

Project Administration Manual

Project Number: 48409-004

Grant Number: GXXXX

July 2018

Lao PDR: Climate-Friendly Agribusiness Value
Chains Sector Project

CURRENCY EQUIVALENTS

(as of 11 June 2018)

Currency unit	–	kip (KN)
KN1.00	=	\$0.00012
\$1.00	=	KN8,379.95

ABBREVIATIONS

ABE	-	agribusiness enterprise
ADB	-	Asian Development Bank
APG	-	agricultural production group
CEAT	-	controlled environmental agricultural technology
CSA	-	climate smart agriculture
DAFO	-	District Agriculture and Forestry Office
DALAM	-	Department of Agricultural Land Management
DOA	-	Department of Agriculture
DOI	-	Department of Irrigation
DPIU	-	district project implementation unit
EMA	-	external monitoring agency
FMA	-	financial management assessment
FME	-	financial management entity
FTP	-	financial training program
GAP	-	good agricultural practice
GDP	-	gross domestic product
GMP	-	good manufacturing practices
GMS	-	Greater Mekong Subregion
GRM	-	grievance redress mechanism
IEE	-	initial environmental examination
IRRI	-	International Rice Research Institute
ISO	-	International Standards Organization
M&E	-	monitoring and evaluation
MAF	-	Ministry of Agriculture and Forestry
MFI	-	microfinance institution
MPI	-	Ministry of Planning and Investment
MOF	-	Ministry of Finance
MOIC	-	Ministry of Industry and Commerce
NAFRI	-	National Agriculture and Forestry Research Institute
MONRE	-	Ministry of Natural Resources and Environment
NCB	-	national competitive bidding
NGO	-	non-governmental organization
NPMO	-	national project management office
PSC	-	project steering committee
NSEDP	-	National Socio-Economic Development Plan
PAFO	-	provincial agriculture and forestry office
PIC	-	project implementation consultants
PCFC	-	project coordination finance committee
PPCP	-	public-private-community partnership
PPIU	-	provincial project implementation unit

PPMS	-	project performance monitoring system
PPTA	-	project preparatory technical assistance
PTAC	-	project technical advisory committee
SFS	-	smallholder financing scheme
TOT	-	training of trainers

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Project Administration Manual Purpose and Process

The project administration manual (PAM) describes the essential administrative and management requirements to implement the project on time, within budget, and in accordance with the policies and procedures of the government and Asian Development Bank (ADB). The PAM should include references to all available templates and instructions either through linkages to relevant URLs or directly incorporated in the PAM.

The Ministry of Agriculture and Forestry (MAF) and its provincial departments are wholly responsible for the implementation of ADB-financed projects, as agreed jointly between the recipient and ADB, and in accordance with the policies and procedures of the government and ADB. ADB staff is responsible for supporting implementation, including compliance by MAF of its obligations and responsibilities for project implementation, in accordance with ADB's policies and procedures.

At grant negotiations, the recipient and ADB shall agree to the PAM and ensure consistency with the grant agreement. Such agreements shall be reflected in the minutes of the grant negotiations. In the event of any discrepancy or contradiction between the PAM and the grant agreement, the provisions of the grant agreement shall prevail.

After ADB Board approval of the project's report and recommendations of the President, changes in implementation arrangements are subject to agreement and approval pursuant to relevant government and ADB administrative procedures (including the Project Administration Instructions) and upon such approval, they will be subsequently incorporated in the PAM.

I. PROJECT DESCRIPTION

A. Rationale

1. Agriculture sector remains an important part of the Lao PDR's economy. However, it faces a range of physical, economic, and capacity constraints: (i) infrastructure and capacity constraints, including inadequate supply of inputs, production technologies and access to affordable credit; (ii) an aging and declining labor force due to migration of youth to urban areas; (iii) poor enabling policy environment characterized by onerous registration requirements and conflicting regulations; (iv) a low level of private sector participation resulting in low investment at farm level in new and innovative technologies such as mechanization; and (v) limited competitiveness of agriculture value chains due to lack of adequate knowledge of value addition and marketing, and underdeveloped marketing systems.

2. The Climate-Friendly Agribusiness Value Chains Sector Project supports the implementation of the government's Agricultural Development Strategy to 2025 by boosting the competitiveness of rice value chains in Khammouane, Saravan and Savannakhet provinces, and vegetable value chains in Vientiane Capital, Champasak and Sekong provinces.¹ The project will improve climate resilience of agricultural infrastructures, and enhance crop productivity, diversification and commercialization. The project will help improve the capacity for storage, processing, quality and safety testing, and promote the use of biofertilizers and organic farming. It will strengthen the technical and institutional capacity for climate smart agriculture (CSA), and create an enabling environment for climate-friendly agribusinesses to promote environmental sustainability and increase the profitability for farmers and agribusinesses.

B. Impact and Outcome

3. The project is aligned with the following impact: agricultural competitiveness improved.² The project will have the following outcome: productive and resource efficient agribusiness value chains developed in project areas.

C. Outputs

4. **Output 1: Critical agribusiness value chain infrastructures improved and made climate-resilient.** Key activities include the following:

- (i) Rehabilitating small-scale irrigation infrastructure and rural roads to climate-resilient condition;
- (ii) Enhancing crop research, protection and quality testing infrastructure; and
- (iii) Improving climate-friendly value chain infrastructure for agribusiness enterprises.

5. **Output 2: Climate smart agriculture and agribusiness promoted.** Key activities include:

- (i) Deploying climate-resilient rice and vegetable varieties;
- (ii) Strengthening capacity in climate smart and organic agriculture; and

¹ Government of Lao PDR, Ministry of Agriculture and Forestry. 2015. *Agricultural Development Strategy to 2025 and Vision to Year 2030*. Vientiane.

² The impact is reflected through enhanced productivity, climate resilience, quality and safety, value addition and increased rural household incomes.

- (iii) Promoting farm mechanization through a smallholder financing scheme.

6. **Output 3: Enabling environment for climate-friendly agribusiness enhanced.** The key activities include:

- (i) Formulating climate-friendly agribusiness policies and standards; and
(ii) Promoting green finance and climate risk sharing mechanisms.

II. IMPLEMENTATION PLANS

A. Project Readiness Activities

Table 1: Project Readiness Activities

Indicative Activities	Ma y	Jun	Jul	Aug	Sep	Oct	Responsible Agency
Grant negotiations							ADB/MOF
Request for EOIs for project implementation consultants and individual start-up consultants advertised							MAF
Establish project implementation arrangements							MAF
ADB Board approval							ADB
Grant signing							ADB/MOF
Government legal opinion provided							MOF
Grant effectiveness							ADB

ADB = Asian Development Bank, EOI = expression of interest, MAF= Ministry of Agriculture & Forestry, MOF = Ministry of Finance.

Source: Asian Development Bank.

Table 2: Lao PDR Project Readiness Activities

	Key Project Preparation Elements	Stage of Project Preparation				
		Appraisal/ Fact-finding (November 2017)	Negotiations (June 2018)	Approval (July 2018)	Effectiveness - within 2 months after signing (October 2018)	First Disbursement (within 3 months after effectiveness) December 2018
1.	Project is within Government development priority	Confirmed	Re-confirmed			
2.	Project administration manual, project implementation manual, or project operational manual	Discussed and drafted	Agreed and signed			
3.	Discussion and agreement with Government on application of taxes and duties	Discussed and drafted	Agreed			
4.	Environment impact assessment, social impact assessment, land acquisition & resettlement plan and ethnic groups development plan	Discussed and agreed	Agreed			
5.	Procurement capacity assessment	Completed	Agreed			
6.	Financial management capacity assessment	Completed	Agreed			
7.	Procurement plan for the first 18 months	Drafted	Agreed			
8.	Auditing arrangements including TOR	Discussed and agreed; TOR included in the draft PAM	Agreed – SAO is an acceptable independent auditor			

	Key Project Preparation Elements	Stage of Project Preparation				
		Appraisal/ Fact-finding (November 2017)	Negotiations (June 2018)	Approval (July 2018)	Effectiveness - within 2 months after signing (October 2018)	First Disbursement (within 3 months after effectiveness) December 2018
9.	Monitoring and evaluation arrangements	Indicators in DMF and monitoring mechanism discussed and agreed	Agreed			
10.	Required staff have been appointed to support project preparation and suitable project offices identified	Project organization chart, job descriptions, staffing and responsibilities discussed and drafted	Project staff to be appointed, as agreed in the PAM, by ADB Board consideration			
11.	Recruitment of project implementation consultants	TORs discussed and drafted	Agreed			
12.	First year bidding documents for goods and civil works (where design is available)	Being drafted	Being finalized			
13.	Government counterpart funds and in-kind support	Discussed and agreed	Agreed			
14.	Legal opinion	Not applicable	Draft legal opinion to be sent to ADB by 15 Sep 2018			
15.	Opening of advance account and sub-accounts	Not applicable				

DMF = design and monitoring framework, PAM = project administration manual, TOR = terms of reference.

B. Overall Project Implementation Plan

7. The overall six years expected project implementation plan is detailed in Table 3 below. This is updated annually and submitted to ADB with contract and disbursement projections for the following year.

Table 3: Overall Project Implementation Plan

Outputs and Activities	Year 1				Year 2				Year 3				Year 4				Year 5				Year 6				Year 7			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Output 1: Critical agribusiness value chain infrastructure improved and made climate resilient																												
Activity 1.1: Rehabilitating small scale irrigation infrastructure and rural roads to climate resilient condition																												
Subprojects (Tertiary canals, ponds & farm access roads)																												
Tertiary canals																												
- Bid preparation for subprojects (including feasibility study, land availability, etc)																												
- Bidding, construction and handover																												
- Further Subproject identification/evaluation bidding																												
- Construction and handover of subprojects																												
Ponds																												
- Bid preparation for subprojects																												
- Bidding, construction and handover																												
- Further subproject identification/evaluation bidding																												
- Construction and handover																												
Farm to market access roads																												
- Eligibility criteria determined																												
- Sites identified																												
- Bidding, construction and handover																												
Activity 1.2: Enhancing crop research, protection and quality testing infrastructure																												
Provincial rice and vegetable research centers																												
- Preparation and approval of subproject proposals on upgrading research centers																												
- Construction and completion																												
Soil and plant protection laboratory at national level and agricultural college laboratories at provincial level																												
- Procurement of laboratory equipment																												
Post-evaluation and reporting																												
Activity 1.3: Improving climate friendly value chain infrastructure for agribusiness enterprises																												
Recruitment of Financial Management Entity																												
Finalization of Matching Grant Scheme (MGS) operations manual																												
Round 1 Subprojects (Upgrading of rice mills/ vegetable pack houses & collection centers/biofertilizer factories)																												
- Identification, approval and implementation (including feasibility studies/surveys/technical specifications/safeguards & gender issues/review/approval/construction/completion)																												
Round 2 Subprojects (Upgrading of rice mills/ vegetable pack houses & collection centers/biofertilizer factories)																												
- Identification, approval and implementation (including feasibility studies/surveys/technical specifications/safeguards & gender issues/review/approval/construction/completion)																												

Project Management Cross-Cutting Activities	Year 1				Year 2				Year 3				Year 4				Year 5				Year 6				Year 7				Year 8	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Consultant selection (including PIC)																														
Baseline studies																														
Project promotion and awareness programs																														
Gender action plan implementation																														
Project M&E																														
Inception report																														
Quarterly progress report (including financial report)																														
Project reviews																														
Midterm Report																														
Government project completion report																														
Project physical completion date																														
Financial closing																														

M&E = monitoring and evaluation, MAF = Ministry of Agriculture & Forestry, MOIC = Ministry of Industry and Commerce, PIC = project implementation consultants.

Note: ▲ - periodic

III. PROJECT MANAGEMENT ARRANGEMENTS

A. Project Implementation Organizations: Roles and Responsibilities

Table 4: Roles and Responsibilities of Project Management Organizations

Project Implementation Organizations	Management Roles and Responsibilities
Ministry of Finance (MOF)	<ul style="list-style-type: none"> Establish the advance account at the Bank of Lao PDR for disbursement of eligible expenditures under the Grant. MOF will manage, replenish, and liquidate the account; Ensure proper use of advances from the advance account and any sub-accounts; and Appoint MOF representative to PCFC.
Ministry of Agriculture and Forestry (MAF) - Executing Agency	<ul style="list-style-type: none"> Provide overall supervision and guidance on implementation of the project through DOPF, MAF; Approve the project's annual workplan and budget; Review the project implementation progress; Review and endorses any proposed change in the project scope or implementation arrangements; Supervise compliance with grant covenants; Consolidate and have the financial statements audited; and Provide oversight for financial management of the project.
Project steering committee (PSC) (Secretariat of the National Food Security and Commodities Committee)	<ul style="list-style-type: none"> Ensure inter-agency cooperation at national level; Provide policy guidance and advice on project-related issues; Meet at least twice a year to review implementation progress and constraints; and Approve overall project work plans and budgets.
Project Technical Advisory Committee (PTAC)	<p>Chair: Director General, DTEAP Members: DOPF, DOA, DOI, DALAM, NAFRI. The PTAC will meet quarterly, or as required, to:</p> <ul style="list-style-type: none"> Provide technical guidance and resolve issues; Review the annual work plans; Approve subproject proposals; Undertake field monitoring, as needed; Review policy documents; and Supervise project implementation, monitoring and evaluation (M&E).
PCFC	<p>Chair: Director General, DOPF, MAF. Members: Bank of Lao PDR, DRDC (MAF), DCU (MAF), MOF, MOIC, MPI The PCFC will:</p> <ul style="list-style-type: none"> Act as secretariat for PSC; Provide guidance to the PTAC and NPMO on project financial management, procurement, modalities of support to the private sector, and financial monitoring and evaluation; Coordinate activities between PSC, NPMO, and PTAC; and On the matching grant scheme: <ul style="list-style-type: none"> Approve changes to the Operations Manual. Oversee and guide the financial management entity (FME) Ensure beneficiary eligibility and selection criteria are adhered. Approve concept notes and business plans (and for the smallholder financing scheme [SFS] applications) based on recommendations from the FME. Assist FME to liaise with other agencies involved in the Project Approve progress reports and workplans submitted by FME.

Project Implementation Organizations	Management Roles and Responsibilities
NPMO – within the Department of Planning and Finance (DOPF), MAF	<ul style="list-style-type: none"> • Responsible for day-to-day management and implementation of the project; • Coordinate activities of the concerned agencies at the national and provincial levels; • Liaise with the implementing agencies to initiate and coordinate effective communication between project stakeholders; • Provide guidance, technical and administrative, support to the implementing agencies; • Consolidate annual work plans, financial management plans (including annual forecast of contract awards and disbursements), and procurement plans for submission to MAF, MOF, and/or ADB; • Establish and implement project performance monitoring and evaluation system; • Establish and manage a sub-account for the ADB grant, prepare withdrawal applications for submission to MOF and ADB, maintain accurate financial records, and oversee other sub-accounts; • Recruit consultants, following ADB procedures, in accordance with the procurement plan; • Procure goods and civil works, following ADB procedures, in accordance with the procurement plan; • Administer consulting and procurement contracts assigned to NPMO; • Monitor compliance with grant covenants and assurances in respect of all subprojects and the good governance framework; • Ensure compliance with social and environment safeguards, including gender action plan and ethnic group development framework, as per ADB's Safeguard Policy Statement (SPS) 2009; • Monitor performance of the SFS; • Approve payment of contractors, consultants, and suppliers; • Organize training, seminars, and workshops as needed; and • Submit required reports to ADB.
Implementing agencies (IA): DALAM, DOA, DOI, DOPF, DTEAP, DRDC, NAFRI	<ul style="list-style-type: none"> • Guide PAFOs and DAFOs in implementing project activities; • Prepare the project workplans and annual plans jointly with NPMO and the provincial project implementation units (PPIUs); • Provide technical supervision on project implementation under each department's respective mandate; • Consolidate and report project progress quarterly to the NPMO; and • Contribute data/information to the project's M&E system.
PPIU	<p>PPIUs will be established within the provincial agriculture and forestry offices of Champasak, Khammouane, Saravan, Savanakheth, and Sekong. Headed by the Provincial Project Director, PPIUs will:</p> <ul style="list-style-type: none"> • Prepare provincial-level rolling annual work plans for approval by the Vice Governor (also the Chairperson of the Provincial Steering Committee) and onward submission to NPMO; • Coordinate with other provincial government departments; • Recruit, with the assistance of NPMO, individual consultants (and administer contracts) to be assigned to PPIUs; • Coordinate with district project implementation units (DPIU) in implementing technical activities; • Coordinate development and agricultural extension training of Agricultural Production Groups (APG); • Coordinate with private sector suppliers and service providers;

Project Implementation Organizations	Management Roles and Responsibilities
PPIU (continued.)	<ul style="list-style-type: none"> • Coordinate with market managers and vendor; • Establish and manage separate sub-accounts for the project; • Administer the SFS scheme in accordance with approved/established guidelines; • Establish/enhance mechanisms to sustainably finance operation and maintenance of project supported infrastructure; • Promote identified public-private-community partnership (PPCP) initiatives; • Coordinate with all concerned stakeholders; • Provide inputs to the quarterly reports on progress and issues to the NPMO; and • Compile M&E data from DPIUs for PPMS.
DPIU	<p>DPIUs will be established within DAFOs and will be headed by a district project manager. The DPIUs will:</p> <ul style="list-style-type: none"> • Report to PPIUs on implementation progress and issues; • Prepare annual and quarter work plans in line with the PPIU workplan; • Provide daily technical support to the APGs and organize farmer activities; • Assist with various surveys; • Coordinate safeguard and gender activities; • Carry out market facilitation and work with Lao Women's Union on village livelihood funds and community mobilization; • Prepare monthly progress reports for submission to PPIUs; • Maintain separate accounting records for the project; and • Provide M&E data into PPMS.
ADB	<ul style="list-style-type: none"> • Finance the project cost through an ADF grant; • Oversee and monitor compliance with ADB procedures and the grant agreement; • Monitor project implementation progress; • Provide guidance for procurement and consultant recruitment; • Monitor disbursement and process withdrawal applications and release of grant funds; • Field review missions, a mid-term review mission, and a project completion review mission jointly with the Government.

ADB = Asian Development Bank, ADF = Asian Development Fund, DALAM = Department of Agricultural Land Management, DAFO = district agriculture and forestry office, DCU = Department Coordination Unit, DOA = Department of Agriculture, DOI = Department of Irrigation, DOPF = Department of Planning and Finance, DPIU = district project implementation unit, DRDC = Department of Rural Development and Cooperatives, DTEAP = Department of Technical Extension and Agricultural Processing, MAF = Ministry of Agriculture and Forestry, M&E = monitoring and evaluation, MOIC = Ministry of Industry and Commerce, MPI = Ministry of Planning and Investment, NAFRI = National Agriculture and Forestry Research Institute, NPMO = National Project Management Office, PAFO = provincial agricultural and forestry office, PCFC = project coordination and finance committee, PPIU = provincial project implementation unit, PPMS = project performance monitoring system, PTAC = project technical advisory committee.

Source: Asian Development Bank.

B. Key Persons Involved in Implementation

Executing Agency

Ministry of Agriculture and Forestry (MAF)

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C. Project Organization Structure

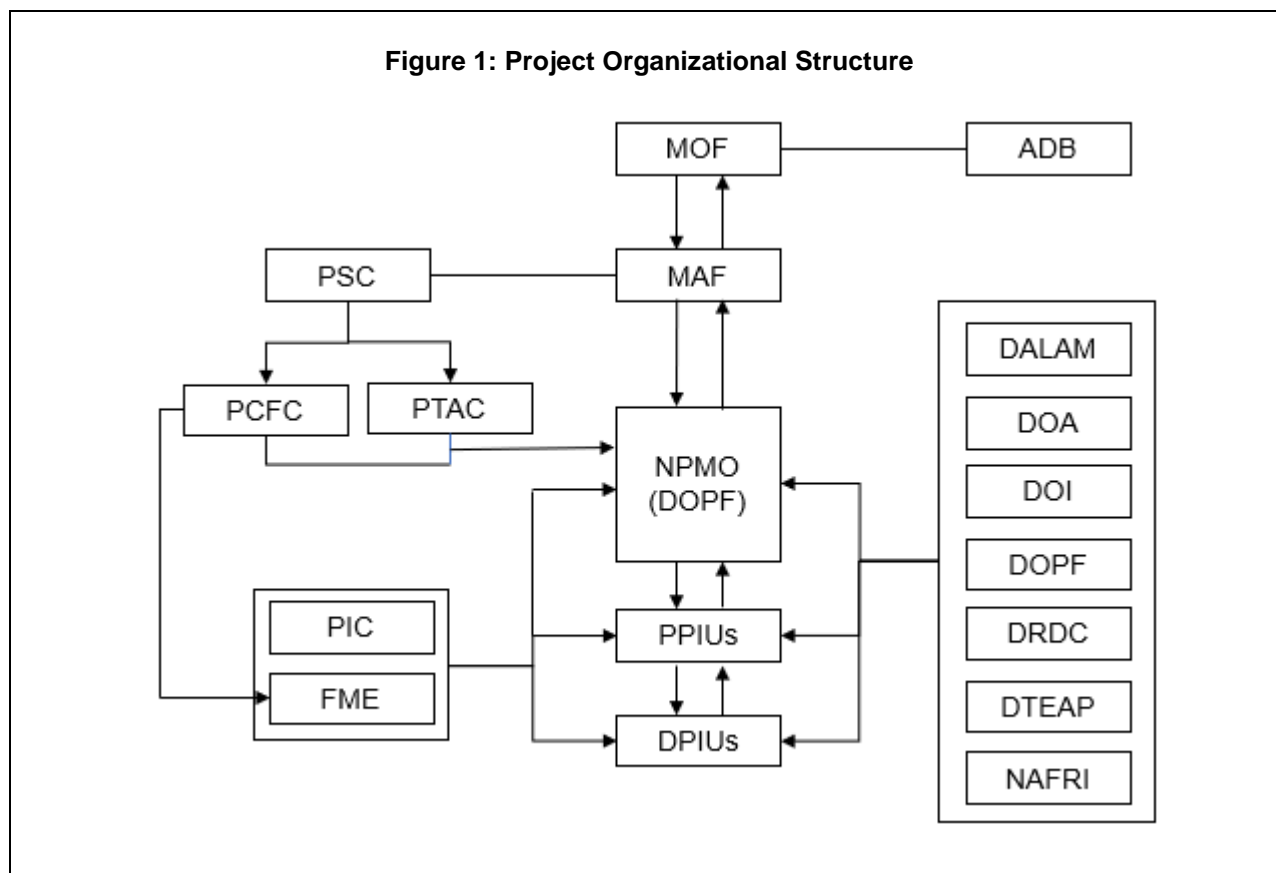
8. MOF will manage the project advance account and all fund disbursement arrangements. MAF is the executing agency (EA) and will be responsible for overall coordination and the delivery of the project outputs and activities. It will manage the government and ADB funds and will be responsible for grant covenant compliance and adherence to safeguard policies. Since the project requires a high level of inter-ministerial cooperation, MAF will engage with other ministries and establish instruments for cooperation such as Memorandum of Understanding, as appropriate.

9. The secretariat of the National Food Security and Commodities Committee, headed by the Vice-Minister of MAF, will serve as the project steering committee (PSC), and ensure inter-agency cooperation and policy guidance. The Vice-Minister of MAF may delegate the chairmanship to a representative of MAF. The PSC will comprise representatives of various ministries including MOF, Ministry of Planning and Investment (MPI), Ministry of Industry and Commerce (MOIC), Ministry of Natural Resources and Environment (MONRE), and other concerned agencies. It is recommended that the steering committee members will be at least the rank of director general to ensure that timely decisions are made.

10. The Project Technical Advisory Committee (PTAC) will provide guidance on technical soundness of the project. It will be chaired by the Director General of Department of Technical Extension and Agricultural Processing with representatives from DOPF MAF, Department of Agriculture (DOA MAF), Department of Irrigation (DOI MAF), Department of Agricultural Land Management (DALAM MAF), and National Agriculture and Forestry Research Institute (NAFRI). Representatives from the MOIC, MONRE, Ministry of Science and Technology, and a representative from the Lao Chamber of Commerce may be invited when specific issues of their concern are for discussion.

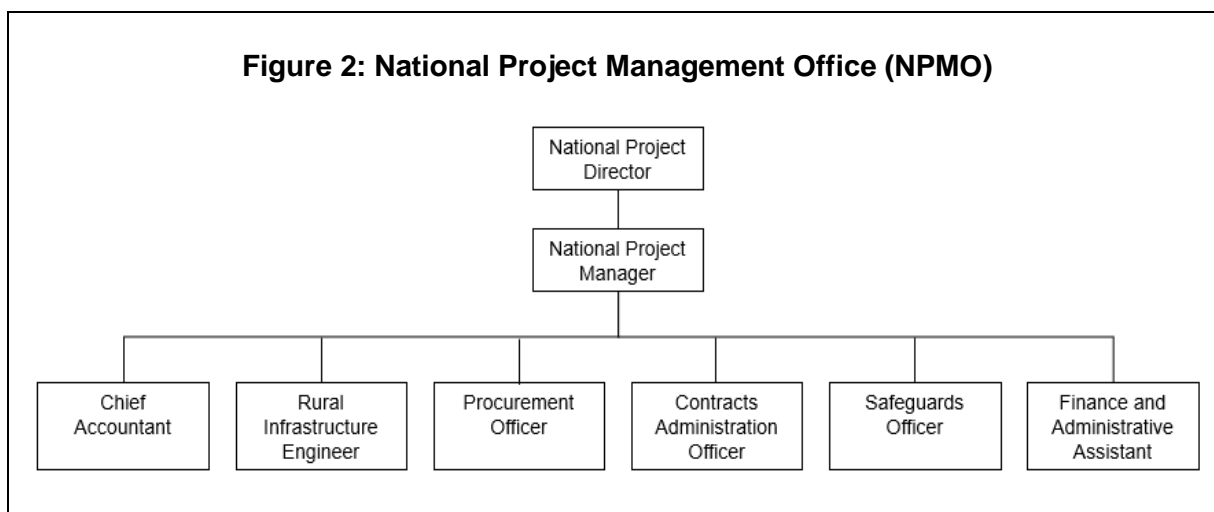
11. The Project Coordination Financial Committee (PCFC) will provide guidance to PSC, PTAC and NPMO on financial management of the project, including modalities of support to the private sector and agriculture production groups. PCFC will directly supervise the performance of the financial management entity. PCFC will be chaired by the Director General of DOPF MAF with representatives from Department of Rural Development and Cooperatives, MOF, MOIC, MPI, MAF (Department Coordination Unit), and Bank of Lao. PCFC will provide secretariat services to PSC. The project organizational structure is in Figure 1.

Figure 1: Project Organizational Structure



ADB = Asian Development Bank, DALAM = Department of Agricultural Land Management, DOA = Department of Agriculture, DOI = Department of Irrigation, DOPF = Department of Planning and Finance, DPIU = district project implementation unit, DRDC = Department of Rural Development and Cooperatives, DTEAP = Department of Technical Extension and Agricultural Processing, FME = financial management entity, MAF = Ministry of Agriculture and Forestry, MOF = Ministry of Finance, NAFRI = National Agriculture and Forestry Research Institute, NPMO = National Project Management Office, PCFC = Project Coordination Finance Committee, PIC = project implementation consultants, PPIU = provincial project implementation unit, PSC = project steering committee, PTAC = Project Technical Advisory Committee.

12. MAF will establish a National Project Management Office (NPMO) within its Department of Planning and Finance (DOPF). NPMO (Figure 2) will be headed by a project director, assisted by a project manager, and will comprise a chief accountant, rural infrastructure engineer, procurement officer, safeguards officer, contracts administration officer, and a finance and administrative assistant. NPMO will provide updates of implementation progress to the project steering committee.



13. The bulk of the project activities will be carried out at the provincial and district levels. However, lessons learned from past projects include the need to involve MAF's specialized technical departments and organizations. The specialized departments and organizations will assist NPMO to design the implementation program and prepare their own work plans/budgets and contribute to the overall work plan. The following table outlines the lead implementation agencies for each activity:

Table 5: Responsibilities of Departments

Outputs	Lead Technical Oversight	Technical Advisory	Implementation	
	MAF Departments	Other Ministries	Project Team	Consulting Team
Output 1: Critical agribusiness value chain infrastructure improved and made climate-resilient				
1.1 Rehabilitating small-scale irrigation infrastructure and rural roads to climate-resilient condition	DOI		NPMO, PPIUs, DPIUs	PIC, EMA (for safeguards)
1.2 Enhancing crop research, protection and quality testing infrastructure				
a. research centers	NAFRI		NPMO, PPIUs	PIC
b. diagnostic soil testing laboratories	DALAM		NPMO, PPIUs	PIC
c. plant protection laboratories	DOA		NPMO, PPIUs	PIC
1.3 Improving climate-friendly value chain infrastructure for agribusiness enterprises	DOPF	Reps on PCFC	NPMO, PPIUs	FME
Output 2: Climate smart agriculture and agribusiness promoted				
2.1 Deploying climate-resilient rice and vegetable varieties	NAFRI		NPMO	IRRI, PIC
2.2 Strengthening capacity in climate smart and organic agriculture	DTEAP		NPMO, PPIUs, DPIUs	PIC

2.3 Promoting smallholder financing schemes for climate-friendly agriculture	DRDC	Reps on PCFC	NPMO, PPIUs, DPIUs	FME
Output 3: Enabling environment for climate-friendly agribusiness enhanced				
3.1 Formulating climate-conscious agribusiness policies and standards				
a. agribusiness and PPCP policies	DTEAP	MOIC, MPI	NPMO	PIC
b. trade standards and certifications	DOA	MOIC, MOST	NPMO	PIC
c. land registration and titling	DALAM	MONRE	NPMO	PIC
3.2 Promoting green finance and climate risk sharing mechanisms	DOPC	MOF, MPI, MOIC	NPMO	FME, PIC

DALAM = Department of Agricultural Land Management, DOA = Department of Agriculture, DOI = Department of Irrigation, DOPF = Department of Planning and Finance, DPIU = district project implementation unit, DRDC = Department of Rural Development and Cooperatives, DTEAP = Department of Technical Extension and Agricultural Processing, FME = financial management entity, MAF = Ministry of Agriculture and Forestry, MOF = Ministry of Finance, NAFRI = National Agriculture and Forestry Research Institute, NPMO = National Project Management Office, PCFC = Project Coordination Finance Committee, PIC = project implementation consultants, PPIU = provincial project implementation unit.

14. At provincial level, the implementing agencies are the provincial governments, whose function and role will be through the provincial agriculture and forestry offices (PAFO). The PPIUs will be established within the PAFOs utilizing, to the extent feasible, infrastructure, and equipment and vehicles under previous ADB projects, e.g. Smallholder Development Project (2001– 2015) and the Sustainable Natural Resource Management and Productivity Enhancement Project (2009 – 2015). The PPIUs will be chaired by the director of the province and comprise a project coordinator, accountant, rural infrastructure engineer, and administrative assistant.

15. Implementation at the district level will be the responsibility of the respective district governments in the project areas. The district project implementation units (DPIU) will be established within the district agriculture and forestry offices (DAFO). Field activities will be supervised by PPIU and the respective DPIUs in MAF's technical departments. DPIU will comprise a district project director and an administrative assistant. The tasks and responsibilities of all government staff to be assigned under the project is detailed in Appendix 2.

16. Project implementation consultants (PIC) will be mobilized to support MAF and the implementing agencies to carry out a range of activities on capacity building and detailed designs.

IV. COSTS AND FINANCING

17. The project is estimated to cost \$46.37 million. The government has requested a grant in the amount of \$40.5 million equivalent from ADB's Special Funds resources to help finance the project. ADB will finance the expenditures in relation to works, equipment, consulting services, incremental operating costs and taxes and duties.

18. The government will finance the equivalent of \$0.75 million for counterpart staff salaries and office space. The beneficiaries will finance the equivalent of \$5.12 million as contribution to upgrade infrastructure under the matching grants scheme. The government will make the grant proceeds available to the executing agency and implementing agencies on a grant basis.

Table 6: Project Investment Plan (\$ million)

Item	Amount
A. Base Costs^{a,b}	
1. Critical agribusiness value chain infrastructure improved and made climate-resilient	26.00
2. Climate smart agriculture and agribusiness promoted	4.85
3. Enabling environment for climate-friendly agribusiness enhanced	1.91
Project management activities	7.48
Subtotal (A)	40.24
B. Contingencies^c	6.13
Total (A+B+C)	46.37

^a Includes taxes and duties of \$4.06 million to be financed by ADB. Such amount does not represent an excessive share of the project cost.

^b In the fourth quarter 2017 prices.

^c Physical contingencies computed at 10% for civil works and equipment, and 5% for the other expenditure categories. Price contingencies on foreign currency costs computed at 1.5% between 2018 and 2020, and 1.6% thereafter. Price contingencies on local currency costs computed at 1.5% in 2018, 2.0% in 2019, and 2.5% thereafter; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

Source: Asian Development Bank estimates.

A. Cost Estimates Preparation and Revisions

19. The project preparatory technical assistance (PPTA) team prepared the cost estimates. Project staff and implementation consultants will revise costs in accordance with the final detailed designs.

B. Key Assumptions

20. The following key assumptions underpin the cost estimates and financing plan:

- (i) Exchange rate: Lao Kip 8,325 = \$1.00 (as of 31 December 2017).
- (ii) Price contingencies based on expected cumulative inflation over the implementation period are as follows:

Table 7: Escalation Rates for Price Contingency Calculation

Item	2018	2019	2020	2021	2022	2023	2024	Average
Local currency (LAK costs)	1.50%	2.00%	2.50%	2.50%	2.50%	2.50%	2.50%	2.30%
Foreign currency (\$ costs)	1.50%	1.50%	1.50%	1.60%	1.60%	1.60%	1.60%	1.60%

Source: Asian Development Bank estimates.

C. Detailed Cost Estimates by Expenditure Category

Table 8: Detailed Cost Estimates by Expenditure Category (\$ million)

	Amount	% of Base Cost
A. Base Costs^a		
Civil Works	12.26	30.5%
Equipment	2.98	7.4%
Matching Grant Scheme (Agribusinesses)	10.75	26.7%
Smallholder Financing Scheme	1.39	3.5%
Supplies, Materials, Office Operations, and Vehicles	1.07	2.7%
Policy Development, Surveys, Studies, and Pilots	2.75	6.8%
Training, Seminars, and Workshops	2.87	7.1%
Consulting Services	5.52	13.7%
Government Staff	0.65	1.6%
Subtotal (A)	40.24	100.0%
B. Contingencies^b		
Physical	3.24	8.1%
Price	2.89	7.2%
Subtotal (B)	6.13	15.2%
Total Project Costs (A+B)	46.37	115.2%

^a Base Costs in the 4th quarter 2017 prices.

^b Physical contingencies computed at 10% for civil works and equipment, and 5% for the other expenditure categories. Price contingencies on foreign currency costs computed at 1.5% between 2018 and 2020, and 1.6% thereafter. Price contingencies on local currency costs computed at 1.5% in 2018, 2.0% in 2019, and 2.5% thereafter; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

Note: Figures may not sum up due to rounding.

Source: Asian Development Bank estimates.

D. Allocation and Withdrawal of Grant Proceeds

Table 9: Allocation of ADB Grant Proceeds

No.	Expenditure Item	Total Amount Allocated for ADB Financing (\$)	Basis for Withdrawal from the Grant Account
1	Works, Goods (Equipment, Materials, Supplies, Office Operations, Vehicles) and Consulting Services (Training, Workshops, Studies, Policy Development)	31,772,000	100% of total expenditure claimed
2	Matching Grant Scheme (Agribusinesses)*	7,478,000	60% of total expenditure claimed
3	Smallholder Financing Scheme*	1,250,000	90% of total expenditure claimed
	Total	40,500,000	

* Subject to the condition of disbursement as set out in the Grant Agreement (Schedule 2, paragraph 5) – A withdrawal from the Grant Account will not be made for the Matching Grant Scheme (Agribusinesses) and Smallholder Financing Scheme until the Recipient confirms in a manner satisfactory to ADB that the relevant beneficiaries of the schemes have committed to contributing their share of the cost or that an alternative arrangement satisfactory to ADB has been put in place.

E. Detailed Cost Estimates by Financier

Table 10: Detailed Cost Estimates by Financier (\$ million)

Expenditure Category	ADB Grant		Beneficiaries		Government of Lao		Total		
	Amount	% of Cost	Amount	% of Cost	Amount	% of Cost	Amount	Taxes and duties	% of Cost
A. Project Costs ^{a,b,c}									
Civil Works	14.54	100.0%	0.00	0.0%	0.00	0.0%	14.54	1.11	31.4%
Equipment	3.54	100.0%	0.00	0.0%	0.00	0.0%	3.54	0.39	7.6%
Matching Grant Scheme (Agribusinesses)	7.48	60.0%	4.99	40.0%	0.00	0.0%	12.46	1.40	26.9%
Smallholder Financing Scheme	1.25	90.0%	0.14	10.0%	0.00	0.0%	1.39	0.00	3.0%
Supplies, Materials, Office Operations and Vehicles	1.19	100.0%	0.00	0.0%	0.00	0.0%	1.19	0.14	2.6%
Policy Development, Surveys, Studies and Pilots	3.12	100.0%	0.00	0.0%	0.00	0.0%	3.12	0.25	6.7%
Trainings, Seminars and Workshops	3.23	100.0%	0.00	0.0%	0.00	0.0%	3.23	0.26	7.0%
Consulting Services	6.16	100.0%	0.00	0.0%	0.00	0.0%	6.16	0.50	13.3%
Government Staff	0.00	0.0%	0.00	0.0%	0.74	100.0%	0.74	0.00	1.6%
Total Project Costs	40.50	87.3%	5.12	11.1%	0.74	1.6%	46.37	4.06	100.0%

Note: Figures may not sum up due to rounding.

^a Includes taxes and duties of \$4.06 million to be financed by ADB.

^b Base costs in 4th quarter 2017 prices.

^c Physical contingencies computed at 10% for civil work and equipment, and 5% for the other expenditure categories; Price contingencies computed at 1.5% between 2018 and 2020, and 1.6% thereafter for foreign currency costs; 1.5% in 2018, 2.0% in 2019, and 2.5% thereafter for local currency costs; conversion between currencies assumes purchasing power parity.

Source: Asian Development Bank estimates.

F. Detailed Cost Estimates by Outputs

Table 11: Detailed Cost Estimates by Outputs (\$ million)

	1. Critical agribusiness value chain infrastructure improved and made climate resilient		2. Climate smart agriculture and agribusiness promoted		3. Enabling environment for climate friendly agribusiness enhanced		Project management activities		Total cost
	Amount	% of Cost	Amount	% of Cost	Amount	% of Cost	Amount	% of Cost	Amount
A. Project Costs a,b,c									
Civil Works	14.54	100.0%	0.00	0.0%	0.00	0.0%	0.00	0.0%	14.54
Equipment	3.53	100.0%	0.00	0.0%	0.00	0.0%	0.00	0.0%	3.53
Matching Grant Scheme (Agribusinesses)	12.46	100.0%	0.00	0.0%	0.00	0.0%	0.00	0.0%	12.46
Smallholder Financing Scheme	0.00	0.0%	1.39	100.0%	0.00	0.0%	0.00	0.0%	1.39
Supplies, Materials, Office Operations and Vehicles	0.00	0.0%	0.00	0.0%	0.00	0.0%	1.19	100.0%	1.19
Policy Development, Surveys, Studies and Pilots	0.00	0.0%	1.14	36.4%	1.98	63.6%	0.00	0.0%	3.12
Trainings, Seminars and Workshops	0.00	0.0%	2.78	86.1%	0.18	5.6%	0.27	8.4%	3.23
Consulting Services	0.00	0.0%	0.00	0.0%	0.00	0.0%	6.16	100.0%	6.16
Government Staff	0.00	0.0%	0.00	0.0%	0.00	0.0%	0.74	100.0%	0.74
Total Project Costs	30.54	65.9%	5.30	11.4%	2.16	4.7%	8.36	18.0%	46.37

Note: Figures may not sum up due to rounding.

Source: Asian Development Bank estimates.

G. Detailed Cost Estimates by Year**Table 12: Detailed Cost Estimates by Year (\$ million)**

Expenditure Category	2018	2019	2020	2021	2022	2023	2024	2025	Total
A. Investment Costs a,b,c									
Civil Works	0	2.24	2.01	3.86	2.06	2.25	2.04	0.09	14.54
Equipment	0	0.54	0.49	0.94	0.50	0.55	0.49	0.02	3.53
Matching Grant Scheme (Agribusinesses)	0	1.15	1.03	1.98	2.10	1.20	0	0	7.48
Smallholder Financing Scheme	0	0.19	0.17	0.33	0.18	0.19	0.18	0.01	1.25
Supplies, Materials, Office Operations and Vehicles	0	0.18	0.16	0.31	0.17	0.18	0.17	0.01	1.19
Policy Development, Surveys, Studies and Pilots	0	0.48	0.43	0.83	0.44	0.48	0.44	0.02	3.12
Trainings, Seminars and Workshops	0	0.50	0.45	0.86	0.46	0.50	0.45	0.02	3.23
Consulting Services	0	0.95	0.85	1.63	0.87	0.96	0.86	0.04	6.16
Government Staff	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Investment Costs	0.00	6.24	5.60	10.74	6.773	6.323	4.62	0.20	40.50

H. Contract and Disbursement S-Curve

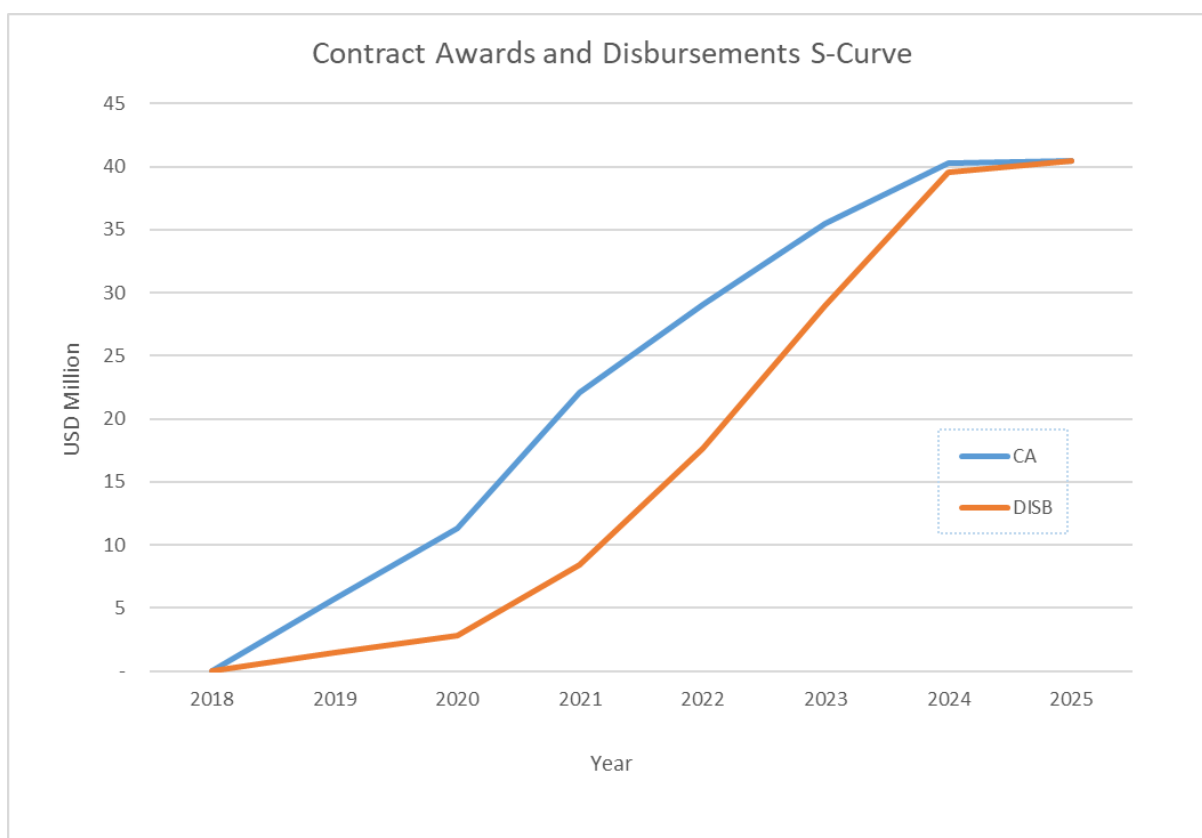
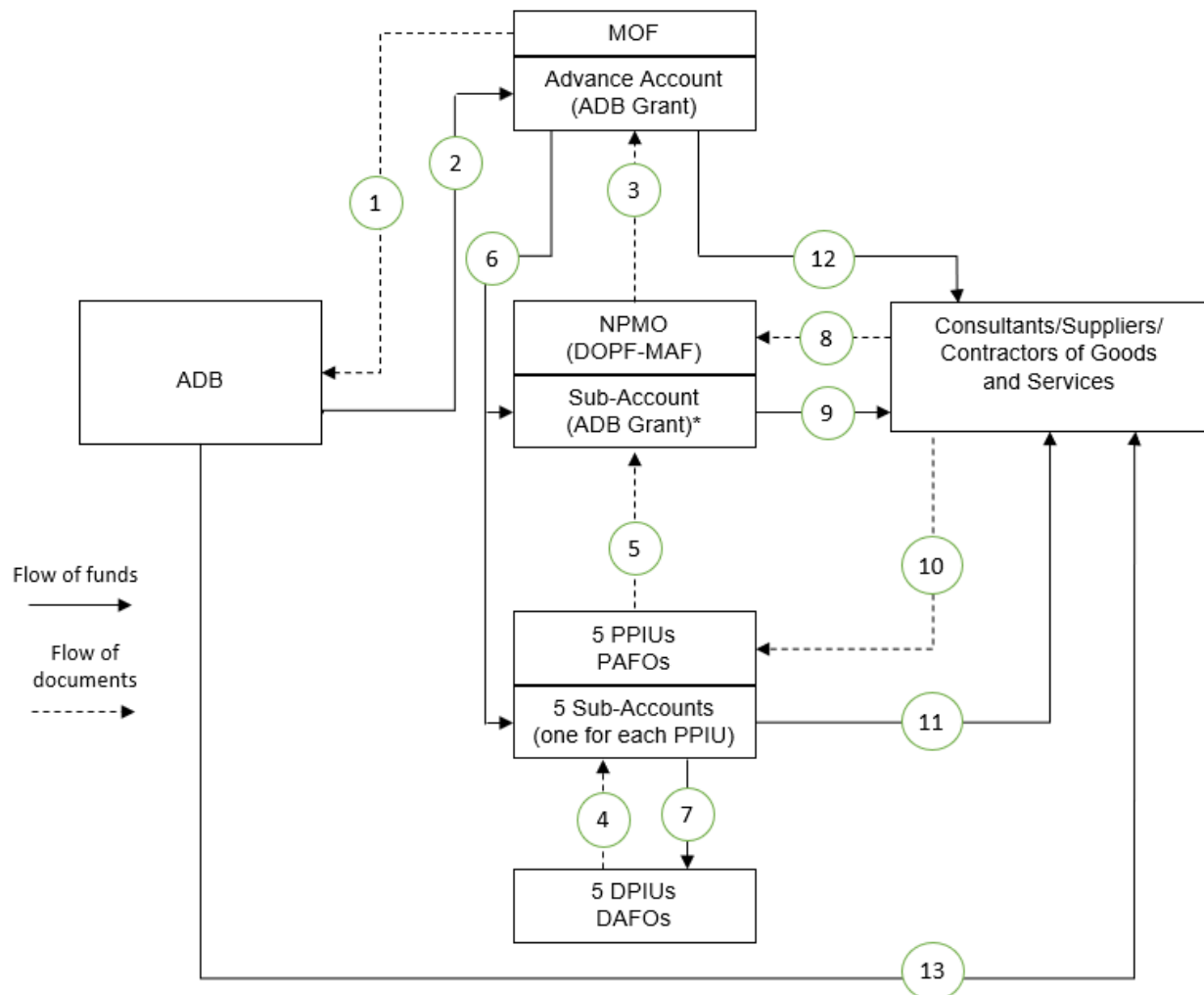


Table 13: ADB Grant - Contract Awards and Disbursements

	Contract Awards (in USD million)					Disbursements (in USD million)				
	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total
2018	-	-	-	-	-	-	-	-	-	-
2019	5.000	0.790	0.230	0.220	6.240	-	1.000	0.237	0.241	1.478
2020	1.000	1.600	1.100	1.900	5.600	0.251	0.339	0.449	0.374	1.412
2021	4.300	0.940	2.900	2.600	10.740	1.592	0.826	0.856	2.461	5.735
2022	1.581	1.681	1.781	1.731	6.773	2.165	2.117	2.117	2.753	9.152
2023	1.581	1.581	1.581	1.581	6.323	2.778	2.800	2.800	2.800	11.178
2024	1.156	1.156	1.156	1.156	4.623	2.800	2.800	2.800	2.175	10.574
2025	0.200	-	-	-	0.200	0.485	0.485	-	-	0.970
Total					40.500					40.500

I. Fund Flow

Figure 5: Funds Flow Diagram



ADB = Asian Development Bank, DAFO = District Agriculture and Forestry Office, MOF = Ministry of Finance, NPMO = National Project Management Office, DOPF-MAF = Department of Planning and Finance, Ministry of Agriculture and Forestry, PPIU = Provincial Project Implementation Unit, PAFO = Provincial Agriculture and Forestry Office.

Note: * Payment for expenditures for Vientiane Capital will be made through the NPMO sub-account.

Source: Asian Development Bank.

21. The funds flow arrangements for the project are summarized below:

- 1) MOF submits to ADB withdrawal applications for advances, replenishments, and liquidations of the advance account;
- 2) ADB deposits advances and replenishments to the advance account;
- 3) NPMO submits to MOF, for review and approval, requests for advances, replenishments, and liquidations of sub-accounts; NPMO also endorses to MOF claims of suppliers and contractors for payment from advance accounts;
- 4) DPIU submits to PPIU requests for advances, replenishments, and liquidation of expenses;

- 5) PPIU submits to NPMO, for review and approval, requests for advances, replenishments, and liquidations of sub-account; PPIU also endorses to NPMO claims of suppliers and contractors for payment from advance accounts;
- 6) MOF deposits advances and replenishments to sub-accounts;
- 7) PPIU deposits advances and replenishments to DPIUs;
- 8) Suppliers and contractors submit claims to NPMO; For the matching grant scheme, the participating agribusiness enterprise will submit a proof of their contribution to NPMO (after FME verification);
- 9) NPMO processes and pays claims for NPMO costs eligible for ADB financing from the sub-account; For the matching grant scheme, NPMO will pay the suppliers and contractors from the sub-account (after FME verification);
- 10) Suppliers and contractors submit claims to PPIU;
- 11) PPIU processes and pays claims for PPIU costs eligible for ADB financing from the sub-account;
- 12) MOF pays suppliers and contractors for claims eligible for ADB financing from the advance accounts; and
- 13) ADB directly pays suppliers and contractors for claims eligible for ADB financing after receipt of MOF requests for direct payment and required supporting documents.

V. FINANCIAL MANAGEMENT

A. Financial Management Assessment

22. The financial management assessment (FMA) was conducted from October 2016 to March 2017 in accordance with ADB's Guidelines for the Financial Management and Analysis of Projects and the Financial Due Diligence: A Methodology Note. The FMA considered the capacity of MAF as the executing agency and PAFO of participating provinces as the implementing agencies, including funds-flow arrangements, staffing, accounting and financial reporting systems, financial information systems, and internal and external auditing arrangements. Based on the assessment, the key financial management risks identified are (i) limited capacity in the control of budget execution, accounting, reporting, and auditing; (ii) limited financial management capability of staff of NPMO and PPIUs; (iii) lack of accounting system to record financial transactions; and (iv) limited capacity in internal audit. It is concluded that the overall pre-mitigation financial management risk of MAF and the PAFOs is substantial. MOF has capacity to administer the advance fund and implement SOE procedures. MAF, as the executing agency and with its extensive experience in the implementation of past and ongoing ADB projects, has agreed to appoint qualified staff with capacity to administer the statement of expenditure (SOE) procedures. MOF, MAF, and PAFOs have agreed to implement an action plan to address the financial management time-bound action plan is provided in Table 8.

Table 14: Time-Bound Action Plan

Weakness	Mitigation Action	Responsibility	Timeframe
<ul style="list-style-type: none"> Coordination from NPMO of MAF as EA and with IAs from MAF, PAFOs, DAFOs, and others 	<ul style="list-style-type: none"> Clear roles and responsibilities are detailed in PAM. 	EA/NPMO/MOF	Right after grant negotiation.
<ul style="list-style-type: none"> Safeguard of vehicles, motorcycles, equipment for workshops, laboratory, and solar power 	<ul style="list-style-type: none"> Inventory list must be set up with accountability. A sound inventory management is required via trainings for IAs. 	NPMO/PIC	3 months from the mobilization of the PIC.
<ul style="list-style-type: none"> Most proposed PPIUs do not have accounting system to record financial transactions and prepare the required financial reports. 	<ul style="list-style-type: none"> The accounting system shall be set up and training will be provided for the project accountants at PPIUs 	NPMO/PIC	3 months from the mobilization of the PIC.
<ul style="list-style-type: none"> Delays and incomplete submission of the un-audited annual project financial statements 	<ul style="list-style-type: none"> MAF and PPIU financial and accounting staff will be trained on financial reporting and requirements needed for submission to external auditor 	MAF/NPMO/PIC	By the 4th month of project effectiveness.
<ul style="list-style-type: none"> Limited capacity of the project staff at the NPMO on budget execution, accounting, reporting and auditing. 	<ul style="list-style-type: none"> International and national Financial Management and Accounting Specialists will be recruited to provide support to the NPMO. In collaboration with LRM, they will train accountants of EA/IA on budget execution, accounting, reporting, and auditing. Training on project management, financial management, SOP and project fund flows shall be provided to the project staff in EA and IAs. Training on ADB disbursement procedures, including online training, will be provided to EA and IA staff; and project staff involved in disbursements will be required to undertake the training to help ensure efficient disbursement and fiduciary control. 	MAF/NPMO/PIC	Starting 3 months from project effectiveness and will be a continuing activity to ensure staff are updated of the latest practice.
<ul style="list-style-type: none"> Limited staff, funding, capacity and quality in internal audit. 	<ul style="list-style-type: none"> MAF will allocate budget and appoint qualified audit specialist. MAF staff will be trained regularly on internal audit procedures. MOF will ensure that MAF will include the project to be subject to internal audit to ensure that the organization's Internal Audit Unit carries out regular reviews of the internal control processes. Training on audit will be provided. 	MAF/MOF/ADB	By the 6th month of project effectiveness. By end of Year 1.
<ul style="list-style-type: none"> Quality of external audit reports remains a concern. 	<ul style="list-style-type: none"> MAF to hire a well-qualified external auditor 	MAF/ADB	Within 1 year of project effectiveness

ADB = Asian Development Bank, DAFO = District Agriculture and Forestry Office, EA = executing agency, IA = implementing agency, MAF = Ministry of Agriculture and Forestry, MOF = Ministry of Finance, NPMO = national project management office, PAFO = Provincial Agriculture and Forestry Office, PIC = project implementation consultants, PPIU = provincial project implementation unit, TOR = terms of reference.

B. Disbursement

1. Disbursement Arrangements for ADB Funds

23. The grant proceeds will be disbursed in accordance with ADB's Loan Disbursement Handbook (2017, as amended from time to time) and detailed arrangements agreed upon between the government and ADB. Online training for project staff on disbursement policies and procedures is available and project staff are encouraged to avail of this training to help ensure efficient disbursement and fiduciary control.³

24. **Advance fund procedure.** MOF, upon grant effectiveness, will be responsible for establishing, managing, replenishing, and liquidating the advance account at the Bank of Lao. The currency of the advance account is the United States dollar. The advance account will be used exclusively for ADB's share of eligible expenditures. MOF is accountable and responsible for proper use of advances from the advance account, including advances to any sub-accounts.

25. Six sub-accounts will be established in a commercial bank. These will be opened and managed by NPMO and the five PPIUs in the provinces of Champasak, Khammouane, Saravan, Savannakhet, and Sekong. Expenditures of Vientiane Capital and other MAF departments will be under NPMO. The sub-accounts are to be used exclusively for ADB's share of eligible expenditures.

26. The total outstanding advances to the advance account should not exceed the estimate of ADB's share to be paid through the advance account for the forthcoming six months. MOF may request initial and additional advances to the advance account based on an Estimated Expenditures Sheet setting out the estimated expenditures to be financed through the accounts for the forthcoming six months. Supporting documents should be submitted to ADB or retained by the executing agency in accordance with the Loan Disbursement Handbook (footnote 4) when liquidating or replenishing the advance account.

27. **Statement of expenditure procedure.**⁴ The state of expenditure (SOE) procedure may be used for reimbursement and to liquidate and replenish the advance accounts for eligible expenditures. Any individual payment to be reimbursed or liquidated under this procedure shall not exceed a ceiling of \$50,000. Supporting documents and records for the expenditures claimed under the SOE should be maintained and made readily available for review by ADB's disbursement and review missions, upon ADB's request for submission of supporting documents on a sampling basis, and for independent audit. Reimbursement and liquidation of individual payments in excess of the SOE ceiling should be supported by full documentation when submitting the withdrawal application to ADB.

28. Before the submission of the first withdrawal application (WA), the recipient should submit to ADB sufficient evidence of the authority of the person(s) who will sign the WAs on behalf of the government, together with the authenticated specimen signatures of each authorized person. The minimum value per WA is stipulated in the Loan Disbursement Handbook (footnote 4). Individual payments below this amount should be paid (i) by the executing agency and/or implementing agency and subsequently claimed to ADB through reimbursement, or (ii) through the advance

³ The handbook is available electronically from the ADB website (<http://www.adb.org/documents/loan-disbursement-handbook>).

⁴ SOE forms are available in Appendix 7B of ADB's Loan Disbursement Handbook (2017, as amended from time to time).

fund procedure, unless otherwise accepted by ADB. The recipient should ensure sufficient category and contract balances before requesting disbursements. SOE records should be maintained and made readily available for review by ADB's disbursement review mission or upon ADB's request for submission of supporting documents on a sampling basis, and for independent external audit. The WAs must be sequentially numbered starting with number one.

29. Further to Schedule 2 (para. 5) of the Grant Agreement, a withdrawal from the Grant Account will not be made for the procurement of equipment (private) until MOF confirms to ADB (in writing) that the relevant beneficiaries have committed to contributing their share of the cost.

2. Disbursement Arrangements for Counterpart Funds

30. NPMO and PPIUs will be responsible for the disbursement and liquidation procedures for government funds and will (i) prepare disbursement projections, and (ii) request budgetary allocations for counterpart funds. Project management staff salaries and supplements will also be covered by counterpart funds.

C. Accounting

31. MOF, NPMO, PPIUs, and DPIUs will maintain separate project accounts and records by funding source for all expenditures incurred on the project following International Public Sector Accounting Standard for cash-based accounting.⁵ The NPMO will prepare project financial statements in accordance with government accounting laws and regulations which are consistent with international accounting principles and practices. A record of government in-kind contributions/counterpart funds shall also be maintained regularly.

D. Auditing and Public Disclosure

32. MAF will cause the detailed consolidated project accounts to be audited in accordance with International Standards on Auditing by an independent auditor acceptable to ADB. The audited project financial statements, together with the auditor's opinion, will be presented in the English language to ADB within six months of the end of the fiscal year by the MAF.

33. The audited entity financial statements, together with the auditor's report and management letter, will be submitted in the English language to ADB within one month after their approval by the relevant authority.

34. The audit report for the project financial statements will include a management letter and auditor's opinions, which cover (i) whether the project financial statements present an accurate and fair view or are presented fairly, in all material respects, in accordance with the applicable financial reporting standards; (ii) whether the proceeds of the grant were used only for the purpose(s) of the project; and (iii) whether the recipient or executing agency was in compliance with the financial covenants contained in the legal agreements (where applicable).

35. Compliance with financial reporting and auditing requirements will be monitored by review missions and during normal program supervision, and followed up regularly with all concerned, including the external auditor.

⁵ An eLearning module, found in <https://www.adb.org/about/financial-management-resources>, can be used by the project team to deliver training to the EA and IA staff.

36. The government, MAF, and the implementing agencies have been made aware of ADB's approach to delayed submission, and the requirements for satisfactory and acceptable quality of the audited project financial statements.⁶ ADB reserves the right to require a change in the auditor (in a manner consistent with the constitution of the recipient), or for additional support to be provided to the auditor, if the audits required are not conducted in a manner satisfactory to ADB, or if the audits are substantially delayed. ADB reserves the right to verify the project's financial accounts to confirm that the share of ADB's financing is used in accordance with ADB's policies and procedures.

37. Public disclosure of the audited project financial statements, including the auditor's opinion on the project financial statements, will be guided by ADB's Public Communications Policy 2011.⁷ After the review, ADB will disclose the audited project financial statements and the opinion of the auditors on the project financial statements no later than 14 days of ADB's confirmation of their acceptability by posting them on ADB's website. The management letter, additional auditor's opinions, and audited entity financial statements will not be disclosed.

VI. PROCUREMENT AND CONSULTING SERVICES

A. Advance Contracting

38. All advance contracting will be undertaken in conformity with ADB Procurement Guidelines (2015, as amended from time to time) and ADB's Guidelines on the Use of Consultants (2013, as amended from time to time). The issuance of invitations to bid under advance contracting will be subject to ADB approval. The government, MAF and DOPF have been advised that approval of advance contracting does not commit ADB to finance the project. Contracts can only be signed after the project is declared effective.

39. NPMO will initiate recruitment of the (i) start-up management consultants (international project management specialist and national project management & coordination specialist), (ii) PIC, and (iii) the financial management entity (FME). ADB's approval on various stages, including requesting for expressions of interest, shortlisting, sending out requests for proposals, and evaluation of technical and financial proposals will be sought prior to proceeding with the next step. NPMO will also initiate procurement of vehicles and office equipment/furniture. The bidding documents (prepared under the PPTA) will be finalized, requests for quotations will be sent out, and evaluation of quotations/bids will be completed in time for project effectiveness.

B. Procurement of Goods, Works, and Consulting Services

⁶ ADB's approach and procedures regarding delayed submission of audited project financial statements:

- (i) When audited project financial statements are not received by the due date, ADB will write to the executing agency advising that (a) the audit documents are overdue; and (b) if they are not received within the next six months, requests for new contract awards and disbursement such as new replenishment of advance accounts, processing of new reimbursement, and issuance of new commitment letters will not be processed.
- (ii) When audited project financial statements are not received within six months after the due date, ADB will withhold processing of requests for new contract awards and disbursement such as new replenishment of advance accounts, processing of new reimbursement, and issuance of new commitment letters. ADB will (a) inform the executing agency of ADB's actions; and (b) advise that the grant may be suspended if the audit documents are not received within the next six months.
- (iii) When audited project financial statements are not received within 12 months after the due date, ADB may suspend the grant.

⁷ Public Communications Policy: <http://www.adb.org/documents/pcp-2011?ref=site/disclosure/publications>.

40. All procurement of goods and works will be undertaken in accordance with ADB's Procurement Guidelines (2015, as amended from time to time).

41. For goods, international competitive bidding (ICB) procedures will be used for contracts estimated at \$1 million or more, national competitive bidding (NCB) procedures for contracts estimated at \$100,000 or more, and shopping procedures for contracts estimated at less than \$100,000. For works, ICB procedures will be used for contracts estimated at \$3 million or more, NCB procedures for contracts estimated at \$100,000 or more, and shopping procedures at less than \$100,000.

42. The Harmonized Bidding Documents for the Procurement of Goods and Works of the Lao PDR will be used for small contracts through shopping and NCB duly following the NCB annex in the procurement plan.

43. An 18-month procurement plan indicating threshold and review procedures, goods, works, and consulting service contract packages and national competitive bidding guidelines is in Section C below.

C. Procurement Plan

Table 15: Basic Data

Project Name: Climate-Friendly Agribusiness Value Chain Sector Project	
Project Number: 48409-004	Approval Number:
Country: Lao PDR	Executing Agency: Ministry of Agriculture and Forestry (MAF)
Project Procurement Classification: B	Implementing Agencies: MAF Department Coordination Unit - Department of Technique Extension and Agriculture Processing Department of Rural Development and Cooperatives Department of Agriculture and Land Management Department of Agriculture Department of Irrigation MAF Department of Planning and Finance National Agriculture and Forestry Research Institute Provincial/District Project Implementation Units of Champassak, Khammouane, Saravan, Savannakhet, and Sekong.
Procurement Risk: Moderate	
Project Financing Amount: \$ 40.50 million ADB Financing: \$ 40.50 million Non-ADB Financing: \$0.75 million (Government) \$5.12 million (Beneficiaries)	Project Closing Date: 31 March 2025
Date of First Procurement Plan: Q2/2017	Date of this Procurement Plan: 9 May 2018

D. Methods, Thresholds, Review and 18-Month Procurement Plan

1. Procurement and Consulting Methods and Thresholds

44. Except as ADB may otherwise agree, the following process thresholds shall apply to procurement of goods and works.

Procurement of Goods and Works		
Method	Threshold	Comments
International Competitive Bidding (ICB) for Works	\$3,000,000 and above	
International Competitive Bidding for Goods	\$1,000,000 and above	
National Competitive Bidding (NCB) for Works	\$100,000 to \$2,999,999	NPMO to procure all NCB packages Further, the first package shall follow prior review procedures. The first draft English version of the procurement documents should be submitted by NPMO for ADB review and approval regardless of the estimated contract amount. ADB-approved documents should be used as a model for all subsequent

Procurement of Goods and Works		
Method	Threshold	Comments
		NCB procurement financed by ADB and need not be subjected to further prior review.
National Competitive Bidding for Goods	\$100,000 to \$999,999	Same as NCB for works
Shopping for Works	Below \$100,000	<p>NPMO or PPIUs to procure all shopping packages</p> <p>Further, the first package shall follow prior review procedures. The first draft English version of the procurement documents should be submitted by NPMO for ADB review and approval regardless of the estimated contract amount. ADB approved documents should be used as a model for all subsequent shopping procurement financed by ADB and need not be subjected to further prior review.</p>
Shopping for Goods	Below \$100,000	Same as shopping for works

Consulting Services	
Method	Comments
Quality and Cost Based Selection	Prior review, 90:10 (PIC and FME)
Consultants' Qualifications Selection	Prior review (EMA)
Least-Cost Selection	Prior Review (external auditor)
Single Source Selection	Prior Review (IRRI)
Individual Consultant Selection (ICS)	Prior review

a. Goods and Works Contracts Estimated to Cost \$1 Million or More

45. The following table lists goods and works contracts for which the procurement activity is either ongoing or expected to commence within the next 18 months.

Package Number	General Description	Estimated Value	Procurement Method	Review	Bidding Procedure	Advertisement Date (quarter/year)	Comments
	None						

b. Consulting Services Contracts Estimated to Cost \$100,000 or More

46. The following table lists consulting services contracts for which the recruitment activity is either ongoing or expected to commence within the next 18 months.

Package Number	General Description	Estimated Value (\$ million)	Recruitment Method	Review (Prior / Post)	Advertisement Date (quarter/ year)	Type of Proposal	Comments
CS01	Project Implementation Consultants	5.94	QCBS (90:10)	Prior	Q3/2018	FTP	Advance action to be done by NPMO
CS02	Financial Management Entity	1.37	QCBS (90:10)	Prior	Q3/2018	FTP	Advance action to be done by NPMO
CS03	External Monitoring Agency	0.08	CQS	Prior	Q3/2019	BTP	By NPMO
CS04	External Auditor	0.23	LCS	Prior	Q3/2019	BTP	By NPMO
ICS01	Project Management Specialist	0.12	ICS	Prior	Q3 2018	N/A	International; advance action to be done by NPMO
ICS02	Project Management & Coordination Specialist	0.25	ICS	Prior	Q3 2018	N/A	National; advance action to be done by NPMO

c. Goods and Works Contracts Estimated to Cost Less than \$1 Million and Consulting Services Contracts Less than \$100,000 (Smaller Value Contracts)

47. The following table groups smaller-value goods, works and consulting services contracts for which the activity is either ongoing or expected to commence within the next 18 months.

Goods and Works								
Package Number	General Description	Estimated Value(\$ millions)	Number of Contracts	Procurement Method	Review	Bidding Procedure	Advertise ment Date (quarter/ year)	Comments
GD01	Office Equipment/ Furniture for NPMO and PPIUs/DPIUs	0.06	1	Shopping	Post	N/A	Q3/2018	Advance action to be done by NPMO The first package will follow prior review procedures.
GD02	Vehicles for NPMO and project provinces	0.39	1	NCB	Post	1S1E	Q3 2018	Advance action to be done by NPMO The first package will follow prior review procedures.
GD03	Motorcycles for PPIUs and DPIUs	0.03	1	Shopping	Post	N/A	Q3 2018	Advance action to be done by NPMO

Consulting Services								
Package Number	General Description	Estimated Value (USD millions)	Number of Contracts	Recruitment Method	Review	Advertise ment Date (quarter/ year)	Type of Proposal	Comments
ICS03	Finance and Administration Assistants	0.28	6	ICS	Prior	Q1/2019	N/A	National; 1 for NPMO and 5 for PPIUs (1 per PPIU) NPMO to assist PPIU

I. Indicative List of Packages Required Under the Project

48. The following table provides an indicative list of goods, works and consulting services contracts over the life of the project, other than those mentioned in previous sections (i.e., those expected beyond the current period).

Package Number	General Description	Estimated Value (cumulative) (\$ millions)	Estimated Number of Contracts	Procurement Method	Review	Bidding Procedure	Comments
CW01	Savannakhet to Xaybouli – Rehabilitation of Access Roads and Tertiary Canals (Priority)	2.27	1	NCB	Post	1S1E	By NPMO The first package will follow prior review procedures.
CW02	Champasak – Rehabilitation of Access Roads, Ponds, and Tertiary Canals (Priority)	2.08	1	NCB	Post	1S1E	By NPMO The first package will follow prior review procedures.
CW03	Khammouane to Nongbok – Rehabilitation of Access Roads and Tertiary Canals (Priority)	1.21	1	NCB	Post	1S1E	By NPMO The first package will follow prior review procedures.
CW04	Saravane to Ngongdeng – Rehabilitation of Access Roads and Tertiary Canals (Priority)	0.71	1	NCB	Post	1S1E	By NPMO The first package will follow prior review procedures.
CW05	Vientiane – Upgrading of Soil Canals (Priority)	1.03	1	NCB	Post	1S1E	By NPMO The first package will follow prior review procedures.
CW06-10	Communal Infrastructure Subprojects	4.35	4	NCB	Post	1S1E	By NPMO The first package will

Package Number	General Description	Estimated Value (cumulative) (\$ millions)	Estimated Number of Contracts	Procurement Method	Review	Bidding Procedure	Comments
							follow prior review procedures.
CW11	Upgrading Crop Research Centers (Khammouane, Savannakhet, Saravan) and Laboratories	0.55	1	NCB	Post	1S1E	By NPMO The first package will follow prior review procedures.
GD04	Equipment for Laboratories Lot 1: Agricultural Training Colleges Lot 2: Soil Laboratories Lot 3: Plant Protection Laboratories	0.23 0.54 0.48	3	NCB	Post	1S1E	By NPMO The first package will follow prior review procedures.
GD05	Equipment for Rice Research Center Lot 1: Khammouane Lot 2: Savannakhet Lot 3: Saravan	0.25 0.53 0.94	3	NCB	Prior	1S1E	By NPMO The first package will follow prior review procedures.

Consulting Services

Package Number	General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Recruitment Method	Review (Prior / Post)	Type of Proposal	Comments
CS05	IRRI	1.14	1	SSS	Prior	STP	By NPMO

E. National Competitive Bidding

2. Regulation and Reference Documents

49. The procedures to be followed for national competitive bidding (NCB) shall be those set forth for “Public Bidding” in Prime Minister’s Decree No. 03/PM of the Lao People’s Democratic Republic, effective 9 January 2004, and Implementing Rules and Regulations effective 12 March 2004 with update 0861/MOF of 5 May 2009 entitled “Amendments of Some Articles of Implementing Rules and Regulations on Decree of Government Procurement of Goods, Works, Maintenance And Services”, with the clarifications and modifications described in the following paragraphs required for compliance with the provisions of the procurement guidelines.

a. Procurement Procedures

50. **Procurement Plan.** Contract packages subject to NCB procedures will be those identified as such in the project procurement plan. Any changes to the method of procurement from those provided in the procurement plan shall be made through updating of the procurement plan, and only with prior approval of ADB.

51. **Eligibility.** The eligibility of bidders shall be as defined under Section I of the Procurement Guidelines; accordingly, no bidder or potential bidder should be declared ineligible for reasons other than those provided in Section I of the Guidelines, as amended from time to time.

52. **Preferences.** No preference of any kind shall be given to domestic bidders or for domestically manufactured goods. Suppliers and contractors shall not be required to purchase local goods or supplies or materials.

53. **National sanctions list.** National sanctions lists may be applied only with prior approval of ADB.

54. **Advertising.** The posting of NCB specific notices for contracts valued at less than \$1 million on ADB’s website is not required but is highly recommended.

b. Procurement Documents

55. **Use of harmonized documents.** The harmonized standard bidding documents entitled “Procurement of Works, NCB-SBD, Harmonized Bidding Documents, December 2015” and “Procurement of Goods, NCB-SBD, Harmonized Bidding Documents, December 2015” approved by the Ministry of Finance through 3246/MOF dated 28 September 2015, and approved by ADB’s PPFD/PFP2 dated 7 June 2016, shall be used for all procurement by NCB unless exceptions are specifically identified in the Procurement Plan.

56. **Rejection of all bids and rebidding.** Bids shall not be rejected, and new bids solicited without ADB’s prior concurrence.

57. **Disclosure of decisions on contract awards.** At the same time that notification on award of contract is given to the successful bidder, the results of the bid evaluation shall be published in a local newspaper or well-known freely accessible website identifying the bid and lot numbers and providing information on (i) name of each bidder who submitted a bid, (ii) bid prices as read out at bid opening, (iii) name of bidders whose bids were rejected and the reasons for their rejection, (iv) name of the winning bidder, and the price it offered, as well as the duration and summary scope

of the contract awarded. The executing agency/implementing agency shall respond in writing to unsuccessful bidders who seek explanations on the grounds on which their bids are not selected.

58. **ADB policy clauses.** A provision shall be included in all NCB works and goods contracts financed by ADB requiring suppliers and contractors to permit ADB to inspect their accounts and records and other documents relating to the bid submission and the performance of the contract, and to have them audited by auditors appointed by ADB.

59. A provision shall be included in all bidding documents for NCB works and goods contracts financed by ADB stating that the recipient shall reject a proposal for award if it determines that the bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the contract in question.

60. A provision shall be included in all bidding documents for NCB works and goods contracts financed by ADB stating that ADB will declare a firm or individual ineligible, either indefinitely or for a stated period, to be awarded a contract financed by ADB, if it at any time determines that the firm or individual has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive or obstructive practices or any integrity violation in competing for, or in executing, ADB-financed contract.

F. Consultants' Terms of Reference

61. All consultants will be recruited in accordance with the ADB's Guidelines on the Use of Consultants (2013, as amended from time to time). The outputs and deliverables from all consulting services shall be in accordance with the government policies, and in support of the development strategies of the target provinces, and the needs of the beneficiaries. Terms of reference for the consulting services are detailed in Appendix 3. Consulting services, to provide assistance to the executing and implementing agencies in the implementation of the project, will be as follows:

Table 16: Start-Up Individual Consultants

Experts	International	National
1. Project Management Specialist	6	-
2. Project Management & Coordination Specialist	-	60
TOTAL	6	60

Table 17: Project Implementation Consultants (CS01)

Experts	International	National
I. Project Management Team		
1. Agribusiness Specialist/Team Leader	15	-
2. Agribusiness Specialist/Deputy Team Leader	-	40
3. Financial Management and Accounting Specialist	5	18
4. Rural Infrastructure Asset Management Specialist	3	30
5. Monitoring & Evaluation Specialist	2	18
6. Social Safeguards Specialist	6	32
7. Environment and Climate Change Specialist	6	18
8. Social Development and Gender Specialist	6	30
9. Value Chain Gender Analysis Specialist	2	3

Experts	International	National
10. Procurement Specialist	5	32
11. Rural Infrastructure Engineer (2 individuals)	-	38
12. AutoCAD Specialist	-	10
Sub-Total (Project Management Team)	50	269
II. Technical Team		
1. GAP & CSA Training Specialist	9	30
2. Land Administration Specialist	6	12
3. Climate Risk Management Specialist	6	12
4. PPP and Value Addition Specialist	4	20
Sub-Total (Technical Team)	25	74
TOTAL (Project Implementation Consultants)	75	343

CAD = computer-aided design, CSA = community-supported agriculture, GAP = good agriculture practice, PPP = public-private partnership.

Table 18: Financial Management Entity (CS02)

Experts	International	National
I. Procurement Team		
1. Agribusiness Value Chain Specialist/Team Leader	18	
2. Sector Specialist	3	4
3. Business Analyst	-	62
4. Environment Safeguards Specialist	-	4
5. Social Safeguards Specialist	-	4
6. Operations Manager	0	22
Sub-Total (Procurement Team)	21	96
II. Training Team		
1. Green Finance and Credit Specialist	6	-
2. Agriculture Production Group Specialist	-	30
Sub-Total (Training Team)	6	30
TOTAL (Financial Management Entity)	27	126

62. **Start-up Consultants.** Two individual consultants will be recruited to assist NPMO with start-up activities.

63. **Project Implementation Consultants (PIC).** PIC consulting firm will be recruited to (i) provide management and technical assistance to the EA and IAs in the implementation of the project and meet the reporting and procedural requirements of ADB; (ii) carry out feasibility studies and supervise construction of the subprojects; (iii) assist in project performance monitoring and evaluation; (iv) develop and implement the capacity building master plan; (v) implement policy research studies and pilot activities; and (vi) ensure adequate provision for compliance with social and environmental safeguards, including monitoring and review during the construction and post-construction period.

64. **Financial Management Entity (FME).** The FME will be a team or consortium of firms, consisting of individuals capable of performing business analysis and formulation of business plans and financial projections for agribusiness and agro processing business. The main function of the FME will be to evaluate and recommend grant applications from agribusiness enterprises (ABEs) in conformity with agreed financial support evaluation criteria and percentage contributions by beneficiaries and the project towards overall subprojects. The FME will also assist in providing awareness and capacity building in green finance instruments, as agreed with the executing agency, to Lao PDR financial institutions committed to supporting the agribusiness sector.

65. **External Monitoring Agency (EMA).** To monitor all safeguard activities under the project. EMA will focus on assessing progress and compliance with the environmental management plans (EMPs), the ethnic group development plans (EGDP), the gender action plan, and the land acquisition and compensation plans (LACPs), identifying constraints and developing remedial actions to effectively address these. The EMA will be a national entity and will have experience in resettlement, environment and ethnic groups.

66. **External Auditor.** The firm will annually audit the project financial statements in accordance with international standards for auditing or the national equivalent acceptable to ADB, and prepare a report (which includes the auditor's opinion on the financial statements, use of the grant proceeds, and compliance with the financial covenants of the Financing Agreement as well as on the use of the procedures for advance fund(s) and statement of expenditures) and a management letter (which sets out the deficiencies in the internal control of the project that were identified in the course of the audit, if any). Audit services will cover from project effectiveness until project completion.

67. **Individual Consultants.** In addition, 6 finance and administration assistants (360 person-months) for NPMO and PPIUs will be recruited.

68. **Single Source Selection.** In close coordination with NAFRI, the International Rice Research Institute (IRRI) (package: CS 05), will be recruited using the single-source selection method to assist the MAF in deploying climate-resilient varieties of rice and vegetables, and in strengthening capacity of stakeholders on climate smart agriculture production technologies and practices. IRRI has been working with Lao PDR on crops and climate change research since 1991 - a time when climate change was considered a marginal topic within agriculture research. The institute has defined a coherent research portfolio on climate change emphasizing on three areas: adaptation, mitigation, and policy. This sets crop production into the broader context of food supply and food security alongside socioeconomic issues, such as rural development and gender mainstreaming. IRRI also maintains good working relationships with other international research institutes belonging to the Consortium of International Agricultural Research Centers (CGIAR) and the World Vegetable Center, and has agreed to deliver their solutions to Lao PDR in a seamless manner.⁸ Outline of the terms of reference is in Appendix 3. The NAFRI will develop detailed terms of reference, with support from project implementation consultants.

⁸ Formerly the Consultative Group for International Agricultural Research.

VII. SAFEGUARDS⁹

A. Resettlement and Land Acquisition

69. The project has been assessed as Category B for resettlement and land acquisition as there will be no significant involuntary physical or economic dislocation, relocation or loss of livelihood. Subproject screening during project preparation and to be used during project implementation in identifying additional subprojects, will reject any cases requiring any significant involuntary resettlement or land acquisition activity. Land acquisition will be limited and mainly comprise thin strips of land to accommodate irrigation canal construction and field access road improvement. Land acquisition will be carried out through negotiated settlement based upon market values, and in some cases, to secure the project, communities are willing to voluntarily donate small strips of non-productive land. These latter donations are subject to stringent conditions and due diligence to verify bona fides. If negotiation fails and expropriation will be used, land acquisition and resettlement plan shall be drafted in accordance with the LARF and sent to ADB for concurrence and disclosure prior to the issuance of the bidding documents.

70. During project preparation, feasibility studies were conducted for three representative subprojects proposed under output 1: (i) rice mill upgrading; (ii) improvements to a vegetable processing, storage and marketing hub; and (iii) improvements to a state-owned biofertilizer factory. The project design team conducted meaningful consultations for safeguards planning and such consultations will continue during project implementation. Land acquisition under the project is only envisaged under Output 1, and mainly for the rehabilitation of irrigation systems and limited road works. Both these activities will not cause significant resettlement impacts because most works will be along existing canal or route alignments and will only require, if any, the acquisition of minor amounts of land. Any access track improvement associated with any subproject must follow existing footprints and not involve further acquisition of land. Design alternatives are investigated to minimize the need for land acquisition.

71. Other activities identified under project preparation such as the rice mill and biofertilizer factory improvements and construction of any training or laboratory buildings will not require land acquisition by the project. Land required under the rice mill initiative is already available and belongs to the selected rice mill owner. The biofertilizer factory is on state land and there is land still available for expansion of storage areas within the existing compound. Vegetable processing and storage facilities delivered via farmer groups or cooperatives will be constructed on land already acquired by the group or being purchased under private commercial transactions at current market value, according to the principle of “willing buyer and willing seller” arrangements, and independent of the project.

72. During implementation, the project must carry out due diligence to ensure that the farmer group have made any decisions to buy or lease land in a transparent manner and in accordance with the group’s articles and memorandum of association regarding voting and decision making. The community must also be provided with the details of the implementation grievance redress procedure as an added safety valve. This will be a priority first task for the implementation team. Due diligence for sample subprojects will be updated based on detailed design, and due diligence will be conducted for non-sample projects.

73. A resettlement framework has been prepared to guide the preparation of land acquisition resettlement plans (LARPs) where subprojects require land acquisition, and to conduct and report

⁹ ADB. 2009. *Safeguard Policy Statement*. <https://www.adb.org/documents/safeguard-policy-statement>

the due diligence required to establish voluntary land donation bona fides. The LARP will record details of any land acquired and or donated by affected households and calculates the amount of compensation payable to the affected households that can be audited later.

74. The NPMO safeguards officer, under the guidance of the international and national safeguards specialists of the PIC, will then screen all additional subprojects identified during CFAVC implementation and rigidly apply both the involuntary and voluntary screening checklists. Where involuntary acquisition or voluntary land donation will take place, the specialists must prepare a LARP in accordance with the framework provided by the PPTA team. This LARP must clearly outline the community consultation process and detail the benefits to be received by the affected households. LARPs will be subject to a 10% case audit by an independent agent selected through a transparent bidding process conducted by the CFAVC management unit.

A. Indigenous People/ Ethnic Groups

75. The project has been classified as category B for indigenous people and ethnic groups mainly due to the presence of ethnic groups in the project provinces and the potential involvement of some minority households in farmer groups or in irrigation or access road subprojects selected for implementation. Due diligence on three representative subprojects showed that there were no indigenous peoples. Therefore, no indigenous people's plan (IPP) has been prepared. The vegetable hub representative subproject includes 50% group members belonging to an ethnic group.

76. An ethnic group development framework has been prepared for any subprojects that will impact on ethnic groups. The extent to which this framework will be used depends upon the scale and nature of impact, and it is most likely to be used only in irrigation or access road rehabilitation subprojects.

77. The project must conduct due diligence in such cases to ensure that the group's decision-making process is inclusive and transparent and carried out with the full knowledge and awareness of all group members regardless of ethnicity and carried out in accordance with the group's articles and memorandum of association. This due diligence must be carried out before the group receives any ADB investment funds.

B. Environment

78. An environmental assessment has been conducted for representative subprojects during project preparation. The three representative subprojects have been classified as Category C based on the ADB's rapid environment assessment checklist. However, the overall project is still classified as Category B, as there may be a few subprojects with some adverse environmental impacts which can be mitigated. To support the environmental management of these anticipated impacts of future subprojects, an environmental assessment and review framework (EARF) has been prepared as a linked document. The EARF provides guidance for the preparation and implementation of mitigation measures when minor environmental issues arise through environmental management plans.

79. For category B subprojects, an initial environmental examination (IEE) is required and a suitable EMP should be developed and applied to strengthen management during the period of construction of infrastructure. The need for improved occupational health and safety in the operation of improved equipment at the biofertilizer factory and in the rice milling processing, as well as in the dispersal of inputs in the intensive horticultural activities associated with market

garden and vegetable hub activities has also been recognized. The farmers involved in the vegetable hub are also pursuing completion of GAP certification, a status which will also ensure that concerns and day-to-day practices associated with environmental management and resource stewardship is enhanced and maintained. Budget for EMP implementation will be included in the design, construction, operations and maintenance costs.

80. A subproject screening process is applied before any additional subprojects are selected to ensure that proposed activities fit ADB environmental category B or C or are environmental category 1 under the 2010 environmental impact assessment sub-decree of Lao PDR. No category A subprojects will be funded. Subprojects located immediately adjacent to protected areas and that could lead to encroachment or higher risk of exploitation of natural resources in protected areas will be excluded.

81. **Institutional arrangements.** MAF will be responsible for ensuring that environmental performance is monitored throughout implementation and the project is implemented in line with ADB and government requirements for environmental safeguards. MAF will appoint a national safeguards officer at NPMO. S/he, duly assisted by the international and national safeguards experts of the PIC, will be active in site supervision, management and appraisal, particularly to identify potential and any current problems, and solve them in a timely manner.

82. **Grievance redress mechanism.** A grievance redress mechanism (GRM) will be established in each subproject province in compliance with ADB's SPS (footnote 11) requirement to prevent and address community concerns and assist the project to maximize environmental and social benefits. The GRM will be accessible to diverse members of the community, including more vulnerable groups such as women and youth. Multiple points of entry, including face-to-face meetings, written complaints, telephone conversations, or e-mail, will be available. Details about the GRM can be found in the EARF and IEE.

83. **Prohibited investment activities.** Pursuant to ADB's Safeguard Policy Statement 2009, ADB funds may not be applied to the activities described on the ADB Prohibited Investment Activities List set forth at Appendix 5 of the Safeguard Policy Statement (2009).

84. **Disclosure.** The executing agency and implementing agencies will be responsible for disclosing all safeguard reports at the provincial level and on the project website. During the project implementation period, all IEEs and semi-annual environmental safeguard monitoring reports will be submitted to ADB every July, which will cover the reporting period of January to June, and every January, which covers the reporting period of July to December for disclosure on ADB website.

VIII. GENDER AND SOCIAL DIMENSIONS

85. In the context of project gender and social dimensions, the Report and Recommendation of the President includes the linked document Social Poverty Reduction and Social Strategy, and the following supplementary documents: (i) detailed poverty and social impact analysis; (ii) detailed gender analysis, (iii) stakeholder consultation and participation plan; and (iv) stakeholder communications strategy. These documents are summarized under the sections below.

A. Social Dimensions of the Project

86. **Links to the National Poverty Reduction and Inclusive Growth Strategy and Country Partnership Strategy.** The project supports the national poverty reduction strategy of Lao PDR

and directly contributes to poverty reduction, inclusive growth and achievement of social development goals of rural populations. The Five-Year National Socio-Economic Development Plan VIII (2016-2020) (8th NSEDP) is a means of implementing the National Strategy on Socio-Economic Development until 2025 and Vision until 2030. The 8th NSEDP aims to: (i) facilitate eligibility for graduation from LDC status by 2020; (ii) consolidate regional and international integration in the context of the launching of the ASEAN Economic Community in 2015; (iii) take further steps towards industrialization and modernization and to enhance the well-being of the people and the prosperity of the country to achieve the ranking as an upper -middle-income country by 2030. The agriculture sector contributes to the 8th NSEDP through the MAF's long term framework for the development of the agriculture and forestry sector which is enshrined in the "Agricultural Development Strategy to 2025 and vision to the year 2030". This document includes the following sectoral vision and aim "Ensuring food security, producing comparative and competitive agricultural commodities, developing clean, safe and sustainable agriculture and a shift gradually to the modernization of a resilient and productive agriculture economy linking with rural development contributing to the national economic basis". The current ADB Country Partnership Strategy (CPS) 2012–2016 supports the 7th National Socio-Economic Development Framework (NSEDP). ADB's support has directly assisted education, water and other municipal infrastructure and services, together with the agriculture and energy sectors. The new ADB CPS 2017–2021 is being discussed with the government and is geared to support and match the 8th NSEDP.

87. **Key Poverty and Social Issues.** Lao PDR has achieved the Millennium Development Goal target of halving its national poverty rate over the past decade.¹⁰ However, poverty reduction and consumption growth lag the country's GDP growth. The poverty rate in rural areas is 2.9 times that of the urban areas. Various analyses identify education, agricultural produce prices, livelihoods and geographic location as important factors in determining poverty patterns and trends in the country. Underlying these are factors that are more difficult to quantify, such as ethnicity, traditions, and attitudes towards gender and education. There is vulnerability to poverty in the subproject areas, mainly because households face constraints in resources such as small landholdings, vulnerability to extreme climatic events, limited water for cropping, and non-affordable credit.

88. **Impact channels.** The project will directly assist in the development of effective supply arrangements between poor farmers, cooperatives, water users' groups, processors, distributors, and traders. Subproject investments will directly reduce poverty among beneficiaries and lead to higher household incomes and the creation of rural employment opportunities. The project will provide support along the length of the rice and vegetable value chains to ensure that value chain linkages are strengthened. Poor farmers will be encouraged to strengthen their producer groups to provide quality products at the right time and with continuity of supply. Landless and poor households will be included in agribusiness development and vocational training.

89. **Other social and poverty issues.** The very poor still have problems in accessing microfinance. Beneficiaries priority need was a source of affordable credit at low interest, as an alternative to informal loans at high interest rates.

90. **Project design features.** Identified poor households in subproject areas will be targeted for job opportunities related to civil works. Landless or poor farmers will have the opportunity to access off-farm and on-farm employment related to post-harvest support services such as farm mechanization, drying, milling, grading and storage of produce.

¹⁰ United Nations. 2015. *Country Analysis Report: Lao PDR*. Vientiane.

B. Gender Dimensions of the Project

91. **Gender dimensions.** Women are key actors in the rice and vegetable value chains—they are producers, collectors, intermediaries and rice millers, and they own and operate their own brokerage and trading enterprises. On an average, women represent 50% of the population engaged in the agricultural sector in the targeted provinces. Rural women generally have joint access to and control over land and capital together with their husbands. Men and women have equal access to markets, although it is mainly men accessing marketing information. They generally jointly agree when, where, and to whom to sell produce. The top two priority needs for both women and men farmers are: (i) year-round supplementary irrigation water, and (ii) access to affordable (short term) credit. Women farmers face additional constraints that include: (i) limited capacity including insufficient technical skills related to productivity enhancement, insufficient information about the impact of climate change, and an inadequate understanding of market mechanisms and how to respond effectively to market information; (ii) less access to agricultural extension and business trainings; and (iii) a lower level of financial literacy compared to their male counterparts in the targeted areas. Moreover, women in Lao PDR were found to spend over four times more time than men on household and caring work, which limits women's participation in economic activities and training opportunities. The target populations are largely homogeneous, but ethnic minority (Laven) households may be poorer than other households. Female-headed households or elderly households are generally constrained by labor shortages.

92. The MAF adopted a gender mainstreaming strategy for the sector: “Vision the year 2030, Ten-Year Gender Equality Strategy of Agriculture, Forestry and Rural Development Sector, from 2016 to 2025”. The strategy includes targets related to facilitating and increasing participation of female farmers and poor families in all activities and trainings to 45% participation, increasing participation of women in decision making to more than 25%, increasing participation of female technical staff in trainings in different topics to 35% participation by 2025, and building capacity of the Subcommittee for the Advancement of Women (Sub-CAWs) of the sector at each level. One of the objectives of the strategy is also to increase women's representation among female staff in the sector to 30% at all levels. Note that women constitute about 25% of the MAF staff in the targeted provinces for this project.

93. The National Commission for the Advancement of Women and Lao Women's Union (LWU) are the two main institutions responsible for monitoring the Convention for the Elimination of Discrimination Against Women implementation and mainstreaming gender into various sectors, including coordinating the gender-related work of line ministries and development partners and monitoring and evaluating the implementation of national strategies and action plans.

94. **Gender action plan.** A gender action plan (see Table 19) has been prepared and includes gender actions and numerical targets to promote women's voice and active participation in all project activities. Implementation of all the gender action plan activities is aligned and meant to support implementation of the Gender Equality Strategy of Agriculture, Forestry and Rural Development Sector 2016-2025. The project will actively involve the MAF's Commission for the Advancement of Women Division (CAW), the Department of Technical Agricultural Extension Services and Processing's CAW focal point, the PAFO and DAFO Sub-CAW gender focal points, and the LWU as key partners in implementation and monitoring of the gender action plan activities.

95. **Gender action plan implementation.** Overall responsibility for gender action plan implementation, monitoring and reporting rests with the executing agency and implementing agency. NPMO will appoint a gender focal point preferably from the MAF CAW who will work

closely with the PAFO and DAFO Sub-CAW gender focal points and the LWU. At project inception, a clear terms of reference will be developed for LWU's involvement as key partner in project implementation. Representative of the MAF CAW will be invited to attend all the meetings of the project technical review committee and encouraged to share gender-related aspects of the project. The MAF CAW will ensure that implementation of gender action plan activities is aligned and supports the MAF Gender Strategy implementation. Social development and gender specialists (international, 6 person-months; and national, 30 person-months) will be recruited as part of the PIC team to build capacity of the NPMO and PPO staff and gender focal points in gender analysis and mainstreaming, and provide support to gender action plan implementation, monitoring and reporting.¹¹ The terms of reference of the social development and gender specialists are contained in the terms of reference of the PIC. Work plans and budget to implement the gender action plan activities will be prepared annually. The project M&E framework will integrate gender sensitive indicators included in the design and monitoring framework and the gender action plan. During project implementation, regular meetings will be conducted with women farmers organized by gender focal points and LWU with the support from the consultants to find out about their concerns and specific training needs, and to ensure that they are included as demonstration and targeted farmers for the adoption of climate-friendly techniques.

96. Adequate financial resources have been allocated to implement the gender action plan. Implementation of its activities will be covered by the budget allocated for implementation of the regular project activities under the corresponding outputs, including any extra costs implied by special arrangements that shall be made to facilitate and increase women's participation in the regular project activities (e.g. such as series of shorter training sessions at venues closer to their communities) and the costs related to the conduct of a gender analysis of the targeted value chains shall be integrated in the PIC contract.

¹¹ Allocation of additional person-months for the social development and gender specialists will be made with additional financing for the project upon the GCF approval.

Table 19: Gender Action Plan

Project outputs	Gender activities/actions	Performance indicators/targets	Some important process related aspects
Output 1: Critical agribusiness value chain infrastructure improved and made climate-resilient			
Gender Objectives			
1.1 Ensure critical agribusiness value chain (VC) infrastructure is responsive to the needs of women and men	<p>1.1.1 Involve women, Sub-CAW gender focal points and LWU representatives actively and meaningfully in each individual event for all consultations and planning of activities related to improvement and climate resiliency of critical infrastructure to be supported by the project.</p> <p>1.1.2 Integrate physical design features that are addressing women's needs into improved climate-resilient VC infrastructure (e.g. sealed road shoulders in farm access roads; footpaths/bridges; roadside market facilities; height, location and design of facility/equipment in agribusinesses to be upgraded).</p>	<p>1.1.1 Women are at least 50% of participants (aggregate basis);^a concrete examples of infrastructure related needs expressed by female participants recorded in the minutes</p> <p>1.1.2 Concrete examples of types of physical design features that are addressing women's needs integrated into improved climate-resilient VC infrastructure</p>	<p><i>1.1.1 This would mean paying attention to the following aspects: convenient time, adequate venue, information sharing with visual aids/illustrations, having female facilitators as well, child supervision arrangements even if informal, etc.</i></p> <p><i>- This would also mean that brainstorming sessions to (i) prioritize infrastructure needs and (ii) identify needs in terms of physical design features to be integrated in prioritized infrastructure are organized first with separate groups of female and male participants before sharing and decision is made in plenary with female and male participants mixed. Ensure decision-making process is participatory and takes into account the needs that were expressed by female participants.</i></p>
1.2 Enhance income generating opportunities for women	1.2.1 Ensure women benefit from new permanent jobs created in agribusinesses (rice mills, vegetable pack houses and marketing centers, biofertilizer factories) as a result of their upgrading through the project	1.2.1 At least 40% of new permanent jobs created are for women (overall target); 30% of any new management positions created are for women	<p><i>1.2.1 This would mean that information about such employment opportunities will be communicated through adequate channels to reach out women in the targeted areas, and that special efforts are made to attract potentially interested and competent women in management positions.</i></p> <p><i>- Core labor standards will be complied with (equal pay for work of equal value, no child labor).</i></p>

Project outputs	Gender activities/actions	Performance indicators/targets	Some important process related aspects
Output 2: Climate smart agriculture and agribusiness promoted			
Gender Objectives 2.1 Strengthen women farmers' (individual and member of groups) involvement along climate-friendly agribusiness VCs	<p>2.1.1 Involve women farmers actively in and build on their traditional knowledge for the selection and multiplication of climate-resilient varieties of rice and vegetables, as well as for botanical production of pesticides for organic farming.</p> <p>2.1.2 Ensure women take an active role in the promotion campaigns about biofertilizer use to raise awareness among women and men farmers about its benefits for value chain improvement, climate change and cost saving.</p> <p>2.1.3 Involve women farmers actively and meaningfully in each individual event for all capacity-building activities (trainings, demonstrations, study tours) supported by the project: (1) agricultural extension and technical capacity-building activities including those related to climate change adaptation and mitigation; (2) trainings on how to operate and maintain a range of agricultural machinery; (3), management (incl. leadership and negotiation) and business skills trainings.</p>	<p>2.1.1 Number and % of women farmers involved</p> <p>2.1.2 Number of farmers using biofertilizer disaggregated by sex;^b Number and % of women active agents in promotion campaigns.</p> <p>For 2.1.3 (1) and (3): Women are 40% of participants (aggregate basis)^c. By 2024: 8,000 women farmers (or 40% of total farmers) trained in CSA, organic farming and agribusiness skills; at least 40% women among the farmers (or 200 out of 500 in total) become GAP and/or organic certified; 30% of agribusiness enterprises (or 10 out of 30 in total) trained in CSA are women-led and/or owned*.^d</p> <p>For (2): (i) Number and percentage of women farmers trained in each event; (ii)</p>	<p>2.1.2 <i>Use of most appropriate ICT and adequate messages will be made to reach out to both women and men farmers.</i></p> <p>2.1.3 <i>This would mean paying special attention to the following aspects: adequate venue, convenient timing, duration, way that invitation is being done (e.g. not to head of household or not exclusively to officially registered members of farmer groups if mainly male), use of visual aids and other illustrated materials, use of female facilitators/demonstrators and extension agents, child care arrangements even if informal, etc.</i></p>

Project outputs	Gender activities/actions	Performance indicators/targets	Some important process related aspects
	<p>2.1.4 Provide skills enhancement for women in infrastructure related operation and maintenance (e.g. irrigation channels and farm access roads)</p> <p>2.1.5 Strengthen linkages between women-led and/or owned farms/enterprises* and agribusiness industry through supporting their participation in fairs, business forums, contract farming arrangements, increased access to market information.</p> <p>For support provided to and through agricultural production groups: Preferential support will be given to groups that have or benefit half or a majority of female members/farmers and have women among their committee members. Special attention will be given in terms of targeting to women farmers whose name may not be officially registered as member because of practice of household-based membership registration (with only husband's name getting officially registered).</p>	<p>women represent 30% of increased labor pool of individuals who can operate agricultural machinery over the baseline.^e</p> <p>2.1.4 At least 30% women with enhanced capacity to operate and maintain irrigation schemes and farm to market access roads</p> <p>2.1.5 Number and type of activities conducted; number and % of women participants</p> <p>2.1.6 Types of practical solutions identified and integrated in the project.</p>	<p>2.1.5 <i>This would mean ensuring that both women and men farmers have a very clear understanding of the contractual arrangements in case of contract farming.</i></p> <ul style="list-style-type: none"> - <i>This would imply a market demand study for the targeted commodities and sharing market information with major VC female and male actors.</i> - <i>This would also mean ensuring access to market information for both women and men farmers and find out what are the most appropriate channels to reach women farmers including use of ICT.</i> - <i>This would also mean raising awareness among the local population about the health benefits of consuming GAP and organic certified products in order to increase local market demand.</i> <p>2.1.6 <i>This would require raising awareness among rural men about gender equality and the importance of women's participation in project activities, particularly agricultural trainings.</i></p> <ul style="list-style-type: none"> - <i>Appropriate targeted interventions may include provision of agricultural tools and</i>

Project outputs	Gender activities/actions	Performance indicators/targets	Some important process related aspects
2.2 Ensure female staff benefit from capacity-building activities related to climate-friendly agribusiness value chains	<p>2.1.6 Work with women and men in the communities to identify context-appropriate ways to address disproportionate burden of household and care work on women farmers, especially female headed households' needs in this respect, which prevents them to increasingly participate and move up along the VCs.</p> <p>2.2.1 Ensure relevant female staff participate in capacity-building activities that are targeted at government officials at national and local levels with regard to climate-friendly agribusiness VCs</p>	<p>2.2.1 At least 25% female staff participants on an aggregate basis at national/local levels.^f</p>	<p><i>equipment that are manual labor and time saving, and that generally reduce women's workload; priority being given to female headed households in terms of provision of inputs, credit, and any other facilities that are deemed necessary and relevant to support their special needs.</i></p>
Output 3: Enabling environment for climate-friendly agribusiness enhanced			
3.1 Institutionalize gender mainstreaming in the climate-friendly agribusiness value chains sector	<p>3.1.1 At project inception, conduct a gender analysis for each of the 2 targeted VCs and develop a set of clear policy and program recommendations to strengthen women farmers' involvement along the different VCs.</p> <p>3.1.2 Integrate key recommendations from above mentioned gender analysis of VCs and key features of MAF Gender Strategy into Agribusiness policy and other related documents prepared under the project.</p> <p>3.1.3 Integrate a session on gender equality in climate-friendly agribusiness VCs (based on gender analysis report</p>	<p>3.1.1 Report prepared with clear recommendations based on gender analysis of the 2 value chains.^g</p> <p>3.1.2 Key recommendations from gender analysis of 2 targeted value chains integrated in the draft Agribusiness Policy.^h</p> <p>3.1.3 Number of sessions provided on gender equality in climate-friendly agribusiness</p>	<p>3.1.2 <i>This would also mean that gender stakeholders (MAF CAW and gender focal points) participate in policy committees and meetings.</i></p> <p>3.1.3 <i>This would include raising awareness on land titling, benefits of biofertilizer use, and gender specific topics</i></p>

Project outputs	Gender activities/actions	Performance indicators/targets	Some important process related aspects
<p>3.2 Enhance access to green finance for women involved in agribusiness value chains</p>	<p>mentioned above) and the MAF Gender Strategy into the training and awareness raising activities for relevant project stakeholders (i.e. relevant departments in MAF, PAFO/DAFO extension officers, local leaders and government officials, MAF CAW, gender focal points, and LWU).</p> <p>3.1.4 Actively involve the MAF's CAW, the Dept. of Technical Agricultural Extension Services and Processing's CAW focal point, the PAFO and DAFO Sub-CAW gender focal points and the LWU at village and local levels as key partners in project implementation and monitoring, especially for gender action plan related activities.</p> <p>3.2.1 Raise awareness among women farmers, women-led and/or owned enterprises*, and female staff in financial institutions about existing affordable credit facilities, green financing including crop insurance and required formalities to access these.</p>	<p>value chains; target groups; number of people trained disaggregated by sex.ⁱ</p> <p>3.1.4 MAF CAW, Sub-CAW gender focal points and LWU are well aware of the project and gender action plan related activities.</p> <p>3.2.1 Number and type of activities conducted; types of communication channels and materials used; female staff are 30% of staff from financial institutions trained (or 15 out of 50 in total); 15,000 women (from 15,000 households) provided with information on climate risk sharing instruments.</p>	<p><i>such as division of labor, access to and control over resources, and decision making.</i></p> <p><i>- Use of educational entertainment is encouraged for raising awareness on gender equality (e.g. drama, songs).</i></p> <p><i>3.1.4 Implementation of all gender action plan related activities is aligned and meant to support implementation of the Gender Equality Strategy of Agriculture Forestry and Rural Development 2016-2025.</i></p> <p><i>- This also entails partnering with Sub-CAW and LWU as facilitators, and for awareness-raising and information sharing targeted at farmers including provision of market information.</i></p>
Project management gender related activities to be implemented by NPMO/PPOs			
<ul style="list-style-type: none"> • NPMO to appoint gender focal (preferably from the MAF CAW) who will closely liaise with PAFO and DAFO Sub-CAW gender focal points. • Prepare a clear TOR for LWU's involvement (especially at local levels) as key partner in implementation, monitoring and reporting of the gender action plan. • Prepare annual workplans and budgets to implement the activities of the gender action plan. 			

Project outputs	Gender activities/actions	Performance indicators/targets	<i>Some important process related aspects</i>
	<ul style="list-style-type: none"> • Translate the gender action plan into Lao language. • Gender consultants (national and international) to be recruited and to build capacity of MAF CAW, gender focal points, LWU and NPMO/PPO staff in gender analysis and mainstreaming and gender requirements for the project, and to support gender action plan implementation, monitoring and reporting. • Collect and analyze data disaggregated by sex where relevant and integrate gender sensitive indicators (from DMF and gender action plan) in the PPMS. • Ensure regular monitoring and reporting (at least semi-annually to ADB) on the progress of gender action plan implementation. 		

CAW= Commission for the Advancement of Women Division, DAFO = District Agriculture and Forestry Office, LWU = Lao Women's Union, MAF = Ministry of Agriculture and Forestry, NPMO = National Project Management Office, PAFO = Provincial Agriculture and Forestry Office, PPO = Province Project Office, PPMS = Project Performance Monitoring System, Sub-CAW = Subcommittee for the Advancement of Women, VC = value chain

* Women-led and/or owned enterprises are enterprises with at least one of the following (i) at least 50% of senior managers are women, and/or (ii) at least 50% of enterprise ownership is controlled by women, and/or (iii) at least 50% staff are women.

^a Point of reference: Female population in sub-project areas around 50%; proportion of women among population involved in agriculture sector average 50% in targeted provinces; women's participation in consultations in completed ADB agricultural projects in LAO PDR 40% to 50%.

^b Baseline: unknown.

^c Point of reference: Women's participation in technical agricultural trainings in completed similar ADB projects in LAO PDR varying between 25% to 39%; corresponding target of 45% by 2025 in MAF Gender Strategy.

^d 2017 baseline: 0

^e Baseline: 0

^f Point of reference: Average of 25% MAF female staff in targeted provinces in 2015.

^g Baseline: NA

^h Baseline: NA

ⁱ Baseline: 0

97. The gender action plan includes the following project management gender-related activities to be implemented by NPMO/PPIUs:

- (i) Appoint gender focal points for the project in the NPMO/PPIUs, representatives from the MAF CAW and Sub-CAW gender focal points at local levels;
- (ii) Prepare annual workplans to implement the activities of the gender action plan;
- (iii) Gender consultants (national and international) to be recruited and build capacity of the gender focal points and NPMO/PPIU staff in gender analysis and mainstreaming, and support gender action plan implementation, monitoring and reporting;
- (iv) Collect and analyze data disaggregated by sex where relevant and integrate gender sensitive indicators (from the DMF and the gender action plan) in the project performance monitoring system; and
- (v) Ensure regular monitoring and reporting (at least semi-annually to ADB) on the progress of gender action plan implementation.

IX. PERFORMANCE MONITORING, EVALUATION, REPORTING, AND COMMUNICATION

A. Project Design and Monitoring Framework

Impact the Project is Aligned with			
Agricultural competitiveness improved (Agriculture Development Strategy to 2025 and Vision to the Year 2030; the 8th Five-Year National Socio-Economic Development Plan, 2016–2020)			
Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting	Risks
Outcome Productive and resource-efficient agribusiness value chains developed in project areas	By 2026: a. Crop yields increased by at least 20% (2017 baseline: rice 3.0 tons/ha; cabbage: 4.0 tons/ha). b. At least 30 agribusinesses became resource efficient in terms of water savings (5%–10% efficiencies) and reduction in postharvest losses by 10% (rice) and 15% (vegetables) (2017 baseline: rice = 25%; vegetables = 35%). c. Rural household incomes increased by at least 30% (2017 baseline: \$1,021). d. Average recovery rate of milled rice increased to 62% (2017 baseline: 55%).	a. Ministry of Agriculture and Forestry agricultural census b. PPMS reports	Declining demand for rice and vegetables from the Lao PDR because of competition from external markets and stringent requirements on quality and safety from importing countries
Outputs 1. Critical agribusiness value chain infrastructure improved and	By 2024: 1a. Tertiary irrigation channels targeting at least 10,000 ha and 6,000 households (with at least 15,000 females) and 150 rainwater harvesting ponds targeting 300 ha and 750 households (with at least 1,900 females) rehabilitated (2017 baseline: 0).	1a.–e. PPMS reports	Inadequate financing of operation and maintenance leading to premature

made climate-resilient	<p>1b. At least 45 kilometers of farm access roads targeting 20,000 households (with at least 50,000 females) rehabilitated to improve climate resilience (2017 baseline: 0).</p> <p>1c. Infrastructure in five provincial crop research centers upgraded and made operational to provide agribusiness services and strengthen value chain links for at least 50 APGs (2017 baseline: 0).</p> <p>1d. Infrastructure in one soil-testing laboratory and one plant-protection laboratory at national level, and three provincial agricultural college laboratories upgraded (2017 baseline: 0).</p> <p>1e. Infrastructure in at least 36 agribusinesses (21 rice mills, 10 vegetable pack houses and marketing centers, and 5 biofertilizer factories) upgraded with gender-responsive designs, and climate change measures integrated (2017 baseline: 0).</p>		<p>deterioration of infrastructure</p> <p>Limited staff capacity in target provinces to meet all ADB and project implementation requirements</p> <p>Catastrophic climate change events damage infrastructure or interrupt implementation.</p>
Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting	Risks
2. Climate-smart agriculture and agribusiness promoted	<p>2a. Two additional climate-resilient varieties of rice and vegetables released (2017 baseline: 0).</p> <p>2b. Knowledge and skills of 20,000 farmers (of whom at least 40% are women and 2,000 from ethnic groups) in CSA, organic farming, and agribusiness increased (2017 baseline: 0).</p> <p>2c. 50 APGs^b developed capacity to operate and maintain irrigation schemes and farm-to-market access roads (2017 baseline: 0).</p> <p>2d. 30 agribusiness enterprises, of which 30% are led and/or owned by women,^c trained on CSA (2017 baseline: 0).</p>	2a.–d. PPMS reports; capacity building master plan monitoring report	
3. Enabling environment for climate-friendly agribusiness enhanced	<p>3a. Climate-smart and gender-responsive agribusiness policy formulated (2017 baseline: not applicable)^d.</p> <p>3b. At least 25 APGs^b and 500 farmers (of which at least 40% are women) became GAP and/or organic certified (2017 baseline: 0).</p> <p>3c. At least 30 agribusiness enterprises (rice mills, vegetable collection and pack houses, and biofertilizer factories) achieved good manufacturing practice and hazard analysis critical control point certification (2017 baseline: 0).</p>	3a.–f. PPMS reports; Mekong Business Forum reports	

	<p>3d. At least 25 APGs^b entered into agribusiness ventures, and at least 5 became agricultural cooperatives (2017 baseline: 0).</p> <p>3e. Knowledge and skills of at least 50 staff (of which 30% women) of financial institutions in green finance increased (2017 baseline: 0).</p> <p>3f. At least 15,000 households, including 15,000 women, provided with information on climate risk-sharing mechanisms (2017 baseline: 0).</p>		
<p>Key Activities with Milestones</p> <p>1. Critical agribusiness value chain infrastructure improved and made climate-resilient</p> <p>1.1 Conduct feasibility studies for additional subprojects (Q2 2019–Q2 2020).</p> <p>1.2 Confirm land availability, locations, suitability, and connectivity for production and postharvest infrastructure (Q2 2019–Q3 2020).</p> <p>1.3 Undertake detailed engineering design, tender (including contractors and equipment suppliers) and construct critical production and postharvest infrastructures to climate-resilient condition and with gender-responsive designs, where relevant (Q3 2019–Q1 2024) [G/CD, GE].</p> <p>1.4 Implement the matching grant scheme to support rice mills, vegetable pack houses, and biofertilizer factories (Q1 2021–Q4 2023) [G/CD, PSD].</p> <p>2. Climate-smart agriculture and agribusiness promoted</p> <p>2.1 Develop, introduce, and distribute additional climate-resilient varieties of rice and vegetables (Q1 2019–Q4 2023) [G/CD, PSD].</p>			
<p>Key Activities with Milestones</p> <p>2.2 Conduct awareness and training programs for women and men farmers, farmer groups, small and medium-sized enterprises, and the private sector on CSA, climate risk management, and green finance, including structuring of public–private partnerships in agribusiness (Q3 2019–Q4 2023) [G/CD, PSD].</p> <p>2.3 Implement the smallholder financing scheme (Q3 2020–Q4 2023).</p> <p>3. Enabling environment for climate-friendly agribusiness enhanced</p> <p>3.1 Assist in formulating climate-smart and gender-responsive agribusiness policy and regulations, including advice on agronomy, markets, links between farmers and the private sector, land titling and registration, and gender constraints and opportunities (Q1 2021–Q2 2024) [G/CD].</p> <p>3.2 Deliver managerial and technical skill-building programs on agribusiness policy reforms, agronomic resource efficiency, and climate resilience in value chains, including organic certification, GAP certification, and other certification of safe and quality agri-foods (Q4 2020–Q1 2023) [G/CD, GE].</p> <p>3.3 Conduct training programs for financial institutions on climate risk management and green finance, including structuring of public–private partnerships in agribusiness (Q2 2022–Q1 2023) [G/CD, GE].</p>			
<p>Project Management Activities</p> <p>Mobilize project implementation consultants (Q1 2019).</p> <p>Procure office equipment, furniture, and vehicles (Q1 2019).</p> <p>Establish PPMS (Q1 2019).</p> <p>Train 200 staff from various levels (national, provincial, and district) in project management procurement, financial management, gender, and social and environmental safeguards (Q4 2018–Q4 2023) [G/CD, GE].</p>			
<p>Inputs</p> <p>ADB: \$40.50 million (grant)</p> <p>Government of the Lao PDR: \$0.75 million</p> <p>Beneficiaries: \$5.12 million</p>			
<p>Assumptions for Partner Financing</p> <p>Not applicable</p>			

ADB = Asian Development Bank, APG = agricultural production group, CSA = climate-smart agriculture, GAP = good agricultural practice, G/CD = governance and capacity development, GE = gender equity, Lao PDR = Lao People's Democratic Republic, ha = hectare, PPMS = project performance monitoring system, PSD = private sector development, Q = quarter.

- ^a Government of the Lao PDR, Ministry of Agriculture and Forestry. 2015. *Agriculture Development Strategy to 2025 and Vision to the Year 2030*. Vientiane; Government of the Lao PDR, Ministry of Planning and Investment. 2016. *8th Five-Year National Socio-Economic Development Plan (2016–2020)*. Vientiane; Government of the Lao PDR, Ministry of Natural Resources and Environment. 2015. *Intended Nationally Determined Contribution to the United Nations Framework Convention on Climate Change*. Vientiane; and Government of the Lao PDR, National Food Security and Commodity Development Committee. 2015. *Zero Hunger Challenge Road Map*. Vientiane.
- ^b Preferential support given to APGs that have or benefit at least 50% of women members/farmers and have at least one female committee member.
- ^c Enterprises led and/or owned by women = enterprises with at least one of the following: (i) at least 50% of senior managers are women, (ii) at least 50% of enterprise ownership is controlled by women, and (iii) at least 50% of the staff are women.
- ^d As women are more vulnerable to the impacts of climate change, any policies developed for public–private partnerships or contract farming arrangements for promoting agribusinesses under output 3 will be responsive to the needs, constraints, and vulnerabilities of women. The detailed gender analysis of the value chains proposed in the gender action plan is expected to inform this process.

Source: Asian Development Bank.

B. Monitoring

98. **Project performance monitoring system (PPMS).** A PPMS will be developed and implemented by the NPMO with the assistance of the PIC. A draft PPMS is attached in Appendix 7 for review and finalization when PIC is on board. The PPMS will be approved by NPMO and endorsed by PSC for no-objection by ADB. Data will be collected at the village level to identify the current socio-economic conditions of target beneficiaries and to assess the impact of the investments. The PPMS will be based on inputs, outputs and outcomes to be measured from the baseline survey and throughout project implementation. PIC's international and national PPMS experts will be responsible for baseline survey, and for subsequent surveys.

99. **Compliance monitoring.** MOF has agreed with ADB on certain covenants for the proposed project, which are set forth in the grant agreement including the following: (i) only investments that have been screened by ADB-approved consultant (i.e., FME) shall be financed by the grants; (ii) the government will ensure that adequate funds are allocated for the periodic maintenance of infrastructure to maintain any infrastructure in functional order; and (iii) the government will also ensure that a grievance mechanism is established for affected people in the participating districts.

100. ADB will monitor compliance with those covenants throughout implementation through regular review missions, quarterly progress reports submitted by the NPMO, and review of project accounts and procurement procedures.

101. **Social and environment safeguards monitoring.** Safeguard monitoring will be undertaken by the safeguard experts under PIC. Independent external monitors will be recruited by NPMO to ensure that all recommendations and mitigation measures under the EMPs, the EGPs, and the resettlement plans are implemented in accordance to the plans. For involuntary resettlement, NPMO with the assistance of PIC will set up monitoring indicators, databases, and systems. PPIUs will oversee monitoring resettlement plan.

102. **Gender and social dimensions monitoring.** Regular monitoring of gender action plan implementation will be done during project implementation. The PPMS will monitor women's participation in all project capacity building, training events and meetings, for both female staff

and women farmers. Sex-disaggregated data will be collected regularly wherever relevant (particularly in relation to project activities that are linked to specific actions and for which verifiable sources of data for monitoring will be available at community/village level), and gender specific and sensitive indicators from the DMF and the gender action plan will be integrated as part of the PPMS. The NPMO will ensure regular monitoring and reporting (at least semi-annually to ADB) on the progress of gender action plan implementation; the template to be used for gender action plan monitoring and reporting is included as Appendix 4.

103. Participatory monitoring of project impact will be implemented at the midterm of the project and this will include women's focus groups discussions and interviews with individual households, Sub-CAW gender focal points and LWU representatives for obtaining quantitative and qualitative data. Household interviews will include adequate representation of female-headed households.

C. Evaluation

104. ADB will conduct regular (at least twice a year) review missions throughout project implementation to assess implementation performance and achievement of project outcomes and objectives, examine financial progress, and identify issues and constraints affecting the project, and work out time-bound action plans for their resolution.

105. A midterm review mission will also be undertaken within 30 months of grant effectiveness. This review will include a comprehensive evaluation of project implementation arrangements, detailed evaluation of the scope and implementation process and progress of investments, feedback from the PPMS, performance of consultants, capacity building progress, and possible reallocation of grant proceeds. During this more significant review, the impact from enhanced performance of APGs will be assessed as will the performance of the value chain credit facility developed under the project. Remedial actions will be instituted as required.

106. Within 12 months of physical completion of the project, ADB will conduct a project completion review mission to carry out a preliminary assessment of the success of the project to achieve its physical, and socioeconomic developmental objectives, as well as to review compliance with ADB requirements and grant covenants.

D. Reporting

107. NPMO will provide ADB with (i) quarterly progress reports in a format consistent with ADB's project performance reporting system (Appendix 5); (ii) consolidated annual reports including (a) progress achieved by output as measured through the indicator's performance targets, (b) key implementation issues and solutions, (c) updated procurement plan, and (d) updated implementation plan for next 12 months, consistent with the approved annual workplan; and (iii) a project completion report within 6 months of physical completion of the project. To ensure the project continues to be both viable and sustainable, project accounts and the executing agencies' AFS, together with the associated auditor's report, should be adequately reviewed.

E. Stakeholder Communication Strategy

108. A stakeholder communication strategy has been prepared, drawing on best practices outlined in ADB's Public Communications Policy.¹² It is based on principles of transparency, timeliness, meaningful participation, and inclusiveness. It will ensure that vulnerable groups, such

¹² ADB. 2011. *Public Communication Policy 2011. Disclosure and Exchange of Information*. Manila.

as the poor and female-headed households, who risk marginalization, are provided with opportunities for receiving timely information, and can provide feedback during project implementation. Stakeholders include: (i) project direct and indirect beneficiaries with a focus on micro- and small-enterprises and small agri-businesses; (ii) civil society organizations; (iii) community groups and individuals living in the project area; (iv) private agencies and service providers who share an interest in the outcomes and/or impacts of the project; and (v) government agencies with a role in implementation. The strategy serves to inform and support community development, enhance government capacity to deliver a positive project outcome, and enhance project performances while mitigating any potential negative impact.

Table 20: Stakeholder Communication Strategy

Objective	Stakeholder Group	Function/Interest in Project	Messages	Means of Communication	Timeline	Responsibility	Resources
1. Ensure a good two-way flow of information, and promote ownership over subproject activities and climate-friendly agribusiness value chains sector development	Beneficiary communities including farmer production groups, women and men farmers, agricultural cooperatives collectors, rice millers, village chiefs and village administrations , local micro-credit institutions.	Direct beneficiaries of project; local authorities participating in implementation and follow-up of subprojects; beneficiaries of vegetable hubs; participants in agribusiness enterprise development; participants in technical and agriculture training, in workshops, study tours and skills and employment training.	<p>Local collaboration and support is fundamental to project effectiveness; information is to be shared openly and transparently; inputs into design and recommendations for improvements are welcome.</p> <p>Clear information on implementation arrangements and schedule of construction and civil works.</p> <p>Update on subproject progress and roles for any operation and maintenance after completion.</p> <p>Planned mitigation measures (including compensation rates, entitlements, grievance redress mechanism, road safety and noise/pollution control measures</p>	<p>The project will produce user-friendly posters at local level giving information about when consultation meetings are to be held, and showing subproject plans and activities. Details of how and where to register feedback (e.g. with village chief) is to be provided.</p> <p>Regular meetings between implementing agency & beneficiaries will be held every month for two-way flow of information about project activities, priorities and progress. Feedback from meetings will be logged, and feedback on follow-up actions will be reported at the following meeting. Village head, village administration and LWU representative will receive orientation from project staff regarding what to do when local community members give them feedback on subproject.</p> <p>Standard reporting formats to be used by local authorities and IA for providing project</p>	<p>Regular ongoing information exchange between IA (implementing agency) and beneficiaries prior to initiation of activities.</p> <p>During initial phase of subproject preparation.</p> <p>During detailed project design phase.</p> <p>At kick-off workshop/meeting when project is launched</p> <p>Ongoing during implementation of activities and any construction and civil works.</p> <p>At completion in closing workshop at local level</p>	<p>EA (NPMO), IAs (PPO), PAFO, DAFO, Sub-CAW Gender Focal Points and other related ministries and departments, local government including village council, village chief and Lao Women's Union representative.</p> <p>Responsibility for producing information materials will be with IA.</p> <p>Responsibility for identifying best publicly accessible places is with village chief.</p>	<p>Refer to Outputs 1 and 3.</p> <p>(Capacity Enhancement) for source, of funding for production of all communication materials and recruiting local communication consultant to design materials where necessary</p>

Objective	Stakeholder Group	Function/Interest in Project	Messages	Means of Communication	Timeline	Responsibility	Resources
			before and after construction).	<p>updates to beneficiaries on a regular basis so that information can be systematically transmitted to communities.</p> <p>Public information meetings, including regular updates by village head, village council members, and LWU at village level following any visits and meeting with IA and project consultants.</p> <p>Printed information about subproject in local language posted in accessible public areas, including information on how to provide comments or register grievances.</p> <p>Posters on information boards on upcoming NPMO training programs for agribusiness, technical training, skills training for employment, and small and microenterprise development.</p>			
2. Ensure an effective two-way flow of project information to women	Women, poor and vulnerable households, ethnic minority groups (where applicable)	As above	As above plus disseminate contents of gender action plan and EMDP (where applicable), and	Separate meetings with women organized LWU and ii) with ethnic groups in local language where applicable.	As above	As above	

Objective	Stakeholder Group	Function/Interest in Project	Messages	Means of Communication	Timeline	Responsibility	Resources
beneficiaries and ethnic minority beneficiaries (where applicable).			opportunities to participate in training in income generating activities.	Printed information about the project posted in local and accessible language (or visual depictions) posted in accessible public areas. Designation and provision of materials/toolkit to LWU for promotion/coaching in micro- and small enterprise development and disseminating information about agribusiness opportunities from IA / project consultants.			
3. Raise visibility and awareness of benefits of agribusiness development for inclusive growth and for building ownership over ongoing infrastructure development (e.g. vegetable hub, bio-fertilizer plant and rice mill improvements) and farmer production	Beneficiary communities.	Direct and indirect beneficiaries of project.	Project investments and agribusiness promotion is beneficial to local economy, culture and gender equity.	Media press releases and coverage about the project by local media –print, radio, and TV features (if possible). Signboards promoting visibility of MAF, ADB and local government collaboration for climate-friendly agribusiness and value chain development and improvements. Inaugurations of completed construction and civil works with promotional events at subproject sites. MAF website about project activities, progress and documents.		At project launch and midway through as tangible results are realized. Signboards at appropriate locations at the start of construction and through project	IA (NPMO), (PPO) PAFO, DAFO, Sub-CAW Gender Focal Points and local authorities

Objective	Stakeholder Group	Function/Interest in Project	Messages	Means of Communication	Timeline	Responsibility		Resources
groups and agriculture cooperative development.						implementa tion.		
4. Ensure an effective two-way flow of project information to promote public-private partnerships for inclusive agribusiness growth and value chain development.	Private sector agribusinesses and milling cooperatives	Direct and indirect beneficiaries of project; partners in development activities.	Promote participation in agribusiness initiatives which will increase available supply of good quality produce such as fresh vegetables, employment creation and initiatives to promote climate-friendly agribusiness value chain development.	Partnership in workshops / meetings / surveys on agribusiness development and marketing / promotion programs. Production of a full suite of marketing materials designed by local communications consultant.		Ongoing during implementa tion of project activities.	EA (NPMO) / project implementati on consultants	Refer to Outputs 1 and 3. Capacity Enhancement

Objective	Stakeholder Group	Function/Interest in Project	Messages	Means of Communication	Timeline	Responsibility		Resources
5. Ensure a good two-way flow of project information and promote women's ownership over subproject activities and agribusiness development.	MAF DAW	<p>Responsible for promoting gender equality and mainstreaming gender in agriculture sector.</p> <p>Plays a role in overseeing gender inclusiveness in agricultural development in Lao PDR.</p> <p>Promote women's involvement and participation in micro- and small-enterprise development and employment training in the agriculture sector.</p>	<p>Key benefits, and gender equity of subproject activities and climate-friendly agribusiness and value chain development.</p> <p>Specific benefits targeted to women</p> <p>Disseminate information on progress on gender equity</p>	<p>National Steering Committee and provincial meetings.</p> <p>Regular coordination meetings between IA, TA Gender consultants and MAF DAW for implementing project GAP and recommending any improvements</p>		From outset of project and regularly throughout project lifetime.	Project Gender Consultants and MAF DAW, and Sub-CAW Gender Focal Points	
6. Ensure a regular flow of project information and promote collaboration to complete constructed infrastructure and civil works.	MAF PAFO and DAFO staff; government officials, contractors, and communities in the project areas.	Responsible for implementation and O&M of constructed infrastructure subprojects and civil works.	<p>Project design, key project performances, implementation arrangements and schedule of construction and civil works</p> <p>Main project impacts (positive and negative).</p> <p>Planned operation and maintenance measures.</p>	<p>National Steering Committee and provincial committee meetings.</p> <p>Regular coordination meeting for detail design of construction and civil works, and implementation of project activities.</p> <p>Regular flow and sharing of documentation.</p> <p>Project website.</p>		From outset of project and throughout implementation.	IA (PPO)	

Objective	Stakeholder Group	Function/Interest in Project	Messages	Means of Communication	Timeline	Responsibility		Resources
7. Ensure understanding of project impacts, outcomes and outputs and importance of theme of inclusive growth.	Beneficiaries; MAF; local authorities such as village chiefs, village council members, LWU (village authorities and LWU will receive orientation to develop their understanding for project impacts)	Responsible for project implementation	Effective execution of their tasks, regular follow up, monitoring and reporting progress and constraints is important for project success. Community collaboration and inclusive approach is essential to effective project delivery.	Dissemination of National Steering Committee decisions and strategic documents. Training in project management and other institutional strengthening activities. Formats and simple chart (s) showing responsibilities for project implementation, flow of funds, flow of activities, monitoring and follow up. Project website (managed under MAF website). Regular email updates on project activities and relevant developments in agribusiness. Sharing of information on project budget allocations; transparent process for selection for study tours, regional visits and other benefits and institutional strengthening activities. Gender and EMDP implementation training.		From outset of project and throughout implementation.	IA (PPO)	

DAFO = District Agriculture and Forestry Office, DAW = Division for the Advancement of Women, EA = executing agency, EMDP = ethnic minority development plan, IA = Implementing Agency, LWU = Lao Women's Union, MAF = Ministry of Agriculture and Forestry, NPMO = National Project Management Office, O&M = operation and maintenance, PAFO = Provincial Agriculture and Forestry Office, PPO = Provincial Project Office, Sub-CAW = Subcommittee for the Advancement of Women.

Source: Asian Development Bank.

X. ANTICORRUPTION POLICY

109. ADB's Anticorruption Policy (1998, as amended to date)¹³ is consistent with its commitment to good governance, accountability, and transparency ADB reserves the right to investigate, directly or through its agents, any violations of the anticorruption policy relating to the project. All contracts financed by ADB shall include provisions specifying the right of ADB to audit and examine the records and accounts of the executing agency and all project contractors, suppliers, consultants and other service providers. Individuals/entities on ADB's anticorruption debarment list are ineligible to participate in ADB- financed activity and may not be awarded any contracts under the project.

110. To support these efforts, relevant provisions of ADB's Anticorruption Policy are included in the grant regulations and the bidding documents for the project. All contracts financed by ADB about the project shall include provisions specifying the right of ADB to audit and examine the records and accounts of MAF, NPMO, the PPIUs, and DPIUs, as well as all contractors, suppliers, consultants, and other service providers as they relate to the project. Individuals/ entities on ADB's anticorruption debarment list are ineligible to participate in ADB- financed activity and may not be awarded any contracts under the project.¹⁴ The project design and implementation arrangements provide for mitigation of corruption risks. Risks associated with project management, including procurement and disbursement, will be mitigated by the engagement of a PIC to advise and assist in the procurement of goods and services, and the engagement of other consultants. The project will also establish a website or establish a subpage under the existing MAF's website in which it will disclose implementation progress; bid notifications and their results; and provide grievance mechanism against any corrupt practice.

XI. ACCOUNTABILITY MECHANISM

111. Those parties who are, or may in the future be, adversely affected by the project may submit complaints to ADB's accountability mechanism. The accountability mechanism provides an independent forum and process whereby people adversely affected by ADB-assisted projects can voice, and seek a resolution of their problems, as well as report alleged violations of ADB's operational policies and procedures. Before submitting a complaint to the accountability mechanism, those affected should make a good faith effort to solve their problems by working with the concerned ADB operations department. Only thereafter, and if they are still dissatisfied, should they approach the accountability mechanism.

XII. RECORD OF CHANGES TO THE PROJECT ADMINISTRATION MANUAL

112. All revisions and/or updated during the course of implementation should be retained in this section to provide a chronological history of changes to implemented arrangements recorded in the PAM, including revision to contract awards and disbursement s-curves.

¹³ ADB. 1998. *Anticorruption: Our Framework Policies and Strategies*. Manila.

¹⁴ ADB's Integrity Office website is available at <https://www.adb.org/site/integrity/main>

IMPLEMENTATION PROCEDURES

1. **Output 1: Critical agribusiness value chain infrastructure improved and made climate-resilient.** This output includes the following activities:

2. Activity 1.1: Rehabilitating small-scale irrigation infrastructure and rural roads to climate-resilient condition. This activity will (i) improve and upgrade tertiary canals from earth-lined to brick-lined or concrete structures (targeting 10,000 ha and 6,000 households with at least 15,000 women) to direct water to the farmer's field and reduce water losses, while ensuring that the improved structures are climate-resilient; (ii) rehabilitate at least 150 water retention ponds to provide supplemental irrigation during droughts (targeting 300 ha and 750 households); and (iii) improve and upgrade at least 45 km of earth-based farm access roads to climate-resilient gravel-based surfaces (benefitting 20,000 households with at least 50,000 women to improve supply of inputs to farms and market access, reduce post-harvest crop losses, and enhance safety). National Project Management Office (NPMO) will implement this activity under the guidance of the Department of Irrigation (DOI) as lead technical oversight agency.

3. During the processing stage of the project, a longlist of candidate investments was identified and a shortlist of priority subprojects were agreed upon by the provincial agriculture and forestry offices (PAFO), district agriculture and forestry offices (DAFO), and farming communities. Prioritization of subprojects from the longlist will be done by NPMO, taking into consideration the inputs of the provincial project implementation units (PPIU) and district project implementation units (DPIU) and after assessment of the requirements of the agriculture production groups (APG) and enterprises, to complement activities under the project. The prioritized list will be reviewed and endorsed by NPMO and submitted to the Project Technical Advisory Committee (PTAC) for approval. ADB will also provide no objection on the list. The PIC will commence work on feasibility studies, following an FS template in Appendix 6, of the priority packages. Detailed designs will be prepared by DOI. The bidding documents will be prepared by NPMO with the assistance of the PIC. The master bidding documents, based on the Harmonized Bidding Documents for the Procurement of Goods and Works of the Lao PDR, have been prepared.

4. Candidates for support under this activity will be evaluated against the following selection criteria:

- (i) The subproject must not be in the mandate for improvement under an existing ADB rural infrastructure project, e.g., Greater Mekong Subregion East-West Economic Corridor Agriculture Infrastructure Project;
- (ii) The proposed irrigation and road improvement work must be directly farm linked;
- (iii) The proposed irrigation work should focus, primarily, on tertiary canal upgrading from soil lined canals to concrete and/or brick lined structures; however, other civil works may be considered at the discretion of the executing agency and on justification from PAFOs; Introduction of appropriate bio-engineering approaches to the upgrade specification and detailing of roads and canals is to be encouraged, both from the climate change perspective, as well as specifically helping to maintain the traditional biodiversity of the canal systems;
- (iv) The proposed road works should focus on upgrading a minimum of 5 km road by the levelling and consolidation of soil based surfaces to gravel;
- (v) The proposed civil works must be appropriately designed to take into account adaptation to climate change variabilities such as improved drainage, particularly flooding (such as road drainage, concrete rather than earthen canals); and

- (vi) Land acquisition avoided to the extent possible and no physical resettlement or dislocation will be accepted.

5. Activity 1.2 Enhancing climate-conscious crop research, protection and quality testing infrastructure. This activity will improve and upgrade equipment and small-scale infrastructure in (i) 5 crop research centers in Khammouane, Saravan, Savannakhet, Champasak and Sekong provinces; (ii) 1 national diagnostic soil testing laboratory; (iii) 1 national plant protection laboratory; and (iv) 2 agricultural training college laboratories at provincial level to be fully operational to provide agribusiness services and strengthen forward and backward value chain linkages for at least 50 APGs. The lead technical agency are NAFRI for the research centers, DALAM for the soil testing laboratories, and DOA for plant diagnostics laboratories (including the upgrading of soil and plant testing laboratories in 2 agricultural colleges).

6. The Department of Agricultural Land Management's (DALAM) diagnostic soil testing laboratory and the Department of Agriculture's (DOA) plant protection laboratories will be upgraded to meet at least regional compliance standards for food safety and organic, including organic fertilizer certification. DALAM and DOA submitted detailed priority lists of equipment, infrastructure, and training and capacity building. While DALAM's diagnostic soil laboratory will be furnished with necessary equipment, DOA will receive broader support including upgrading of plant protection testing laboratory equipment, improved demonstration plots, and integrated pest management section.

7. PIC will conduct a needs analysis on the rice research centers, vegetable seed research centers, soil laboratories, and plant protection laboratories in the provinces of Khammouane, Saravan and Savannakhet, identify subprojects for prioritization, and develop an implementation plan. The prioritized list and implementation plan shall be submitted to NPMO for review, incorporation in the overall workplan, and endorsement to PTAC. Guidance may be sought from PCFC for any vague financial issues. Upon ADB's no objection on the list, NPMO shall notify the research centers and laboratories on their respective approved subproject for preparation of design, specifications and initial procurement documentation of the needed equipment, facility, supplies or small works. Procurement will be done by NPMO. PIC will assist NPMO on procurement where necessary, in accordance with ADB's policies on procurement. The following eligibility criteria for the research centers and laboratories in requesting for support under this investment activity are:

- (i) The subproject activity must not be in the mandate for improvement under an existing rural infrastructure project;
- (ii) Investments must be market/demand driven;
- (iii) Support must not duplicate that given under the ADB Smallholder Development Project (2002–2015); and
- (iv) Any proposed infrastructure and technology, supplied by the project, must be appropriately designed to consider adaptation to climate change variabilities.

8. Before works commence, the center or laboratory commit to O&M in a written agreement with the NPMO. The MAF has ultimate responsibility for O&M of communal infrastructure in this regard which will be reflected as a covenant in the grant agreement, and ensure budgetary provision.

9. Activity 1.3 Improving climate-friendly agribusiness enterprise value chain infrastructure. In this activity (i) infrastructure in at least 36 agribusinesses will be upgraded and greenhouse gas mitigation and adaptation measures will be integrated, and (ii) average recovery rate of milled rice

will be increased by 62%. Agribusiness enterprises (ABEs) include rice mills, vegetable collection centers and pack houses, and biofertilizer factories. This activity will be directly managed by the FME, with oversight from the PCFC.

10. **Rice Mills.** The project will upgrade infrastructure in at least 21 small and medium rice mills, being members of clusters formed into registered rice groups or cooperatives to, among others, (i) allow the separation of white and glutinous rice and avoid the production of mixed rice types and improve access to premium domestic and export markets; (ii) improve rice recovery rates; (iii) enhance mill capacity usage; (iv) provide services and support to rice APG paddy suppliers; and (v) comply with the requirements to achieve good manufacturing practices (GMP) and hazard critical control points (HACCP) certification. The target beneficiaries will have a production capacity between 4 to 16 paddy tons per day. The project will focus on supporting registered rice milling groups and cooperatives. The following specific selection and evaluation criteria are proposed for project support for rice mill enterprises:

(i) Rice mill enterprises - Eligibility criteria

- a) Proposed investment is eligible;
- b) Have a business license in line with the Enterprise Law;
- c) Be a member of a registered rice mill group, or cooperative and a majority Lao PDR owned legal entity;
- d) Be prepared to contribute to the investment cost (40%) in accordance with the matching grant scheme (MGS) policy, with at least 10% being provided with own equity;
- e) Commit to support the community (rice farmer APGs) and establish a production arrangement (input supply, credit, minimum guaranteed price, extension etc.) with the farmer's groups to operate efficiently and to operate within a planned business framework of the small-scale mill and medium scale rice mill within their registered rice mill group network – a MOU is to be provided in this respect;
- f) Medium mills to commit to enhance the production capacity of the small rice mill in their network by the transferring knowledge and know-how
- g) A commitment, in writing, to become resource efficient in terms of water savings and energy efficiencies;
- h) Have a climate smart agriculture (CSA) and green energy saving policy, or a commitment to produce one if not;
- i) Beneficiaries are responsible for O&M of the infrastructure provided under the project both during and post project, and before works commence they must commit to O&M; and
- j) Acceptable environmental and social safeguards.

(ii) Rice mill enterprises - Selection criteria

- a) The financial situation of the business is sound as proven by the last 3 years of audited accounts;
- b) A robust business plan. Will it produce the cash flows necessary to make the investment profitable, and allow adequate O&M to take place? Are sales forecasts realistic (and based on demand analysis)?
- c) A clear logical plan of how the investment will improve the recovery rate and quality of milled rice (quantified). Is the technology and infrastructure appropriate?

- d) A clear logical plan of how the investment will improve linkages with APGs (quantified to show how many APGs and farmers will benefit and how) through contract farming, etc. Evidence such as agreed MoUs will be beneficial, and evidence of access to networks that link the applicant to large numbers of target beneficiaries;
- e) Agreements, where appropriate, for medium mills to buy the paddy from the small rice mills in their network to balance demand supply gaps (only if it gives them a better return than their traditional market activity, e.g. toll paddy milling for rice farmers);
- f) Plans to support women farmers and mainstreaming and empowerment of women in the agribusiness value chain;
- g) Plans and equipment or infrastructure which promotes climate mitigation and adaptation, such as renewable energy, energy efficient technology, water conservation technology and climate proofing of infrastructure;
- h) Details of the company and management team experience (i.e. in the milling and selling of rice, education/training of managers), and plans to ensure that additional resources will be recruited to implement the investment if required;
- i) The investment cost. Are budget items competitive compared to market prices? Since this criterion will be scored, applicants will be incentivized to keep costs low otherwise they may not be selected. In addition, the FME team will benchmark costs against the market while a technical sector expert within the FME will check that the items requested are relevant for the business plan purpose;
- j) Payment milestones. As well as payment milestones based on achievement of the investment (e.g. equipment installed, training undertaken), are there payment milestones based on achievement of the business plan (e.g. % increase in rice recovery rates) and development outcomes (e.g. no. contracts with APGs, percent increase in sales to the enterprise from APGs, etc); and
- k) involve no involuntary land acquisition, resettlement, physical or economic dislocation.

11. Vegetable collection centers and pack houses. The project will support registered APGs/agriculture cooperatives to upgrade at least 10 pack houses for vegetable collection and marketing clusters to, among others, (i) reduce post-harvest losses; (ii) improve quality and quantity of high value vegetables marketed to premium domestic and export markets; (iii) provide services to their members; and, (iv) comply with the requirements of good agriculture practice (GAP) and organic agriculture certification. The following specific selection and evaluation criteria is proposed for project support for vegetable collection centers and pack houses:

- (i) Vegetable APGs - Eligibility criteria
 - a) Proposed investment is eligible
 - b) Be registered with the PAFO as a farmers group or agricultural cooperative having met the requirements of the MAF Ministerial Decree of 25 September 2014¹⁵ regarding agricultural producers' groups;

¹⁵ APGs: (http://swgard.maf.gov.la/download/other_important_resource_and_documents/MAF%20Agreement%20on%20Establishment%20and%20Management%20of%20Agriculture%20Production%20..pdf)

- c) APG members shall be primarily involved in the cultivation of vegetables;
- d) Be prepared to contribute to the investment cost (40%) in accordance with MGS policy, with at least 10% being provided with own equity;
- e) Beneficiaries are responsible for O&M of the infrastructure provided under the project both during and post project, and before works commence they must commit to O&M; and
- f) Acceptable environmental and social safeguards.

(ii) Vegetable APGs - Selection criteria

- a) The financial situation of the APG is sound as proven by the last 3 years of audited accounts or financial records;
- b) A robust business plan. Will it produce the cash flows necessary to make the investment profitable, and allow adequate O&M to take place? Are sales forecasts realistic (and based on demand analysis)?
- c) A clear logical plan of how the investment will improve the marketability of produce, including linkages to traders, wholesalers, and agriprocessors. Is the technology and infrastructure appropriate?
- d) A clear logical plan of how the investment will support farmers (quantified to show how many farmers will benefit and how – e.g. will the APG support farmers in terms of access to inputs, etc.);
- e) Plans to support women farmers and mainstreaming and empowerment of women in the agribusiness value chain;
- f) Strength of commitment to become resource efficient in terms of water savings and energy efficiencies;
- g) Plans and equipment or infrastructure which promotes climate mitigation and adaptation, such as renewable energy, energy efficient technology, water conservation technology and climate proofing of infrastructure;
- h) Details of the APG and management team experience (i.e. in the production and marketing of vegetables; education/training of managers), and plans to ensure that additional resources will be recruited to implement the investment if required;
- i) The investment cost. Are budget items competitive compared to market prices? Since this criterion will be scored, applicants will be incentivized to keep costs low otherwise they may not be selected. In addition, the FME team will benchmark costs against the market while a technical sector expert within the FME will check that the items requested are relevant for the business plan purpose;
- j) Payment milestones. Are payment milestones based on achievement of the investment?
- l) Are budget items competitive compared to market prices?
- m) Payment milestones. Are payment milestones based on achievement of development outcomes as well as linked to the investment e.g. are payment milestones linked to contracts with agribusinesses, no. of farmers utilizing infrastructure, etc.; and
- n) Payment milestones. As well as payment milestones based on achievement of the investment (e.g. equipment or infrastructure installed), are there payment milestones based on achievement of the business plan (e.g. % reduction in post-harvest losses) and development outcomes (e.g. increase in sales by farmers); and

- o) involve no involuntary resettlement or land acquisition, physical or economic dislocation.

12. **Biofertilizer factories.** The project will upgrade at least five registered biofertilizer factories to (i) increase organic fertilizer production and operational efficiency; (ii) promote the use of organic fertilizers to organic crop farmers; (iii) provide services and support to APG buyers; and (iv) comply with the requirements to achieve GMP certification. The following specific selection and evaluation criteria is proposed for project support under this subproject for biofertilizer factories:

(i) Biofertilizer factories - Eligibility criteria

- a) Proposed investment is eligible;
- b) Have a business license in line with the Enterprise Law;
- c) Be a majority Lao-owned company;
- d) Be prepared to contribute to the investment cost (40%) in accordance with MGS policy, with at least 10% being provided with own equity;
- e) A commitment, in writing, to become resource efficient in terms of water savings and energy efficiencies;
- f) Have a climate smart agriculture (CSA) and green energy saving policy, or a commitment to produce one if not;
- g) Beneficiaries are responsible for O&M of the infrastructure provided under the project both during and post project, and before works commence they must commit to O&M; and
- h) Acceptable environmental and social safeguards.

(ii) Biofertilizer factories - Selection criteria

- a) Medium scale organic fertilizer companies with the current production capacity between 1,500 to 2,000 tons per annum;
- b) The financial situation of the company is sound as proven by the last 3 years of audited accounts;
- c) A robust business plan. Will it produce the cash flows necessary to make the investment profitable, and allow adequate O&M to take place? Are sales forecasts realistic (and based on demand analysis for biofertilizers and supply analysis for feedstock)?
- d) Evidence of ability to source feedstock. E.g. a concession/exploitation agreement with authority concerned (the village authority, etc.);
- e) A clear logical plan of how the investment will improve the quality and output of biofertilizers produced. Is the technology and infrastructure appropriate?
- f) A clear logical plan of how the investment will improve linkages with organic APGs – what are the routes to scale (quantified to show how many APGs and farmers will benefit and how e.g. will embedded services such as training on biofertilizer application be provided, or training for feedstock suppliers?). Evidence such as agreed MoUs will be beneficial, and evidence of access to networks that link the applicant to large numbers of target beneficiaries;
- g) Plans to support women farmers and mainstreaming and empowerment of women in the agribusiness value chain;

- h) Plans and equipment or infrastructure which promotes climate mitigation and adaptation, such as renewable energy, energy efficient technology, water conservation technology and climate proofing of infrastructure;
- i) Details of the company and management team experience (i.e. in the production and marketing of biofertilizers, education/training of managers), and plans to ensure that additional resources will be recruited to implement the investment if required;
- j) The investment cost. Are budget items competitive compared to market prices? Since this criterion will be scored, applicants will be incentivized to keep costs low otherwise they may not be selected. In addition, the FME team will benchmark costs against the market while a technical sector expert within the FME will check that the items requested are relevant for the business plan purpose; and
- k) Payment milestones. As well as payment milestones based on achievement of the investment (e.g. equipment installed, training undertaken), are there payment milestones based on achievement of the business plan (e.g. % increase in biofertilizer production) and development outcomes (e.g. increase in usage of biofertilizer by client farmers or even increase in sales of organic produce by client farmers).
- l) involve no involuntary resettlement or land acquisition, physical or economic dislocation.

13. **Matching Grant Scheme.**¹⁶ Financial support will be provided to qualified agribusinesses through a matching grant scheme (MGS) with beneficiaries contributions in cash. The operational guidelines for MGS were developed in cooperation with the World Bank, which is implementing a similar MGS in other provinces. The MGS will be handled by the financial management entity (FME) consultants under MAF-ADB approved operating guidelines.

14. The co-investment requirement can be variable depending on the level of risk and readiness for co-investment currently established at 60:40, subject to PCFC and ADB approval. The MGS will support agribusinesses in targeted sub-sectors (rice, vegetables and bio-fertilizers) to encourage private investment and also to increase their overall competitiveness. The MGS will provide a grant to cover up to 50 percent of investment cost in post-harvest facilities, including cleaning, drying, storage, and processing. The recipient agribusinesses are to provide the remaining 40 percent of investment from a combination of equity and commercial loans. They should also provide a market plan with a sound market analysis, and provide evidence of agreements with business partners and APGs. To ensure independency, the selection process will be administered by the FME, which will also assist the shortlisted agribusinesses to apply for commercial loans.

15. MOF and MAF confirmed that such support to the private sector is in line with the government's objectives on agricultural commercialization and trade facilitation. However, MOF and MOIC cautioned that the matching grants should not undermine the development of other financial institutions and should not distort the credit market.

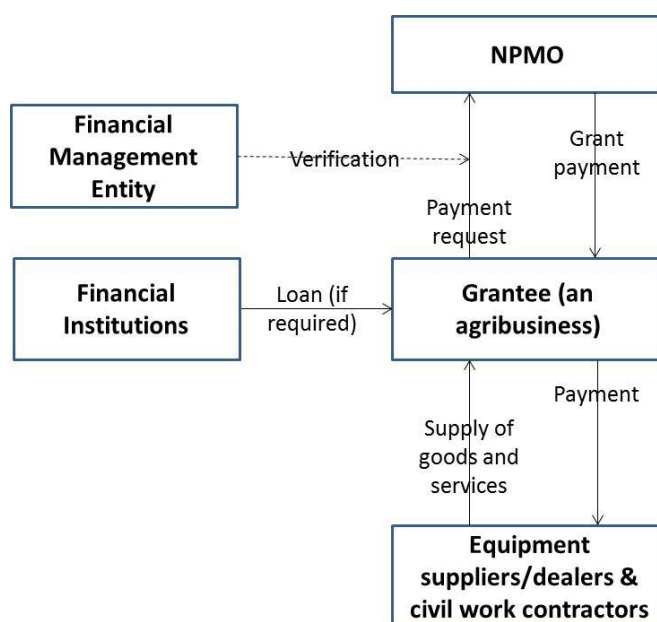
16. Subject to any agreed changes to the operations manual during an initial review by the FME upon start-up, the steps in the MGS process are as shown in the figure below.

¹⁶ Details of the Matching Grant Scheme and its operational guidelines, including the establishment and implementation of smallholder financing scheme (SFS) under activity 2.3, are available in a supplementary document.

Figure 1: Steps in the MGS Process

Steps/Responsibility	Days	Excluded from the process
1. FME: Marketing of the MGS and initial training		
2. FME: Launch round (request for concept notes)	Day 0	
3. FME: Concept Note workshops (if required)		
4. Applicants: Submit concepts	Day 30	
5. FME: Evaluation of CNs (<i>Eval and Selection criteria</i>)		
Eligibility Review	-----	Ineligible
Strategic review	-----	Inconsistent with MGS objectiv
Due diligence	-----	Fails review
Technical expert review	-----	Weak
Env, social and gender screening	-----	Fails screening
Draft shortlist	Day 60	
6. PCFC: Assessment and approval	-----	Reputational risk
Final shortlist		
7. FME: Invite full applications (business plans)	Day 75	
9. FME&BDS: Support to business plan preparation		
9. Applicants: Submit applications	Day 135	
10. FME: Evaluation of applications (<i>Selection criteria</i>)		
Development and commercial review	-----	Unconvincing business model
Due diligence review	-----	Fail reference checks
Technical expert review	-----	Weak
Env, social and gender screening	-----	Fails screening
Grant offer	-----	Negotiations fail
11. FME: Funding recommendation	Day 165	
12. PCFC: Assessment and approval (with conditionalities)	-----	Non-authorised GIAs
13. ADB no-objection	Day 180	Rejected
14. NPMO signs GIAs	Day 190	
15. Implementation		
Grantee: Procurement, implementation...		
FME: Support, monitoring and reporting	-----	GIA cancelled if violate terms
FME: Verification of milestones		
NPMO: Disbursements to grantee		Cancelled
(advance conditional)		(if pre-conditions not met)

17. Grant disbursement will be made directly from the NPMO to grantees, with the FME providing a verification function. A fund flow summary is provided in Figure 2 below.

Figure 2: MGS fund flow arrangements

18. Details of the scheme, including selection criteria, are in Supplementary Document 16. ABEs will also benefit from training and capacity building in CSA, financial management and operational logistics, to be provided by the FME.

19. **Output 2: Climate smart agriculture and agribusiness promoted.** This output includes the following activities:

20. Activity 2.1: Deploying climate-resilient rice and vegetable varieties. Yields of both rice and vegetable varieties grown in the target provinces are adversely impacted by climate change. Under this activity, the project will support the National Agricultural and Forestry Research Institute (NAFRI) to develop, trial and release climate-resilient rice and vegetable varieties.¹⁷ An agreement with the International Rice Research Institute (IRRI) will be initiated to develop new rice varieties and improve land management and crop establishment, which are resource use (labor, water, energy) efficient, with reduced risk and drudgery, able to generate avenues for employment and economically attractive to youth and women. The varietal characteristics will include tolerance to higher temperatures, drought, prolonged submergence as well as varieties with shorter cropping cycles. Support will be provided to NAFRI to develop a commercialization program with recommendations on the legal framework to develop intellectual property rights and partial cost recovery for the institution. The lead technical oversight agency for this activity is NAFRI.

¹⁷ The National Agricultural and Forestry Research Institute (NAFRI) is the government research agency responsible for increasing agricultural productivity, improving crop diversification and ensuring environmental sustainability and stability of rural livelihoods through agricultural research and technology utilization.

21. The project implementation consultants will provide coordination support in the preparation of the terms of the agreement with International Rice Research Institute (IRRI).¹⁸ On the introduction and distribution of the rice varieties, the following should be kept in mind when preparing the agreement, as a wide range of climate adaptation practices has been evaluated on farm. These included the testing of (i) precision land leveling, (ii) improved wet season rice varieties (drought, submergence tolerance and short-duration varieties), (iii) drum and direct seeding of wet season rice, (iv) double cropping of short duration wet season rice crops improved agronomy, including nitrogen management and weed control, (v) improved planting rules for rain fed crops, and (vi) supplementary wet season irrigation from stored water. Most of these practices appear to perform as well or better than current farmer practices and seem to offer technically feasible opportunities for adaptation, as well as providing immediate benefits under current climate conditions. The general trends exhibited by modelling of the adaptation practices are that the 2030 climates in many cases do not suggest a major decline in yields.

22. Activity 2.2: Strengthening capacity in climate smart and organic agriculture. The project will strengthen technical capacity of MAF staff, including PAFO and DAFO staff, farmers and farmers' groups (20,000 farmers of which at least 40% are women and 2,000 are ethnic group members), water user groups, APG committee members, agribusinesses, and other value chain actors on CSA, organic farming and agribusiness. Women led/owned agribusinesses will be identified during the 6-month awareness raising program on matching grants scheme. To the extent possible, regional and international institutions such as IRRI and International Water Management Institute will be engaged to assist in capacity building. The Department of Technical Extension and Agricultural Processing shall be the lead technical oversight agency.

23. An initial capacity-building master plan is to be developed by the start-up consultants, and reviewed and finalized by PIC in close consultation with NPMO, PTAC and PCFC to ensure training needs are identified and assessed carefully. The master plan may include the following:

- (i) **Training of Trainers (TOT) courses.** The courses indicated below may be merged and form part of an overall TOT curriculum and are not exhaustive. It is recommended that the Food and Agricultural Organization of the United Nations publication, *Climate Smart Agriculture Sourcebook*,¹⁹ is used as a guideline when preparing TOT courses, including the following: controlled environmental agricultural technology (CEAT) including hydroponics, good agricultural practices (GAP), integrated pest management practices, farm mechanization, organic farming, land preparation and sustainable land management techniques, on farm micro irrigation techniques and innovation, post harvesting and handling, value addition and marketing, climate change adaptation and mitigation measures, and environmental and gender issues in farming.
- (ii) **Farmer training courses.** Based on the advice of district project implementation units (DPIUs), selected farmers will be trained in CSA through district level training courses. The courses, the content of which will be based on the subjects indicated above, will be delivered by Department of Technical Extension and Agricultural Processing

¹⁸ Note that it is recommended that IRRI is contracted under single source selection, since it is the leading international agency responsible for rice variety research. In addition, over the past decade IRRI has had a close involvement in the Lao PDR rice sub sector. For example (i) in collaboration with the World Bank, IRRI prepared the "Lao People's Democratic Republic Rice Policy Study, 2012" (<file:///C:/Users/User/Documents/LAOS/REFERENCE%20DOCUMENTS/WB%20FAO%20LAOS%20RICE%20POLICY%202012REV.pdf>); and (ii) in collaboration with ACIAR, IRRI prepared the "Rice in Lao Study, 2006" (<http://www.worldcat.org/title/rice-in-laos/oclc/99996465>).

¹⁹ Food and Agriculture Organization (FAO) of the United Nations. 2013. *Climate Smart Agriculture Sourcebook*. Rome. (available at www.fao.org/docrep/018/i3325e/i3325e.pdf).

- (DTEAP) staff who have completed TOT courses and appointed by the National Project Management Office (NPMO), and organized by PIC. The indicated average duration of each course is five days, including one-day practical field work. The courses will be arranged with intermittent sessions over a maximum of five weeks. Each training session should be organized with a maximum of 25 participants, with duration of at least one full day per session.
- (iii) **Farm demonstration plots.** Field demonstrations on farm mechanization, micro irrigation and water conservation, climate-resilient varieties, and CEAT techniques will be undertaken using a roadside demonstration plot provided by a volunteer lead farmer selected by the PPIU/DPIU under overall advice from the DTEAP. The project will nominate lead farmers responsible for the demonstration plots. The project will provide the lead farmer with a stock of farm equipment including micro irrigation, mechanized and other farm tools and implements, CEAT such as shade houses, net houses, green houses, and an annual supply of agricultural inputs including seeds and planting materials, fertilizers, herbicides and pesticides. It is proposed that the project pays the lead farmer a nominal fee to compensate for the use of his/her land, and time, for demonstration purposes.
 - (iv) **Farmer field days.** Regular field days will be organized at critical times, such as planting or harvest, for small groups of a maximum of 10, linked to the demonstration plots described above.
 - (v) **Farmer study tours.** Farmers wishing to learn from examples of growing or improving crop production, using innovative technology, will be eligible for participation in regional tours of one-week duration, in groups of 10 maximum, to suitable locations in the region, particularly Cambodia, Southern China, Thailand, and Viet Nam.
 - (vi) **Workshops.** A minimum of three workshops will be organized, at central level, to discuss developments in innovative farm technology including research and development studies, experiences of individual farmers, and solutions to problems. Three provincial level workshops will also be held during the lifetime of the project.
 - (vii) **Farmer group training.** Training will be provided to APGs and water user groups in group formation, management, administration, accounts, logistics, marketing, certification and networking. A main objective is to encourage several APGs, say in a district, to evolve into agricultural cooperatives.
 - (viii) **Gender sensitization.** The safeguards, gender and social development specialist will provide training for government officials, workshops and provincial/district gender focal points, facilitated by the NPMO safeguards officer.

24. The masterplan should include all information dissemination and promotion seminars, trainings under this activity and other safeguards, gender, project financial management, and procurement sessions, taking into consideration the timing, human resources, target participants, agricultural calendar and budget. The plan shall be updated and revised, as necessary. The plan should also provide for post-training evaluation mechanisms and should be in sync with the annual workplans. Detailed budget estimate should be prepared and approved by NPMO prior to implementation of each training/workshop/seminar at least one month prior to ensure fund availability. The financial training program (FTP) targeting the farmers, APGs, research center staff, laboratory staff, private enterprises, and financial institution personnel should be developed by the FME. The FTP will include the curricula, materials, resource persons, budget estimates, and timing, and should be incorporated in the capacity-building master plan. The FME will implement the FTP.

25. Activity 2.3: Promoting smallholder financing scheme for climate-friendly agriculture. Under this activity, the project will provide financial and technical support to APGs entering into

profitable agribusiness ventures through the establishment and operation of smallholder financing scheme (SFS). Further details are in the matching grant operations manual as a supplementary document. Small investments in farm-based CSA technology, mechanization and infrastructure may be funded through the SFS on a group guarantee basis, subject to the guidelines on SFS. A key activity under this activity will be the promotion and support to the formation of agricultural cooperatives for those interested APGs who meet the requirements of regulations under the ministerial agreement dated 25 September 2014.²⁰ The SFS will be directly managed by the FME, with oversight from the PCFC.

26. APG members will be supported to gain access and apply knowledge of on farm climate smart and organic agricultural practices and technologies. The aim is to improve yields, quality, productivity, profitability, reduce post-harvest losses, and foster crop diversification and organic farming. Financial and technical support will be given, among others, in the following areas: (i) land clearance and leveling equipment such as tractors, laser precision land levelers, and ploughing equipment; (ii) planting equipment such as seed drills; (iii) small-scale on-farm irrigation such as ponds, drip and sprinkler systems; (iv) water storage and conservation facilities; (v) CEAT such as plastic sheets, shade/net houses, and greenhouses; and (vi) equipment for the application of agricultural inputs such as high quality seeds and planting material, bio-fertilizer, pesticides, herbicides and agricultural tools and implements.

27. Interested lead farmers will be selected to partner with the project in promotion of crop diversification and organic farming. In this context, any infrastructure and mechanized technology needed to establish and operate demonstration plots will be supported financially. Lead farmers will be incentivized through priority participation in trainings, study tours and field visits. Emphasis will be on promoting techniques to cope with impacts of climate change and reduce greenhouse gas emissions in both rice and vegetable farming systems. Practices such as (i) greater crop diversification and optimum crop rotation; (ii) the timing of field operations based on better knowledge of climate changes; (iii) the improvement of soil quality and the judicious use of organic fertilizers; (iv) zero tillage to reduce carbon emissions; and (v) farm-based production and use of renewable energy.

28. The project will also support APGs through promotion of joint activities in combined harvesting, and post-harvest crop handling to promote improved market access, prices, contract farming and value addition through small-scale agro processing, packaging and branding. The project design team, together with PAFOs and DAFOs, noted the need for provision of mechanized services to individual farmers. The services include the following: (i) land leveling, seed planting, use of combined harvesters; (ii) small-scale post-harvest handling infrastructure such as collection sheds, washing and drying, grading and sorting, packaging, storage including cold stores, and transport including refrigerated trucks; (iii) joint CEAT, e.g. greenhouses, hydroponics, plastic coverings, etc.; (iv) small scale organic fertilizer production; and (v) small scale agro processing, such as rice chips, pancakes, juices, and dried vegetables. Examples of APG joint agribusiness activity are illustrated in the following tables:

²⁰ Government of Lao PDR, MAF. 2014. *Ministerial Agreement No. 2983*. Vientiane.

Table A1.1: Indicative joint agribusiness activities of Agricultural Production Groups in Nombok District, Khammouane Province

Small scale biofertilizer production	Kootchar village
Small scale rice chip production in Thakek	Nabo village +3 villages
Joint provision of mechanization services to individual farmers	Danpakse, Nonglom, Dongphangphao, Phonsao-Ae Tantherng, Khokkong, Nongsaphanhthong, Nonglee, Sadue and Khoksavang villages

Source: PPTA survey, October 2016.

Table A1.2: Indicative Joint Agribusiness Activities of Agricultural Production Groups in Xaybouli District, Savannakhet Province

Biofertilizer production	Somsa-at village (Official)
Commercial rice production (also, provide mechanization services to other farmers)	Tonhean village Beungxe village Kang village Dangsavanh village Hatkhamdy village +5 villages

Source: PPTA survey, October 2016.

Table A1.3: Indicative joint agribusiness activities Agricultural Production Groups in Saravan, Vapi, Lakhonepheng, and Khongxedon Districts, Saravan Province

Type of farmer	Farmer group
Rice seed production (also, provide services to other farmers)	Khamthong village (Official), Donmuang village (Official) Nongkhulu village (Official), Tanpiew village (Official) Nongsai village (Official) Natium village (Official) Phao village (Official) Beungxay village (Official), Muang village (Official) Paksuak village (Official)

Source: PPTA survey, October 2016.

29. The SFS will provide support to agricultural production groups (APGs). There will be no scored selection criteria for APG applicants for the SFS. Applications (plus budget items within applications) will either be eligible or not eligible. Eligibility criteria include:

- (i) proposed use of funds is eligible and amount requested is not more than the equivalent of US\$1,000 for each member. The APG shall provide a comprehensive list of activities to be supported by the SFS, including an explanation of how the investment will help farmers to undertake CSA, grow higher quality crops and add-value, or cope with the impacts of climate change and reduce greenhouse gas emissions.
- (ii) The type and value of individual budget items will be listed. The FME team will benchmark costs against the market while a technical sector expert within the FME will check that the items requested are relevant for the business plan purpose and are viable e.g. will there be sufficient utilization of equipment (either within the sub-group, APG or outside the APG to make investment viable);

- (iii) be registered with the PAFO as a farmers group or agricultural cooperative having met the requirements of the MAF Ministerial Decree of 25 September 2014 regarding agricultural producers' groups;
- (iv) the APG should have, or be willing to open, a bank account with a registered FI with joint signatories;²¹
- (v) be prepared to contribute to the investment cost (10%) in accordance with MGS policy;
- (vi) APG members shall be primarily be involved in the cultivation of vegetables and/or rice;
- (vii) proven links with agribusinesses;
- (viii) confirmation that the SFS shall be available to all members of the APG;
- (ix) APG members shall have participated in the capacity building and knowledge transfer training on CSA and green finance options including crop insurance and public private community partnerships (PPCP), and in particular on group formation and strengthening, provided by the project under outputs 2 and 3;
- (x) confirmation to abide by the terms of the SFS (e.g. to propose loan repayment terms for sub-groups of farmers who lend from the scheme).

30. Subject to any agreed changes to the operations manual during an initial review by the FME upon startup, the steps in the SFS process are as shown in the figure below.

²¹ Few APGs in Lao PDR have bank accounts at this stage, although as they are registered with PAFOs, this should be possible.

Figure 3: Steps in the SFS Process

Steps/Responsibility				Excluded from the process			
1. FME: Marketing of the SRS and initial training							
↓							
2. FME: Training to APGs on group development							
↓							
3. FME: Launch round (request for applications)							
↓							
4. FME/PAFO/DAFO: Support to preparation of application							
↓							
5. Applicants: Submit applications							
↓							
6. Evaluation of applications							
Eligibility Review				-----Ineligible			
Due diligence				-----Fails review			
↓							
7. FME: Funding Recommendation							
↓							
8. PCFC Assessment and approval				-----Every quarter-----Reputational risk			
↓							
9. PPIO signs GIA							
↓							
10. Implementation and monitoring							
Grantee: Procurement, implementation...							
FME/PAFO/DAFO: Support, monitoring and reporting							
PPIUs: Disbursements to grantee				-----Cancelled			
(after evidence of contribution)				(if no evidence)			

31. Grant disbursement will be made directly from the NPMO to grantees, with the FME providing a verification function.

32. Grant disbursement will be made in one lumpsum advance by the PPIU to the APG's bank account, according to the amount in the grant agreement. It will then become the APG's own assets and can be used as a fund for investments as outlined in the application. Before disbursement is made, evidence of the 10% seed fund deposit in the APG bank account will be required.

33. Depending on the approved application (as outlined in the grant implementation agreements) the APG will then use the fund for either (a) purchase of items to be owned by the group as a whole, but for use by members of the group (depending on the type of investment use may either be for free or on a fee basis – e.g. renting of equipment); or (b) on-lending to sub-groups of farmers who will then borrow the funds as a loan from the APG fund (for activities as outlined in the application), following signature of a loan agreement, and will collectively then have to repay the loan back to the APG at an interest rate and at terms as set out by the APG (which should be proposed as part of the grant application, and which should be no less than 5% per annum). The fund then becomes a revolving fund to be used by the APG in perpetuity, to be reused for other sub-groups or the group as a whole. Loan agreements will be guaranteed, by legal document, by each member of each sub-group, witnessed by the chairman of the APG. If

one member of a sub-group cannot provide his/her loan repayment amount, the others must cover this. Nonpayment of loans (within a specific period as set-out by the APG) will result in the debtor sub-group being debarred from applying for and receiving further loans from the fund (and potentially for utilizing group level assets – to be decided by the APG board).

34. It should be noted that it is the APG or farmer sub-group's responsibility to purchase the equipment or supplies for its activities. This will not be a project responsibility.

35. Since no collateral is required upfront, disbursement of 100% of the grant poses a risk in case of misuse of funds. To mitigate this risk the PPIUs or DPIUs (with PAFO and DAFO staff) will monitor use of the fund (disbursements and repayments to the fund) as outlined in the GIA, and provide ongoing support (training, etc). They will be trained to do this by the Agricultural Production Group Development Specialist (part of the FME). While it is recognised that some investments may not have the desired outcome and that farmers may not be able to pay back loans, such events will not be penalized but regarded as lessons learned. However, if there is any misuse of funds (e.g. not used for the intended purpose as set out in the application) then APGs will be penalised – they will be blacklisted by PAFOs (and PAFOs) for the receipt of future donor or government support, and their registration as a group may be cancelled. Legal recourse to get the grant money repaid will also be an option.

36. To assist the PPIUs and DPIUs in their monitoring function, the grantee will be required to prepare brief quarterly progress reports (to be submitted to the DPIU). Training can be provided by the PPIUs and DPIUs on how to do this, while this will also be part of the training as mentioned above. Such reports will feed into the FME PPMS.

37. **Output 3: Enabling environment for climate-friendly agribusiness enhanced.** This activity will focus on support for formulation of climate-friendly agribusiness policies and standards and enabling environment for green finance.²² Key activities include:

38. Activity 3.1 Formulating climate-friendly agribusiness policies and standards. In Lao PDR, both MAF and MOIC do not have a climate-friendly policy for agribusiness. Any agribusiness policy must provide stability in the sector to encourage private investment, which includes green investment, and will consider both mitigation and adaptation opportunities and socially appropriate best practices. The policy formulation will involve (i) identification of measures to remove barriers for private sector investment in agribusiness and related activities; (ii) identification of investment strategies for the public sector to enhance CSA; (iii) promotion of the development of climate-friendly infrastructure so that Lao PDR's agribusinesses have a comparative and competitive advantage with their regional rivals; and (iv) creation of institutional and legal frameworks conducive to supporting and assisting CSA, particularly with respect to regulations, taxes, business registration and the streamlining of licenses required and the multiplicity of government institutions involved in the sector.

²² Green finance can be defined as financing of investments that provide environmental benefits in the broader context of environmentally sustainable development. These environmental benefits include, for example, reductions in air, water and land pollution, reductions in greenhouse gas (GHG) emissions, improved energy efficiency while utilizing existing natural resources, as well as mitigation of and adaptation to climate change and their co-benefits. Green finance involves efforts to internalize environmental externalities and adjust risk perceptions in order to boost environmental friendly investments and reduce environmentally harmful ones. Green finance covers a wide range of financial institutions and asset classes, and includes both public and private finance. Green finance involves the effective management of environmental risks across the financial system (Source: UNEP, September 2015).

39. The project will identify reforms required with the overall objective of easing the freedom to do business and to improve efficiencies in logistics and administration. Integrating climate change concerns into agribusiness policy at national level is critical to developing a strong and dynamic market-driven private agribusiness sector and a long-term agribusiness strategy with a climate-friendly vision. Activities also entail working with MAF, MOIC and MONRE for mainstreaming climate change in policies, particularly to conduct studies identifying priority agricultural products with processing potential and prepare a comprehensive strategic action plan based on value chains. The study and the resulting strategic action plan will be submitted to MAF.

40. Currently, the International Standards Organization (ISO) is developing/enhancing ISO 14080 towards climate neutrality in different operations and ISO 26000 to consider climate change adaptation. The project will support developing climate-conscious standards for agribusiness operations aimed at climate neutrality and effective adaptation. The activities may be broadly divided into two categories: (i) for standards that have been drafted already, a technical review followed by public consultation is needed to determine impact for the eventual endorsement by the government, in order that the standard can be a national standard with the Lao PDR Standard mark; and (ii) for the standards that are yet to be drafted, working groups will need to be formed to develop the first draft, followed by technical committees for the review of the drafts, followed by public consultation with the eventual endorsement by the government.

41. For climate-conscious standards, most of the project activity may fall into category (ii); for example, standards for climate-resilient post-harvest infrastructure facilities (e.g., storage, milling, processing) will need to be developed to guide the development of future infrastructure. The project will support activities related to certification and compliance that concerns climate change issues and human health and welfare in line with corporate social responsibility guidelines. It includes support to GAP for vegetables to develop a LAO GAP standard, and organic production standards for both rice and vegetables. The project will support the working groups in specialized subjects including GAP, GMP, HACCP and organic certification. The project will support a human resource development program for government staff to build capacity in policy and standards development and elaboration, and link with the work on regulatory impact assessment, already supported by ADB.²³ The project will also provide liaison support to ensure harmonized actions with the Sanitary and Phytosanitary (SPS) project.

42. Recent assessments of the facilitation of safe trade in Lao PDR in respect of analytic and diagnostic capacity are still insufficient to conduct basic functions as demonstrated by the plant protection center, the animal health laboratory, and the Food and Drug Control Center. No laboratory has ISO 17025 accreditation. Capacity for chemical analysis of food and agrochemicals must still be developed. Lack of staff and operational funding is a key constraint for the operation of laboratories and development of testing and analytical skills.²⁴ The project will commission an in-depth study to assess and analyze the country's requirements laboratory testing and certification requirements to meet regional and international food safety requirements, together with organic food certification requirements for export, under the mandate of the Standards Division of the DOA. The study shall also identify the steps and facilitate getting certification.

43. Land and access to land for agribusinesses is a major contemporary issue in Lao PDR. Furthermore, land titles and the security of tenure for farmers is imperative in fostering agricultural

²³ CREST Project – Regulatory Impact Assessment Subproject No. 38421-023.

²⁴ K. van der Meer and S. Rasphone. 2014. *Implementing SPS measures to facilitate safe trade in Lao PDR – Study conducted for Standards and Trade Development Facility (STDF)*. Geneva. (available at http://www.standardsfacility.org/sites/default/files/Implementing_SPS_Measures_to_Facilitate_Safe_Trade_LaoPDR_Jun-2014.pdf).

development and making the move from subsistence farming to commercial agriculture. The Law on Lands determines the principles of land ownership, management, registration and certification, and the right of land use, and details the structure for land management in Lao PDR. Article 8 establishes the National Land Management Authority, assigns to it the duties of coordination with sector ministries (Article 9) and spells out in greater detail its general rights and duties in Article 10.²⁵ Land categories are defined in Article 11 of the land law and individual sector ministries are given responsibility for the management and issuance of regulations on the management, protection, development and use of those categories of land.²⁶ Expected results from delivering this activity to be closely coordinated with MONRE, will include (i) an in-depth study on agricultural land registration and titling issues affecting the agribusiness sector, taking into account recent work on this subject by donors and identifying gaps;²⁷ and (ii) a pilot project introducing a land registration and titling model for rice and vegetable farmers in a selected project district.

44. The policy studies and pilot modelling activities may be implemented by engaging short-term experts through the PIC. The detailed terms of reference, budget estimate and study and/or modelling objectives shall be prepared by the PIC, subject to the review and approval of NPMO and the corresponding technical oversight agency. PTAC, PCFC, and/or PSC may also be consulted to address technical and financial issues. Studies, reports, roadmaps and/or strategic action plans shall be submitted to the concerned technical oversight department for no objection, then to PTAC, PCFC and/or PSC if needed, for review and endorsement. In all cases, a Lao-translated version of the final documents will be produced.

45. Experts on trade standards and certifications will be engaged on a short-term basis by the PIC to identify gaps and intervention requirement to help the enterprises secure export-standard certifications.

46. Activity 3.2 Promoting green finance and climate risk sharing mechanisms. The project will support creation of PPCPs in agribusiness by identifying incentives for private sector participation, enhancing ABEs' access to finance, reducing risk aversion of commercial banks to financing the agribusiness sector; and reducing climate change risk to crop production through promoting crop insurance.

47. To achieve the PPCP objectives, the project will support dialog between public and private sector stakeholders at the national level through inter-ministerial cooperation and

²⁵ In general these are of a policy development, legislative drafting, and coordination function.

²⁶ As follows: to Ministry of Agriculture and Forestry for agricultural, forestry, and water area lands (Articles 16, 20 and 24 respectively); to Ministry of Industry and Handicraft for industrial land (Article 28); to Ministry of Communication, Transport, Post and Construction for managing communication land (Article 31); to Ministry of Information and Culture for managing cultural land (Article 34); to Ministry of National Defense and Ministry of Public Security for the management of national defense and security land (Article 36); and to NLMA for the management of construction land (Article 39). These lands are also described in the legislation to clarify what land is covered under the management responsibility (Article 15 agricultural land, Article 19 forestry land, Article 23 water area land, Article 27 industrial land, Article 30 communication land, Article 33 cultural land, Article 35 defense and security land, and Article 38 construction land).

²⁷ For example, State Land Leases and Concessions in Lao PDR - Land Policy Study No. 4 under LLTP II, Gunda Schumann, Pheuiphanh Ngaosrivathana, Bouakham Soulivanh, Somboun Kenpraseuth, Khamdeng Onmanivong, Khamthanh Vongphansipraseuth, Chithasone Bounkhong Lao-German Land Policy Development Project (German Contribution to the Lao Land Titling Project II in Lao PDR) (2006); 'Study on Land Conflicts and Conflict Resolution in Lao PDR'; Sponsored by: Lao-German Land Policy Development Project (German Contribution to the Lao Land Titling Project II in Lao PDR) Land Policy Study No. 9 under LLTP II, Mr. Noupphanh Mahaphonh Dr. Pheuiphanh Ngaosrivathana, Mrs. Meena Phimpachanh, Mr. Sysaweui Chittasupha, Mr. Serntai Pasay, Mr. Peter Jones (2007), Study on Expropriation and Compensation in Lao PDR Sponsored by Lao-German Land Policy Development Project (German Contribution to the Lao Land Titling Project II in Lao PDR) Land Policy Study No. 11 under LLTP II (2007).

discussion and promotion of the establishment of crop centric forums for each value chain (rice and vegetables). For key players within the scope of PPCP initiatives, two regional study tours will be supported with a maximum of 25 stakeholders to acquire a better knowledge of how a new green technology works, what is available, what market opportunities there may be for particular agricultural products, and the benchmarking of potential Lao PDR PPCP initiatives with those taking place in the region.

48. PPCP projects should have the following features: (i) Eligible PPCP partners should be legal entities that have the capacity to engage successfully with small-scale farmers through their APGs and agro processors through their rice milling groups and vegetable packhouse operating groups, to increase output, productivity, quality and sustainability of the marketing of primarily, food products, and to integrate the agricultural value chain through backward and forward linkages; (ii) The range of potential PPCP partners should be defined in a broad and inclusive manner covering all stakeholders in the agriculture sector, and identify a lead PPCP partner, eligible to enter contracts and manage funds, and a secondary partner(s); and (iii) Eligible PPCP activities should generally include a large proportion of small scale farmers. It is proposed that legally binding PPCP arrangements will be established for the export of rice and vegetables by the end of the project. A single partnership may cover more than one agricultural product and value chain, and individual farmers may participate in more than one PPCP partnership. Examples of possible PPCP eligible activities may include:

- (i) production of improved planting material, including rehabilitation and/or expansion of existing nurseries, and the establishment of satellite nurseries;
- (ii) investments in improved agro processing, value addition trading and marketing, and storage facilities for quality management and environmental sustainability;
- (iii) training to improve farmers' financial literacy, business and farm management skills;
- (iv) capacity building of market driven APGs or cooperatives in management skills, record keeping, and participatory and democratic group processes;
- (v) training in sustainable and certified production and processing systems including support to interested APGs producing certified food products; and
- (vi) facilitation of crop diversification activities to reduce one crop dependence and risk and contribute to improved food and nutrition security.

49. Ineligible PPCP activities may cover:

- (i) activities that do not comply with ADB environmental and social safeguard policies;
- (ii) overhead and management costs of PPCP partners which are not directly and exclusively linked to the PPCP investment project;
- (iii) funding of activities through third parties that are not part of the PPCP partnership agreement or not formally linked with the lead partner;
- (iv) activities that focus on the import of foodstuffs into Lao PDR; and
- (v) retroactive financing of activities already undertaken.

50. **Promotion of climate risk sharing instruments:** Penetration of climate risk sharing instruments such as crop insurance is extremely low to nonexistent. The project aims to create an enabling environment for crop insurance in the target provinces by examining financial and regulatory constraints specific to target provinces in developing the insurance market and identify mechanisms to overcome such barriers. A final comprehensive report, including a strategic action plan, shall be submitted to MAF, subject to NPMO's review and recommendations.

51. The project will provide capacity building assistance to the financial sector to evaluate climate risks and recognize lending opportunities for banks and financial institutions for climate-friendly investments. At least 50 staff, 30% of which are women, from financial institutions will be trained in CSA lending and green finance. The project, through a training and capacity building program, comprising awareness raising and promotional activities and field visits to green financing projects, will build the capacity of banks and financial institutions to evaluate loans against environmental and climate risk screening criteria, by integrating them into the current credit application process and reporting procedures, and to recognize both mitigation and adaptation opportunities. It will also strengthen linkages, trust and shared understanding between lenders, recipients, and input and services providers regarding climate-friendly agribusiness investment opportunities. It is expected that the green finance mechanism will be sustainable even at the end of the project with the strengthening of the capacity of the financial institutions, not just the APGs.

TASKS AND RESPONSIBILITIES OF GOVERNMENT STAFFS

Position	Tasks and Responsibilities	Qualifications
National Project Management Office		
National Project Director (NPD)	The NPD is based at NPMO and reports to the PSC on the overall supervision and implementation of the project. He/she (i) ensures that the PSC and ADB are kept informed of project developments and issues, (ii) oversees and coordinates the work of NPMO staff, (iii) oversees the recruitment and performance of consultants, (iv) approves, and ensures timely execution of, budgets and workplans, and (v) supervises project activities and expenditures.	A senior government official with at least 12 years of project management experience. Master's degree or equivalent in a relevant subject with fluency in spoken and written English.
National Project Manager (NPM)	<p>The NPM is based at the NPMO and reports to the NPD. He/she ensures effective coordination among project stakeholders on administrative and financial aspects of the project. The NPM's main duties are to (i) prepare and implement the detailed annual work plans and budgets, (ii) coordinate administration/finance/ procurement activities, (iii) manage NPMO sub-account to ensure timely disbursement, (iv) manage consultant recruitment and procurement and oversee contract administration, (v) manage the project's fixed assets, (vi) oversees the implementation of the PPMS, (vii) monitor the performance of the PIC and FME, (viii) review and endorse budget requests from PPIUs for onward submission for approval of the NPD, and (ix) ensure implementation and monitoring of gender, social and environmental safeguards in accordance with ADB's SPS 2009.</p> <p>During the start-up phase, he/she will closely coordinate with the Project Implementation Specialist-Intl (SUC), and provide assistance on the following critical activities: work planning and project implementation scheduling, initial set up of procurement, disbursement and administrative arrangements within the NPMO, and drafting of the initial capacity building master plan.</p>	A senior government official with at least 10 years of experience in management of rural infrastructure/ agriculture development projects. Master's degree or equivalent in a relevant subject and fluency in spoken and written English.
Chief Accountant (CA)	The CA is based at NPMO and reports to the NPM, overseeing the day-to-day financial management of the Project. The CA will (i) facilitate the establishment and management of the sub-account at the NPMO, (ii) provide oversight on the establishment and management of the PPIUs sub-accounts; (iii) establish (and ensures compliance with) the required accounting, withdrawal approval and audit systems and procedures, (iv) set up accounting software in line with project requirements, (v) establish a system for safekeeping of tender documents, minutes of committee meetings, contracts and financial and audit reports; (vi) prepare financial projections against the work plans, (vii) carry out a financial management training program for PPIU staff; (viii) provide ongoing training	A senior government official with formal accounting qualifications and at least 8 years of experience in the financial management of internationally financed projects, preferably projects financed by ADB or World Bank. A Bachelor's degree or equivalent in a finance related subject and/or a professional accountancy qualification from a recognized institution.

	and coaching to PPIU's as needed, and (ix) supervise the preparation of regular financial reports for transmission to the executing agency, PSC and ADB.	He/she will be fluent in spoken and written English.
Procurement Officer (PO)	<p>The PO is based at NPMO and ensures that all procurement activities are undertaken in accordance with ADB and the Government's procurement guidelines. He/she will work closely with NPM, PPIU provincial project director (PPD), PIC (specifically the procurement consultants and rural infrastructure engineers), and other government staff to ensure smooth start up relating to procurement/ recruitment activities. The PO will build on the work previously undertaken under advance action by the TRTA consultant.</p> <p>When engaging consultants, the PO will prepare the required documents from recruitment to finalization of the contracts. This includes finalizing TORs (where necessary), developing detailed cost estimates, developing evaluation criteria, preparing the requests for proposal, evaluating expressions of interest, preparing submissions requirements of ADB, evaluating technical and financial proposals, finalizing contracts, and preparing submission requirements to ADB.</p> <p>When procuring goods and works, the PO will monitor the government's approval of the technical specifications (which includes the widest possible competition and, at the same time, present a clear statement of the required standards of materials, plant, other supplies, and workmanship to be provided); prepare the employer's requirements (ERQ) which includes specifications, drawings, and supplementary information based on the technical design of the civil works to be procured; develop the evaluation and qualification criteria; identify provisions that need to be specified in the procurement contract through consultative meetings with relevant agencies of the government. The PO will prepare bidding documents, evaluate bids, prepare bid evaluation reports, negotiate and finalize contracts. The PO will ensure that required documents have both English and Laotian versions.</p>	Five years of experience as procurement officer on ADB or internationally financed projects. Master's degree in business administration, engineering or related field and a good command in spoken and written English.
Rural Infrastructure Engineer (RIE)	The RIE is based in NPMO and reports to the NPM. He/she oversees the implementation of the project's agribusiness infrastructure activities under Activities 1.1 and 1.2. The provincial engineers, procurement specialists, PIC's rural engineers, and DOI engineers will support the RIE.	Three years previous experience working in a rural infrastructure engineering capacity on ADB or internationally financed projects. Ability to use word processing software and fluency in spoken and written English.

Contracts Administration Officer (CAO)	The CAO is based in NPMO and will ensure the implementation and monitoring of contracts entered into by the NPMO, PPIUs and DPIUs (including tracking of deliverables and processing of variations, if needed). The CAO is supported by the CA, PO and finance and administration assistant (FAA), and liaises closely with the PPIUs/DPIUs. He/she can be sought for advice during procurement and recruitment. The expert, with the help of the FAA, also implements an organized and systematic filing system for all contracts with proper log information.	A degree in business studies including contract law and at least 3 years of work experience in a related field, preferably on internationally supported projects. Good command of spoken and written English
Safeguards Officer (SO)	The SO reports to the NPM and works closely with the PIC. He/she will ensure implementation and monitoring of gender, social and environmental safeguards action/implementation plans in accordance with ADB's SPS 2009. The SO will work closely with the international and national safeguards consultants on institutional strengthening and capacity building, updating IEEs/EMPs, RPs, IPP, and gender action plan, as well as preparing quarterly reports on safeguards compliance. He/she will provide inputs in the review of FS for subprojects with gender, social, and environmental impact.	A degree in environment / social science and 3 years work experience in related field, preferably on internationally supported projects. Good command of spoken and written English.
Provincial Project Implementation Units		
Provincial Project Director (PPD)	The PPD oversees implementation of activities at provincial level. Main duties include leading the preparation of the provincial project work plans and budgets, recruiting required consultants, coordinating with related government agencies and development partners in the implementation of civil works subprojects and capacity building activities, ensuring compliance with provincial policies and regulations, supervising and approving all project activities and PPIU expenditures. The PPD is responsible for the proper implementation of the SFS.	A senior government official with 8 years project management experience. Strong technical qualification in relevant fields.
Provincial Project Coordinator (PPC)	The PPC reports to the PPD and ensures effective implementation of project activities at provincial level. Main duties include assisting the PPD in coordinating development of provincial work plan and budget, recruiting/procuring per provincial requirements, coordinating with related government agencies and development partners in the implementation of civil works subprojects and capacity building activities, supervising and reviewing DPIUs work plan and budget, following up and monitoring field implementation, and consolidating and reporting PPMS.	A senior government official with 5 years of experience in managing internationally financed projects and with relevant technical background. Ability to use word processing software. Good command of spoken and written English.
Provincial Rural Engineer (PRE)	The PRE reports to the PPC. He/she implements PPIU activities, working closely with DPIUs and guiding DAFO staff on field implementation of all agribusiness infrastructure activities under project Activities 1.1 and 1.2.	Three years of experience as technical staff in similar projects and a bachelor's degree or equivalent in engineering or a related field.

Provincial Administrative Assistant (PAA)	The PAA provides logistical support to the PPIU staff as needed.	Three years of experience working on ADB or internationally financed projects. Ability to use word processing software and can communicate in English language.
District Project Implementation Units		
District Project Director (DPD)	The DPD reports to the PPC ensuring effective implementation of project activities at district level. Main duties include coordinating development of district work plan and budget, coordinating with related government agencies and development partners in the implementation of civil works subprojects and APG capacity building activities, supervising DPIUs work plans and budget, monitoring field implementation, and consolidating and reporting PPMS.	A government official with 3 years of experience in managing internationally financed projects with relevant technical background. Ability to use word processing software. Can communicate in English.
District Administrative Assistant (DAA)	The DAA provides logistical support to the DPIU staff as needed.	Three years of experience working on an ADB or internationally financed project. Ability to use word processing software and can communicate in English language.

ADB = Asian Development Bank, APG = agricultural production group, DAFO=district agriculture and forestry office, DPIU=district implementation unit, NPMO= national project management office, PSC = project steering committee, PIC = project implementation consultants, PPIU=provincial implementation unit, PPMS = project performance monitoring system, SUC = start-up consultant,

TERMS OF REFERENCES OF CONSULTANTS

A. INDIVIDUAL CONSULTANTS

1. **Project Management Specialist (Package ICS 01)** (6 person-months [pm], international, continuous)

1. **Qualifications:** A master's degree or equivalent in engineering, agronomy, or a related discipline with preferably 15 years of experience in rural infrastructure/agriculture development in developing countries in a humid climate, preferably in environments with similar characteristics to the southern areas of Lao PDR. Must have 10 years experience with the implementation of ADB projects.

2. **Tasks:** The specialist will be based in the NPMO and will directly support the National Project Director. He/she will:

- (i) Supervise the work of the start-up national consultant to ensure that inputs and activities are effective and of high quality;
- (ii) Assist NPMO in the initial scheduling and planning of project implementation;
- (iii) Assist in the ranking and arrangement of agribusiness production groups;
- (iv) Provide advice and guidance on procurement, disbursement and liquidation of expenditures following ADB procedures;
- (v) Assist the monitoring and evaluation specialist in the preliminary design, planning and supervision of the monitoring of implementation safeguards and benefits; and
- (vi) Provide orientation to NPMO, PPIUs and DPIUs on the project design.

3. In terms of planning, the specialist will perform the following:

- (i) Review, analyze, and report on the government's budget planning and disbursement procedures.
- (ii) Together with NPMO, PPIUs, and DPIUs, assist in the identification and ranking of sub projects and help prepare an overall work plan (OWP) and workplans for each PPIU and DPIU for the first 18 months of the Project, with a detailed work plan for the first 6 months, with each workplan identifying and quantifying time required for each activity, human resources requirement, budget requirement and a detailed works schedule highlighting any constraints and risks.
- (iii) Draft the capacity building master plan (CBMP).

2. **Project Management & Coordination Specialist (Package ICS 02)** (60 pm, national, continuous)

4. **Qualifications:** A master's degree or equivalent in a relevant subject and 8 years of experience in project management of rural infrastructure/agriculture development. He/she should have excellent skills in spoken and written English.

5. **Tasks:** The specialist will assist the national project manager to ensure effective coordination among stakeholders on administrative and financial aspects of the project. During the start-up phase, he/she shall coordinate closely with the international project management specialist and will provide assistance on work planning and project implementation scheduling, initial set-up of procurement, disbursement and administrative arrangements within the NPMO, and drafting of the initial capacity building master plan (CBMP). The expert's contract may have

a performance management clause, by which after 6 months of satisfactory performance at the start-up phase, he/she may continue until the end of the project period or as needed.

6. He/she will closely monitor and coordinate the activities of the consulting firms (project implementation consultants and Financial Management Entity). Specific tasks of the specialist are the following:

- (i) prepare and implement the detailed annual work plans and budgets;
- (ii) coordinate administration/finance/ procurement activities;
- (iii) manage the project account to ensure timely disbursement for project activities;
- (iv) manage consultant recruitment and procurement and contract administration;
- (v) managing project fixed assets;
- (vi) oversee the implementation of the project performance monitoring system (PPMS);
- (vii) review and endorse the budget requests from PPIUs for onward submission for approval of the NPD; and
- (viii) ensure implementation and monitoring of gender, social, and environmental safeguards in accordance with ADB's SPS 2009.

3. Finance and Administration Assistants (Package ICS 03)
(360 pm, 6 national [1 NPMO, 5 PPIU], 60 pm each, continuous)

7. **Qualifications:** A bachelor's degree or equivalent in accounting and 3 years of experience working on project accounting of ADB or internationally financed projects. He/she should be knowledgeable in MS Word and Excel and should have good skills in spoken and written English.

8. **Tasks:** The Finance and Administration Assistant at NPMO will report to the National Project Manager. He/she will provide accounting/bookkeeping support to the Chief Accountant and logistical support to NPMO staff, as needed. The Provincial Finance and Administration Assistants will report to the PPIU. He/she will oversee the establishment of the PPIU's accounting systems and procedures, ensure that accurate and up-to-date financial accounting information is available to the PPIU, consolidate PPIU and DPIU expenses, process requests for replenishment/liquidation of the PPIU sub-account. The accountant will provide hands on training to DPIU staff and maintain the smallholder financing scheme (SFS) financial records.

B. PROJECT IMPLEMENTATION CONSULTANTS (Package CS 01)

9. **Objectives of the assignment.** To provide management and technical assistance to the **executing** and implementing agencies in the implementation of the project, strengthen technical and management capacities of the participating government agencies and ensure compliance with the Grant Agreement (e.g. safeguard) and government policies.

10. **Scope of services.** In close coordination with the project director and project manager, PIC will perform the following, but not limited to:

- (i) Support, strengthen, coordinate and guide NPMO, PPIUs, implementing agencies and contractors in the design and operation of the infrastructure related to Output 1.
- (ii) Detailed planning of yearly activities in all aspects of the agreed and foreseen implementation schedules;
- (iii) Prepare feasibility studies for subprojects;
- (iv) Supervise construction of civil works in conjunction with the DOI;
- (v) Provide necessary capacity building training;
- (vi) Assist NPMO, and PPIUs in the procurement of works, goods and services including contract management;
- (vii) Carry out environmental and social due diligence of the subprojects;
- (viii) Assist in the preparation of safeguard documents in compliance with LARF, EARF, EMDF and Gender Action Plan;
- (ix) Prepare quarterly progress reports, annual progress reports, PPMS, safeguard monitoring reports and gender action plan monitoring reports;
- (x) Plan and develop the safeguards monitoring and evaluation systems; and
- (xi) Any other activities for delivering the envisage outputs of the project and achieving desired outcome.

11. **Team composition & qualification requirements.** The PIC will comprise the following teams to support the executing agency and the implementing agencies in the implementation and management of the project:

1. Project Management Team

- a. **Agribusiness Specialist/Team Leader** - 1 international, 15 person-months (pm)

12. **Qualifications:** A master's degree or equivalent in agribusiness or an agribusiness related subject, such as agricultural marketing, agro processing, or international commodity trade. He/she will have excellent communication (written and oral) skills and will be fluent in the English language. He/she will have 15 years of experience in the implementation of rural development, agriculture, natural resources projects in Southeast Asia, preferably in environments with similar characteristics to the project area. Ten years of experience in the implementation of multilaterally funded development projects, preferably projects with ADB funding. The candidate must demonstrate ability to lead teams composed of international and national consultant and create strong working relations with the EA/IAs.

13. **Tasks:** The team leader (TL) will provide implementation support to the NMPO and will coordinate the PIC team's inputs to the project. The TL will be based in NPMO and will directly

support the PSC, the PCFC, and the MAF coordinating units, viz, DOA, DTEAP, DALAM, DOI, Department of Rural Development and Cooperatives, and NAFRI. Duties of the TL will include the following:

- (i) Provide overall responsibility for technical support during implementation.
- (ii) Establish the overall project performance monitoring, evaluation, reporting and communication regime.
- (iii) Supervise the consulting team and ensure that inputs and activities of both the international and national consultants are of a high quality.
- (iv) Assist the NPMO in the scheduling and planning of project implementation, including preparation and implementation of the work plans.
- (v) Provide advice and guidance on procurement, disbursement and liquidation of expenditures following ADB procedures;
- (vi) Ensure that baseline surveys and annual surveys are carried out to obtain the necessary information to measure implementation and impact performance;
- (vii) Assist the NPMO to identify all agribusiness value chain actors, and devise strategies/activities to help improve their performance;
- (viii) Assist the NPMO to monitor the performance of agribusiness value chain actors during and following interventions;
- (ix) Assist in the design, planning and supervision of the monitoring of implementation safeguards and benefits;
- (x) Lead the consulting team in assisting the NPMO to review technical and safeguard aspects of investment studies;
- (xi) Ensure the pro-poor measures identified in the community consultations are designed and carried out;
- (xii) Assist the NPMO in addressing O&M issues;
- (xiii) Supervise safeguard and social monitoring during construction implementation;
- (xiv) Assist the NPMO to resolve safeguard and implementation problems and issues that may arise from time to time;
- (xv) Submit reports to the NPD following each input to the project, organize, contribute presentations and deliver project workshops, and prepare and submit the project's mandatory semiannual, annual, midterm reports, and additionally, any specific reports and papers as requested by the NPD; and
- (xvi) Participate in the mid-term review; and lead a team to prepare the project completion report.

14. As Agribusiness Specialist, the consultant will supervise and support the national Agribusiness Specialist in undertaking the following specific tasks:

- (i) Introducing and facilitating GAP, GMP and HACCP for rice mills, vegetable pack houses (collection and marketing infrastructure) and organic fertilizer factories
- (ii) Liaising with building contractors during the construction and upgrading of rice mills vegetable pack houses and bio fertilizer factories;
- (iii) Coordinating with the owners and operators of rice mills, vegetable pack houses and bio fertilizer factories to provide capacity building training for management and staff;
- (iv) Supervising the preparation of agribusiness training materials
- (v) Strengthening agribusiness skills of APGs and ABEs, and support services;
- (vi) Facilitating contract farming initiatives;
- (vii) Supporting market assessments/studies;
- (viii) Facilitating the development of value chain partnerships;

- (ix) Developing existing markets and Identifying new markets for rice and high value vegetables including the organic and export market; and
- (x) Facilitating the development of the domestic market for organic fertilizer.

b. Financial Management and Accounting Specialist - 1 international (5 pm) and 1 national (18 pm)

15. **Qualifications:** The financial management and accounting specialists (FMAS) will have tertiary qualifications in finance, accounting, and financial management from an established and recognized institution. CPA qualifications is preferred. The international specialist will have 10 years of relevant work experience in the financial management of rural infrastructure, agriculture and agribusiness development project preferably financed by ADB. He/she will have extensive experience in designing and implementing accounting systems or similar projects in the region, preferably in Lao PDR. The national specialist will have 3 years of experience working with a multilateral rural development/agriculture project, preferably funded by ADB. The FMAS will be familiar with financial and management/cost accountancy requirements and methodologies used for internationally funded development projects and will be fluent in the English language.

16. **Tasks:** The FMAS will be responsible for overseeing and supervising the methodologies and due diligence used by project staff to produce regular project management accounts. The international FMAS will work together with the national FMAS in the initiation of accounting procedures at central provincial and district levels to ensure that the approaches and methodologies being used meet acceptable international standards. The international FMAS will guide the activities of the national FMAS to ensure sound finance, accounting and audit procedures are in place and implemented. Subsequently, the national FMAS will complete the financial and accountancy work required to put in place adequate accountancy and reporting procedures throughout project activities including preparation of the FMM together with procedures, forms and report formats. The FMAS will perform the following tasks:

- (i) Develop a financial planning system for project implementation and its subsequent operation. Develop long, medium term and annual operating plans and schedules as agreed between ADB, MOF and the executing agency for project implementation and subsequent administrative operation.
- (ii) For accounting oversight, develop and establish a manual and standard procedures for project accounting to the standard agreed between ADB, MOF and the executing agency.
- (iii) For internal control, funds flow management, financial reporting; develop and make operational a manual and procedures as agreed between ADB, MOF and the executing agency for project financial management, for use by the PMU in project implementation and the implementing and executing agencies to operate.
- (iv) For audit planning, comply with the terms and standards agreed between ADB, MOF and the executing agency; and advise and assist the executing agency in the recruitment of specialists to conduct internal audits of the project accounts and advance account activities.
- (v) Liaise with auditors to ensure effective annual audits in accordance with ADB's requirements.
- (vi) Ensure that project assets and inventories are safeguarded, revalued, and verified periodically (in accordance with the requirements of ADB and government) to support annual project financial audits.

- (vii) Conduct training on project accounting and financial management (including planning) for NPMO/PPIU financial and accounting staff assigned to the project implementation and subsequent operations.
- (viii) Following the establishment of financial and accounting procedures, the specialists will be in charge of all the operations and administrative control.
- (ix) Submit reports to the team leader bi-annually, based on the work of the national FMAS and contribute to the project's mandatory semiannual, annual, midterm reports, and, additionally as requested by the team leader.

c. Rural Infrastructure Asset Management Specialist – 1 international (3 pm) and 5 national (1 per province, 6 pm each)

17. **Qualifications:** The specialists must have a higher degree (M.S. or equivalent) in civil engineering, information systems, GIS or related fields in asset management, with 5 (national) or 10 (International) years of relevant experience in asset management. The specialists must have a robust knowledge base on asset management principles, frameworks and standards; operations and maintenance using geospatial information systems, and must have experience in rural infrastructure asset management systems in at least two projects. Knowledge of the government planning cycle, procurement procedures and financial management systems is essential. The specialists must have excellent written and oral communication skills.

Tasks: The specialists will:

- (i) Prepare rural infrastructure asset registers of five target provinces through identification and inventory of assets which support the delivery and maintenance of key rural infrastructure;
- (ii) Review the current rural infrastructure building codes, assessment of infrastructure functions, status and vulnerability to climate risks for the target provinces;
- (iii) Support the development of climate-resilient construction guidelines and asset management for small-scale rural infrastructure based on existing national construction standards and guidelines;
- (iv) Create an information management system based on GIS to include
 - (a) Key description and details of rural infrastructure assets in target provinces;
 - (b) Date of construction and cost;
 - (c) Dates of repair or renewal including cost;
 - (d) Frequency of breakdowns in a given period and need for replacement; and
 - (e) Current depreciated value.
- (v) Identify methods for routine collection and recoding of data, including staff and materials and equipment requirements, and asset valuation to maintain a good asset management system;
- (vi) Develop strategies and recommendations to determine appropriate opportunities to leverage assets for various purposes;
- (vii) Review the existing rural infrastructure asset management systems and procedures in Lao PDR and provide recommendations to improve the systems and procedures to support, among others, operation and maintenance (O&M); and
- (viii) Conduct workshops on asset management systems to enhance capacity of provincial staff.

d. Monitoring and Evaluation Specialist - 1 international (2 pm) and 1 national (18 pm)

18. **Qualifications:** The monitoring and evaluation specialists (M&E) will have tertiary qualifications in rural development or a related field, with specific knowledge of monitoring and evaluation of development projects. The international expert will have 5 years of experience as a monitoring and evaluation (M&E) specialist or in a related area, including work on M&E in donor funded projects. The national expert will have 3 years of relevant experience, preferably in projects funded by ADB, and will have demonstrated ability to work in a multidisciplinary team. The experts will have excellent communication skills in spoken and written English.

19. **Tasks:** The M&E will assist in the overall survey and monitoring of the project and provide the principles for analysing the results. The specialist will work closely with the safeguards/community development (SCD) Specialists to ensure all the provisions of the safeguard plans frameworks are covered by the project performance monitoring system (PPMS).

20. Specific tasks will include the following:

- (i) Establish the project performance monitoring system and mentor the national PPMS specialist for updating and reporting to the Government and ADB. This will include implementation of subprojects;
- (ii) Work closely with the SCD Specialists to ensure annual monitoring surveys are designed and implemented to enable complete collection of data;
- (iii) Regarding the DMF, and within the context of the baseline surveys, and together with NPMO staff, review the PPMS design and report format drafted during the project processing which will be based on measurable inputs, outputs and outcomes. The system shall be disaggregated by gender and age. PPIUs and DPPIUs will play a major role in collecting the monitoring data needed;
- (iv) Together with NPMO staff, brief PPIUs and DPIUs on their duties and responsibilities under the Project monitoring system;
- (v) Assist in the undertaking of annual surveys in project districts, and together with PPIUs and DPPIUs staff adjust the data requirements and data collection procedures required to meet local conditions;
- (vi) Document procedures and agreed data requirements along with the duties of the PIU and DPIU staff in providing monitoring schedules for each subproject;
- (vii) Periodically review the data being collected, analyze results and report any deficiencies, problems, issues or shortcomings to the NPMO;
- (viii) Submit reports to the team leader following each input to the project, contribute presentations on relevant subjects to project workshops, and contribute to the project's mandatory semiannual, annual, midterm reports, and, additionally as requested by the team leader; and
- (ix) Prepare an annual PPMS report, lifting the information from the PPMS at the end of each year and at project completion for inclusion into the EA's project completion report.

e. Social Safeguards Specialist - 1 international (6 pm) and 1 national (32 pm)

21. **Qualifications:** The international social safeguards specialist (SSS) will have a master's degree in social sciences, development studies or a related discipline from a recognized educational institution with 5 years of experience in gender-related work and rural community

development. He/she will be familiar with policies and practice in Lao PDR under donor-funded projects. The international expert will be fully familiar with ADB's Safeguard Policy Statement 2009 and will train the national SSS accordingly. The national SSS will have a tertiary degree in social sciences from a recognized educational establishment with 3 years of experience working on a multilateral rural development/agriculture project, preferably funded by ADB. He/she will have excellent communication skills in written and spoken English.

22. **Tasks:** The international SSS will prepare reports on subproject poverty and social assessments, stakeholder communication strategy, and consultation and participation plans for local community engagement to ensure beneficiaries leverage full impact of the project's activities. High priority value chain subprojects will be identified based on established criteria (e.g., contribution to food security, energy security, water security, environmental sustainability, positive social impacts). Identification of subprojects will be accomplished through organizing stakeholder consultations with the aim of setting the longer-term vision and objectives of the value chain, identifying constraints and opportunities that are holding back growth and competitiveness, and jointly agreeing on commercially viable solutions that can address these constraints. The international SSS will carry out the following activities in close association with the national SSS:

- (i) Provide technical leadership related to the future proposed subprojects from the social development and gender perspectives; commencing with a review and reconfirmation of the subprojects developed during project preparation in close association with the NPMO/PPIUs;
- (ii) Review the SPRSS and the gender action plan and their application in the three subprojects and specifically working with the PPIUs and the project affected communities in providing advice on implementing the gender action plan, including reference to: (i) coordinating gender development with sector/technical issues; (ii) gender sensitive communication; (iii) equal access to training and capacity development; and (iv) mentoring issues;
- (iii) Design and assist the PPIUs in the implementation of appropriate additional socioeconomic and other relevant surveys in each target area, with data disaggregated by sex, ethnicity and income;
- (iv) Work closely with the PPIUs in all subproject areas and support them in implementing the activity plans that constitute part of the SPRSS/ gender action plan. This will include, but not be limited to refining training and capacity building activities for the PPIUs, regarding support for implementation of the project;
- (v) Design and assist the PPIUs in the implementation of information campaigns and community mobilization, and further, programs and projects to develop livelihoods, social development and vocational needs with an emphasis on poor and vulnerable households such as female-headed households;
- (vi) Coordinate with the project safeguard specialists regarding the livelihood and social development aspects, and advising the PPIUs on a training needs assessment of impacted households, including disaggregation of livelihoods by gender;
- (vii) Ensure that social development and gender issues are accurately covered within all phases of the project; and assess and carefully track youth and women's livelihood needs;
- (viii) Assist the PPIUs with provision of technical assistance and coordination of demand-driven awareness building and training and guidelines to support vulnerable households and groups;

- (ix) Prepare and assist in delivering training courses relevant to project implementation, including gender related issues for all the project implementation agencies and other stakeholders as appropriate;
- (x) Facilitate knowledge sharing on social development and gender related issues, including through partner forums, web pages and reports and including lessons learned/ best practice from Southeast Asia and elsewhere if relevant.
- (xi) The international will support the national in the preparation of reports and documents following Government of Lao and ADB rules and guidelines which will include: (i) social and gender analysis appendices of feasibility studies for subproject preparation, (ii) progress reports every 3 months including details of progress of Gender Action Plan, and (iii) any other social development study reports as required and requested by NPMO.

23. The NPMO will support the SSS in organizing field work related to the (i) preparation of required social analysis appendices of subproject feasibility studies; (ii) required social benefit monitoring activities; and (iii) social development and gender awareness capacity building workshops with stakeholders in the target areas.

f. Environment and Climate Change Specialist - 1 international (6 pm)
and 1 national (18 pm)

24. **Qualifications:** The international environment and climate change specialist (ECC) will have a master's degree in environmental science/engineering, natural resource management or a related discipline from a recognized institution. He/she will have 8 years of relevant experience working for internationally funded development projects in Lao PDR or in the Mekong subregion, and will be familiar with the environment laws of Lao PDR. The specialist will have demonstrated experience in carrying out EIA/IEE and preparing EMP for at least 2 ADB-financed projects in accordance with ADB's Safeguards Policy Statement 2009. The national ECC will have a tertiary degree in environmental management or a related discipline from a recognized educational establishment. He/she will have 3 years of relevant experience working on a multilateral rural development/agriculture project, preferably funded by ADB. The experts will have excellent skills in written and spoken English. Training skills is an advantage.

25. **Tasks:** The main role of the ECC will be to undertake any due diligence required, prepare environmental guidelines for contractors and monitor that the guidelines are being followed during the construction period. The international expert will guide the national expert and work together on the following tasks:

- (i) Review the project scope, the range of subprojects and the nature of works planned, paying specific attention to any environmental issues identified during the screening process;
- (ii) Visit each proposed subproject and liaise with the Provincial Office for Natural Resources and the Environment (PONRE) to ensure that all environmental concerns of the subprojects have been identified and documented.
- (iii) Regarding the results of the field visits, revise and update the environmental documentation and requirements prepared during the PPTA;
- (iv) For subprojects with no environmental concerns prepare a due diligence report documenting the fact that no IEE will be required;
- (v) Review subproject construction schedules with NPMO, prepare a schedule for IEE preparation for any subprojects where one will be required and undertake IEEs according to the schedule;

- (vi) Regarding the documentation prepared by the PPTA consultants, prepare an environmental management plan for the construction phase of the project. The plan will include guidelines for contractors requiring good environmental management practices, the opportunity for input from participation beneficiaries and a grievance mechanism;
- (vii) Periodically review construction activities during the construction phase to ensure compliance with the guidelines;
- (viii) Liaise with the PONRE officers in each province and make spot checks during implementation to ensure that environmental plans are being properly implemented.
- (ix) Assist in the preparation and implementation of training activities regarding the environmental aspects of the project.
- (x) Submit reports to the team leader following each input to the project, contribute presentations on relevant subjects to project workshops, and contribute to the project's mandatory semiannual, annual, mid-term reports, and, additionally as requested by the team leader.

g. Social Development and Gender Specialist - 1 international (intermittent, 6 pm) and 1 national (intermittent, 30 pm)

26. Qualifications: The international specialist will have a master's degree in social sciences, gender, development studies or a related discipline with 7 years of experience in gender-related work in the context of agriculture and rural community development. He/she will be familiar with policies **and** practice in Lao PDR and ADB's gender policy. The specialist will have experience working with a multilateral development project, preferably funded by ADB. The national specialist will have a degree in social sciences, development studies, gender or a related discipline. He/she will have at least 5 years experience in gender-related work, with a strong background in the agriculture and rural development sector including working with ethnic minorities. The expert will be familiar with policies and practices in Lao PDR, will demonstrate the ability to work on a multilateral development project, preferably funded by ADB, and will have excellent skills in written and spoken English.

27. Tasks: The main responsibility of the international specialist will be to ensure effective gender mainstreaming in the project and provide guidance in the implementation of the gender action plan. The specialist should mainly assist the national expert in carrying out the following activities:

- (i) Provide technical advice related to the future proposed subprojects from the social development and gender perspectives and based on the gender analysis of the two agricultural value chains to ensure women and men beneficiaries leverage full impact of the project's activities. Review the subprojects developed during project preparation in close association with the NPMO/PPIUs, and the MAF CAW and Gender Focal Points. Review and develop detailed baseline and targets for overall gender action plan and poverty reduction indicators.
- (ii) Review the project gender action plan (included in the PAM) and specifically working with the NPMO/PPIUs, and the MAF CAW and Gender Focal Points and the project affected communities, provide overall leadership and technical advice with regard to implementing, regularly monitoring and reporting on the gender action plan (at least semi-annually to ADB, using the template in Appendix 4). Refer to the ADB gender tip sheets for gender action plan implementation, monitoring and reporting. Coordinate with the MAF to ensure alignment with and

support the operationalization of the MAF *Gender Equality Strategy of Agriculture Forestry and Rural Development 2016-2025*.

- (iii) Implement him/herself and/or provide strong technical support to the National Social Development and Gender Specialist to implement specific activities that are included in the gender action plan, especially (i) the capacity building activities for the MAF CAW, gender focal points, LWU and NPMO/PPO staff in gender analysis and mainstreaming and gender requirements for the project; (ii) support, coordinate, review and provide feed-back on the gender analysis of the two targeted value chains and in the agricultural sector; (iii) provide advice to MAF on key recommendations from the gender analysis of the targeted value chains for inclusion in the MAF agri-business policy; (iv) capacity-building activities in gender equality in climate-friendly agribusiness value chains (based on gender analysis in value chains report) and the MAF gender strategy targeted at relevant project stakeholders.
- (iv) Work closely with the M&E specialist to ensure that the gender indicators and targets included in the DMF and the GAP, as well as indicators to measure poverty status changes over time are included in the PPMS for the project and build capacity to collect and document the relevant quantitative and qualitative data.
- (v) Assist the NPMO/PPIUs/project consultants to design and help manage the implementation of additional socioeconomic surveys as appropriate and which are relevant to the subprojects in the target areas with data disaggregated by sex, ethnicity and income, including gender, poverty and community development assessments.
- (vi) Coordinate with and provide technical inputs to the project safeguard specialists regarding the livelihood and social development components, and advising the PPIUs on a training needs assessment of impacted households.
- (vii) Ensure that social development and gender issues are accurately covered at all phases of the project; ensure poor and women's livelihood needs are regularly assessed and addressed.
- (viii) Assist the National Social Development and Gender Specialist to prepare and conduct before and after surveys to assess project gender impacts.
- (ix) Support and provide technical advice at the start of and during project implementation to the National Social Development and Gender Expert related to any other matters in relation to gender action plan implementation, monitoring and reporting as and when required.
- (x) Prepare a gender appendix to the project completion report summarizing major achievements regarding the intended gender equality results and reporting achievements on every activity and target included in the gender action plan. Refer to the ADB Tip Sheet on reporting gender results at project completion.
- (xi) Facilitate knowledge sharing on social development and gender related issues, including with the sister CFAVC projects in Cambodia and Myanmar, through partner forums, web pages and reports and including lessons learned/ best practice from Lao PDR or elsewhere.
- (xii) Support and provide guidance to the national social development and gender specialist in the preparation of reports and documents following Government of Lao PDR and ADB rules and guidelines which will include: social and gender analysis appendices of feasibility studies for subproject preparation; progress reports every 3 months on gender action plan implementation using the template in Appendix 4; and, any other social development study reports as required and requested by NPMO.

28. The national specialist will liaise on a regular basis with the gender specialist in the ADB Resident Mission. The major responsibilities of the expert are to (i) support the NPMO and the PPIUs in the project gender action plan (GAP) implementation, monitoring and reporting, and (ii) build capacity of the MAF CAW, gender focal points, LWU and NPMO/PPIUs staff in gender analysis and mainstreaming and about the gender requirements for the project.

29. In close collaboration, and under the guidance of the international specialist, the national expert will carry out the following activities:

- (i) Provide the necessary support to the NPMO and the PPIUs to implement and monitor the GAP and report on progress of the GAP implementation in accordance with ADB and Government of Lao PDR gender related policies, guidelines (also refer to the ADB gender tip sheets), including orientation and training on the role of the GAP in enhancing project effectiveness, in GAP activities and implementation mechanisms, and the NPMO/PPIUs' responsibilities in ensuring GAP implementation, monitoring and reporting.
- (ii) Translate the GAP in Lao language.
- (iii) Develop/strengthen capacity of the MAF CAW, Gender Focal Points, LWU and project staff at all levels in gender analysis and mainstreaming, particularly gender analysis of value chains and gender mainstreaming in the agricultural sector, and about the gender requirements for the project (GAP and implementation of GAP activities). This will include but not be limited at the preparation and delivery of training courses and stakeholder workshops to inform and raise awareness about project related and other more general social development and gender issues in the subproject areas and how the GAP intends to address these issues; gender equality in climate-friendly agribusiness VCs (based on gender analysis in VCs report) and the MAF gender strategy targeted at relevant project stakeholders.
- (iv) Review and ensure key training materials prepared under the project can be easily understood (considering women's literacy level and local language), and that they are sensitive to gender and ethnicity.
- (v) Support the NPMO/PPIUs in the preparation of annual work plans and budgets for GAP implementation.
- (vi) Provide the necessary support to local service providers (NGO and/or community-based organizations) for the implementation and monitoring of GAP activities.
- (vii) Work in close collaboration with the M&E specialist to ensure that the gender indicators and targets included in the DMF and GAP as well as indicators to measure poverty status changes over time are included in the PPMS for the project, build capacity to collect and document the relevant quantitative and qualitative data, and ensure sex-disaggregated data is collected during project implementation wherever relevant.
- (viii) Assist the NPMO/PPIUs/project consultants to design and help manage the implementation of new socioeconomic surveys as appropriate and which are relevant to the subprojects in the target areas, including gender, poverty and community development assessments.
- (ix) Conduct regular field trips to monitor GAP implementation, collect data reflecting progress on GAP targets and indicators, and prepare GAP progress reports to be submitted together with the quarterly project progress reports by the NPMO.
- (x) Regularly consult with project beneficiaries and stakeholders, including female-headed households, to ensure women's needs and constraints to fully participate and benefit from the project are being addressed as part of GAP implementation.

- (xi) Based on the findings from regular monitoring of GAP implementation and field visits, amend and/or develop GAP activities with the main aim of ensuring intended gender results will be achieved.
- (xii) Provide support for ADB review mission teams to ensure that GAP implementation is being adequately assessed and reported on.
- (xiii) Ensure and facilitate close collaboration and coordination with MAF CAW, the DOA Sub-CAW Gender Focal Points, and the LWU as key partners in project GAP implementation and monitoring.
- (xiv) Act as the main focal point/contact for all gender-related activities between the project, the PPIUs, the gender specialist in the ADB resident mission, NGOs, gender and other relevant consultants.
- (xv) Collect human stories during project implementation that document how the project contributed towards enhanced gender equality and women's empowerment and greater inclusion in the sector – which can be used in the project completion report to document achievement of gender equality results.
- (xvi) Prepare and conduct before-and-after surveys to assess project gender impacts.
- (xvii) Facilitate knowledge sharing on social development and gender related issues, including with the sister CFAVC projects in Cambodia and Myanmar, through partner forums, web pages and reports and including lessons learned/ best practice from Lao PDR or elsewhere.
- (xviii) Under the guidance of the international social development and gender specialist, the expert will assist the NPMO to consolidate the necessary data and information, and to prepare reports and documents following Government of Lao PDR and ADB rules and guidelines which will include: (i) social and gender analysis appendices of feasibility studies for subproject preparation; (ii) Progress reports every 3 months on GAP implementation using the template in Appendix 4; and (iii) Any other social development study reports as required and requested by NPMO.

30. The NPMO/PPIUs will support the specialist in organizing field work related to (i) the preparation of required social and gender analysis appendices of subproject feasibility studies, (ii) required monitoring activities (iii) and social development and gender awareness and capacity building activities with stakeholders in the target areas.

h. Value Chain Gender Analysis Specialist - 1 international (2 pm) and 1 national (3 pm)

31. **Qualifications:** The international specialist will have a master's degree in agricultural economics or similar field with strong expertise in gender studies, development studies, and environmental sustainability. He/she will have demonstrated experience in working on gender issues in Southeast Asia or Asia region, will have excellent knowledge of and practical experience in undertaking value chain analyses, preferably with a gender perspective. The expert will have strong analytical, research and writing skills, and good command of spoken and written English. The national specialist will have a bachelor's degree in agriculture, agricultural economics or other relevant degree with expertise in gender studies, development studies, or environmental sustainability. He/she will have experience in (i) working on gender issues in Lao PDR, preferably in the agricultural or rural development sector; (ii) undertaking gender analysis in sectors, preferably in the agricultural or rural development sector; and (iii) conducting research, particularly using qualitative methods. The expert will have demonstrated the ability to work with international consultants, and fluently communicate in English, and translate documents from Lao to English.

32. **Tasks:** Duties of the international expert, with the support of the national expert, include producing an analytical report containing the gender analysis of each of the targeted crop value chains addressed by the CFAVC project in Lao PDR. The report will be based on qualitative and quantitative data collection and analysis, including primary data from field research. The report will include (i) analytical framework and methodological approach; (ii) gender analysis of the targeted crop value chains (rice and vegetable), including findings about gender specific opportunities and constraints found along the value chains; (iii) recommendations for including gender in the agribusiness policy that will be formulated under the project (a five-page policy brief will be developed); and, (iv) recommendations for making agribusiness programs/projects/subprojects gender responsive. The approach and methodology should promote building capacity for gender-responsive agricultural value chain analysis within MAF (including the Gender Unit and Gender Focal Points and project national gender consultant) and relevant partners, and ensure that the results of the gender analysis are widely disseminated and utilized in policy and program planning.

33. The national specialist will work closely with, and under the guidance of, the international counterpart to conduct desk review, identify key actors along the value chains and key informants for the field research, organise and facilitate all field research related activities and validation workshops, take detailed notes during the field work, translate from Lao to English and English to Lao, and other activities as needed.

34. **Deliverables:**

- (i) Phase 1: Desk review - At the start of the assignment, the international expert (with the support of the national specialist) will undertake a desk review of policy and project documents and thematic reports related to the targeted agricultural value chains – rice and vegetable (including general information on gender in agriculture/agribusiness, gender analysis of agricultural value chains, gender issues related to access to productive resources such as land, credit, agricultural inputs, extension/technology, etc. in Lao PDR). This should build on and complement the desk review of the PPTA value chain research and PPTA gender analysis. The national specialist will gather all documents available on Lao PDR that are relevant to this assignment (including government reports and other documents in Lao) and summarize major points in English for those that are written in Lao language and have not been translated.
- (ii) Phase 2: Assignment work plan - Based on the findings from the desk review and in line with the requirements of the TOR, the international specialist will elaborate an assignment work plan (around five pages) which will be submitted to the project executing agency for endorsement. It will present the initial findings from the desk review, and will identify gaps in information which will need to be filled as part of the assignment. The work plan will describe the proposed approach and methodology that will be applied for undertaking the gender analysis of the targeted agricultural value chains, and will specify the time frame allocated for each stage of work. It will also detail the linkage to the PPTA value chain research and gender analysis, the involvement of project stakeholders and key gender actors and informants. The proposed approach and methodology will contain information on a tentative selection of producers, processors, enterprise groups, traders and other key actors such as input suppliers and service providers to participate in the gender analysis of the 2 targeted value chains of the project. The work plan will also include a draft outline of the final report as well as drafts of research

instruments. Finally, the work plan should outline capacity development opportunities to ensure the sustainability of value chain analysis within MAF and the Gender Unit/Gender Focal Points. During this phase, the national specialist will contribute to determine the best approach and methodology and time frame for the research work, and will identify a list of most relevant stakeholders, key actors and key informants to be consulted at national level and in the project provinces, including a tentative selection of producers, processors, collectors, traders, enterprise groups, input suppliers, service providers (finance, transport, service, equipment, crop insurance, etc.), government institutions and units such as MAF, Gender Unit and relevant NGOs such as Lao Women's Union, and others, to participate in the gender analysis of the two targeted value chains of the project. The national will translate the drafts of research instruments in Lao language.

- (iii) Phase 3: Fieldwork related to value chain gender analysis - Based on the approach and methodology agreed under phase 2, the international specialist, together with the national specialist, will conduct the gender analysis of each of the 2 targeted value chains using both quantitative surveys as well as participatory methods such as:
- focus group discussions with female and male actors along the different segments of the value chains (separate and/or mixed)
 - key informant interviews
 - implementation of other research methods as identified in the Specialist's methodology proposal, meetings with key actors in addition to producers such as collectors, traders, processors, input suppliers, service providers (finance, transport, service, equipment, crop insurance, etc.), government institutions and units such as MAF, Gender Unit, and relevant NGOs such as LWU, and others.

The national specialist will coordinate the research plan and schedule at national and sub-national levels, organize consultation meetings, focus groups discussions and key informant interviews. Under close guidance of the international specialist, the national specialist will be mainly responsible for organizing and undertaking the field work. S/he will facilitate meetings/discussions/interviews, take detailed notes in local language and summarize key points raised. He/she will translate and prepare a comprehensive and accurate summary of the discussions in English as well as record relevant quotes of the participants/key informants for the international specialist, which will be used for the purpose of analysis and inclusion of quotes in the draft and final reports. The national specialist will work in close collaboration with the MAF/Gender Unit/key Gender Focal Points and Lao Women's Union (LWU) in organizing and undertaking the field work.

- (iv) Phase 4: Draft report - After the field work, the international specialist will prepare a draft report in English presenting the major findings and providing recommendations on the report below. The national specialist will mainly review, crosscheck and provide feed-back on the findings based on the detailed notes he/she took in local language while doing the field work. The report will include the following:
1. analytical framework and methodological approach, and set of tools and research instruments such as guides that can be used in future value chain gender analysis by the EA;

2. gender analysis of the 2 targeted crop value chains (rice and vegetable), including findings about gender specific opportunities and constraints found along the value chains;
3. clear set of recommendations for including gender in the agribusiness policy that will be formulated under the project (a 5-page policy brief will be developed); and
4. clear set of recommendations for ensuring gender responsive agribusiness programming and planning.

The international expert will present major findings and recommendations during validation workshops to be organized (by the national expert) at local and national levels, and solicit comments from relevant stakeholders. S/he will ensure all comments on the draft report will be integrated in the final report.

The specialists will ensure that all comments on the draft report are recorded and addressed in the final report. If needed, the national will translate major findings and recommendations in Lao language for the validation workshops.

- (v) Phase 5: Final report - The international specialist will prepare a final report in English with the above mentioned (under iv) content, which incorporates the feedback from the executing agency and relevant stakeholders. The national specialist will review, crosscheck and provide feedback to its international counterpart on the final draft of the final report.

i. Procurement Specialist – 1 international (5 pm) and 1 national (32 pm)

35. **Qualifications:** The procurement specialists will have a master's degree in business administration, engineering or other related field with preferably 10 and 5 years, for international and national respectively, of experience as procurement officer on ADB or internationally financed projects. The specialists should demonstrate experience in the procurement of works and goods, preparation of tender and contract documents, evaluation of bids, contract management, and recruitment of consultants in at least two ADB financed projects.

36. **Tasks:** The specialists will build on the work previously undertaken in procurement under advance action. The specialists will assist NPMO to undertake the following:

- (i) Provide guidance to NPMO and implementing agencies in preparing bidding documents, evaluation of bids, contract negotiations and in finalizing contract agreements for works, goods and services;
- (ii) Guide the NPMO in preparing request for proposal for engaging consulting services and other services, reviewing proposals; negotiating contracts and finalizing contract agreements for services;
- (iii) Recommend and ensure implementation of contract management capacity building training covering ADB procurement guidelines and procedures for the project implementation staff in the NPMO and PPIUs;
- (iv) Assist in establishing an appropriate procurement monitoring system;
- (v) Review progress reports on progress and issues relating or might affect procurement, and implementation of contracts; and
- (vi) Provide recommendation or advice to resolve contractual issues.

j. Agribusiness Specialist/Deputy Team Leader - 1 national (40 pm)

37. **Qualifications:** The expert will have a master's degree in agribusiness or an agribusiness related **subject**, such as agricultural marketing, agro processing, or international commodity trade. He/she will have excellent communication (written and oral) skills and will have excellent communication skills in spoken and written English. He/she will have 5 years of experience in working with a multilateral rural development/agriculture project, preferably funded by ADB.

38. **Tasks:** The expert will assist the Team Leader to:

- (i) Provide overall responsibility for technical support during implementation.
- (ii) Establish the overall project performance monitoring, evaluation, reporting and communication regime.
- (iii) Supervise the consulting team and ensure that inputs and activities of both the international and national consultants are of a high quality.
- (iv) Assist the NPMO in the scheduling and planning of project implementation, including preparation and implementation of the work plans.
- (v) Provide advice and guidance on procurement, disbursement and liquidation of expenditures following ADB procedures;
- (vi) Ensure that baseline surveys and annual surveys are carried out to obtain the necessary information to measure implementation and impact performance;
- (vii) Assist the NPMO to identify all agribusiness value chain actors, and devise strategies/activities to help improve their performance;
- (viii) Assist the NPMO monitor the performance of agribusiness value chain actors during and following interventions;
- (ix) Assist in the design, planning and supervision of the monitoring of implementation safeguards and benefits;
- (x) Lead the consulting team in assisting the NPMO to review technical and safeguard aspects of investment studies;
- (xi) Ensure the pro-poor measures identified in the community consultations are designed and carried out;
- (xii) Assist the NPMO in addressing O&M issues;
- (xiii) Supervise safeguard and social monitoring during construction implementation;
- (xiv) Assist the NPMO to resolve safeguard and implementation problems and issues that may arise from time to time;
- (xv) Submit reports to the NPD following each input to the project, organize, contribute presentations and deliver project workshops, and prepare and submit the project's mandatory semiannual, annual, mid-term reports, and, additional, any specific reports and papers as requested by the NPD; and
- (xvi) Participate in the mid-term review; and lead a team to prepare the project completion report.

k. Rural Infrastructure Engineers - 2 national (19 pm each)

39. **Qualifications:** The expert will have a degree in civil engineering, with a major in the design of water management and irrigation systems design, with 7 years of working experience in climate-resilient design, operation and maintenance of water management and irrigation systems. He/she will have good knowledge of drip irrigation as well as surface water catchment ponds for supplementary irrigation. The expert will have experience working with international consulting firms in donor-funded projects. He/she will have good communication skills in spoken and written English.

40. **Tasks:** Detailed tasks will include the following, but not limited to:

- (i) Provide necessary technical and management support to the executing agency for effective project implementation relating to off-farm and on-farm irrigation and water catchment;
- (ii) Assist NPMO in the selection of subprojects (irrigation, water retention ponds, farm access roads);
- (iii) Review the design of works (including assessing the feasibility against economic, technical, environmental and social criteria) and prepare the technical aspects of the bid documents;
- (iv) Assess the plan for the construction of the subprojects and make field trips to confirm eligibility criteria is satisfied and report back to the TL, DTL and NPMO;
- (v) Establish the schedule, methods, and procedures for the review of the detailed engineering design and construction drawings of the civil works provided by the employer;
- (vi) Review the detailed design and construction drawings in accordance with the design standards, criteria, and conceptual design;
- (vii) Ensure that the technical specifications in the bid documents and the provisions of Lao Design and Construction Standards have been duly accounted for in the detailed engineering design and construction drawings;
- (viii) Work with NPMO to provide inputs on the tender documents, selection of eligible bidders and provide guidance to the procurement selection committee on choice of contractor. The procurement will be in accordance with the Government of Lao PDR and ADB Guidelines on Procurement;
- (ix) Give the order to commence civil works;
- (x) Inspect and approve all material sources identified by the contractors;
- (xi) Review and approve the contractor's implementation schedule and supervise progress of construction. The specialist will keep the employer informed of any delay or potential delays in the work schedule of the contract, and will take all necessary actions to prevent potential delays;
- (xii) Review, approve, and monitor the construction plan to minimize disruption to vehicular traffic and water supply and agricultural activities during construction, and to ensure that construction activities do not endanger safety of the public.
- (xiii) Regularly monitor and inspect the contractor's quality control and assurance program to ensure that quality of the finished works meet the contract standards and specifications. This includes regular checking of the materials testing program;
- (xiv) Advise and assist the employer with respect to arbitration or litigation relating to the works, whenever required;
- (xv) Convene regular site meetings with the contractor to discuss issues and problems affecting the progress, and brief the employer;
- (xvi) Coordinate with the relevant local government authorities/agencies to minimize disruption to the works program, as required by the contractor;
- (xvii) Review the contractor's insurance coverage to ensure that the contractor has provided all the insurance required by the contract and such insurance are maintained throughout the contract period;
- (xviii) Prepare any required variation orders requested by the employer and review any variation order proposed by the contractor and provide advice to the employer in accordance with the contract;
- (xix) Review all claims submitted by the contractor and provide advice to the

- employer of the validity of the claim, the effect of such claim on the construction schedule and the cost of the project;
- (xx) Review and comment on the monthly progress reports submitted by the contractor detailing the work undertaken during the previous month, the progress of the work against the approved schedule, the problems and difficulties encountered by the contractor and other issues requested by the employer;
 - (xxi) Issue completion certificate after satisfactory completion of the works in accordance with the contract provisions;
 - (xxii) Supervise updating of the resettlement plan, if necessary, and develop poverty monitoring impact monitoring systems;
 - (xxiii) Review and advise the employer whether the construction methods as proposed by the contractor for carrying out the works are satisfactory, with particular references to the technical requirements of sound environmental standards on the basis of ADB's Safeguards Policy Statement (2009), inspection of contractor's construction equipment, safety of the works, property, personnel, and general public;
 - (xxiv) Assess and check the laboratory and field tests carried out by the contractor, and independent tests;
 - (xxv) Issue orders to the contractor to remove or improve any works that are not in accordance with the drawings and/or specifications;
 - (xxvi) Maintain records of all testing work, including cross-referencing of items of work to which each test refers and location from which any samples were obtained for testing;
 - (xxvii) At the completion of the contract, verify the contractor's "as-built drawings" as a true record of the works as constructed;
 - (xxviii) Measure the completed works and keep detailed records, including the measurement books;
 - (xxix) Prepare quarterly cash flow projections for the employer in an acceptable format, in which cash flow should identify budget estimates for all outstanding works;
 - (xxx) Supervise the maintenance of records for all plant, labor and materials used in the construction of the works;
 - (xxxi) Supervise the process of interim and final payments to the contractor (interim monthly payment shall be based on interim payment certificate processed by the consultant following claims filed by the contractor);
 - (xxxii) The consultant will be responsible for checking and monitoring the performance requirements in the contract and ensuring the criteria and limits are met;
 - (xxxiii) Maintain a day-to-day diary, which shall record all events pertaining to the administration of the contract, request forms, and order given to the contractor, and any other information which may at a later date be of assistance in resolving queries which may arise connecting execution of the works;
 - (xxxiv) Supervise the implementation of training programs of project staff at the site on project management including quality assurance and contract administration;
 - (xxxv) Assist in the development of a detailed work plan for the irrigation system's infrastructure activities with the implementation agencies, this includes establishing an appropriate management and monitoring system;
 - (xxxvi) Assess the compliance of the subprojects to climate resilience in the design;

- (xxxvii) Propose appropriate operation and maintenance regimes and options for PPP arrangements; and
- (xxxviii) Contribute to the elaboration and submission of the progress reports for submission to PMU and M&E staff, the frequency of reporting will be in accordance to that specified in the PAM.

41. The expert will be required to obtain prior approval of the employer in the following matters as specified in the civil works contracts: (i) recommending the subletting of any part of the works; (ii) certifying additional cost; (iii) determining an extension of time; (iv) issuing a variation having financial implications; and (v) fixing rates or prices.

I. AutoCAD Specialist - 1 national (10 pm)

42. **Qualifications:** The expert will have a degree in engineering, preferably civil engineering, with 3 years of working experience in the use of AutoCAD. He/she will have experience in the design of rural infrastructure, irrigation rehabilitation, and upgrading of works. The engineer will have experience working with international consulting firms in donor-funded projects. He/she will have good communication skills in spoken and written English.

43. **Tasks:** Detailed tasks will include the following:

- (i) Prepare detailed design drawings using AutoCAD;
- (ii) Link the design drawings to the calculation of the bill of quantities.

2. Technical Team

a. GAP & CSA Training Specialist - 1 international (9 pm) and 1 national (30 pm)

44. **Qualifications:** The specialists will have a university degree in the biological sciences, business administration or marketing. The international specialist will have post graduate experience in ISO or GAP auditing and certification procedures. The international will have 7 years, while the national specialist will have 5 years, of experience in agricultural production standards compliance and must be familiar with GAP. Preferably with good managerial, analytical and interpersonal skills and a proven ability to communicate clearly in English.

45. **Tasks:** Building capacity is important in such activities as climate smart agriculture (CSA) and standards compliance for good agricultural practice (GAP), both of which are required for farmers entering a quality assured value chain, depending on the crop and the level of assurance required, which more and more traders and processors are insisting on particularly in more mature export markets of EU, USA, Japan, Korea and even China. The international expert will develop a capacity-building program related to compliance with the standards being promoted and their certification processes. The scope of work includes:

- (i) Develop an action plan for capacity building of MAF, PAFO & DAFO staff, farmers and farmer groups, and water user groups;
- (ii) Review the progress of standards relating to CSA and GAP;
- (iii) Identify synergy with other donor partner projects that have or are developing standards and training farmers on standards compliance such as IFC, KfW, FAO, and GIZ and assess lessons learned in the policy development process;

- (iv) Provide assistance to the Department of Agriculture to develop GAP and organic farming standards for rice and vegetables and advise on developing a certification scheme using ISO standards;
- (v) Work and assist the national capacity building coordinators in developing training programs both formal and practical for farmers and government officials;
- (vi) Work with the NPMO, PAFOs, and DAFOs on the procurement and the costing of the capacity building and on-farm training activities. The procurement will be in accordance with the Government of Lao PDR and ADB Guidelines on Procurement. Procurement, will also include the identification and contracting of private sector service providers; and
- (vii) Submit progress reports to NPMO and M&E staff. The frequency of reporting will be in accordance to that specified in the PAM.

b. Land Administration Specialist – 1 international (6 pm) and 1 national (12 pm)

46. **Qualifications:** The international specialist will have a master's degree, while the national specialist will have a university degree, in agriculture, land management, or a related field. The international specialist will have 7 years, while the national specialist will have 5 years, of experience in land management, land administration, land titling, and land registration procedures. Experience in Lao PDR is an asset. Preferably with good managerial, analytical and interpersonal skills and a proven ability to communicate clearly in English.

47. **Tasks:** The specialists will assist the Department of Agriculture Land Management (DALAM), in partnership with the Department of Agriculture, develop a capacity building program to support village clusters (kumban) land administration staff, targeting DALAM, including the design of a model office at the kumban level to put into place more client friendly service delivery. The specialists will:

- (i) Produce at least 6 kumbans land management plans;
- (ii) Establish regional/kumban crop suitability for on and off-season production for a selection of relevant crops under different input scenarios;
- (iii) Build capacity to validate, strategize, and implement participatory kumban land management plans produced at the national level;
- (iv) Train in the use of modern, but cost effective and simple techniques to handle routine and new land administration tasks (land use titling, crop statistics); and
- (v) Develop training program for land administration systems, participatory land use planning, work ethics, and relationship with clients, land dispute management, work planning, and report preparation.

c. Climate Risk Management Specialist – 1 international (6pm) and 1 national (12 pm)

48. **Qualifications:** The international and national specialist will have a master's degree and bachelor's degree respectively in natural resource management or agriculture. The international will have 10 years of experience in climate change capacity building, environmental management, monitoring, and/or impact assessment. For both experts, it is an advantage to have knowledge of ADB's project management requirements and national environment procedures. He/she will have fluent skills in written and spoken English.

49. **Tasks:** Working closely with NPMO, the specialist will:

- (i) Collect data and identify observed trends in climate;
- (ii) Conduct field consultation with local community groups on existing vulnerabilities and coping strategies;
- (iii) identify priority activities for strengthening the capacity of policymakers and relevant stakeholders;
- (iv) Identify priority areas with high vulnerability, to be verified during ground-truthing along the proposed rural investments to assess current observed changes and coping practices;
- (v) Identify all potential climate risk management adaptation solutions, including soft and hard measures;
- (vi) Conduct multi-stakeholder consultations to identify and confirm all options, including their costs, benefits, and risks;
- (vii) Organize a second consultation meeting with NPMO and other stakeholders' to seek agreement on prioritized climate risk management measures to undertake during project implementation;
- (viii) Identify any additional capacity building needs required for staff of MAF, PAFO, and DAFO; and
- (ix) Identify indicators to monitor vulnerability reductions and sustainability of adaptation measures in the context of project implementation.

d. PPP and Value Addition Specialist – 1 international (4 pm) and 1 national (20 pm)

50. **Qualifications:** The international specialist will have a post graduate qualification in agricultural marketing or other relevant subject from an internationally recognized educational institution. He/she will demonstrate 10 years of experience in agricultural marketing and trade policy in developing countries, preferably in Southeast Asia with knowledge and experience of value addition in the rice and horticultural, and organic farming sub sectors. The national specialist will have a tertiary degree in agricultural marketing or other relevant subject from a recognized educational establishment. He/she will have 3 years of experience working on a multilateral rural development/agriculture project, preferably funded by ADB. The experts will have excellent skills in written and spoken English.

51. **Duties:** Together with other PIC team members, the specialists will be responsible for implementation of Outputs 1 and 2, and specifically those interventions relating to agricultural marketing in the domestic and export market, capacity building trade policy. Specifics tasks are as follows:

- (i) The international expert will guide and supervise the national expert, and collaborate with the national agro processing specialist/DTL to ensure that the upgrading of rice mills and organic fertilizer production units and construction of vegetable pack houses (collection and marketing infrastructure) achieve their improved marketing efficiency objectives in both the domestic and export markets.
- (ii) Submit reports to the team leader following each input to the project and contribute to the project's mandatory semiannual, annual, midterm reports, and, additionally as requested by the team leader.
- (iii) Contribute presentations on relevant subjects to project workshops.

e. Unallocated Specialists

52. Funding is available for unallocated consultancy which, it is envisaged, may be used to assist in training and capacity building activities and research and studies under Outputs 2 and 3.

53. **Reporting Requirements and Time Schedule for Deliverables.** The project implementation period of the consultant services is 72 months.

54. Deliverables of the project management team include:

- (i) Inception Report (within 3 months of mobilization) - presenting approach to tasks and reporting, with details of how each task will be performed, and identifying what resources will or may be required.
- (ii) Quarterly Progress Reports - summarizes the highlights per quarter, the activities undertaken and a summary of disbursements; physical and financial progress of the project; achievement of targets for outputs and inputs defined in DMF, to be submitted within 14 working days of the first month of the succeeding quarter.
- (iii) Project Performance Monitoring Reports – shall be submitted every 6 months, highlighting the performance based on the DMF targets.
- (iv) Recipient's Project Completion Report – within 6 months from physical completion of the project.
- (v) Safeguard monitoring reports – due as required in the project LARF's, EARF's and EMDF (linked documents).
- (vi) Gender Action Plan - due as required in the gender action plan linked document.

55. Deliverables of the technical team include:

- (i) Action and work plans: Within 2 months of mobilization, an action plan and first year work plans that will be prepared to determine the approach to their respective scopes of work and how each task will be undertaken with the support of the international experts, identifying what physical and financial resources will or could be required;
- (ii) Quarterly Progress Reports: Contribute to the project's QPRs, which will summarize activities undertaken, impediments to effective implementation, progress in achieving targets for the outputs and inputs defined in DMF, to be submitted within one week of the first month of the succeeding quarter for collation by the NPMO;
- (iii) Project Performance Monitoring Reports: Submit information and data relating to the DMF targets for collation into the PPMS;
- (iv) Safeguard monitoring reports: Contributions to the safeguard monitoring reports will be undertaken within the scope of the project's LARFs, EARFs and EMDF (linked documents) and as required by those safeguard and social development experts and specialists; and
- (v) Gender Action Plan: Oversee compliance with the GAP and highlight deviations from the GAP highlighting the reason or rationale of such deviations.

56. **Client's Input and Counterpart Personnel.** Services, facilities and property to be made available to the consultants by the client:

- (i) All available project reports and data including feasibility study reports and detailed engineering design for the three representative subprojects;

- (ii) Office space with furniture and office equipment;
- (iii) Vehicles; and
- (iv) Counterpart staff in NPMO.

C. FINANCIAL MANAGEMENT ENTITY (Package CS 02)

57. **Objectives of the Assignment.** To administer the matching grant scheme (MGS) and smallholder financing scheme (SFS). The primary tasks of the FME are set out in the MGS Operations Manual.

58. In addition to administering the MGS, a secondary function of the FME will be to organize a training and awareness raising program to financial institutions (FIs), predominantly banks. The rationale being that in the medium to long term it is envisaged that commercial FIs will provide increased levels of credit for agribusinesses against terms which are attractive enough for agribusinesses to invest, negating the need for a MGS. This will require a change in the risk averse nature of FIs in loaning to agribusiness.²⁸ This can be partly overcome by providing training to selected FIs in assessing the risk of agribusiness lending (credit risk and business plan *analysis*); in raising awareness and building capacity on new financial products (including green finance products) that can be offered to the agribusiness sector; and in providing training to agribusinesses and farmers groups on applying for bank loans or other financial products, and in financial management.²⁹ The range of training topics to be provided by the FME should include regional or global best practices in agribusiness lending, credit assessment, credit risk mitigation, available financial products, and operation risk mitigation. Training to commercial bank staff will be conducted by an international green finance and agricultural credit analysis specialist, although joint training with those responsible for training agribusinesses and APGs in business plan preparation (and for APGs financial management) could be envisaged to ensure integration between credit suppliers and users.³⁰ Aside from knowledge transmission, the training can be a venue for trainees to make business contacts. Consultants will be based in Vientiane although travel to the project provinces will be required.

59. **Qualifications of the firm.** The firm, or consortium of firms, will have recent demonstrable experience in administering and managing matching grant schemes (with experience in the management of related challenge funds also beneficial); analyzing agribusiness plans; providing training on business plan preparation (including preparing financial projections); undertaking monitoring (including fiduciary oversight) of grant projects; providing training to financial institutions on agribusiness credit risk (and business plan) analysis; knowledge of a variety of financial products appropriate to agribusinesses (preferably including green financing). Knowledge of the financial (banking) and agribusiness sector in Lao PDR is an advantage, including agribusiness technology and infrastructure needs.

60. Team composition & qualification requirements

3. Agribusiness Value Chain Specialist/Team Leader – 1 international (18 pm)

61. **Qualifications:** The specialist will have a master's degree in agribusiness or an agribusiness related subject and experience in (i) managing matching grant projects or challenge funds (with at least some agriculture portfolio); (ii) preparing business plans, and (iii) conducting analysis of business plans (preferably including cash flow and other financial analysis and financial modelling), including for agricultural enterprises. He/she will preferably have

²⁸ Facilitating linkages between agribusinesses and FIs under the MGS will also help build their credit history so accessing future loans is more likely.

²⁹ The engagement of BDS providers in providing support to target beneficiaries in preparing concept notes and business plans will also increase their capacity to provide support to other agribusinesses post-project which will improve the quality of business plans presented to FIs.

³⁰ MGS Manager, business analysts and APG development specialist

experience with agricultural value chains (rice and vegetables), and in working in Lao or in Southeast Asia.

62. **Tasks:** The Agribusiness Value Chain Specialist will have overall responsibility for the successful implementation of the MGS (and SFS). He/she will

- (i) lead the team, providing oversight and mentoring to the business analysts;
- (ii) update the operations manual and prepare relevant associated documents templates, guidelines, etc. necessary to administer and manage the MGS;³¹ and
- (iii) provide support in preparing applicant business plans, assessing them, and preparing milestone payment schedules and grantee M&E plans.

4. **Sector Specialist** – 1 international (3 pm) and 1 national (4 pm)

63. **Qualifications:** Since it is not possible to determine requirements at this stage, which may be very specific, and require inputs of only a few hours or days, this may be an unallocated budget line to be drawn down as needed. CVs and TORs (including number of days input and expected outputs) will be presented to the NPMO for approval. However, since support may be required within a short time period the FME should try and identify types of expertise needed in advance (even if not eventually used) and submit to the NPMO for early approval.

64. **Tasks:** The sector specialist pool will be utilized, as required by the core team, to help assess concept notes and applications. For example:

- Agricultural equipment specialists to determine the applicability of proposed equipment for a business, including the commercial viability and price benchmarking;
- Pack house design specialists to assess the quality of proposed designs and to propose improvements; and
- Sector specialists (e.g. in rice or vegetables) to determine the quality of business plans in terms of market and supply demand analysis, assumptions on improvements in production, recovery rates, etc.

5. **Business Analyst** – 2 nationals (31 pm each)

65. **Qualifications:** The business analysts will have a tertiary degree in finance/financial management and will collectively have experience in assessing business plans, including preparing cash flow analysis (with the ability to conduct more complex financial analysis and modelling preferred), and in agricultural value chains, preferably for rice and vegetables. One person may not possess all these skills so the tenderer will propose the most appropriate mix of staff.

66. **Tasks:** The business analysts will be the main interlink with applicants and thereafter grantees. They will be involved in all key steps of the MGS process. During concept note and application preparation and evaluation stages they will gain in-depth insights into applicants businesses and plans. Upon award they will build strong professional relationships with grantees, in the same way that a bank manager would with his/her clients.

³¹ Building on where necessary strategies, forms and guidelines used on other matching grant projects, or challenge funds, in Laos or elsewhere.

6. Environment Safeguard Specialist – 1 national (4 pm)

67. **Qualifications:** The specialist will have a tertiary degree in environmental science or a related field and experience in screening projects for environmental issues, and proposing mitigation measures and opportunities (preferably in the agribusiness sector). Experience on a matching grant or challenge fund project in a similar role is preferred.

68. **Tasks:** He/she will screen concept notes and applications against environmental criteria, and identify weaknesses, mitigation measures, and opportunities (to improve the climate adaptation or resilience of plans, including measures to improve the resource efficiency e.g. energy or water efficiency), as detailed in the Operations Manual.

7. Social Safeguard Specialist – 1 national (4 pm)

69. **Qualifications:** The specialist will have a tertiary degree in social sciences with experience in screening projects for social and gender issues, and proposing mitigation measures and opportunities, preferably in the agribusiness sector. Experience on a matching grant or challenge fund project in a similar role is preferred.

70. **Tasks:** He/she will screen concept notes and applications against social and gender criteria, identifying weaknesses, mitigation measures and opportunities, as detailed in the Operations Manual.

8. Operations Manager – 1 national (22 pm)

71. **Qualifications:** The operations manager will have a bachelor's degree in business administration, marketing management or a related field and experience in setting up and managing operations. Previous experience in such a role on a donor-funded project is an advantage. He/she should have excellent IT literacy, preferably with experience of setting up social media or other marketing tools

72. **Tasks:** The Operations Manager will

- (i) help set up and manage the filing system for the MGS and the management information system (MIS), which may also incorporate the M&E framework;
- (ii) help prepare the marketing and communications plan and associated tools (brochures, leaflets, etc.); and
- (iii) assist the business analysts in undertaking due diligence of applicants (e.g. requesting evidence of registration), and in benchmarking costs contained in applications to ensure value for money.

73. Tenderers should state in their methodology how they will undertake the above tasks in the most efficient and effective manner. Methodologies should include details on the proposed implementation arrangements and scope of the FI training and awareness building program.

9. Green Finance and Credit Specialist – 1 international (6 pm)

74. **Qualifications:** The specialist will have a master's degree in economics, business or other relevant disciplines with 10 years of experience in banking sector work, preferably in the Lao banking sector. He/she will have (i) 7 years professional experience in climate change project/program design and implementation for bilateral or multilateral donors; (ii) experience and

deep knowledge of investments/loans and sustainable financing practices; (iii) experience working with development institutions supporting the financial sector in Lao PDR to support responsible and sustainable growth; (IV) experience in forestry practices of Asia, preferably Lao PDR, particularly in relation to their role for climate change adaptation and mitigation; (v) previous work experience in Lao PDR and clear understanding of the ADB modality of project technical assistance; (vi) knowledge of UNFCCC negotiations, NAMA's, NAP's, national REDD strategies and NAPA's and related documents; (vii) good background in forest policy, strategy and program development with strong gender components; and (viii) fluent in English both verbal and written.

75. **Tasks:** To achieve the objectives, activities are to:

- (i) Conduct a comprehensive landscape and key stakeholder analysis to determine implementation activities exist in green climate financing, and the key stakeholders involved in each including implementation agencies and donor partners. Determine what is required to remove financing aversion into green climate projects. Analyse potential incentives for financial institutions to increase lending to green climate finance projects. Include research with UNCDF, the GCF Consortium (Conservation International, the World Wildlife Fund, and Wildlife Conservation Society), USAID, DFAT, AFD, and other stakeholders;
- (ii) Design a training program for financial institutions including banks/MFIs to understand environmental and climate screening criteria, and to evaluate loans against these criteria. Training topics could include: (a) What is green lending - identification, benefits and opportunities; (b) Awareness of green climate financing projects and the Cambodia Climate Fund (CCF) operations and requirements; (c) Integration of green climate finance criteria into current credit application process; and (d) reporting on the credit guarantee;
- (iii) Plan, organize and facilitate a financial institution training and workshop on green climate-friendly investments in Lao PDR, in coordination with other stakeholders;
- (iv) Design and manage bank climate-friendly financing accreditation process. This accreditation process will ensure that banks have climate-friendly criteria included in their credit application process. These accredited banks will then become eligible for CCF lending for them to on lend to climate-friendly projects;
- (v) Conduct ongoing field visits with banks to review potential green financing projects. Conduct ongoing awareness workshops and accreditation seminars, as needed;
- (vi) Consult and coordinate with all stakeholders including the Government, environmental supporting NGOs, financial lenders, and the private sector;
- (vii) Strengthen linkages, trust and shared understanding between lenders, recipients, and input and services providers regarding climate-friendly investment opportunities;
- (viii) Deliver regular project reporting on a quarterly basis on results achieved, specific roadblocks and challenges, and next steps;
- (ix) Support expansion of newly tested crop-insurance models; and
- (x) Support procurement and installation of infrastructure to provide accurate and reliable weather information in focus provinces for the Climate-Friendly Agribusiness Value Chains Sector Project.

10. Agriculture Production Group (APG) Development Specialist – 1 national (30 pm)

76. **Qualifications:** The specialist will have a tertiary degree in agribusiness or an agribusiness related subject and experience in member group strengthening, preferably for

agricultural production groups, but experience of strengthening village groups or other relevant groups is sufficient. He/she will also have experience in training groups on financial management.

77. **Tasks:** The APG development specialist will:

- (i) help raise awareness of the fund (especially the SFS) to APGs,
- (ii) provide training (together with the business analysts) to potential applicants particularly APGs,
- (iii) design a training program (together with PAFOs and DAFOs and other relevant training providers) for the delivery of training to potential applicant groups for the SFS, in group development, in particular financial management and sustainability,
- (iv) help introduce groups to green finance products, where these are present or being planned, from FIs. This will be done in coordination with the international green finance specialist.

78. **Reporting requirements and time schedule of deliverables**

- (i) Updated operations manual with templates (within 1 month of the commencement date);
- (ii) Quarterly progress reports detailing grant portfolio performance;
- (iii) Draft final report (1 month before end date);
- (iv) Final report (within 30 days of comments on the draft final report); and
- (v) Reports as necessary for administration of the MGS – see the operations manual.

79. All reports will be written in English and Laos (unless agreed otherwise by the NPMO). Recipients of reports will include the NPMO and each member of the PCFC. Reports are considered approved if no comments have been provided within 30 calendar days.

80. **Client's input and counterpart personnel staff.** MAF will provide office space for the FME team and will cover the cost of office utilities (electricity, water). The FME will be required to equip the office, cover office running costs (stationary, etc.), provide communications for its staff (including internet), plus logistical and translation/interpretation support services, and cover all travel costs.

D. EXTERNAL MONITORING AGENCY (Package CS 03)**81. Scope of Services and Tasks.** Key responsibilities include:

- (i) Review of the FS reports of PRI subprojects. The feasibility reports include the annexes of (a) Social Impact Assessment (the EGDs, or IPPs and the GAPs), (b) Initial Environmental Examination (the EMPs), and (c) Land Acquisition and Compensation Plan (LACP);
- (ii) Review of participation and disclosure. Assess the adequacy of (a) process such as participation, consultation, grievance resolution, (b) integration of gender vulnerable groups and ethnic groups into planning and implementation of activities; and (c) mitigation of environmental impacts with respect to the EGDs, GAPs, EMPs and RPs;
- (iii) Develop a monitoring and assessment plan. Develop a monitoring and assessment plan responding to the scope of works outlined in these terms of reference including the detailed field survey plan;
- (iv) Conduct field monitoring survey. Conduct field monitoring survey according to the monitoring plan by interviewing the concerned households as well as the project staff;
- (v) Conduct water quality monitoring; and
- (vi) Assess the attainment and sustainability as defined in the EGDs, GAPs, EMPs and RPs. Particularly, on environmental issues, EMA will provide recommendations for any organizational or methodological improvements with an aim to ensuring the sustainability of the government's internal capacity of environmental monitoring.

82. Team Composition and Qualification Requirements**11. Safeguard Monitoring Specialist/Team Leader**

83. Qualifications: The expert will have preferably 5 years of relevant experience on the planning and conduct of socio-economic analysis and social impact assessment of rural infrastructure or agricultural development projects. She/he must hold at least a bachelor's degree on irrigation, agriculture, economics or social sciences.

84. Tasks: The specialist will be responsible for the overall planning and management of the safeguards monitoring. Specifically, she/he will be responsible for the following:

- (i) Review of the (a) Social Impact Assessment (the EGDs, or IPPs and the GAPs), (b) Initial Environmental Examination (the EMPs), and (c) Land Acquisition and Compensation Plan (LACP) in the FS reports;
- (ii) Review previous Safeguard Monitoring Reports;
- (iii) Assess the adequacy of: (a) process such as participation, consultation, grievance resolution, (b) integration of gender vulnerable groups and ethnic groups into planning and implementation of activities; and (c) mitigation of environmental impacts with respect to the EGDs, GAPs, EMPs and RPs;
- (iv) Develop a monitoring and assessment plan responding to the scope of works outlined in these terms of reference including the detailed field survey plan;
- (v) Conduct the field monitoring survey according to the monitoring plan by interviewing the concerned households as well as the project staff of PPOs;
- (vi) Conduct water quality monitoring;

- (vii) Assess the attainment and sustainability as defined in the EGDs, GAPs, EMPs and LACPs. Particularly, on environmental issues, the EMA will provide recommendations for any organizational or methodological improvements with an aim to ensuring the sustainability of the government's internal capacity of environmental monitoring;
- (viii) Prepare the Safeguard Monitoring Report, which includes the results and assessment on (a) EMPs, (b) EGDs (or IPPs), (c) GAPs and (d) LACPs;
- (ix) Conduct the field monitoring survey on resettlement; and
- (x) Assist the Safeguard Monitoring Team Leader in preparing the draft safeguard monitoring report on: (i) Ethnic Group Development Plans (EGDs), (ii) Gender Action Plan (GAPs), and LACPs for the PRI subprojects.

12. Resettlement Specialist

85. **Qualifications:** The expert will have preferably 5 years of experience in conducting socioeconomic surveys on rural infrastructure or agricultural development projects utilizing different methodologies such as interviews using structured questionnaires and focus group discussions.

86. **Tasks:** The specialist will assist in conducting field monitoring survey of PRI subprojects. Specifically, the specialist will be responsible for the following:

- (i) Conduct the field monitoring survey on resettlement; and
- (ii) Assist the Safeguard Monitoring Team Leader in preparing the draft safeguard monitoring report on: i) Ethnic Group Development Plans (EGDs), ii) Gender Action Plan (GAPs), and LACPs for the PRI subprojects.

13. Environment Specialist

87. **Qualifications:** The Environment Specialist will have preferably 5 years of experience on the conduct of environment surveys on rural infrastructure or agricultural development projects utilizing different methodologies such as interviews using structured questionnaires and focus group discussions.

88. **Tasks:** The Environment Specialist will assist in conducting field monitoring survey of PRI subprojects. Specifically, s/he will:

- (i) Conduct the field monitoring survey on environment; and
- (ii) Assist the Safeguard Monitoring Team Leader in preparing the draft safeguard monitoring report on Environment Management Plan for the subprojects.

14. **Assistant Surveyors** - Three (3) assistant surveyors should be selected in each relevant province.

89. **Reporting requirements and Deliverables.** The results of the monitoring will be part of the quarterly progress reports of the overall project.

- (i) Monitoring and assessment plan as well as the draft contents of the Safeguards Monitoring Report responding to the scope of works outlined in these terms of reference including the detailed field survey plan for each mission;

- (ii) Draft Safeguard Monitoring Report of each mission that documents the LARP implementation and voluntary donation processes, findings, conclusion, and recommendations (This report includes the minutes of interviews/meetings held for verification);
- (iii) Draft Safeguards Monitoring Report based on NPMO/PIC comments;
- (iv) Final Safeguard Monitoring Report, which includes the results and assessment on EMPs, EGDs (or IPPs), GAs, and RPs; and
- (v) Hard copies of the reports must be accompanied with soft copies (not pdf).

90. **Client's inputs and counterpart personnel.** EMA will be expected to undertake their work from their home office but will also be required to spend considerable time in each of the participating provinces. NPMO and PPIUs will make available to EMA all relevant data, maps and reports, and ensure access to all equipment purchased under the Project at no cost to the EMA. NPMO and PPIUs will provide counterpart and support staff to work with ESM, and will arrange necessary introductions to concerned government organizations, ministries and their departments.

E. EXTERNAL AUDITOR (Package CS 04)**15. Background of the Project:**

91. Please refer to Annex E.1 (attached to this TOR), the following information:

- a. background of project
- b. project description
- c. executing and implementing Agencies (EA/IAs)

16. Accounting and Financial Management

92. If the project has a financial management manual, mention it here, please include as Annex E.2, attached to this TOR for the content of the Financial Management Manual.

17. Objective

93. The objective of audit assignment is to ensure that ADB, on an annual basis, is provided with the following reliable, comprehensive, and timely information: (i) audited project financial statements (APFS); (ii) specific additional audit opinions; and (iii) management letter. ADB requires these documents to be provided in English.

18. Scope of Work ³²**A. APFSs: Financial Statement to be audited:³³**

94. The EAs/IAs are responsible for preparation and consolidation of APFSs. The Auditor is to express an opinion on the accompanying statements based on the audit. The accounting standard adopted should be specified in the annual audited financial statements. The content of the financial statements is expected to include, as a minimum (refer to Annex E.3, attached to this TOR for a sample list of requested document):

- a. A Summary of all sources of funds, as well as expenditures against a classification system that is responsive to the project's objectives both for the current fiscal year and cumulative to date, showing ADB funds and counterpart fund and funding from other sources separately;

³² The auditor should be sufficiently clear with the scope of the audit to properly define what is expected of the auditor. The EA should not restrict the audit procedures or the techniques the auditor may wish to use to form an opinion. The TOR will not generally have to be customized to a particular audit situation. The list of issues outlined in the TOR is not exhaustive, nor should all matters be addressed in every project. The scope and detail of an audit are likely to be unique for each project.

³³ The form of the APFS and supporting documentation that will be supplied to the auditor, and on which they are to give an opinion and a report, should be specified. In practice, the form and content of APFS will vary among countries and projects. For instance, the APFS may comprise a Statement of Receipts and Payments only on project transactions. Other schedules may include cumulative work-in-progress, assets and inventories, and summarized bank reconciliation. The estimated time for providing these documents to the auditor should be stated (e.g., one month after financial year-end). This schedule helps the auditee and the auditor plan for the financial statements-preparation and the audit process.

- b. A Summary of Expenditures (SOE) shown under the main project components and by main categories of expenditures, both for the current fiscal year and accumulated to date;
- c. A Balance Sheet showing Accumulated Funds of the Project, bank balances, other assets of the project, and liabilities, if any; and
- d. Supporting schedules to the financial statements which at least include: (i) a reconciliation of the amounts shown as received by the project from the ADB with those shown as being disbursed by ADB; and (ii) SOE procedure (if applicable) listing individual SOE withdrawal applications by specific reference number and amount.

95. In addition to the audit of the project financial statements, the auditor is required to audit all SOEs as the basis for the submission of the withdrawal applications to ADB. The auditor should apply such tests and controls as the Auditor considers necessary under the circumstances. These expenditures should be carefully compared for project eligibility with the relevant grant agreement for guidance when considered necessary. Where ineligible expenditures are identified as having been included in withdrawal applications and reimbursed against, these should be separately noted by the Auditor. A note to the Project Financial Statements should be a schedule listing individual SOE withdrawal applications by specific reference number and amount. The total withdrawals under the SOE procedure should be part of the overall reconciliation of ADB disbursements described above.

96. Advance Account/Sub Account statement showing movement and reconciliation with the bank statements. The Auditor is also required to audit the activities of the Advance Accounts/Sub Accounts associated with the Project that usually comprise of:

- a. Deposits and replenishments received from ADB;
- b. Payments substantiated by withdrawal applications;
- c. Interest that may be earned from the balances and which belong to the Recipient; and
- d. The remaining balances at the end of each fiscal year.

97. The Auditor must form an opinion as to the degree of compliance with ADB's procedures and the balance of the EAs at year-end. The audit should examine the eligibility and correctness of financial transactions during the period under review and fund balances at the end of such a period, the operation and use of the IAs in accordance with the financing agreement, and the adequacy of internal controls for this type of disbursement mechanism.

98. The Accounting Policies adopted and Explanatory notes. A Management Assertion that ADB funds have been expended in accordance with the intended purposes. Request for form of Annual Project Financial Statements (extracted from PAI 5.07 revised on Jun.2012) including, but not limited to:

- a. Annual project financial statements should normally be presented in the local currency, with the basis for conversion of any foreign exchange transactions or commitments explicitly stated.
- b. The annual project financial statements should be presented in the English language and should reflect the operations supported by ADB financing, including ADB-administered funds.

- c. The project expenditures should be presented following the expenditure categories contained in the legal agreement and/or the PAM, and revisions thereto.
- d. The annual project financial statements should include comparative figures for the preceding reporting year and cumulative figures from the grant effectiveness date to the end of the current reporting year. For projects that receive funding from other sources, the annual project financial statements should include all sources of funds (both ADB-provided and otherwise).
- e. The accompanying Notes to Financial Statements should provide sufficient explanation and information on the financials in narrative form or appropriate supporting schedules, including description of key financial reporting policies.
- f. For projects where separate and distinct components are being administered by the EA and/or several implementing agencies (IAs) each agency should prepare separate project financial statements reporting on the funds they are administering.
- g. Financial statements should be prepared in accordance with accrual based financial reporting standards.
- h. The agreed financial reporting and auditing arrangements will be set forth in the legal agreement and detailed in the PAM.

B. Specific additional audit opinions:

99. The auditors are engaged to provide an independent and objective opinion on whether the financial statements present a true and fair view, in all material respects, in accordance with the applicable financial reporting framework. The auditors should also form an opinion from the audit evidence obtained, and clearly express that opinion through a written report. The auditor's opinion is necessary to establish the credibility of the project financial statements. The objective of the audit of the annual project financial statements (APFS) is to enable the auditor to provide opinion(s) covering:

- a. Use of grant proceeds - to confirm whether the recipient or EA has utilized all proceeds of ADB's grant only for purposes of the project;
- b. Compliance with financial covenants: (Please refer to: Annex E.4 attached to this TOR, where applicable) - to confirm or otherwise, that the recipient or EA was in compliance with the financial covenants of the grant agreement.
- c. Compliance with the advance fund procedure which includes advance account(s) and sub-account(s) (where applicable) - to confirm or otherwise, whether the advance account (and sub-accounts) gives a true and fair view of the receipts collected and payments made and supports advance and sub-account- liquidations and replenishments during the year.
- d. Compliance with the Statement of Expenditure (SOE) procedures (where applicable) - to confirm or otherwise, whether adequate supporting documentation has been maintained to support claims to ADB for reimbursement of expenditures incurred and that the expenditures are eligible for financing under the grant agreement.

C. Management Letter

100. ADB requires the EA/IAs to provide a copy to provide a copy of the auditor's Management Letter, together with the APFS/AFS. At the minimum, this should include:

- a. a general overview of the internal control systems of the project and the EA, or an opinion on the management systems;
- b. an identification of material deficiencies or weaknesses in the project or EA/IAs' internal controls over financial reporting or on the overall system of internal control;
- c. the auditor's recommendations for improvements or for rectification of identified weaknesses;
- d. the client's comments on the findings and recommendations; and
- e. follow-up action/s or status to previously identified issues and findings, if any.

101. In cases where a management letter is not received for the entity as a whole, then a management letter covering internal controls and procedures associated with the preparation of the project financial statements is required and should be submitted together with the APFS. When significant weaknesses come to attention of the auditor during the course of audit that are not reflected in the audit opinion, they should be reported in a management letter as follows;

- a. A description of specific internal control weaknesses noted in the financial management and recommendations to resolve/eliminate the internal control weaknesses;
- b. Inappropriate accounting policies and practices and effectiveness of the accounting records system in providing useful and timely information for proper management of the program/and project;
- c. Issues regarding general compliance with broad covenants on each financing agreement and give comments, if any, on internal and external matters affecting such compliance;
- d. Report significant matters raised in previous reports which have not been dealt with effectively
- e. Any other matters that the auditor considers should be brought to the attention of the recipient.
- f. A time bound actions plan that have been agreed with the management to address each of the individual issue, including date of completion, and person(s) responsible for implementation of the action plan.

A. Locations to be Audited

102. ADB funded projects in Lao PDR often include central level, provincial and even lower levels. The auditors may have to travel to all lower levels to do the audit. If it is the case, the TOR should specify the provinces where Auditors must visit.

B. Phasing of the Audit

103. The TORs must specific in the following table when the report will be submitted in draft and in final format:

Month of fiscal year (FY) and report submission

Period	FY start	FY End	Report Submission	Remarks
1				
2				

104. Although the auditing firm will be contracted for the mentioned audit phases (maximum three years per contract), it must submit the financial proposal in US\$ in a format indicating the amount for each financial year independently: (i) If performance is not satisfactory in one year then the client will not be bound for subsequent year's audits; and (ii) If the performance is satisfactory, the auditor may participate in bidding process for the next fiscal years, but the total assignment should be up to 6 years for one project.

C. Auditing Requirements:

105. The audit will be carried out in accordance with International Standards of Auditing including:

- a. planning and conducting the audit in accordance with a risk-based framework with a detailed audit work program which is sufficiently extensive in its coverage of the project's FS to support the opinion given.
- b. the auditor will gather evidence and prepare working papers to properly documents the evidence seen in support of the opinion given, sufficient audit evidence will be gathered to substantiate in all material respects the accuracy of the information contained in supporting schedules attached to the feasibility.
- c. the auditor will review and evaluate the system of internal controls in effect, including internal audit procedures, to determine the degree of reliance that may be placed upon them and to determine the extent of testing of actual transactions needed to assure the auditor of the accuracy of the accounting records,
- d. the audit coverage will consider the risk of material misstatement(s) as a result of fraud or error. The audit program should include procedures that are designed to provide reasonable assurance that material misstatements (if any) are detected.
- e. the auditor must obtain an understanding of the design and operation of internal control over compliance with requirements that could have a direct and material financial effect on the funding agreements. The auditor's work in this area is in addition to the consideration of internal control over financial reporting that is part of the FS audit. Specifically, the auditor must obtain an understanding of the internal control over compliance that is sufficient to plan the audit to support a low assessment level of control risk for donor program. The auditor needs to test the internal control unless the internal control is likely to be ineffective in preventing or detecting noncompliance.

106. The auditor need also review the following:

- a. ADB financing (and expand to all external financing where ADB is not the only financier) shall be used in accordance with the conditions of the relevant financing agreement, with due attention to economy and efficiency, and only for the purposes for which the financing was provided, as detailed in the supporting documents
- b. Counterpart funds shall be provided and used in accordance with the relevant grant agreements, with due attention to economy and efficiency, and only for the purposes for which they were provided;
- c. Goods, works and services financed shall be procured in accordance with the relevant financing agreements including specific provisions of the ADB Procurement Policies and Procedures and relevant laws of Recipient. However, in case there are

conflicts between ADB policies and procedures with Recipient's relevant laws, ADB policies and procedures will prevail. Fixed assets procured by all financiers shall be reviewed;

- d. The expenditures submitted to ADB shall be eligible for financing and all necessary supporting documents, records, and accounts in support of credit withdrawals have been adequately maintained with clear linkages between the books of account and reports presented to ADB;
- e. Funds disbursed through SOEs shall be utilized for the purposes defined in the funding agreements. Where ineligible expenditures are identified as having been included in withdrawal applications and reimbursed against, these should be separately noted by the auditor;
- f. Advance Accounts and sub-accounts, (if used) shall be maintained in accordance with the provisions of the relevant financing agreements and funds disbursed out of the account were used only for the purpose intended in the financing agreement and other supporting documents.

D. Accounting Policies and Changes

107. The auditor should comment on the project's accounting policies and confirm the extent to which the agreed project accounting policies have been applied. In particular, the auditor should note the impact on the APFS arising from any material deviations from the agreed accounting standards. The auditor should also comment on any accounting policy changes, either during a financial year, or from one year to another.

E. Compliance with laws, regulations and funding agreements

108. The auditor should be aware of the unique characteristics of the compliance auditing environment. Governments and not-for-profit organizations differ from commercial enterprises in that they may be subject to diverse compliance requirements including its compliance with financial covenants and financial assurances.

109. Management is responsible for ensuring compliance with relevant laws, regulation and funding agreements. That responsibility encompasses the identification of applicable laws, regulations and funding agreements and the establishment of internal control designed to provide reasonable assurance that the auditee complies with those laws, regulations and funding agreements.

110. In addition to the opinion on the FSs, the auditor should provide an opinion on whether the auditee complied with laws, regulations and provision of contracts and funding agreements that have a direct and material financial effect on the project financial statements. The auditor should prepare a report with separate schedule of findings and questioned costs. The scope of the audit should also refer to compliance with the Procurement procedures as set out in the funding agreements.

F. Responsibility to Consider Fraud in an Audit

111. The primary responsibility for the prevention and detection of fraud rests with both those charged with governance of the entity and with management. It is important that management, with the oversight of those charged with governance, place a strong emphasis on fraud prevention, which may reduce opportunities for fraud to take place, and fraud deterrence, which

could persuade individuals not to commit fraud because of the likelihood of detection and punishment. It is the responsibility of those charged with governance of the entity to ensure, through oversight of management, that the entity establishes and maintains internal control to provide reasonable assurance with regard to reliability of financial reporting, effectiveness and efficiency of operations and compliance with applicable laws, regulations and funding agreements. To do that, management is responsible for establishing a control environment and maintains policies and procedures to assist in achieving the objectives of ensuring the orderly and efficient conduct of the entity's operation.

112. Therefore, in order to ensure that those assertions are addressed in the audit of the entity, it is important that auditors must follow International Standards of Auditing (ISA 240) "The Auditor's Responsibility to consider Fraud in an Audit of Financial Statements.

G. Audit Report

113. The auditor should become familiar with the following documents: Guideline for the financial governance and management of investment projects financed by the Asian Development Bank; and the Loan Disbursement Handbook. The Auditor's reports on the projects financial statements should be prepared in 08 copies (04 in English and 04 in Lao)³⁴ and mentions the following matters:

- a. A title identifying the person or persons to whom the report is addressed;
- b. An introductory paragraph identifying the financial statements audited;
- c. Separate sections, appropriately headed dealing with respective responsibilities of directors (or equivalent persons),
- d. The basis of the Auditor's opinion,
- e. The Auditor's opinion on the financial statements, SOEs and IAs/SAs;
- f. The manuscript or printed signature of the Auditor; and
- g. The date of the Auditor's report.

114. The audit report is required to include separate audit opinions on the Financial Statements (as described in part D. the Scope). This would include at least the following:

- a. the audit report will state the purpose of the report and its intended use,
- b. the audit report will state which/whose generally accepted accounting standards have been applied and indicate the effect of any deviations from those standards,
- c. the audit report will state that the audit was conducted in accordance with ISAs,
- d. the audit opinion will cover the current period,
- e. the audit opinion will state whether or not the financial statements presents fairly in accordance with the adopted accounting policies for the project and that the funds were utilized for the purposes defined by the funding agreements,
- f. the audit opinion will cover in all material respects the supporting schedules,
- g. the auditor should provide an opinion on whether the Project complied with applicable laws, regulations and the Procurement procedures and other provisions of the funding agreements that have a direct and material financial effect on the Project's financial report,

³⁴ The auditing firm must take note that audited financial statements, audit report and the management letter prepared by the Auditor, should be received by ADB no later than six months after the end of the accounting period (ie., normally no later than June 30). The Auditor should therefore submit, on a timely basis, audit report, management letter and the relevant documentation to the EAs/IAs to meet this requirement. The EAs/IAs will be responsible for forwarding two copies of the audited project financial statements, audit report and management letter to the ADB.

- h. the auditor should provide an opinion on the effectiveness of internal control over compliance with requirements that could have a direct and material financial effect on the financial statements as well as internal control over financial reporting.

H. Available Information and Services to be Provided to the Auditor

115. Please refer to Annex E.3 attached to this TOR for a sample list of requested documents by Auditor. These include:

- a. The auditor should have access to all legal documents, correspondences, and any other information associated with the project and deemed necessary by the auditor. The auditor will also obtain confirmation of amounts disbursed and outstanding at ADB. Available information should include copies of the relevant: project appraisal document; financing agreement; financial management assessment reports; supervision mission reports and implementation status reports.
- b. The Auditor shall have the right of access to banks and depositories, consultants, contractors and other persons or firms engaged by the project. In case access has been restricted, the auditor must note this in the management letter.
- c. ADB can request access to the auditors unedited audit working papers. If necessary, the auditing company can be requested, free of charge, to participate in a wrap-up session for the Ministry of Finance (MOF), the EA/IAs and ADB to share common findings across projects being audited and provide recommendations for addressing bottlenecks in preparation for the next audit.

I. Services to be Provided to the Auditor

116. The following services will be provided by the EA/IAs without cost to the Auditor. The NPMO should coordinate with the EA/IAs and the Auditor to ensure the following services are adequately and timely provided to the Auditor:

- a. **Data:** Provide the Auditor with access to all available data, information, legal documents, correspondence and any other information considered necessary by the Auditor and shall be returned at the completion of the assignment or earlier, or as may be requested by the EA/IAs.
- b. **Access:** The NPMO and the IAs will arrange for access by the Auditor to the sites which the Auditor deems necessary to visit and conduct investigations in connection with performing their duties. Access to the key officials in the Government, the project provinces and agencies concerned with subjects related to the assignment will also be arranged by the EA/IAs, as appropriate.

J. Auditor Qualification

117. Please refer to: "Guidelines on the Use of Consultants by Asian Development Bank and Its Recipients" - Part 1: Introduction and Policies for further instruction on general consultant qualification. The following are the requirements on the qualification of auditing firms for auditing ADB funded projects in Lao PDR. It must be authorized to practice in Lao PDR and be capable of applying the agreed auditing standards. The detailed requirements on the qualification of auditing company are:

- a. Be a legal entity with business license granted by the competent authority, as requested by Lao law;

- b. Must be impartial and independent from all aspects of management or financial interests in the EA/IA being audited;
- c. Be included in the most updated list of authorized auditing companies and auditors which is approved by Ministry of Finance and published on its website;
- d. Have adequate staff, with appropriate professional qualifications and suitable experience in finance/financial management in Official Development Assistance (ODA) funded projects or Government projects/ programs, including experience in auditing the Enterprise Financial system (EFS) comparable in nature, size and complexity to the entity whose audit they are to undertake;
- e. Notify and get written endorsement of the EA every time a staff member is substituted; and
- f. Subcontracting of audit services is not permitted.

28. The following are the requirements on the qualification of Individual auditor for each proposed position in the firm. The TOR must indicate clearly how many international and national experts the assignment will include. General requirements on the qualification of individuals are as follows: Auditors shall hold relevant professional qualifications with in-depth experience in conducting audits of project FSs. Auditors should hold a fair opinion on, and be independent of, control of the submitting entity and the employer by whom they were appointed. The auditor should follow procedures and methodology that conform to International Standards on Auditing (ISA). The following are the outline TOR of each position:

1. Audit Director (AD):

118. As head of the audit team, the Director will be responsible for:

- a. Keeping lines of communication open with staff and clients;
- b. Ability to manage within budgetary and time constraints while providing a high-level of client satisfaction;
- c. Anticipating and addressing client concerns and escalating problems as they arise.
- d. Keeping abreast of latest developments as they affect GAAP and the firm's standards and policies; and
- e. Developing an understanding of client's business and becoming a functional expert in the area.

119. Minimum Qualifications/Experience:

- a. A university graduate (preferably with a post-graduate degree) in accounting, finance, Certified auditor certificate by the MOF or international certificate (ACCA or other recognized international accounting/ auditing certificate);
- b. At least 15 years or above experience working in auditing services; At least 4 year experience in management of auditing teams; and at least 8 years actual working years in auditing since being granted with Lao or international auditor certificate;
- c. Should have worked as Audit Director for at least 3 audit contracts on ADB, the World Bank or other international donors funded projects;
- d. Fluency in English is compulsory; and
- e. Experience working for a Big 4 or large regional accounting firm is a plus.

2. Audit Managers (AM)

120. The Manager will:

- a. Receive the instructional directives from Directors and give detailed guidance to all team members;
- b. Monitor the audit fieldwork of engagement team, reviews staff work and ensure that it meets professional standards and the internal audit department's guidelines;
- c. Take responsibility for the quality of the audit before submitting to Director;
- d. Be the contact point with Client's Management and Chief Accountant regarding key issues identified, audit adjustments; and
- e. Monitor the progress of the audit and monitor the adherence to the deadline committed with Client.

121. **Minimum Qualifications/Experience:**

- a. A university graduate (preferably with a post-graduate degree) in accounting, finance, Certified auditor certificate by the MOF or international certificate (ACCA or other recognized international accounting/ auditing certificate);
- b. At least 10 years or above experience working in auditing services; Audit seniors who are the team leader shall have 5 years experience in their profession;
- c. Audit experience for ADB/World Bank funded projects in Lao PDR would be an advantage;
- d. Ability to work within budgetary and time constraints while providing a high-level of client satisfaction; and
- e. Certified auditor certificate by the MOF or international certificate (ACCA or other recognized international accounting/ auditing certificate).

3. Senior Auditors/ Team leaders: (SA/TL)

122. The Senior Auditors will be responsible for:

- a. Implementing the instructions from Director and Audit Manager;
- b. Keeping AD and AM updated with the key issues or key audit adjustments day to day;
- c. The audit quality of the whole team; and
- d. The compliance with auditing firm quality standards and procedures and with the requirements of Clients/ Projects.

123. **Minimum Qualifications/Experience:**

- a. Senior Auditors are required to be graduates of a recognized university in the fields of commerce, economics, accounting and auditing or equivalent;
- b. Five years experience working in auditing services;
- c. Preferably holding Certified auditor certificate by the MOF or international certificate (ACCA or other recognized international accounting/ auditing certificate);
- d. Preferably should have worked as Auditor for audit contracts on ADB, the World Bank or other international donors' funded projects; and
- e. English proficiency would be preferable.

4. Auditor

124. The Auditors will be responsible for:

- a. Implementing professional work, auditing assigned sections in the agencies, be responsible for the data and issues related to the auditing activities, and
- b. Supporting the release of the official report; draft minute of audit; report to the Team Leader of arising issues related to the audit in the agencies.

125. **Minimum Qualifications/Experience:**

- a. A university graduate (preferably in recognized university in the fields of Commerce, Economics, Accounting and Auditing or equivalent);
- b. At least 03 years or above experience working in auditing services Preferably to whom holding Certified auditor certificate by the MOF or international certificate (ACCA or other recognized international accounting/ auditing certificate);
- c. Should have worked as Auditor for audit contracts on ADB's, the World Bank's on other international donors' funded projects would be preferable).
- d. English proficiency would be preferable.

K. Involvement of Technical Experts

126. Depending on the complexity of procurement activities, the auditor may consider involving technical experts during the audit engagement. In cases where such experts are involved, the auditor is expected to comply with provisions of International Standard on Auditing 620: Using the Work of an Expert. Consideration to use of the work of experts should be brought to the early attention of the recipient and the ADB for mutual agreement and appropriate guidance.

L. Reporting Relationships

127. The audit services will be contracted by EAs/IAs or implementation units. The Auditor shall report to the Project Manager and Chief Accountant. The Auditor should maintain and file the work papers and provide them to ADB and/or the Government when required.

O. Contract and Procurement Mode

128. Please refer to: Annex E.5 attached to this TOR.

129. The financial statements templates will be provided by ADB.

Annex E.1: Project Background, Executing and Implementing Agencies**A. The Project to be Audited**

1. Project No:
2. Grant No:
3. Project Name:
4. Executing Agency:
5. Implementing Agencies:
6. Total Project Costs: (from all financiers)

B. Project Description

Describe the project here, in the context of its contribution to achievement of the EA's economic goals. The auditor must understand the "purpose for which the funds are intended" in the context of the broad project objectives as well as in terms of the specific project budget.

C. The Executing and the Implementing Agencies (EA/IAS)

A detailed description, both legal and generally informative, should be provided here to enable the auditor to understand fully the nature, location and objective of the executing and implementing arrangements among agencies (EA/IAS), and the entities under audit. Geographic characteristics should be described, together with organization charts; names of senior managers.

Annex E.2: Financial Management Manual (FMM)

A. General framework for financial management

1. Objectives of the FMM:

- To enhance the transparency in project financial management procedures to ensure the proper and effective use of project resources;
- Provide guidelines concerning the Financial Management procedures and project systems facilitating the monitoring and evaluation tasks required by ADB and relevant government agencies; and
- Provide clear requirements, processes and project management procedures to facilitate project implementation.

2. Financial roles and responsibilities of related agencies/organization (such as SBV, MOF, State Treasury, service banks, project implementation units (PIUs).

3. Detail responsibilities and qualification of each personnel in Finance management team – such as: functional and duties: Director, Internal controller, Accountant, Chief accountant, Cashier, etc.

B. Project planning and budgeting

- Description of how to develop and control planning and budgeting;
- Summary responsibilities of involved parties in the project; and
- Description of forms for planning and supervising purposes, such as general project implementation, procurement, disbursement, etc.

C. Disbursement process

4. Based on ADB Disbursement guidelines (Loan Disbursement Handbook). Disbursement process: responsibilities of each involved parties in the process, disbursement types and applicable disbursement procedure (such as statement of expenditure) in the project, fund-flow illustration etc.

D. Project accounting system reporting and liquidation

5. General regulation, basic accounting policy, financial reporting, and project accounting (indicate clearly which accounting policy is used) and reporting system (list all reports, names, contents, prepared by whom, deadline to submit etc.).

E. Internal control (IC)

1. IC Objectives:

6. The IC forms part of the financial and accounting policies for the management of the project. The objectives of the internal controls are to:

- (i) ensure adherence to Government's and donors' regulations and guidelines, project policies and procedures;

- (ii) achieve clear and transparent financial practices;
- (iii) promote operational efficiency;
- (iv) provide controls to safeguard the project assets; and
- (v) facilitate the early detection of errors and problems.

2. Internal control principles: The basic principles of the internal controls are as follows:

- (i) monitoring, checking and approving, by an upper level, of expenditures and procurements executed by the lower level;
- (ii) defining responsibilities of project staff commensurate with position and level of authority;
- (iii) separating specific responsibilities of staff;
- (iv) using appropriate method to ensure proper custody of assets;
- (v) ensuring full and appropriate documentation;
- (vi) using internal procedures for cross-checking of accounts, payments and transaction;
- (vii) entries for timely detection of errors; and
- (viii) preparing annual inventory of assets.

3. IC requirements: Key internal controls to be implemented by PCU/PMU must satisfy the below requirements:

- **Competent and Reliable Personnel:** The internal control system relies on the people running it. Employees should be adequately trained and properly supervised to enable them to carry out their duties and responsibilities effectively.
- **Separation of Functional Responsibilities:** A person should not have complete control of a transaction from beginning to end. There should be clear understanding as to who will approve, what is to be approved and the limitations of authorization. The approving officers should not have responsibility for posting or the ability to change accounting records.
- **Assignment of Responsibility for Every Function:** Employee responsibilities should be clearly defined to avoid overlapping or unassigned areas of responsibility (e.g. an organization chart should be prepared). Staff must know their responsibilities and whom they report to.
- **Separation of Asset Custodianship and Accounting:** The accounting function should be separated from the custody of assets (e.g. an employee who is entrusted to receive cash should not have access to the cash journals or ledgers).
- **Security Measures:** Techniques, procedures and measures should be employed to protect assets and ensure reliable accounting data and reports (e.g. use of mechanical devices such as vaults and cash registers; use of control accounts and subsidiary ledgers).
- **Supervision:** Internal regulations should include the supervision of staff. For example, the supervision of the director or manager of a DPIU for example on setting up of annual estimated expenditures, approving of the annual reports, or the supervision of

chief accountant to the process of setting, recording of transactions made by assistants, and the preparation of financial statements.

- **Regular Independent Review:** Internal auditors should regularly review and evaluate the system of internal controls to determine whether it is functioning effectively as planned (e.g. internal auditors' findings and recommendations should be submitted to senior management for action).
- **Control of Transactions:** Every transaction should be authorized, approved, executed and recorded according to prescribed procedures (e.g. staff are not free to procure without the approval of the manager).
- **Serially Numbered Documents:** Organization documents should be serially numbered to check completeness of transactions (e.g. checks, invoices and vouchers should be serially numbered).
- **Sequencing:** Accounting control system should be set up in such a manner that proper sequencing is followed with regards to payments, posting of transactions to ledgers etc. For example, payments should not be authorized or made before the goods or services for which the payment relates to has been received by the project.
- **Duration of documentation archiving:** Full documentation of project transactions will be managed and recorded in accordance with existing regulations. The records should be kept for 10 years in good condition to avoid damage and ensure easy access when needed. Document disposal (if necessary) shall be done with prior approval of competent authority.

4. Content of IC:

7. Must ensure that the FMM covers all important IC matters: such as cash control, bank account control, procurement, assets management, contract management and receivables, and payables etc.

5. IC system:

8. The auditor shall assess the adequacy of the project financial management systems, including internal controls. The assessment includes whether:

- Proper authorizations are obtained and documented before transactions are entered into;
- Accuracy and consistency are achieved in recording, classifying, summarizing and reporting transactions;
- Reconciliations with internal and external evidence are performed on a timely basis by the appropriate level of management;
- Balances can be confirmed with external parties;
- Adequate documentation and an audit trail is retained to support transactions;
- Transactions are allowable under the agreements governing the project;
- Errors and omissions are detected and corrected by project personnel in the normal course of their duties, and management is informed of recurring problems or weaknesses;

- Management does not override the normal procedures and the internal control structure; and
- Assets are properly accounted for, safeguarded and can be physically inspected.

Annex E.3: A Sample for List of Required Documents

A. General project documents

1. Report and Recommendations of the President
2. Grant Agreement
3. Project Administration Manual
4. Documents on appointments of National Project Management Office (Director, Deputy Director, Chief Accounts) and delegation of authorities
5. Documents on registration of VAT codes with local authorities
6. Documents on registration of authorised signatories with the banks
7. Annual budget and workplans, including all revisions, if any
8. Annual procurement plans, if any
9. Quarterly and annual progress reports
10. Comparison between actual expenses and budgets, if any, prepared by project management,
11. A summary of key financial covenants as indicated in the Grant/Financing Agreements and the self-assessment of the Project management on these financial covenants
12. Copies of all meeting minutes of Project Steering Committee and project management unit, if any
13. Internal audit reports, prior year audited reports and management letter, if any; and
14. External review reports.

B. Accounting books/records

1. Annual Financial Statements for the year subject to audit, including the financial statements of the NPMO and all PPIUs (Summary sources of funds, Summary of expenditures, Balance sheet, IA statement...etc).
2. Accounting books and all original supporting documents (hard and soft copies).
3. Confirmations of fund received from the ADB during the year.
4. Disbursements and payment vouchers with original supporting documentation.
5. Bank statements, cash count minutes, periodic bank reconciliation documents (signed by authorized personnel of the project).
6. Reports and supporting documents for counterpart expenditure for the year subject to audit.
7. Documents on monthly VAT declaration and periodic VAT refund claims, if any.
8. List of outstanding advances at the year end and the related aging report, if any. The total of this list should be reconciled to the advances of the balance sheet.
9. Summary of procurement contracts signed and ongoing during the year.
10. Bidding documents (if any).
11. Consultant contracts (local and international), minutes of evaluation board, consultant reports (if any).
12. Record of training courses, attendance lists, and course evaluations (if any).
13. Fixed asset registers.
14. Minutes recording annual physical checking of equipment (including all minutes completed by PPMU).
15. Logbooks for vehicles (if any).
16. Access to Program's/Projects' computers and other office equipment under the supervision of responsible Program/Project personnel (strictly for audit purposes only).

C. Personnel

1. List of all Project's contracted staff and their related recruitment documents, personnel records.
2. Documents on PIT, Social Insurance and Health Insurance calculations and monthly declaration and payments.

Annex E.4: Financial covenants, financial assurances and How to confirm the compliance?

1. **Financial Covenants:** The financial covenants that are applicable to projects are included in project agreements. The Auditor should list, describe and fully reference all applicable financial covenants, review and comment on the compliance.
2. **Compliance with Financial Covenants.** The auditor will confirm compliance with each financial covenant contained in the project legal documents. Where present, the auditor should indicate the extent of any noncompliance by comparing required and actual performance measurements for each financial covenant for the financial year concerned.
3. **Financial Assurances Applicable to Projects:** The financial assurances that are applicable to the EA—such as a commitment to employ suitably qualified accounting personnel—will be included in project legal documents. The auditor should list, describe and fully reference all applicable financial assurances, review and comment on the compliance.
4. **Compliance with Financial Assurances.** The auditor will confirm compliance with all financial assurances contained in the project legal documents. Where present, the auditor should indicate the extent of any noncompliance by comparing required and actual performance of the recipient in respect of these ADB requirements for the financial year concerned.

Annex E.5: Procurement Mode and requested document to be submitted by Audit firms

1. The procurement method agreed for auditor recruitment will follow “Guidelines on the Use of Consultants by Asian Development Bank and Its Recipients”.³⁵
2. The contract will be on lump sum in accordance with annual based performance.
3. In order to meet with the working plan and schedule report delivery as requested, the auditing firm must submit a Description of Approach, Methodology and Work Plan for Performing the Assignment including:
 - (i) **Technical Approach and Methodology:** explain the understanding of the objectives of the assignment, approach to the services, methodology for carrying out the activities and obtaining the expected output, and the degree of detail of such output. Should also highlight the problems being addressed (and their importance) and explain the technical approach would adopt to address such problems. Explain the methodologies you propose to adopt and highlight the compatibility of those methodologies with the proposed approach.
 - (ii) **Work Plan.** Propose the main activities of the assignment, their content and duration, phasing and interrelations, milestones (including interim approvals by the Client), and delivery dates of the reports. The proposed work plan should be consistent with the technical approach and methodology, showing understanding of the TOR and ability to translate them into a feasible working plan. A list of the final documents, including reports, drawings, and tables to be delivered as final output, should be included here. The work plan should be consistent with the Work Schedule.
 - (iii) **Organization and Staffing.** Propose the structure and composition of your team. Should list the main disciplines of the assignment, the key expert responsible, and proposed technical and support staff.
4. Submitted Document must indicate: How many Team Leaders and Senior auditors/auditors allocated for the assigned audit with suitable qualification and experience by each position.
5. For each audit period, how many are expected person-months to fulfill auditing works of each auditor position: for example, Audit Director: (how many) person-months; Team Leader: (how many) person-months; etc.
6. The person-months are only as an estimate since the auditing company will be recruited on lump sum-based performance for each annual package. The auditing company should provide to the Government project management unit details in the followings: working schedule, management and execution method together with allocated man power implementing auditing activities in project’s financial reports for a good contract performance.

³⁵ Guidelines on the Use of Consultants by Asian Development Bank and Its Borrowers can be accessed through: <http://www.adb.org/documents/guidelines-use-consultants-asian-development-bank-and-its-borrowers>

F. VARIETY DEVELOPMENT (Package CS 05)

130. Lao PDR is one of the most vulnerable countries in the world to climate change. Agriculture sector is one of the most vulnerable sectors to such impacts. The climate change events reflected in terms of increased frequencies of temperature extremes, frequent droughts, and floods have already started affecting agricultural production and productivity and particularly more so in marginal or low input environments like Lao PDR.

131. The climate-friendly agribusiness value chains sector project aims to support the National Agriculture Forestry Research Institute (NAFRI) in production and multiplication of climate-resilient varieties of rice and vegetables. In addition, assistance will be provided to NAFRI to develop a commercialization program with recommendations on the legal framework to develop intellectual property rights and partial cost recovery for the institution.

132. The climate-resilient traits to be selected in new varieties shall include shorter maturity duration, tolerance to drought, tolerance to high temperature, tolerance to prolonged flooding, anaerobic germination, as well as traits supporting better adaptation to water saving cultivation practices- dry direct seeding and alternate wetting and drying. This will not be a basic plant breeding program which will take 10 years to develop. Instead, the focus would be on testing available climate-resilient lines within a 5-year program that includes continued selection, agro-climatic adaptation, climate-resilient trait evaluations, yield comparisons and farmer and processor evaluation. Ensuring the availability of quality seed of climate-resilient varieties in adequate quantity at right time poses greater challenge rather than production per se.

133. The project will also support large scale seed multiplication of climate-resilient varieties in target provinces and distribution of quality seed to farmers. For example, new rice varieties suitable for direct seeding, and for alternate wetting and drying technologies will be demonstrated together with the full technology package on about 100 hectares in each target province. The project will recommend standards for seed certification procedures for different grades of seed, and seed certification procedures for the approval of and implementation by the government.

134. By 2024, it is expected that at least two climate-resilient varieties of rice and vegetables would be released for commercial production; and that NAFRI would be able to achieve partial cost recovery in variety development and foundation seed supply with the corresponding legal framework in place. The project will develop seed quality standards, seed certification standards for different classes of seeds for the four crops and maintain such standards in the quality seed production in the current project.

135. The scope of work also covers the development and dissemination of climate smart agriculture (CSA) practices including improved land-water-nutrient management and crop establishment practices. The work includes dissemination of mechanized cultivation practices that have reduced risk and drudgery and generate avenues for employment for youth and women farmers. The project will work closely with NAFRI and other key institutions as well as private-sector partners for the deployment of the climate-resilient varieties and technology of different crops. In addition, the work includes efforts to reduce postharvest losses during harvesting, drying, storage, and processing through implementation of modernized post-harvest practices, capacity development and training on postharvest technology, and the development of linkages between the public and private sector.

136. An international research institution of high repute will be recruited to deliver the above services. Based on assessment of various institutions in the region focusing on development and

deployment of climate-resilient varieties, and substantial contributions made so far on climate smart agriculture in various countries including Lao PDR, it is proposed to select the International Rice Research Institute (IRRI) to deliver the above services. The detailed terms of reference will be developed by NAFRI with cooperation from project implementation consultants during the first year of project implementation after assessing needs of target crops in target provinces.

137. IRRI has been working with Lao PDR on crops and climate change research. The Institute has defined a coherent research portfolio on climate change emphasizing on three areas: adaptation, mitigation, and policy. This sets crop production into the broader context of food supply and food security alongside socioeconomic issues, such as rural development and gender mainstreaming. IRRI also maintains solid working relationships with other international crop research institutes belonging to the Consultative Group on Agricultural Research (CGIAR) and has agreed to deliver their solutions to Lao PDR in a seamless manner.

138. Currently, Lao PDR and IRRI are conducting joint research projects on climate change adaptation and mitigation, climate-resilient rice varieties, remote sensing-based crop monitoring, improvement of farmers' livelihoods, and postharvest technology. Many Lao researchers are also benefiting from IRRI's training and capacity-building activities. Some achievements of IRRI in relation to the development of climate-resilient varieties are listed below:

- (i) Flood tolerance: The erratic floods experienced in rainfed and flood-affected areas are usually caused by heavy rainfall, overflow of nearby rivers and canals or sometimes tidal movements as in coastal areas. These floods cause serious problems for rice and other crops because of the poor or non-existent drainage and, in some cases, the topography of the land prevents fast water movement to drain flooded fields. Through conventional breeding, IRRI developed a rice variety that can withstand being submerged under water for two weeks. After the gene (called SUB1 gene) was found, it was infused into popularly grown rice varieties in rice-growing countries in Asia. Scuba rice is spreading fast in several countries over the last few years and are currently grown by more than 5 million farmers in Asia.
- (ii) Drought tolerance: Drought is the most widespread and damaging of all environmental stresses, affecting 23 million hectares of rainfed rice in South and Southeast Asia. IRRI scientists have identified several key regions of the rice genome that give the rice drought tolerance and improve rice grain yield under drought. IRRI is working towards introducing drought tolerance into popular high-yielding rice varieties. By using drought-tolerant rice, farmers can enjoy 0.8-1.2 tons per hectare yield advantage than non-drought-tolerant varieties. This yield advantage will make the drought prone areas of target provinces in Lao PDR to be much more productive, contributing to food security in poor rural communities.

139. Some achievements of IRRI on climate smart agriculture techniques are listed below:

- (i) Climate smart water management: IRRI has developed the alternate wetting and drying technology (AWD) or intermittent irrigation of the rice field as an effective water-saving measure. It reduces water consumption in paddy rice by 30% and consequently, reduces the cost of pumping water. Additionally, AWD helps mitigate emissions of methane—a greenhouse gas—in rice production by 50%.

- (ii) Nutrient management: Fertilizer often represents the highest input cost for farmers after labor, accounting for about 20% of the total cost of production. Soil nutrient knowledge can guide the development of practical tools to help farmers increase rice production and reduce costs through smart nutrient management. Importantly, the work shows that when fertilizer is used appropriately, yield can boost without negative impact on soil health.
- (iii) Pest management: Through a collaborative research network with national scientists in Asia, IRRI and ADB initiated the Rice Planthopper Project. It promotes ecological engineering as a management strategy to build ecological diversity which strengthens the rice field's natural capacity to cope with pests.
- (iv) Rice Research and Training Project: An SDC-funded project provided higher degree training, short courses, on-the-job training, and participation in international conferences/seminars to Lao PDR. Now, Lao PDR is a key site for rice research in uplands under IRRI's CURE with a network of thirteen research stations and a well-trained cadre of research scientists and managers. The project helped the government of Lao PDR achieve sustainable rice self-sufficiency.

140. In view of the wide-ranging achievements in development of climate-resilient varieties and dissemination of climate smart agricultural practices and technologies to various countries, and in recognition of outstanding contributions to the Lao research institutions, IRRI is ideally placed to provide its services under this package in a comprehensive manner. Estimated budget below.

I. Identification, testing, multiplication and demonstration of climate-resilient varieties of rice and vegetables	\$300,000
II. Capacity strengthening climate smart agriculture focusing on rice and vegetables	200,000
III. Personnel requirements	600,000
	\$1,100,000

GENDER ACTION PLAN MONITORING TEMPLATE

Date of update: XX

Project Title: Climate-Friendly Agribusiness Value Chains Sector Project**Country:** Lao PDR**Project No.:** 48409-004**Type of Project (Loan/Grant/TA):** Grant XX**Approval and Timeline:** XX**Gender Category:** Effective Gender Mainstreaming (EGM)**Mission Leader:****Project Impact:** Agricultural competitiveness in project areas improved through enhanced productivity, climate resilience, quality and safety, value addition and rural household incomes**Project Outcome:** Productive and resource efficient agribusiness value chains developed

Gender Action Plan (GAP Activities, Indicators and Targets, Timeframe and Responsibility)	Progress to date (as of _____) (This should include information on period of actual implementation, sex-disaggregated quantitative updated (e.g. number of participating women, women beneficiaries of services, etc.), and qualitative information. However, some would be on-going - so explain what has happened so far towards meeting the target.	Issues and Challenges (Please include reasons why an activity was not fully implemented, or if targets fall short, or reasons for delay, etc., and provide recommendations on ways to address issues and challenges)
Output 1: Critical agribusiness value chain infrastructure improved and made climate-resilient.		
1.		
2.		
3.		
Output 2: Climate smart agriculture and agribusiness promoted.		
1.		
2.		
Output 3: Enabling environment for climate-friendly agribusiness enhanced.		

Comments/ Remarks:

Accomplished by: _____

Date Accomplished: _____

PROGRESS REPORT OUTLINE

A. Introduction and Basic Data

- (i) Provide the following: ADB grant number, project title, recipient, executing agency, implementing agencies;
- (ii) total estimated project cost and financing plan;
- (iii) status of project financing including availability of counterpart funds and cofinancing;
- (iv) dates of approval, signing, and effectiveness of ADB grant;
- (v) original and revised (if applicable) ADB grant closing date and elapsed grant period based on original and revised (if applicable) grant closing dates; and
- (vi) date of last ADB review mission.

B. Utilization of Funds (ADB Grant, Cofinancing, and Counterpart Funds)

Provide the following:

- (i) cumulative contract awards financed by the ADB grant, cofinancing, and counterpart funds (commitment of funds to date), and comparison with time-bound projections (targets);
- (ii) cumulative disbursements from the ADB grant, cofinancing, and counterpart funds (expenditure to date), and comparison with time-bound projections (targets); and
- (iii) re-estimated costs to completion, need for reallocation within ADB grant categories, and whether an overall project cost overrun is likely.

C. Project Purpose

Provide the following:

- (i) status of project scope/implementation arrangements compared with those in the report and recommendation of the President (RRP), and whether major changes have occurred or will need to be made;
- (ii) an assessment of the likelihood that the immediate development objectives (project purpose) will be met in part or in full, and whether remedial measures are required based on the current project scope and implementation arrangements;
- (iii) an assessment of changes to the key assumptions and risks that affect attainment of the development objectives; and
- (iv) other project developments, including monitoring and reporting on environmental and social requirements that might adversely affect the project's viability or accomplishment of immediate objectives.














D. Implementation Progress

Provide the following:

- (i) assessment of project implementation arrangements such as establishment, staffing, and funding of the PMO or PIU;
- (ii) information relating to other aspects of the EA's internal operations that may impact on the implementation arrangements or project progress;
- (iii) progress or achievements in implementation since the last progress report;
- (iv) assessment of the progress of each project component, such as,
- (v) recruitment of consultants and their performance;

- (vi) procurement of goods and works (from preparation of detailed designs and bidding documents to contract awards); and
- (vii) the performance of suppliers, manufacturers, and contractors for goods and works contracts;
- (viii) assessment of progress in implementing the overall project to date in comparison with the original implementation schedule—quantifiable and monitorable target, (include simple charts such as bar or milestone to illustrate progress, a chart showing actual versus planned expenditure, S-curve graph showing the relationship between physical and financial performance, and actual progress in comparison with the original schedules and budgets, the reference framework or guidelines in calculating the project progress including examples are shown in Appendix 2); and
- (ix) an assessment of the validity of key assumptions and risks in achieving the quantifiable implementation targets.

Sample Implementation Schedule

Activities	Year 1	Year 2	Year 3	Year 4	(a) Assigned Weight	(b) Actual Progress	(a) x (b) Weighted Progress
Establish PIU					5%	100%	6%
Establish Accreditation Board, etc.					5%	0%	0%
Appoint Staff and Budget					4%	75%	3%
Adopt Architecture Plans					2%	100%	2%
Shortlist Consulting Firms					6%	100%	6%
Prepare Fellowship Program					6%	76%	4%
Prepare Civil Works Tendering					30%	0%	0%
Civil Works: Classrooms, Dorms, etc.					6%	0%	0%
Procurement of Furniture and Equipment					16%	10%	2%
Field Work of Consultants					7%	0%	0%
Provide Fellowships					6%	0%	0%
Conduct Study Tours					6%	0%	0%
Provide Curriculum Standards					6%	0%	0%
				Total Weight Imp. Progress	100%		24%

(a) Assigned weight for each activity

(b) Actual progress of each activity

(a) x (b) weighted progress for each activity

Project progress = sum of all weighted progress for each activity

E. Compliance with Covenants

Provide the following:

- (i) the recipient's compliance with grant covenants such as sector reform initiatives and EA reforms, and the reasons for any noncompliance or delay in compliance;
- (ii) the recipient's and EA's compliance with grant covenants including the EA's financial management, and the provision of audited project accounts or audited agency financial statements; and
- (iii) the recipient's and EA's compliance with project-specific grant covenants associated with implementation, environment, and social dimensions.

F. Major Project Issues and Problems

Summarize the major problems and issues affecting or likely to affect implementation progress, compliance with covenants, and achievement of immediate development objectives. Recommend actions to overcome these problems and issues (e.g., changes in scope, changes in implementation arrangements, and reallocation of grant proceeds).

TEMPLATE FOR SUBPROJECT FEASIBILITY STUDY REPORT

Acronyms

Map of Subproject Area

- I. Rationale for the Subproject
 - A. Need and Justification for the Investment
 - B. Related Development Initiatives
- II. Subproject Context
 - A. Natural Features
 - B. Social-economic and Cultural Conditions
 - C. Engineering Conditions and Requirements
 1. Description of the Irrigation Scheme
 2. General Description of Irrigation Network
 3. Main Constraints
- III. Subproject Objectives
 - A. Project Outcome and Impact
 - B. Project Outputs
- IV. Design and Due Diligence Process
 - A. Subproject Selection Process
 - B. Technical Design Methodology
 1. Irrigation Rehabilitation and Upgrading
 2. Other Investments
 - C. Economic Analysis
 1. Benefits
 2. Economic Returns
 3. Household Financial Returns
 - D. Environment and Social Safeguards
 1. Environment
 2. Indigenous Peoples
 3. Involuntary Resettlement
 4. Gender Mainstreaming
 - E. Monitoring, Reporting and Evaluation
 1. Performance Indicators
 2. Evaluation Arrangements
 3. Reporting Arrangements
 - F. Risks and Mitigating Measures
- V. Total Investment and Financing Plan
- VI. Subproject Implementation and Operating Arrangements
 - A. Execution and Implementation Agencies
 - B. Subproject Implementation Management
 1. Output 1
 2. Output 2
 - C. Subproject Implementation Schedule
 - D. Subproject Procurement

Annex 1 – Subproject Design and Monitoring Framework

Annex 2 – Subproject Socio Economic Survey and Analysis

Annex 3 – Subproject Economic and Financial Analysis

Annex 4 – Subproject Resettlement Plan
Annex 5 – Subproject Initial Environmental Examination
Annex 6 – Water Requirements and Availability
Annex 7 – Engineering Drawings
Annex 8 – Bills of Quantities Methodology
Annex 9 – Agricultural Survey Report

PROJECT PERFORMANCE MONITORING SYSTEM

1. This document presents the project performance monitoring system (PPMS) for the Lao PDR: Climate-friendly Agribusiness Value Chains Sector Project funded by the Asian Development Bank (ADB) and the Government of Lao PDR. The PPMS is developed for monitoring the indicators and targets for outcome and outputs outlined in the project design and monitoring framework (DMF) and against those targets and indicators in the Gender Action Plan, social development and safeguards and those covenants as detailed in the grant agreement.

The outputs of the project include

- Output 1: Critical agribusiness value chain infrastructure improved and made climate-resilient.
- Output 2: Climate smart agriculture and agribusiness promoted.
- Output 3: Enabling environment for climate-friendly agribusiness enhanced.

2. **Project Area.** Rice value chains in Khammouane, Saravan and Savannakhet provinces, and vegetable value chains in Vientiane Capital, Champasak and Sekong provinces.

3. **Project Costing.** The project cost is estimated at \$46.37 million. (i) ADB will provide \$40.5 million in grant (ii) \$5.12 million from beneficiaries, and (iv) \$0.75 million from the Government of Lao PDR.

4. Project Implementation Arrangements

Table A3.1: Implementation Progress Startup Activities Table

Activity	Deadline	Status
Open advance account & subaccounts		
PIC recruitment		
Advanced implementation award of subproject contracts		
Advanced procurement of goods		

5. Key Activities and Milestones

- Explain activities and milestones per output.
 - (i) Output 1: Critical agribusiness value chain infrastructure improved and made climate-resilient
 - (ii) Output 2: Climate smart agriculture and agribusiness promoted
 - (iii) Output 3: Enabling environment for climate smart agri-business enhanced

6. Safeguards

Subproject/ Contract	Social safeguard assessment	Social Safeguard screening	Resettlement Plan		Environment assessment	
			Comple ted	Ongoing	Comple ted	Ongoing
Subproject 1 - name	completed	Yes	Yes, no or NA		Yes or no	

Subproject 2 - name	completed	yes				
Subproject 3	Under review	In progress				
Subproject 4						

7. Procurement

A brief write-up and review of the 18-month procurement plan.

Procurement of Goods and Equipment

Package	Estimated Amount (\$)	Award Date	Contract Amount (\$)
Package 1	Insert amount	Insert date	Insert amount
Package 2			
Package 3			

Works contract progress

Subproject/contract	Scheduled Completion	Time elapsed	Physical progress (%)
Contract one	Insert date	Months	Percent
Contract 2			
Contract 3			

Disbursements

Grant Category	Allocation (\$)	Amount disbursed	Percentage	Target
ADB	40.5 million	Insert amount		
Government of Lao PDR	3.5 million			

Financial Progress

Item	Amount allocated (\$)	Amount committed (\$)	Paid (\$)
Goods			
Contract 1			
Contract 2			
Consulting Services			
Contract 1			
Contract 2			
Works			
Contract 1			
Contract 2			

8. Project Performance

9. The project's performance against the targets set out in the DMF for outcome, outputs and inputs is reported in the table below:

Table A3.2: DMF Targets Vs Achievements

Results Chain	Performance Indicators with Targets and Baselines	Achievements
Outcome Productive and resource efficient agribusiness value chains developed in project areas		
Outputs		

Results Chain	Performance Indicators with Targets and Baselines	Achievements
1. Critical agribusiness value chain infrastructure improved and made climate-resilient		
2. Climate smart agriculture and agribusiness promoted		
3. Enabling environment for climate-friendly agribusiness enhanced		

10. Use the Annex 4 template in monitoring the project's progress in terms of gender action plan.

11. Data Management.

12. **Status of Compliance with Grant Covenants.** There are a number of grant covenants, out of which the PPMS will indicate and report the number where compliance has been achieved, partly complied and are ongoing and are still not met or are not yet due. The list of covenants under relevant categories and their status of compliance as of a certain date are provided in the table below.

Status of Compliance with Grant Covenants

No:	Covenant	Grant Agreement Reference	Compliance status	Remarks
	Financial			
1				
2				
	Safeguards			
1				
2				
	Social Development			
1				
2				
	Economic			
1				
2				
	Others			
1				

13. **Problems and Issues during Implementation.** The final section of the PPMS report will describe any problems caused by delayed project implementation over the last 6 months. The list of actions taken, and the status of proposed actions are recorded.

14. **Reporting.** The PPMS will be updated every 6 months from the start to end of the project. It will be sent to ADB by 30 January and 30 July every year.