Technical Assistance Report

Project Number: 51139-002
Transaction Technical Assistance Cluster (C-TRTA)
November 2017

Olam International Limited: Inclusive, Sustainable, and Connected Coffee Value Chain

Financed by ADB's Technical Assistance Special Fund and Cofinanced by the Canadian Climate Fund for the Private Sector in Asia under the Clean Energy Financing Partnership Facility (Indonesia, Timor-Leste, Viet Nam, and Papua New Guinea)

This is the abbreviated version of the document that excludes commercially sensitive and confidential business information that is subject to exceptions to disclosure set forth in ADB's Public Communications Policy 2011.

Asian Development Bank

CURRENCY EQUIVALENTS
(as of 14 August 2017)

Currency unit	–	Singapore dollar (S$)
S$1.00	=	$0.7343
$1.00	=	S$1.362

ABBREVIATIONS

OFIS	–	Olam Farmer Information System
OIL	–	Olam International Limited
Olam	–	Olam International Limited and its subsidiaries
PNG	–	Papua New Guinea
TA	–	technical assistance
TASF	–	Technical Assistance Special Fund

NOTE

In this report, "$" refers to US dollars.

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TRANSACTION TECHNICAL ASSISTANCE AT A GLANCE

1. Basic Data — **Project Number:** 51139-002

Project Name	Olam International Limited: Inclusive, Sustainable, and Connected Coffee Value Chain	**Department /Division**	PSOD/OPSD
Nature of Activity	Capacity Development	**Executing Agency**	Asian Development Bank
Modality	Regular		
Country	REG		

2. Sector	**Subsector(s)**	**Financing ($ million)**
✓ Agriculture, natural resources and rural development	Agricultural production	3.00
	Total	**3.00**

3. Strategic Agenda	**Subcomponents**	**Climate Change Information**	
Inclusive economic growth (IEG)	Pillar 2: Access to economic opportunities, including jobs, made more inclusive	Adaptation ($ million)	0.40
		Climate Change impact on the Project	High
Environmentally sustainable growth (ESG)	Eco-efficiency		
Regional integration (RCI)	Pillar 2: Trade and investment		

4. Drivers of Change	**Components**	**Gender Equity and Mainstreaming**	
Knowledge solutions (KNS)	Application and use of new knowledge solutions in key operational areas	Effective gender mainstreaming (EGM)	✓
	Knowledge sharing activities		
	Pilot-testing innovation and learning		
Partnerships (PAR)	Bilateral institutions (not client government)		
	Official cofinancing		
Private sector development (PSD)	Promotion of private sector investment		

5. Poverty and SDG Targeting		**Location Impact**	
Geographic Targeting	No	Regional	High
Household Targeting	No		
SDG Targeting	Yes		
SDG Goals	SDG2, SDG5, SDG8, SDG12, SDG13, SDG17		

6. Risk Categorization Low

7. Safeguard Categorization Safeguard Policy Statement does not apply

8. Financing

Modality and Sources	**Amount ($ million)**
ADB	**2.60**
Transaction technical assistance: Technical Assistance Special Fund	2.60
Cofinancing	**0.40**
Canadian Climate Fund for the Private Sector in Asia under the Clean Energy Financing Partnership Facility (Full ADB Administration)	0.40
Counterpart	**0.00**
None	0.00
Total	**3.00**

I. THE PROPOSED PROJECT

1. The proposed transaction technical assistance (TA) cluster is designed to complement the proposed loan of up to $100,000,000 to Olam International Limited (OIL) and two of its subsidiaries. The loan will support the $223 million capex and expansion plan of OIL and its subsidiaries (Olam) over the 2017-2019 period and invest in Olam's midstream processing assets and permanent working capital for smallholder farmer supply in Indonesia, Timor-Leste, Papua New Guinea (PNG), and Viet Nam.[1] The project will promote inclusive and sustainable agricultural value chains with higher local value addition in Southeast Asia and the Pacific.

2. The TA cluster grant will complement the loan by providing capacity building support to 20,000 smallholder coffee farmers that Olam sources from across, Indonesia, PNG, Timor-Leste, and Viet Nam. The TA cluster will help smallholder coffee farmers fully benefit from their inclusion in the coffee value chain by improving the productivity and quality of crops, and meeting international certification standards. The TA cluster will also ensure that these farmers are better prepared to cope with the negative consequences of climate change.

II. THE TECHNICAL ASSISTANCE CLUSTER

A. Analysis of Key Issues

3. **Smallholder coffee farmers**. Coffee is a key sector in Indonesia, Timor-Leste, Viet Nam, and PNG, but primarily characterized by unorganized, small-scale farming. 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 one hectare whose livelihoods depend on a successful coffee crop. While coffee is Timor-Leste's largest non-oil export and is grown by 38% of all Timorese households,[2] more than half of coffee planted area consists of unproductive old trees resulting in low yields.[3] In PNG, coffee production, primarily done by smallholders, is the backbone of the rural economy and accounts for 30% of the total labor force.

4. **Challenges**. 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. In Indonesia, low yields (three times lower than that of Viet Nam[4]) are due to the low penetration of extension services and limited adoption of new technologies by smallholder coffee farmers. Coffee production in Timor-Leste is de-facto organic, but only around 25% of exports have the certifications needed to be sold as a premium organic product. Coffee yields in Timor-Leste are also extremely low (150-200 kg per ha) and there is significant potential to improve livelihoods by increasing productivity, improving quality, and helping coffee farmers to realize additional value through certification and traceability. In PNG, the quality and productivity of coffee has been declining and smallholder farmers' yields are 50-60% below their potential.[5] 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.[6]

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[1] In order of start dates (see Table 3).
[2] Government of Timor-Leste. 2016. *Timor-Leste Population and Housing Census 2015*. Dili.
[3] Timor-Leste Ministry of Agriculture and Fisheries. 2009. *Commodity Profile Series: No. 9 Version 1 – Coffee.* Dili.
[4] Global Coffee Platform. 2014. *Indonesia: A business case for sustainable coffee production*. Jakarta.
[5] World Bank. 2009. *Project Information for PNG Productive Partnerships in Agriculture Project*. Washington DC.
[6] World Bank. 2016. *Vietnam Development Report 2016: Transforming Vietnamese Agriculture: Gaining More from Less*. Washington DC.

5. **Climate change**. Climate change is a serious threat to countries in Southeast Asia and the Pacific, especially in the agriculture sector. Indonesia 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. Timor-Leste and PNG are the two most vulnerable countries to climate change in the Pacific when measured by economic losses (as proportion of GDP), with losses from climate change expected to reach 10% of Timor-Leste's annual GDP and 15% of PNG's by 2100.[7] 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 as one of the five countries that will be worst-affected by climate change given its high exposure to floods and storms.[8]

6. **Olam Livelihood Charter**. The overall framework under which Olam International Limited and its subsidiaries (Olam) is providing assistance to smallholder farmers is the Olam Livelihood Charter (Charter). Though not a certification standard, Olam assures customers that their product is sustainable, traceable, and helping rural communities.[9] From 2011 to 2016, 350,000 farmers have come under the Charter (representing 25% of the tonnage sourced from smallholder farmers), and Olam intends to keep increasing this number every year. In Indonesia, less than 1% of the smallholder farmers that Olam sources from are in the Charter. In Timor-Leste and PNG, none of smallholder coffee farmers that Olam sources from are in the Charter. In Viet Nam, 10% of smallholder farmers that Olam sources from are in the Charter.

7. **Olam Farmer Information System**. The Olam Farmer Information System (OFIS) works with smallholder farmers by using mobile technology to survey and register their farms and local social infrastructure. OFIS is a multi-product platform that is able to collect and analyze transaction data from the farm onwards, as well as all farmer training records. This data allows Olam to give more farmers tailored support including personalized farm management plans that help farmers track inputs and outputs. Also, a mobile messaging functionality allows users to directly contact farmers with information such as pricing, weather and agri-tips. OFIS also has full Internal Management System (IMS) capability allowing farmer groups and cooperatives to fully manage their organizations. Olam registered 100,000 smallholder farmers in OFIS across 21 countries. In Timor-Leste and PNG, OFIS has not yet been implemented. In Viet Nam and Indonesia, 1,600 and 500 farmers, respectively, are registered in OFIS.

8. **Impact on smallholder farmers**. The TA cluster will provide support to the smallholder coffee farmers that Olam sources from through training and agricultural extension services that improve productivity and assist with certification. Certifiers that Olam will work with include CAS-4C, Alliance for Water Stewardship, Rainforest Alliance, Starbucks C.A.F.E., and UTZ Certified. 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 and environmental degradation. The TA cluster will build on the mobile technology platform that Olam is building to ensure that it directly benefits farmers through better access to market information and personalized training. The TA cluster 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.

B. Justification for Cluster Modality

[7] ADB. 2014. *The Economics of Climate Change in the Pacific*. Manila.
[8] World Bank. 2010. *Vietnam: Economics of Adaptation to Climate Change*. Washington DC.
[9] Under the Charter, farmers must receive all of the following assistance: (i) finance, (ii) improved yield, (iii) labor practices, (iv) market access, (v) quality, (vi) traceability, (vii) social investment, (viii) environmental impact.

9. A cluster TA is being proposed to maximize efficiency of available TASF money and to allow for funding across multiple years. The transaction TA cluster will complement the proposed loan of up to $100,000,000 to Olam International Limited and two of its subsidiaries. The start dates of the subprojects of the TA cluster are staggered by country (see Table 2) so that lessons learned from countries with earlier start dates can be applied and to accommodate local operational readiness of Olam.

C. Outcome and Outputs

10. Impacts and outcome of the TA cluster are in line with the financing project. Impacts are: (i) double the agricultural productivity and incomes of small-scale food producers through inputs, knowledge, markets, and opportunities for value addition and non-farm employment, (ii) ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, and (iii) significant increase in the exports of developing countries. The major outputs and activities are summarized in Table 1.

Table 1: Summary of Major Outputs and Activities

Major Outputs	Key Activities
1. Inclusive coffee supply chain established	1.1 Support quality improvements and market linkages (certification if appropriate) to smallholder farmers.[a] 1.2 Training of farmers on gender inclusion and elimination of child labor.[a] 1.3 Training of smallholder farmers in financial literacy.[a] 1.4 Initiate smallholder specialty coffee traceability program in 10 farmer groups and cooperatives in Timor-Leste and 10 farmer groups and cooperatives in Indonesia. 1.5 Farmer-to-farmer best practice exchanges facilitated by training farmer-instructors: 400 in Indonesia; 400 in Timor-Leste; 200 in Viet Nam; and 200 in PNG. 1.6 Conduct assessment of impact of project on the income and livelihood of the target households leveraging OFIS and other primary/secondary data.[b]
2. Environmentally sustainable and climate resilient coffee supply chain established	2.1 Develop and provide training to farmers in climate smart agriculture, including (i) adaptation strategy for temperature increase and precipitation change, (ii) water harvesting and drip irrigation, and (iii) conservation agriculture.[a] 2.2 Develop and provide training to farmers in good agricultural practices, including (i) replanting/rejuvenation, (ii) pruning, (iii) integrated pest management, (iv) intercropping, and (v) harvest and post-harvest solutions.[a] 2.3 Establish network of trial demonstration plots for good agricultural practices and climate smart agricultural practices at central, district, and village levels to design, implement and propagate the appropriate methodologies: 50 in Timor-Leste; 40 in Indonesia; 20 in Viet Nam; and 20 in PNG. 2.5 Initiate organic coffee farming program designed and delivered to farmers: 500 in Indonesia; 1,000 in Timor-Leste; 400 in Viet Nam; and 200 in PNG. 2.6 Develop and provide training for 2,000 farmers in Viet Nam in: (i) innovative technologies for resources conservation, (ii) innovative technologies for climate adaptation, (iii) sustainable use of agri-chemicals and organic inputs, (iv) pollution control
3. Smallholder coffee farmer access to information and services expanded	3.1 Roll out OFIS to farmers across Viet Nam, Indonesia, Timor-Leste and PNG and provide personalized farm management plans.[a] 3.2 Provide OFIS data platform giving transparency on project activities and progress 3.3 Conduct feasibility study and pilot the use of OFIS as a tool for the wider coffee sector renovation program in Timor-Leste and PNG. 3.4 Initiate financial inclusion program by using OFIS to connect farmers to formal financial institutions: 500 in Indonesia; 400 in Timor-Leste.

OFIS = Olam Farmer Information System, PNG = Papua New Guinea.
[a] 6,000 in Indonesia; 6,500 in Timor-Leste; 4,500 in Viet Nam; and 3,000 in PNG, and at least 25% women
[b] Data collection for impact assessment will be ongoing through OFIS field surveys from the start of the project.
Sources: Olam; Asian Development Bank.

D. Cost and Indicative Financing

11. The TA cluster is estimated to cost $3,000,000, of which $2,600,000 will be financed on a grant basis by ADB's Technical Assistance Special Fund (TASF-6) and $400,000, for the components related to climate change adaptation, will be financed by the Canadian Climate Fund for the Private Sector in Asia under the Clean Energy Financing Partnership Facility and administered by ADB. Detailed cost estimates and financing arrangements will be presented in each TA subproject proposal submitted for approval.

E. Implementation Arrangements

12. ADB will administer the TA from December 2017 to September 2021, with start dates and duration for each subproject indicated in Table 3. Olam will be the recipient of the TA cluster as Olam is best positioned to coordinate the work of the consulting firms and share learning with farmers, the government, and other stakeholders in the project countries. Olam has the financial and administrative capacity to provide the required in-kind contributions (such as staff time, domestic transportation, and office and housing accommodation) to the consultants and ensure successful implementation of the TA cluster. Each TA subproject proposal will be submitted for approval to the Director General of the Private Sector Operations Department, in accordance with the business process for transaction TA cluster processing. Subproject activities will start only after the project concept of the corresponding ensuing project is approved by ADB. Olam and ADB have agreed to the terms of a draft TA cluster implementation agreement.

Table 2: Implementation Arrangements

Aspects	**Arrangements**		
Indicative implementation period	December 2017–September 2021		
Executing agency	ADB		
Implementing agency	Olam		
Consultants	To be selected and engaged by ADB		
	Firm: Inclusive and Climate Resilient Coffee Value Chain Subproject 1: Indonesia	Quality and Cost-Based Selection	$750,000
	Firm: Inclusive and Climate Resilient Coffee Value Chain Subproject 2: Timor-Leste	Quality and Cost-Based Selection	$1,200,000
	Firm: Inclusive and Climate Resilient Coffee Value Chain Subproject 3: Viet-Nam	Quality and Cost-Based Selection	$750,000
	Firm: Inclusive and Climate Resilient Coffee Value Chain Subproject 4: PNG	Quality and Cost-Based Selection	$300,000
Advance contracting	Use of advanced contracting will be specified in each subproject proposal. Advance contracting, when used, will be to facilitate ease of contracting. No contracts will be signed until subprojects are approved.		
Equipment	The consulting firms will be in charge of procuring the equipment required for the TA		
Disbursement	The TA resources will be disbursed following ADB's *Technical Assistance Disbursement Handbook* (2010, as amended from time to time). Disbursements from the two funding sources will be made pro-rata[a]		

[a] 87% by ADB's TASF-6 and 13% by the Canadian Climate Fund for the Private Sector in Asia under the Clean Energy Financing Partnership Facility

13. **Subprojects.** The TA cluster will be implemented through four subprojects as described in Table 3. Each subproject will be designed in accordance with the general output descriptions as and when needed during the implementation period.

Table 3: Indicative Implementation Period and Budget Allocation for Subprojects

Item	Subproject Title	Implementation Period	Budget
Subproject 1	Indonesia	December 2017–September 2020	$750,000
Subproject 2	Timor-Leste	April 2018–September 2020	$1,200,000
Subproject 3	Viet Nam	October 2018–March 2020	$750,000
Subproject 4	Papua New Guinea	April 2019–September 2021	$300,000

Sources: Olam; Asian Development Bank.

14. The TA will be carried out by up to four consulting firms (one per each subproject), who will be engaged in accordance with the ADB Procurement Policy (2017, as amended from time to time) and the associated project administration instructions and/or staff instructions. Each contract will be a performance-based contract.[10] Quality- and cost-based selection, with 80:20 weighting, and Full Technical Proposals will be used for the recruitment of the consulting firms. Advance action for the recruitment of the consulting firms will occur. The estimated cost and requisite fields of expertise are indicative and estimates will be finalized prior to approval of each TA subproject.

15. The consulting firms will be in charge of procuring the equipment required for the TA.[11] Given the small size of the equipment package, the anticipated method of procurement is Request for Quotations. Upon TA completion, equipment will be turned over to its users (Olam or the farmers). The consulting firms will also be in charge of administering trainings and conducting surveys.

16. ADB and Olam will form a TA task force comprising representatives from ADB and Olam, and consultants from the consulting firms to be hired. The task force will meet regularly to assess the progress of the assistance, and will also share information with the respective focal points for the Agriculture and Natural Resources sector in ADB's Resident Missions in the project countries.

17. In addition to the indicators in the Revised Design and Monitoring Framework, the following indicator will be monitored for reporting requirements of the Canadian Climate Fund for the Private Sector in Asia under ADB's Clean Energy Financing Partnership Facility: number of hectares of land under climate resilient conservation, rehabilitation, or sustainable management.

III. THE PRESIDENT'S DECISION

18. The President, acting under the authority delegated by the Board, has approved (i) the Asian Development Bank (ADB) administering a portion of technical assistance not exceeding the equivalent of $400,000 to be financed on a grant basis by the Canadian Climate Fund for the Private Sector in Asia under the Clean Energy Financing Partnership Facility and (ii) ADB providing the balance not exceeding the equivalent of $2,600,000 on a grant basis to Olam International Limited for the Inclusive, Sustainable, and Connected Coffee Value Project in Indonesia, Timor-Leste, Viet Nam, and PNG, and hereby reports this action to the Board.

Takehiko Nakao
President

[•] December 2017

[10] It is anticipated that at least 16 people (8 international experts and 8 regional experts) working for a total of 270 person-months will be needed under these four consultant contracts.

[11] All TA financed Goods shall be procured in accordance with ADB Procurement Policy (2017, as amended from time to time) and the associated PAIs/TA Staff Instructions.

SUMMARY OF SUBPROJECTS AND CORRESPONDING PROJECTS

Nature of Assistance	TA Subproject Title	TA Subproject Amount	Ensuing or Ongoing Project Title	Risk Categorization	Loan Amount
Subproject 1	Indonesia	$750,000	Agricultural Value Chain Development Project Viet Nam, Indonesia, Timor-Leste, and Papua New Guinea	low	$100,000,000
Subproject 2	Timor-Leste	$1,200,000			
Subproject 3	Viet Nam	$750,000			
Subproject 4	Papua New Guinea	$300,000			

Source: Asian Development Bank estimates.

COST ESTIMATES AND FINANCING PLAN

Table A1.1: Cost Estimates and Financing Plan for Subproject 1 (Indonesia)
($'000)

Item	Amount
A. ADB[a]	
1. Consultants	
a. Remuneration and per diem	
i. International	351.00
ii. National	117.00
b. International and local travel	61.75
c. Reports and communications	12.35
2. Equipment	12.03
3. Training, seminars, and conferences	60.13
4. Surveys	11.05
5. Miscellaneous administration and support costs	6.18
6. Contingencies	18.53
Subtotal (A)	**650.00**
B. Canadian Climate Fund for the Private Sector in Asia under the Clean Energy Financing Partnership Facility[b]	
1. Consultants	
a. Remuneration and per diem	
i. International	54.00
ii. National	18.00
b. International and local travel	9.50
c. Reports and communications	1.90
2. Equipment	1.85
3. Training, seminars, and conferences	9.25
4. Surveys	1.70
5. Miscellaneous administration and support costs	0.95
6. Contingencies	2.85
Subtotal (B)	**100.00**
Total	**750.00**

Note: The technical assistance (TA) subproject is estimated to cost $750,000 of which contributions on a grant basis from the Canadian Climate Fund for the Private Sector in Asia under the Clean Energy Financing Partnership Facility and administered by ADB are presented in the table above.
[a] Financed by the Asian Development Bank's Technical Assistance Special Fund (TASF-Other)
[b] Disbursements from the two funding sources will be made pro-rata (87% by ADB's TASF-Other and 13% by the Canadian Climate Fund for the Private Sector in Asia under the Clean Energy Financing Partnership Facility)
Source: Asian Development Bank estimates.

Table A1.2: Cost Estimates and Financing Plan for Subproject 2 (Timor-Leste)

($'000)

Item	Amount
A. ADB[a]	
1. Consultants	
a. Remuneration and per diem	
i. International	561.60
ii. National	187.20
b. International and local travel	98.80
c. Reports and communications	19.76
2. Equipment	19.24
3. Training, seminars, and conferences	96.20
4. Surveys	17.68
5. Miscellaneous administration and support costs	9.88
6. Contingencies	29.64
Subtotal (A)	**1,040.00**
B. Canadian Climate Fund for the Private Sector in Asia under the Clean Energy Financing Partnership Facility[b]	
1. Consultants	
a. Remuneration and per diem	
i. International	86.40
ii. National	28.80
b. International and local travel	15.20
c. Reports and communications	3.04
2. Equipment	2.96
3. Training, seminars, and conferences	14.80
4. Surveys	2.72
5. Miscellaneous administration and support costs	1.52
6. Contingencies	4.56
Subtotal (B)	**160.00**
Total	**1,200.00**

Note: The technical assistance (TA) subproject estimated to cost $1,200,000 of which contributions on a grant basis from the Canadian Climate Fund for the Private Sector in Asia under the Clean Energy Financing Partnership Facility and administered by ADB are presented in the table above.

[a] Financed by the Asian Development Bank's Technical Assistance Special Fund (TASF-VI)

[b] Disbursements from the two funding sources will be made pro-rata (87% by ADB's TASF-VI and 13% by the Canadian Climate Fund for the Private Sector in Asia under the Clean Energy Financing Partnership Facility)

Source: Asian Development Bank estimates.

Table A1.3: Cost Estimates and Financing Plan for Subproject 3 (Viet Nam)

($'000)

Item	Amount
A. ADB[a]	
1. Consultants	
a. Remuneration and per diem	
i. International	351.00
ii. National	117.00
b. International and local travel	61.75
c. Reports and communications	12.35
2. Equipment	12.03
3. Training, seminars, and conferences	60.13
4. Surveys	11.05
5. Miscellaneous administration and support costs	6.18
6. Contingencies	18.53
Subtotal (A)	**650.00**
B. Canadian Climate Fund for the Private Sector in Asia under the Clean Energy Financing Partnership Facility[b]	
1. Consultants	
a. Remuneration and per diem	
i. International	54.00
ii. National	18.00
b. International and local travel	9.50
c. Reports and communications	1.90
2. Equipment	1.85
3. Training, seminars, and conferences	9.25
4. Surveys	1.70
5. Miscellaneous administration and support costs	0.95
6. Contingencies	2.85
Subtotal (B)	**100.00**
Total	**750.00**

Note: The technical assistance (TA) subproject is estimated to cost $750,000 of which contributions on a grant basis from the Canadian Climate Fund for the Private Sector in Asia under the Clean Energy Financing Partnership Facility and administered by ADB are presented in the table above.

[a] Financed by the Asian Development Bank's Technical Assistance Special Fund (TASF-VI)

[b] Disbursements from the two funding sources will be made pro-rata (87% by ADB's TASF-VI and 13% by the Canadian Climate Fund for the Private Sector in Asia under the Clean Energy Financing Partnership Facility)

Source: Asian Development Bank estimates.

Table A1.4: Cost Estimates and Financing Plan for Subproject 4 (PNG)
($'000)

Item	Amount
A. ADB[a]	
1. Consultants	
a. Remuneration and per diem	
i. International	140.40
ii. National	46.80
b. International and local travel	24.70
c. Reports and communications	4.94
2. Equipment	4.81
3. Training, seminars, and conferences	24.05
4. Surveys	4.42
5. Miscellaneous administration and support costs	2.47
6. Contingencies	7.41
Subtotal (A)	**260.00**
B. Canadian Climate Fund for the Private Sector in Asia under the Clean Energy Financing Partnership Facility[b]	
1. Consultants	
a. Remuneration and per diem	
i. International	21.60
ii. National	7.20
b. International and local travel	3.80
c. Reports and communications	0.76
2. Equipment	0.74
3. Training, seminars, and conferences	3.70
4. Surveys	0.68
5. Miscellaneous administration and support costs	0.38
6. Contingencies	1.14
Subtotal (B)	**40.00**
Total	**300.00**

Note: The technical assistance (TA) subproject is estimated to cost $300,000 of which contributions on a grant basis from the Canadian Climate Fund for the Private Sector in Asia under the Clean Energy Financing Partnership Facility and administered by ADB are presented in the table above.

[a] Financed by the Asian Development Bank's Technical Assistance Special Fund (TASF-VI)

[b] Disbursements from the two funding sources will be made pro-rata (87% by ADB's TASF-VI and 13% by the Canadian Climate Fund for the Private Sector in Asia under the Clean Energy Financing Partnership Facility)

Source: Asian Development Bank estimates.

LIST OF LINKED DOCUMENTS

http://www.adb.org/Documents/LinkedDocs/?id=51139-002-TAReport

1. Revised Design and Monitoring Framework for the Project
2. Terms of Reference for Consultants
3. Approved Report and Recommendation of the President

REVISED DESIGN AND MONITORING FRAMEWORK FOR THE PROJECT

Impacts the Project is Aligned with
Double the agricultural productivity and incomes of small-scale food producers through inputs, knowledge, markets, and opportunities for value addition and nonfarm employment (Sustainable Development Goals, Target 2.3)[a]

Ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, help maintain ecosystems, and strengthen capacity for adaptation to climate change (Sustainable Development Goals, Target 2.4)[a]

Increase significantly the exports of developing countries (Sustainable Development Goals, Target 17.11)[a]

Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting	Risks
Outcome Inclusive and sustainable agricultural value chains with higher local value addition in Viet Nam, Indonesia, Timor-Leste, and PNG scaled up	By 2021: [Redacted]	a–h. Olam's annual report to ADB	Commodity risk. Supply and demand dynamics affect the volume and price of agricultural products being traded. Regulatory risk (e.g., taxes, tariffs, duties, subsidies, and export restrictions on agricultural products)
Outputs 1. Viet Nam value-added agribusiness operations expanded 2. Indonesia value-added agribusiness operations expanded 3. Timor-Leste value-added agribusiness operations expanded 4. PNG value-added agribusiness operations expanded	By 2020: [Redacted]	1–5. Olam's annual report to ADB	Operational risk (e.g., equipment failure, underperformance of equipment, obsolescence, industrial accidents, natural disasters, and the need to comply with new directives of relevant government authorities)

Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting	Risks
5. Training on productive and sustainable farming methods for smallholder farmers in Viet Nam, Indonesia, Timor-Leste, and PNG provided			

Key Activities with Milestones

Outputs 1–4. Viet Nam, Indonesia, Timor-Leste, and PNG value-added agribusiness operations expanded
1. OIL, COVL, and PT DUS sign loan agreements by 30 November 2017
2. OIL, COVL, and PT DUS make first disbursements by 31 December 2017

Output 5. Training on productive and sustainable farming methods for smallholder farmers in Viet Nam, Indonesia, Timor-Leste, and PNG provided
5.1 First consulting firm appointed by 31 December 2017
5.2 First training conducted by 31 March 2018

Inputs

Loans
ADB: $65 million (loan to OIL)
ADB: $5 million (loan to COVL)
ADB: $30 million equivalent in United States dollars and rupiah (loan to PT DUS)
JICA: $75 million (loan to COVL)

Equity
Olam's internally-generated cash flow: $48 million

Technical Assistance
$3 million Transaction TA Cluster

Assumptions for Partner Financing
Not applicable

ADB = Asian Development Bank, COVL = Café Outspan Vietnam Limited, DMC = developing member country, JICA = Japan International Cooperation Agency, t = ton, OIL = Olam International Limited, Olam = Olam International Limited and its subsidiaries, PNG = Papua New Guinea, PT DUS = PT Dharmapala Usaha Sukses, TA = technical assistance, tpa = tons per annum.
[a] United Nations. Sustainable Development Goals. https://sustainabledevelopment.un.org.
[b] Including corporate income tax, net value-added tax, and import duties.
[c] Average of 2014–2016.
Sources: Asian Development Bank and Olam International Limited.

Terms of Reference for Consultants

Inclusive and Climate Resilient 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%[1] of all Timorese households, more than half of the coffee planted area consists of unproductive old trees resulting in low yields.[2] 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.[3] 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.[4] In Indonesia, low yields (three times lower than that of Viet Nam[5]) 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.[6] 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.[7] Indonesia, the third largest emitter of greenhouse gases in the developing world after 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.

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1 Government of Timor-Leste. 2016. *Timor-Leste Population and Housing Census 2015*. Dili.
2 Timor-Leste Ministry of Agriculture and Fisheries. 2009. *Commodity Profile Series: No. 9 Version 1 – Coffee.* Dili.
3 World Bank. 2009. *Project Information Document for PNG Productive Partnerships in Agriculture Project*. Washington DC.
4 World Bank. 2016. *Vietnam Development Report 2016: Transforming Vietnamese Agriculture: Gaining More from Less*. Washington DC.
5 Global Coffee Platform. 2014. *Indonesia: A business case for sustainable coffee production*. Jakarta.
6 ADB. 2014. *The Economics of Climate Change in the Pacific*. Manila.
7 World Bank. 2010. *Vietnam: Economics of Adaptation to Climate Change*. Washington DC.

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 into the Olam Farmer Information System (OFIS). This requires building on-the-gournd 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:

- Located on individual farmers' land and broadly representative of size / growing conditions faced by other farmers in the immediate vicinity;
- Managed according to a design that is centrally coordinated and that involves 'side-by-side' application of different treatments / practices.
- Supported by careful data collection and monitoring to enable clear evaluation of the economic returns of different 'improvements' or changes in farming practices.
- 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:

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 famers 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.

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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.

(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.

(iv) Pilot financial inclusion program by using OFIS to connect farmers to formal financial institutions: 400 in Timor-Leste; 500 in Indonesia.

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, for each project country, 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:

- **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 for each country is 2.5 years from the start date, with staggered start dates for each country as follows: December 2017 in Indonesia; April 2018 in Timor-Leste; October 2018 in Viet Nam; and April 2019 in PNG. 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.