 years of international or national experience in smallholder agricultural development;
(iii) Track record of success in designing and delivering agricultural training and extension to smallholder coffee farmers;
(iv) Extensive work experience in Southeast Asia and Pacific;
(v) Familiarity with ADB or other MDB operations in the ANR sector would be desirable;
(vi) Strong verbal and written communication skill in English and local language.

In addition to the above required international key experts, the proposing entities should also include in their technical proposal, in the personnel work plan and in their financial proposal all national key experts and other “non-key experts” required in accordance with their proposed approach and methodology. All experts engaged under the contract, whether key or non-key experts, must be citizens of one of the ADB eligible countries.

**C. Preparation of Proposal**

Proposing entities are requested to prepare a detailed description of how they propose to deliver on the outputs of the contract in the section of their proposal called “Approach and Methodology”. In this narrative, entities should be explicit in explaining how they will achieve the outputs, and include any information on their existing activities upon which they may eventually build as well as the details of what expert will comprise the project team.

The contract for each country will be awarded on an output-based contract, to be determined after review of the proposals and proposed deliverable timeframe.

Only one curriculum vitae (CV) must be submitted for each key and non-key expert included in the proposal. Only the CVs of key experts will be scored as part of the technical evaluation of proposals. The CVs of non-key experts will not be scored, however ADB will review and individually approve or reject each CV for each non-key expert position in the proposal.

All positions under the contract, both key and non-key experts, must be included and budgeted for in the financial proposal in accordance with the person-month allocation required for each as defined by the proposing organization.

**D. Terms of the assignment**

The duration of the assignment is 2.5 years from the start date. The assignment of experts is intermittent in nature. The terms may be modified to reflect consultations between the parties involved in the assignment or to incorporate additional requirements identified during the course of implementation. It is expected that the terms will be finalized during contract negotiations with a first-ranked firm.