Combined Project Information Documents / Integrated Safeguards Datasheet (PID/ISDS)
BASIC INFORMATION

A. Basic Project Data

<table>
<thead>
<tr>
<th>Country</th>
<th>Project ID</th>
<th>Project Name</th>
<th>Parent Project ID (if any)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lao People's Democratic Republic</td>
<td>P161473</td>
<td>Lao PDR Agriculture Competitiveness Project</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Region</th>
<th>Estimated Appraisal Date</th>
<th>Estimated Board Date</th>
<th>Practice Area (Lead)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EAST ASIA AND PACIFIC</td>
<td>12-Dec-2017</td>
<td>30-Mar-2018</td>
<td>Agriculture</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Financing Instrument</th>
<th>Borrower(s)</th>
<th>Implementing Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment Project Financing</td>
<td>Lao People's Democratic Republic</td>
<td>Department of Planning and Finance</td>
</tr>
</tbody>
</table>

Proposed Development Objective(s)

The Project Development Objective (PDO) is to increase competitiveness of selected agricultural value chains in the project areas.

Components

A. Improved Agricultural Efficiency and Sustainability
B. Enhanced Agricultural Commercialization
C. Project Management
D. Contingent Emergency Response
Refund of Preparation Advance

Financing (in USD Million)

<table>
<thead>
<tr>
<th>Financing Source</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Borrowing Agency</td>
<td>0.50</td>
</tr>
<tr>
<td>International Development Association (IDA)</td>
<td>25.00</td>
</tr>
<tr>
<td>Local Sources of Borrowing Country</td>
<td>3.80</td>
</tr>
<tr>
<td><strong>Total Project Cost</strong></td>
<td><strong>29.30</strong></td>
</tr>
</tbody>
</table>

Environmental Assessment Category

B - Partial Assessment

Decision

The review did authorize the preparation to continue
B. Introduction and Context

Country Context

1. **Over the past two decades, the Lao People's Democratic Republic has experienced rapid yet, not highly inclusive economic growth.** Gross domestic product (GDP) growth has typically exceeded 7 percent per year and, in 2015, this lower-middle-income country had a per capita GDP of US$1,740. While Lao PDR’s population and livelihood dependence remain predominantly rural and agrarian, the bulk of recent economic growth has stemmed from the more intensive utilization of the country’s natural resources, including those for mining, forestry, and hydroelectric power. Despite their output growth, job creation in those sectors has been modest. Because of this, the poverty reduction elasticity of Lao PDR’s growth has been relatively low. For every percent of GDP growth, poverty in Lao PDR has declined only by 0.4 percent compared to 1.2 percent in Cambodia and 1.0 percent in Vietnam.

2. **While Lao PDR has been meeting its Sustainable Development Goals (SDGs) targets in relation to poverty reduction, large segments of the population remain vulnerable and progress in relation to many non-monetary dimensions of welfare has been very uneven.** Between 2002/03 and 2012/13, absolute poverty fell from 34 to 23 percent, although a sizable proportion of the population remains vulnerable to slipping back into poverty due to frequent shocks and the absence of effective risk mitigation measures. Climate change is putting greater pressure on government and community capabilities to manage disaster risks and build more resilient livelihoods. Extreme poverty remains more persistent in mountainous areas, but the absolute number of the poor has remained largest in the lowland rural areas. Economic growth and rising income has not translated into major gains in nutritional outcomes. Between 2001 and 2012, the proportion of stunted under-five-year-olds only declined from 48 percent to 44 percent. The country has achieved a national surplus in its staple rice production, yet 27 percent of young children are underweight. Progress in physical connectivity, access to improved water and sanitation, and access to social services has been uneven across the country. Important gender gaps remain, especially in relation to literacy and economic opportunity.

3. **Malnutrition in Lao PDR remains highest in Southeast Asia, hardly declining with time.** Though the highest malnutrition incidence is found in the far north and south of the country, in the central part of the country the stunting averages 38 percent, twice as high as the 20 percent threshold considered in East Asia and Pacific as a moderate rate of stunting. Although the country has achieved a national surplus in its staple rice production, nearly half of the Lao children are chronically malnourished (stunting or height for age), affecting 385,000 or 44 percent of children under the age of five (CU5). Stunting remains the biggest malnutritional challenge, as data from the Lao Social Indicator Survey (2011–2012) indicate that 6 percent of CU5 suffer from wasting (weight for height, an indicator for acute malnutrition) and 27 percent are underweight (weight for age, a composite indicator of both chronic and acute malnutrition). Micronutrient deficiencies, indicative of insufficient access to diverse foods, are substantial, including Vitamin A and iron (up to 59 percent of children under two years are reported to be anemic).
4. **Among the countries of the Greater Mekong Sub-region, Lao PDR faces a distinctive set of development challenges.** The country has a small population with its population density being the second lowest in the East Asia and Pacific region, after Mongolia, with less than 30 persons per km². While some urban growth has occurred, some 70 percent of the population remains in rural areas. These demographics, combined with the country’s landlockness and (mountainous) topography, create enormous challenges for the cost-effective delivery of public services, for creating efficient logistical services, and for integrating (and competing) in international markets. Domestic purchasing power is a fraction of what exists in the other countries of the sub-region. Neither manufacturing nor services have provided many opportunities for highly remunerative employment.

5. **Last but not least, Lao PDR is highly vulnerable and exposed to climate disasters.** Most frequent disasters include floods and storms and, to a lesser degree, droughts. Climate change is adding to the vulnerability by changing weather patterns and resulting in more frequent and severe events. Already rainfall has become more volatile and temperature have been increasing by around 0.1°C per decade since the second half of the last century. Projections include further increases in temperature and increased intensity and frequency of extreme events, including higher rainfall and flooding risks during the wet season—which will affect agricultural land along the Mekong River and tributaries—and longer dry seasons accompanied by more severe water shortages.

6. **Going forward, Lao PDR will need to more sustainably and efficiently manage its ample natural resources while unlocking the potential of its non-resource intensive sectors to create broad-based opportunities.** More selective investments in natural resources can bring about higher and more sustainable economic and social returns. Of these, agriculture and nature- and culture-based tourism have considerable further potentials for inclusive growth. While Lao PDR cannot aim to compete for volume market share with the regional agricultural commodity giants, it has considerable and largely untapped potential to profitably supply niche and expanding markets for high-quality, consumer-safe, and environmentally sustainable foods and agricultural materials.

**Sectoral and Institutional Context**

7. **Agriculture remains the primary source of livelihood for the majority of Lao PDR’s population, although prevailing levels of labor productivity are low.** There are currently around 2 million adults engaged in agriculture, representing about 64 percent of the workforce. This pattern of employment is among the most agrarian in the world. Evidence indicates a high level of underemployment in the sector. The most recent agricultural census found that only 11 percent of farmers work 9 to 12 months on the family farm, while 45 percent work between 3 and 6 months. This, together with the prevailing cropping pattern, helps explain the statistical low productivity of Lao PDR’s agricultural workforce. In 2014, these workers generated a value added per hectare of US$578, compared with US$994 in Thailand and US$1,338 in Vietnam.

8. **Lao PDR agriculture has underperformed, both in relation to its potential and its peers.** Agricultural growth exceeded 5 percent per year in the 1990s, but declined thereafter and has been erratic over the past decade. Between 2000 and 2014, agricultural growth has averaged only 3.4 percent per year, compared with 4.1 percent and 3.7 percent for Cambodia and Vietnam, respectively. Most of the limited growth has come from an expansion in the land under cultivation rather than through productivity improvements. Most of the 650,000 farming households are engaged in subsistence cultivation, with (in
2010/11) only 30 percent of farm households reporting to produce primarily for sale. More than 1 million ha has been given over to land concessions and yet, such units have not noticeably contributed to sectoral growth or improved employment or productivity.

9. **Lao PDR agriculture remains structurally narrow, although there are emerging commercial opportunities, both domestic and for export.** Rice accounts for some 72 percent of cultivated area, with much of the remaining diversification representing household livelihood coping strategies rather than commercial endeavors. Increased domestic (and tourist) demand for fresh fruits and vegetables is being serviced primarily by imports from China, Thailand, and Vietnam. Improving nutritional outcomes will require more affordable and regular access to such foods. In recent years, maize production has increased in response to the increased demand for animal feed ingredients, both in Thailand and Vietnam. There has been growing interest in Lao PDR’s high-quality coffee from the European countries, and the production and consumption of animal products have also increased responding to the rising domestic demand. A gradual shift from rice production would contribute to multiple objectives—including improved nutrition, farm incomes, and livelihood resilience—yet the Government is cautious in embracing a more aggressive policy of agricultural diversification as food security is still viewed largely through a rice sufficiency lens.

10. **There are growing markets for high-quality Lao rice in China and Vietnam, maize in Thailand, and ‘clean and safe’ vegetables in fast-growing urban centers in Lao PDR.** These demands for high-quality products provide ample market opportunities for Lao PDR’s ‘clean and green products’. However, Lao PDR’s agriculture sector is facing serious challenges in meeting this market demand. For instance, since 2014, Chinese buyers have sought some 20,000 tons of high-quality rice annually from Lao PDR, yet exports have generally only met about a quarter of this demand. The poor quality of agricultural products at farming and low efficiency at the postharvest processing stage has compromised Lao PDR’s ability to respond to the market specifications in these markets.

11. **A wide range of sector-specific issues affect farm productivity and profitability.** At the farm level, low productivity reflects low availability of high-quality seeds, declining soil fertility, limited access to irrigation and drainage services, and unsecure land tenure. The reach and effectiveness of farm advisory services is limited. Collective action is also limited as there are very few farmers’ organizations providing technical or commercial services to farmers. Agricultural value chains are highly fragmented with large numbers of (poorly capitalized) intermediaries and processors and few larger players using modern infrastructure and equipment. Advances in increasing the quantity of output have generally not been matched with gains in quality management, because of limited direct sourcing by agribusinesses from farmers, inadequate postharvest management, underinvestment in value chains and public market infrastructure, and inadequacies in the ‘soft’ infrastructure for food quality (i.e., product standards, raw material traceability systems, consumer food safety awareness and advocacy, and so on).

12. **To compete and meet the demands of international markets and high-quality emerging domestic markets, Lao PDR’s agriculture needs to position itself as a green and clean producer based on the foundation of good agricultural practices (GAP).** Traditional farming systems in Lao PDR have featured very limited use of synthetic fertilizers and agrochemicals, while intensive farming systems in neighboring countries have tended to involve excessive use of such inputs, resulting in water and air pollution, as well as consumer food safety concerns. Lao PDR could effectively complete, albeit on a modest scale, in the regional markets for higher-quality food and agricultural raw materials on the basis
of increased adoption of improved seed varieties, widespread application of GAP, and upgrades in postharvest and processing infrastructure and practices. This competitiveness would be based upon improved (product) quality, farm and value chain productivity, and the sustainable use of natural resources.

13. **To effectively develop agricultural value chains, it is necessary to address the four most important developmental issues at the same time**, including (a) promoting adoption of GAP among small farmers to improve the quality of farm produce and further reduce production costs; (b) linking farmers to agribusinesses to improve marketing; (c) stimulating agribusinesses to shift from the currently poor processing and postharvest equipment and facilities to more modern and environment-friendly technologies to improve the product value and reduce postharvest losses; and (d) improving the enabling environment to reduce the costs of doing business in the agriculture sector. These issues are interrelated and need appropriate public interventions to accelerate the process. It is important to note that the present lending from commercial banks to agribusinesses is very limited.1 This is partially because most agro-enterprises are weak and cannot afford market rates. But more importantly it is due to the low demand that resulted from the low-level commercialization of the agriculture sector. Currently, agricultural value chains in Lao PDR are largely unstructured; most agribusinesses only possess out-of-date equipment, resulting in high losses in both value and volume during processing and postharvest stages. In addition, the high costs of imported inputs (i.e., fertilizers and machinery) due to government policies, the lack of quality assurance, and the absence of capacity to certify sanitary and phytosanitary standards are also major constraints which affect agricultural competitiveness and export to foreign markets.

14. **There is high potential for the Lao agriculture sector to contribute importantly to reduction of malnutrition if its development model is nutrition sensitive and gender inclusive.** Addressing malnutrition requires multi-sectoral interventions to affect food access, care practices, and health and sanitation environment. At present, the Lao food plate is principally based on rice, particularly glutinous rice (81 percent of total daily food consumption). There is a need for Lao PDR’s agriculture sector to transform toward higher diversification and commercialization to improve rural incomes and people’s access to diverse food and healthy food basket—one of the key factors for good nutrition and health. Available statistics showed that in Lao PDR when income grows, it has a significant impact on reduction in CU5 stunting.2 There is also a relationship between nutrition and women empowerment. Where there are improvements in women empowerment, together with family incomes and better access to clean/safe food, women will be able to take care of their children better, especially when they are provided with additional information and nutritional knowledge through awareness raising and behavioral change communications to ensure healthy and sustainable care and dietary practices.

15. **The present and future trends of the weather and climate conditions reconfirm the need for Lao agriculture to transit to climate-smart agriculture to mitigate the risks and be more sustainable.** The

---

1 According to the Bank of Lao PDR Statistic Report (2017), the share of commercial bank credits to agribusiness dropped significantly from 11 percent in 2013 to 8 percent in 2016, and credit growth in the agriculture sector dropped from 14 percent in 2014 to 2 percent in 2016.

2 In 2014, each incremental increase in income was positively associated with a reduction in CU5 stunting, decreasing by 10 percentage points per wealth quintile: stunting in the poorest quintile averaged 61, second 50, middle 42, fourth 32, and richest 20.
Climate Risk Screening Assessment (CSA) attaches moderate to high risk of climate variability, stemming from increased precipitation and droughts, to both agriculture and water sectors. The recently completed CSA Climate Profile (2017) for Lao PDR highlights the vulnerability of agriculture to climate variability as follows: (a) an increase in floods is expected to have implications on the agricultural lands along the Mekong River and its tributaries; (b) an increase in temperatures along with a decrease of rainfall during the dry season would likely lead to longer and severe droughts; (c) rising temperatures will likely increase the incidence and range of pests and, when combined with decreased rainfall and increased demand for water, higher temperatures will also present new challenges related to water availability for agriculture in an already water-stressed scenario; and (d) climate change would also potentially threaten and lead to a loss in the agriculture production (rice in particular) affecting the economy of the country and the food security. The September 2017 Intended Nationally Determined Contribution submitted by Lao PDR to the U.N. Framework Convention on Climate Change clearly identifies resilience and adaptation actions covering appropriate resilient agricultural farming system practices and technologies to address climate change impacts and developing and improving crops diversification and resilience especially in the risk, flood, and drought areas.

16. **The Government of Lao PDR (GOL) has recognized the abovementioned needs and is trying to address them.** The Government’s agricultural public spending recently has been increased to about 1 percent of GDP, on par with the neighboring East Asia and Pacific countries. The Ministry of Agriculture and Forestry (MAF) is also paying increased attention to addressing both productivity and quality issues at the farming level through promoting and adopting GAP and improving efficiency at the postharvest processing stage to improve the country’s value chain capability to supply quality agricultural products, especially rice, maize, and horticulture. The Government’s 8th National Social-Economic Development Plan (NSEDP) for 2016–2020 has also explicitly emphasized the role of green and clean agriculture production. The objective of food security is also officially complemented by the objective of nutritional security, for which the supply of more diverse, nutrient-balanced, and safe food is considered a new priority and the private sector—especially small and medium enterprises (SMEs)—is seen an important partner.

**C. Proposed Development Objective(s)**

17. The Project Development Objective (PDO) is to increase competitiveness of selected agricultural value chains in the project areas.

18. The PDO-level results indicators would be:

   a) Change in agricultural land productivity of the targeted farmers (percentage)
   b) Increase in sales of farm produce as a share of production among targeted farmers (percentage, breakdown to gender male- and female-headed households)
   c) Increase in rice milling efficiency (percentage).

**D. Project Description**

19. The ACP comprises the following four components: (a) Improved Agricultural Efficiency and Sustainability (US$18.2 million), (b) Enhanced Agricultural Commercialization (US$7.2 million), (c) Project Management (US$2.9 million), and (d) Contingent Emergency Response (US$0 million). Total project cost
is US$29.3 million, which IDA would finance US$25 million, the Government would provide an estimated US$0.5 million in counterpart financing for the project, and farmers, farmer groups, and agribusiness entities would provide an estimated US$3.8 million associated with their matching grants. The IDA financing includes US$24 million for the four components and refund of the Project Preparation Advance (PPA).

Component A: Improved Agricultural Efficiency and Sustainability (estimated US$18.2 million, of which IDA would finance around US$16.3 million)

20. This component will support (a) the increased adoption of improved varieties and high-quality seeds, (b) the increased application of GAP, (c) the provision of critical productive infrastructure, and (d) the strengthening of public services delivery.

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

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

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

22. This subcomponent will support activities to promote good agricultural practices (GAP), including the provision of: (a) technical assistance for the establishment of FPGs and building their capacity to adopt GAP; (b) Matching Grants to selected FPGs to carry out Sub-projects that implement GAP; (c) technical and material assistance (i.e., small works, goods, equipment, training, etc.) to build the capacity of PAFOs, DAFOs, and relevant MAF technical departments to conduct training for FPGs on GAP and to carry out related extension and certification activities including soil analysis, organic fertilizer production, and organic farming; and (d) technical assistance to link FPGs with agribusinesses in marketing farm produce.

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

23. This subcomponent will support activities to improve critical irrigation infrastructure and water use practices, including: (a) rehabilitation of selected irrigation schemes; and (b) provision of technical assistance to establish water user groups and to build their capacity to adopt improved water use models.

Subcomponent A4: Strengthening Public Services Delivery (estimated US$2.1 million, of which IDA would finance US$2.1 million)
24. This subcomponent supports activities to strengthen agricultural and nutrition service delivery, including the provision of technical and material assistance (i.e., small works, goods, equipment, training, etc.) to: (a) improve the overall extension service capacity of the PAFOs and DAFOs; (b) develop and implement mapping and demarcation pilots for agricultural land in irrigated areas; and (c) conduct studies on integrated farming systems and diversification for nutrition, and carry out social behavioral change communication (SBCC) activities related to dietary diversity, adequate care practices, and processing and cooking for improved nutrition.

Component B: Enhanced Agricultural Commercialization (estimated US$7.2 million, of which IDA would finance around US$4.8 million)

25. This component will support (a) establishing of an Agricultural Value Chain Facility (AVCF), (b) measures to better link farmers to markets, and (c) studies to improve the enabling environment for agro-enterprise and value chain development.

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

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

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

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

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

28. This subcomponent will support activities to improve the enabling legal, policy and institutional environment for supporting agribusiness investment and agricultural trade policies, including the development of improved sanitary and phytosanitary standards, rice standards and rice export policies, and improved import and export legislation focusing on agriculture inputs and farm machinery.

Component C: Project Management (estimated US$2.9 million, of which IDA would finance US$2.9 million)
29. The component will support (a) project management and (b) monitoring and evaluation (M&E).

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

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

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

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

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

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

**E. Implementation**

**Institutional and Implementation Arrangements**

33. **Department of Planning and Finance (DOPF)** of MAF will be the key implementing agency. DOPF will be responsible for: (a) managing and coordinating the overall project implementation; (b) providing guidance and support to the project provinces in project implementation and management according to their mandates; (c) developing and maintaining a sound project financial management system; (d) handling international competitive bidding (ICB) packages, selection of international consultants, and other procurement packages which need to be handled at the central level; and (e) monitoring the quality of project implementation, safeguards compliance, and impact evaluation for reporting to MAF and IDA.

34. **Central Project Management Office (CPMO)** will be established at DOPF. The CPMO will be responsible overall project coordination and management including financial management, procurement monitoring and evaluation and reporting. The CPMO will be also responsible for implementation of activities related to policy and legal issues. The Project Management Division (PMD) under DOPF will provide day-to-day support CPMO on financial management, procurement, and safeguards implementation and compliance.
35. **Provincial Agriculture and Forestry Office** (PAFO) will be responsible for project implementation in their province, including: (a) preparing project plans and reports; (b) handling procurement activities which are decentralized to the province; (c) maintaining a sound financial management system for the project, satisfactory to IDA; (d) monitoring the quality of project implementation and safeguards compliance; and (e) coordinating with PICO, selected districts and villages to carry out planned activities. PICO and technical departments of MAF and MOIC will provide necessary technical support to PAFO when required.

36. In addition, a Central Project Steering Committee (CPSC) and a Provincial Steering Committee (PSC) will be established at the central level and provincial levels, respectively. The CPSC will be chaired by a Vice Minister of MAF with representatives from MOIC, concerned ministries and project provinces, which will be responsible for approving the annual work plans (AWP), reviewing the project implementation progress, and providing guidance to the project implementing agencies to resolve implementation bottlenecks. The PSC will be chaired by the Governor or Vice Governor and will be responsible for approving the detailed provincial annual work plans which have been designated to the Province.

37. For the environmental and social safeguard arrangements, The DOPF/CPMO and the PAFOs/DAFOs, which are responsible for overall supervision, monitoring, and implementation of the Environmental and Social Management Framework (ESMF), and the Environmental Codes of Practice (ECOP), as well as Compensation and Resettlement Policy Framework (CRPF) and Ethnic Groups Engagement Frameworks (EGEF) will each appoint an Environmental and Social Safeguard Officer. The project will provide adequate resources to allow the DOPF/CPMO and the PAFOs/DAFOs to cooperate effectively with the local governments in carrying out environmental and social monitoring and management activities as stipulated in the ESMF/ECOP/CRPF/EGEF. The project will also provide training to build capacity of the DOPF/CPMO, and the PAFOs/DAFOs on implementation of the ESMF/ECOP/CRPF/EGEF and related monitoring activities. The main role of the CPMO during project implementation will be to provide necessary guidance, training and technical assistance to the PAFOs and ensure that the PAFOs are aware of the environment and social safeguard policy requirements and able to implement, monitor and report the safeguard compliance status effectively. PAFOs will be responsible for preparing Abbreviated Resettlement Action Plans (ARAPs)/RAPs for submission to the World Bank for review and to the District Office of Natural Resources and Environment (DONRE) or Provincial Office of Natural Resources and Environment (PONRE) for approval. A technical assistance team and environmental and social (E&S) consultants will also be recruited to assist the DOPF/CPMO in managing project implementation, including environmental and social safeguards.

38. During project implementation, the following steps will be taken: (a) environmental and social screening to determine eligibility (by PAFO with technical assistance from DOPF/CPMO, E&S consultant and concerned line agencies such as Department of Agriculture (DOA), Department of Irrigation (DOI), and Department of Technical Extension and Agro-processing (DTEA), etc.; (b) determining whether an environmental impact assessment including ECOP is required for the sub-project (by PAFO/DAFO with technical assistance from DOPF/CPMO); (c) preparation of the required safeguards documents (by PAFO/DAFO with technical assistance from DOPF/CPMO and E&S consultant) and seek approval (by DONRE or PONRE for sub-project that required initial environmental examination (IEE) followed by public disclosure (by PAFO/DAFO); (d) incorporating mitigation measures into bidding documents, construction
and supervision contracts (by PAFO/DAFO); and (e) monitoring of implementation of ECOP (by PAFO/DAFO/DOPF-CPMO and construction supervision consultants).

F. Project location and Salient physical characteristics relevant to the safeguard analysis (if known)

The five project provinces include Vientiane capital, Vientiane province, Bolykhamxay, Khammouane, and Xayabury. The project is generally located from highland areas or the mountainous province of Xayabouly downward to the plain areas of Vientiane province, Vientiane Capital, Borikhamxay, and Khammoun province. The elevation varies from around 1,000 meters above sea level in Xayabury and decreases downward to approximately 200 meters above sea level along the Mekong. The area is dominated by the southwest monsoon climate, which brings heavy seasonal rainfall averaging annually 2,500 to 3,500 mm. The alluvial river plains along the Mekong and its tributaries in the central and southern parts of the country are where more than 50% of the population lives. These areas include the Vientiane Plain, a narrow plain in Bolikhamsay and Xebangfay plain in Khammouane Provinces, a larger plain of Savannakhet Provinces. These plains are the most productive areas of the country, dominated by a moist tropical climate that brings an annual average rainfall ranging from 1,500mm to 2,000mm. According to Roder et al (2006), soil fertility studies in Lao PDR for upland rice and lowland rice showed that soils used for rice production are generally of low fertility, with low organic matter and N-availability. Despite this, fertilizers are rarely used for upland rice cultivation. In contrast, the use of chemical/inorganic fertilizer inputs for lowland rice has risen dramatically over the past 10 years (though still less than 20 kg/ha, on average). The main rivers and Mekong tributary flowing through the project provinces include: in Xayabury- Mekong; Vientiane province-NamNgum; Vientiane Capital- Mekong and NamNgum; Bolikhaxay-Nam Kading, Nam Xan and Mekong; Khammouane- Xebangfai and Mekong. Project activities will be implemented using surface water resources, particularly drawing from the Mekong River and its tributaries. There are protected areas and natural habitats within the project provinces. The project activities need to be selected and ensure there will be no negative impacts to those protected area and natural habitats. These target provinces are home to some ethnic groups including Hmong, Khmu, Makong and Katang who are defined as Indigenous Peoples under the World Bank’s policy OP/BP 4.10.

G. Environmental and Social Safeguards Specialists on the Team

Sybounheung Phandanouvong, Social Safeguards Specialist
Waraporn Hirunwatsiri, Environmental Safeguards Specialist
**SAFEGUARD POLICIES THAT MIGHT APPLY**

<table>
<thead>
<tr>
<th>Safeguard Policies</th>
<th>Triggered?</th>
<th>Explanation (Optional)</th>
</tr>
</thead>
</table>
| Environmental Assessment OP/BP 4.01 | Yes        | LACP has been classified as Environmental Category B by the World Bank due to its small scale and the impact from the project activities is minimal, localized and can be managed through appropriate mitigation measures. The project’s overall socio-environmental impacts are expected to be positive. The project will finance improving agricultural productivities and quality through providing good seed quality, promoting good agriculture practices (minimize water and chemical fertilizer and pesticide use), and water management practices. Investments may also include small scale infrastructure (i.e. rice mill, storage facilities, processing house, irrigation and drainage refurbishment and upgrades, etc.), procurement of combine harvester machines, equipment provision as well as training. The envisaged investments are typical to similar agriculture development projects and are not expected to have adverse and unprecedented environmental and social impacts. Implementation of irrigation and drainage infrastructure and land improvements investments on farmer fields under Component 1 are mainly rehabilitative by their nature and are not expected to have significant negative environment and social impacts. The civil works on some small-scale infrastructure such as storage facilities, dryer, irrigation canals would cause some small impacts such as dust, noise, waste and wastewater generation and safety concerns during construction phase. Most of the negative impacts are short term, temporary, localized and immitigable. However, some proposed irrigated areas depend on 5 potential dams, the dam safety must be taken into account to those sub-project financing activities downstream of those dams as per OP4.37. Given that the nature of the project is demand driven and the scope and targets of the project will be dependent on farmers’ participation during project implementation, an ESMF has been developed for application by the project. The ESMF
The World Bank  
Lao Agriculture Competitiveness Project (P161473)

<table>
<thead>
<tr>
<th><strong>Natural Habitats OP/BP 4.04</strong></th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Forests OP/BP 4.36</strong></td>
<td>No</td>
</tr>
<tr>
<td><strong>Pest Management OP 4.09</strong></td>
<td>Yes</td>
</tr>
</tbody>
</table>

provides policy provisions, principles and processes to address the environmental and social impacts. It describes procedures for sub-project screening, impact assessment, consultation, preparation of subsequent safeguard instruments, implementation arrangements, budget and monitoring program. OP 4.01 also requires that public consultations must be conducted during the preparation of the safeguard documents. The final draft of the ESMF must be disclosed locally both in English and local language and at the Bank for public access.

The LACP will provide support towards good farming practices in existing farm land and will not acquire new land for farm expansion into the natural habitats. It will also not extend irrigation systems beyond their original design/planning. As such, the project is unlikely to result in adverse impacts on environmentally sensitive areas such as protected areas, national parks, forests or special areas for biodiversity conservation. As the locations of small-scale infrastructure are not finalized at project appraisal, environmental screening during the project implementation will exclude subprojects that might cause adverse impacts on environmental sensitive areas.

The policy requires impacts on forests be avoided or mitigated. The project envisages no investments in management of natural forests or plantations or involving conversion or degradation of critical forest areas. Activities to be financed under the project will be implemented in existing cultivated lands and no project activities will take place in forest areas. The project would apply a screening process to eliminate subprojects which will impact on forests or involve forests in the early planning stage during project implementation.

The LACP will not promote the procurement of any chemical pesticides or herbicides. However, if pest invasion occurs, small amount of eligible and registered pesticides in the project provinces is allowed if supplemented by additional training of farmers to ensure pesticide safe uses in line with World bank’s policies (OP 4.09). And given that the
The project is designed to promote the reduction in chemical pesticide and fertilizer use in existing farm land by enhancing sustainable farming practices, a simplified Pest Management Plan was prepared, along with a negative list. The simplified Pest Management Plan (PMP) was developed in line with the Regulation on the Control of Pesticides in Lao PDR (2014) as well as guidelines on Integrated Pest Management (IPM) provided by the Food and Agriculture Organization of the United Nations (FAO) and the World Bank OP4.09. The ESMF included the simplified PMP.

<table>
<thead>
<tr>
<th>Physical Cultural Resources OP/BP 4.11</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>The policy requires that siting of subprojects should avoid impacts on any known physical cultural resources. The project may impact on physical cultural resources although it is expected to be limited to areas of land already utilized for agriculture. Mitigation measures must be proposed and implemented if a physical cultural resource be affected. Chance find procedures was developed as preventive measures for projects involving earthworks and built into the ESMF to address the potential impact on PCR. The siting of small infrastructure under LACP will avoid relocation of any known existing physical cultural resources. As sub-projects also may involve limited earth work, a “chance finds” procedure has been developed and will be included in an ECOP and construction contracts as preventive measures.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Indigenous Peoples OP/BP 4.10</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>The social assessment (SA) and FPIC conducted reveals that the project will likely operate in areas which is home to at least 6 ethnic groups, belonging to Mon-Khmer and Hmong – lew Mien ethnolinguistic families, that meet the four characteristics specified as defining criteria for indigenous peoples (IPs) in the World Bank Policy on IPs (OP/BP4.10). An Ethnic Group Engagement Framework (EGEF) has been prepared to be applied under the LACP in line with OP/BP 4.10 requirements based on free, prior and informed consultations that had been conducted during project preparation with affected ethnic groups. Given minor and manageable potential adverse impact, potentially affected ethnic groups confirmed their broad community support for project implementation. Based on the social</td>
<td></td>
</tr>
</tbody>
</table>
assessment, measures and recommendations have been proposed and reflected in the EGEF to avoid/minimize/mitigate potential adverse impact while enhancing overall development effectiveness through specific intervention methods to ensure ethnic groups could receive project benefits in a culturally appropriate manner. The EGEF, which is designed as a standalone document connected with the ESMF and CRPF has been submitted to the World Bank for review and disclosure prior to appraisal.

Due attention will be given to ensure that ethnic groups do not suffer adverse impacts and that they receive culturally compatible social and economic benefits. Necessary steps and procedures are included in the EGEF to ensure that the cultures of the multi-ethnic society are respected and that gender dimension are integrated at all levels and cycles of project implementation. A feedback and grievance resolution mechanism will be developed and applied under the project to provide affected ethnic groups with a legitimate platform for monitoring and reporting on the safeguard policy compliance as well as on project implementation.

Screening of ethnic group(s) will be conducted for subprojects identified during project implementation. Where ethnic minorities have been identified with collective attachment to the project area, EGEP(s) will be prepared to be applied under the subproject in accordance with the EGEF.

Involuntary Resettlement OP/BP 4.12  Yes

Insignificant and temporary land acquisitions and economic losses are envisaged from the project investments in key productive and economic infrastructure development including rehabilitation of existing irrigation schemes under Component A and construction of processing and postharvest handling facilities financed through the matching grants under Component B. These potential impacts can be avoided or minimized through impact assessments, consultation and application of mitigation measures. In addition, design of subprojects may be adjusted and locations sought to minimize the impacts identified. Given that the
design of irrigation and matching grant subprojects and areas to be covered are still to be finalized during the project implementation, a Compensation and Resettlement Policy Framework (CRPF) has been developed to be applied by the project in compliance with OP/BP 4.12 requirements. To ensure affected people could make an informed choice on how they get compensated for, in addition to two options which are a) full voluntary donation of the affected assets (with no compensation) and b) receiving full compensation payment, a third option is proposed under this project which is referred to as “voluntary contributions with compensation”. This option is positioned between the option of full donation and option of full compensation to allow affected people to partially contribute to the project by receiving partial compensation based on their informed choice. For subproject involving land acquisition, preparation of (abbreviated) RAPs for sub-projects acquiring land will be required. In case where voluntary land donations and voluntary contributions with compensation are involved, verification and documentation of the consultation process and outcome will be performed. The CRPF will complement the EGPF and ESMF. If land or asset loss are unavoidable, the principles and process described in the CRPF will be applied to address and mitigate negative impacts.

<table>
<thead>
<tr>
<th>Safety of Dams OP/BP 4.37</th>
<th>Yes</th>
</tr>
</thead>
</table>

The policy requires that appropriate measures are taken to ensure the safety of the dam, either a new dam or existing dam on which the Bank-financed project is directly dependent. Headwork for five reservoirs in the project area classify as large Dams as per the World Bank Operational Manual OP 4.37 for Safety of Dams. The reservoirs are expected to be used as the main source of irrigation water supply to the target command cropping areas. Therefore, this policy is triggered. TOR of Panel of Experts (POE) has been prepared. During project implementation, the POE will conduct: (a) inspect and evaluate the safety status of the existing dam, its appurtenances, and its performance history; (b) review and evaluate the owner’s operation and maintenance procedures; and (c) provide a written report of findings and recommendations for any remedial work or safety-related measures necessary to upgrade the existing
dam to an acceptable standard of safety. Detailed roles assigned and mandated for dam inspection to the relevant agencies and organizations; strengthening the inspection, operation and maintenance, improving of inspection procedures and reporting system officers as well as the plan for implementing the dam safety will be proposed in Dam Inspection Report as part of the recommendations by POE. The result of the dam inspection and findings and recommendations as well as the plan for implementing the dam safety recommendations for remedial work or safety-related measures necessary to upgrade the existing dam to an acceptable standard of safety will be reviewed by the Bank. MAF will ensure that the plan for implementing the dam safety recommendations that agreed with the Bank will be implemented.

Projects on International Waterways OP/BP 7.50  Yes
The LACP will involve project areas and irrigation systems located in tributaries which are part of the Mekong river basin. To comply with this policy, a letter informing other riparian countries (China, Myanmar, Thailand, Cambodia, and Vietnam) will be done through MRC mechanism.

Projects in Disputed Areas OP/BP 7.60  No
The sites for the LACP will not fall within disputed areas of Lao PDR and, therefore, the OP 7.60 will not be triggered.

KEY SAFEGUARD POLICY ISSUES AND THEIR MANAGEMENT

A. Summary of Key Safeguard Issues

1. Describe any safeguard issues and impacts associated with the proposed project. Identify and describe any potential large scale, significant and/or irreversible impacts:
The project’s overall impacts are expected to be positive in particular on increase of food security, agriculture productivity, household income, and food safety, improve access to water for agriculture purpose, etc. Some negative impacts are envisaged to be limited, localized, manageable and reversible. Currently, there are no major issues found related to chemical fertilizer use in rice farming in Lao PDR. However, insecticide is commonly use in association with high yield rice varieties cultivation along the Mekong river as well as horticulture. Herbicides are generally applied on maize farming areas i.e. Xayabury province. Good quality seeds that are resistant to pests, suitable in flood prone areas, unfertile soil and good taste, Good Agriculture Practices (GAP) and Integrated Pest management (IPM) will be introduced for sub-project activities to reduce impact from herbicide/insecticide utilization.

No potential large scale investments that will cause significant and/or irreversible impacts (Category A) will be supported under the project. To enhance irrigation services and water productivity in the targeted project area and to
support agriculture commercialization and enhance climate resilience, the project will finance rehabilitation of selected irrigation infrastructure, including: (i) improvement of irrigation canals (tertiary canal, pontoons, pumps, motors, structures, pipes, changing electricity wire, etc.); (ii) establishment and re-organization of water users’ associations; and (iii) capacity development on irrigation O&M. It is anticipated that improving of small pumping irrigation schemes taking water from the Mekong river and its tributaries, gravity irrigation schemes supplied by small weirs, and gravity irrigation schemes fed by reservoirs, pontoons, motors, pumps and piping will not have significant impact on the environment and natural resources. However, some proposed irrigated areas depend on 5 potential dams, the dam safety must be taken into an account to those sub-project financing activities downstream of those dams to ensure that the failure of the existing dams will not cause extensive damage to or failure of the Bank-funded activities.

The project will support some 28,000 farm households (HHs), consisting of some 150,000 people including some 70,000 women and working on 30,000 ha of farm area. Out of these, 1,700 HHs (8,450 people) or around 5% are of 6 ethnic minority groups defined as Indigenous People under OP/BP 4.10. These ethnic groups include Hmong (376 HHs), Iewmien (70), Bru or Makong (922), Khmu (269), Katang (28) and Pray (26 HHs). These project beneficiaries live in 15 agricultural districts of 5 provinces namely Vientiane Capital, Vientiane province, Bolikhamxay, Khammouane, and Xayabury. In addition, the project will provide direct benefits to some 30 agribusinesses operating rice, maize and horticulture value chains, and to staff of the research, extension, and planning institution under MAF and MOCI, through the institutional and capacity building activities.

A social assessment (SA) along with gender supply chain analysis and a free, prior and informed consultation (FPIC) was conducted in 4 out of 5 project provinces during the project preparation (i.e. in September and early October 2017). Outcomes of the SA suggest that the project’s overall impacts are expected to be positive with some potential adverse impacts envisaged to be limited, localized, manageable and reversible. Potential impacts would be mainly associated with the implementation of project activities or sub-projects under the two components. Component A: Improved Agriculture Efficiency and Sustainability would (a) finance rehabilitation of irrigation infrastructure to improve operation and efficiency of existing irrigation systems in the project areas, and b) under Component B - Enhanced Agricultural Commercialization in which an Agriculture Value Chain Facility (AVCF) will be established to support agribusinesses to invest in key infrastructure of relatively small scale and technical support they require to build their capacity to become more efficient and productive suppliers of higher quality products, reduce wastage through improved post-harvest handling methodologies. It is expected that the AVCF would provide matching grants to some 30 eligible agribusinesses to invest in their infrastructure and facilities such as harvesting and rice milling machines, storage and processing facilities, vegetable green houses.

The following World Bank safeguard policies are triggered under the project: Environmental Assessment (OP/BP 4.01), Pest Management (OP 4.09), Indigenous Peoples (OP/BP 4.10), Involuntary Resettlement (OP/BP 4.12), Physical Culture Resources (OP/BP 4.11), Safety of Dam (OP/BP 4.37) and Projects on International Waterways (OP/BP7.50). Given the nature and scope of impacts anticipated, the project is classified as Category B. Mapping, demarcation, and registration of irrigation land/systems are not expected to cause changes in land use types and land ownership as they will be carried out on a block basis (not for individual plots). Forced child labor and labor influx are not anticipated from the project as famers will be encouraged to contribute their labors for subprojects and contractors, if hired for subproject implementation will be required to comply with the World bank safeguard policy requirements on labor, health and safety provided in the ESMF and EGEF. The project would comply with the three gender tags proposed by the World Bank Standards. This is to ensure that the project will address gender in terms of (i) analysis; (ii) action; and (iii) monitoring and evaluation framework. The project has identified specific measures to enhance equal access and opportunities for women to benefit from the matching grants and other project activities.
2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:

A potential long term environmental impact is the possible raising of groundwater levels, a known effect of increased irrigation after rehabilitation and increased system utilization. In addition, a potential indirect impact of the rehabilitation and improving of irrigation scheme and structures may be on drinking water quality for villagers that might use shallow wells around the sub-project areas.

Further, since irrigation efficiency is improved by the proposed sub-projects, there could be a tendency of increase in cropping intensity in the future. If farmers only grow paddy after paddy in their farmland where irrigation efficiency was improved without replenishing soil nutrients with fertilizers or rotation farming (bean cropping), soil fertility could gradually decline due to the changes of physical and chemical properties in the soil.

Overall, the proposed project will address some of these impacts through robust design of selected irrigation structures such as concrete lining and detailed site assessment during implementation that target effectiveness of the agriculture extension systems, using IPM and promoting organic fertilizers. In connection with the agriculture commercialization support, the project would also finance capacity building for stakeholders at various levels for wider dissemination of environmentally sound agriculture technologies and integrated pest management.

For the social safeguards, some technologies and practices to be introduced and supported through the project to farm HHs, farm groups and agribusinesses may result in increased workload among women who are the main workforce in agriculture and agribusiness sector in Laos as well as in the project areas. In addition, project’s interventions might be culturally inappropriate or unacceptable for some ethnic groups based on experiences from similar projects financed by the World Bank in Laos including the Agriculture Development Project (ADP) during 2004-2008, Rice Productivity Improvement project (RPIP), 2009-2011, and Upland Food Security Improvement Project (LUFSIP), 2010-2114. The social assessment (SA) along with gender supply chain analysis conducted has identified specific measures to minimize potential negative impacts on women and to enhance equal access and opportunities for them to benefit from the matching grants and other project activities. A gender action plan with tangible targets and monitoring indicators is designed and mainstreamed into the Project Results Framework and Monitoring in the Project Appraisal Document (PAD) and the Project’s Safeguard Policy Frameworks. The Free, Prior and Informed Consultation (FPIC) carried out during the project preparation has resulted in community broad support for the project with their concerns and suggestions the project design reflected in the project design and Safeguard Policy Frameworks (ESMF, EGEF and CRPF).

3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts.

Available Options for Improving Traditional Agricultural Practices:

For rice production:

- Use good quality seeds and varieties which are adaptive to environmental conditions (i.e. pest resistance, flood and drought tolerance, high market demand);
- Introduce new agricultural techniques and technologies with low investment costs, such as direct seeding; drum seeders; wet and dry direct seeding; transplanting machines; and others;
- Introduce soil fertility management by using leguminous crops after harvesting; practicing crop rotation; using green manure, compost, and decomposed farm residues; applying organic fertilizers to paddy fields; and optimizing fertilizer application;
• Use integrated pest management (IPM), apply bio-control agents and biological extracts, conduct pest monitoring with used light traps, diversify crops, and use pest resistant varieties, break the life cycle of pests, produce and release predators.
• Apply water management techniques, wet and dry alternate technology, introducing water holding capacity.
• Introduce new agriculture machinery such as rotary for weeding, transplanting machine, harvesting machine or combine and dryer for improve paddy rice quality.
• Conduct demonstration plots, organize farmer field schools, sharing information and access to technology information.

For maize production:
• Select good quality and suitable varieties adaptive to local environment.
• Improve soil quality by using crop rotation, intercropping, and mulch keeping, decomposed farm residues, and introduce nitrogen fixation and phosphate solubilizing microorganisms, optimum fertilizer application.
• Introduce trapping crop for minimizing insects, use IPM; apply bio-control agents and biological extracts.
• Introduce machinery for controlling weeds, harvesting and drying after harvesting.
• Conduct demonstration plots, organize farmer field schools, sharing information and access to technology information.

For vegetable production:
• Introduce off-season vegetable cultivation.
• Promote seed production in dry season.
• Apply agriculture tools for preparing plots, watering systems.
• Introduce organic fertilizer production and bio-fertilizer application.
• Improve water holding capacity, apply water infiltration systems.
• Use botanical control agents and botanical extracts to control pest, product predators and release at vegetable plantation.
• Introduce packing technology and cool rooms.
• Setting up crop calendar and vegetable menus for marketing.
• Conduct demonstration plots, organize farmer field schools, sharing information and access to technology information.

Many farmers have recently indicated willingness to grow organic vegetables and employ Good Agricultural Practices (GAP) due to the high market value of organic produce and the increased safety for farmers associated with the associated reduced pesticide and herbicide use. One of the constraints in growing organic and GAP vegetables is the certification process – specifically the quality management, which is required in marketing the products.

If, significant adverse impacts and issues have been identified through the impact assessment to be carried out after subprojects and area of influence have become known, subproject design will be adjusted and/or alternative locations sought to avoid or minimize the impacts. The process of identifying impacts and mitigation measures will be conducted with participation and in consultation with the beneficiaries and project affected persons.

4. Describe measures taken by the borrower to address safeguard policy issues. Provide an assessment of borrower capacity to plan and implement the measures described.
In order to ensure that the environmental and social issues are addressed properly in accordance and in compliance with the World Bank Safeguards Policies, all project activities including small scale infrastructure in particular
construction of seed storage facilities, value added processing facilities and rehabilitation of existing irrigation schemes (tertiary canals and drainages) shall undergo screening, assessment, review, and clearance process before execution of the physical activities. The project will use a structured approach to environmental and social management to allow the project development process, follow the hierarchy of avoidance, minimization, compensation/mitigation for negative impacts and enhancement of positive impacts where practically feasible and advantageous. An ESMF, EGDF and Grievance Redress Mechanism have been prepared by DOPF working closely with national and international consultants with the Bank guidance and in close cooperation among concerned agencies such as DOI, DOA, DTEA, and MOIC, etc. DOPF will continue conducting further consultations to ensure farmers and small holders understand and follow the safeguard policies and will coordinate concerned technical department to monitor the sub-project activities. PAFOs and DAFOs will take a lead role to supervise the implementation of sub-projects in their respective areas. CPMO and E&S consultants will work closely with farmers and small enterprises to prepare sub-project proposals, conduct E&S screening and prepare appropriate safeguard instruments. Due to most of agencies have limited experience with the Bank safeguard policies, The Bank safeguard specialists will continue providing training on the Bank safeguard policies in particular on the project screening and impact assessment of sub-project proposals and safeguard instrument preparation for Category B sub-projects.

Insignificant or temporary land acquisition may be required for the purpose of rehabilitation of the irrigation schemes as well as construction of processing facilities supported by the project’s matching grants. Although the project will focus on the rehabilitation of existing irrigation schemes, the civil works may require expansion of existing intake and irrigation canals. Potential impacts from these investments can be avoided or minimized through impact assessments, consultation and application of mitigation measures.

Given that the targets, types and design of subprojects and are still to be determined and finalized after the project has become effective, the following interconnected safeguard policy frameworks have been prepared to be applied by the project: Environmental and Social Management Framework (ESMF), Compensation and Resettlement Policy Framework (CRPF) and Ethnic Group Engagement Framework (EGEF).

The ESMF provides policy provisions, principles and process to address the potential environmental and social impacts. The policy framework describes procedures for impact assessment, consultation, preparation of subsequent safeguard instruments and implementation arrangement. The CRPF was developed in compliance with OP/BP 4.12 requirements. If land or asset loss are unavoidable, the principles and procedures described in the CRPF will be applied to address and mitigate negative impacts. The EGPF was prepared in line with OP/BP 4.10 requirements to address and mitigate potential adverse impacts on ethnic minorities and groups with collective attachment to the project area of influence. The EGEF ensures that free, prior and informed consultations would be conducted with affected ethnic groups leading to their broad community support, and that they receive project benefits in a culturally appropriate manner.

For the project intervention downstream of large dams, MAF has drafted TOR of Panel of Expert. The POE will conduct: (a) inspect and evaluate the safety status of each dam, its appurtenances, and its performance history; (b) review and evaluate the owner's operation and maintenance procedures; and (c) provide a written report of findings and recommendations for any remedial work or safety-related measures necessary to upgrade the existing dam to an acceptable standard of safety. Detailed roles assigned and mandated for dam inspection to the relevant agencies and organizations; strengthening the inspection, operation and maintenance officers as well as improving of inspection procedures and reporting system will be proposed in the Dam Inspection Report as part of the recommendations by the POE. The result of the dam inspection and findings and recommendations for remedial work or safety-related measures necessary to upgrade the existing dam to an acceptable standard of safety will be reviewed by the Bank.
Despite of having received extensive support from the World Bank as well as other donors financed projects, institutional capacity of MAF remains inadequate. This is possibly due to its limited resources and staff turnover. The MAF as well as other ministries in Laos are in the on-going process of institutionalizing all development and investment projects into their systems and thus is still on a learning curve. Environmental and social consultants have been recruited to help the client prepare and implement the ESMF CRPF and EGEF as well as subsequent instruments to be developed as required. A capacity building program and estimated budget are outlined in the policy frameworks to ensure that project staff, consultants and its partners will be provided with required training and support to enable them to comply the policy requirements described in these policy frameworks.

5. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people.

The main project beneficiaries include some 28,000 farm households (HHs), consisting of 150,000 people including some 70,000 women. Out of these, 1,700 HHs (8,450 people) are of 6 ethnic minority groups. In addition, some 30 agribusinesses would also benefit from the project through the matching grants to invest in improvement and construction of post-harvesting facilities and equipment and technology. These beneficiaries may be potentially affected by the infrastructure subprojects and technology support financed under the project as described above. The social assessment and FPIC were carried out with these project stakeholders during the project preparation and will continue during the project implementation to establish and maintain their broad support for the project. The final consultation was conducted to review and finalize the ESMF, CRPF and EGEF on December 6, 2017. The results of the consultation were incorporated into the policy frameworks, which were submitted for Bank review on the same day. The revised ESMF, CRPF and EGEF were cleared by the Bank and publicly disclosed in the local language and on the MAF’s website prior to the appraisal mission.

B. Disclosure Requirements

<table>
<thead>
<tr>
<th>Environmental Assessment/Audit/Management Plan/Other</th>
<th>Date of receipt by the Bank</th>
<th>Date of submission for disclosure</th>
<th>For category A projects, date of distributing the Executive Summary of the EA to the Executive Directors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>08-Nov-2017</td>
<td>19-Dec-2017</td>
<td></td>
</tr>
</tbody>
</table>

"In country" Disclosure

Lao People's Democratic Republic

06-Dec-2017

Comments

Disclosure of cleared ESMF in local language on the website: http://www.maf.gov.la of the Ministry of Agriculture and Forestry (MAF), and at Vangvieng District, Vientiane Province, with participation of MAF and Provincial Agricultural and Forestry Offices (PAFOs) of 5 project provinces prior to the appraisal mission.
### Indigenous Peoples Development Plan/Framework

<table>
<thead>
<tr>
<th>Date of receipt by the Bank</th>
<th>Date of submission for disclosure</th>
</tr>
</thead>
<tbody>
<tr>
<td>08-Nov-2017</td>
<td>19-Dec-2017</td>
</tr>
</tbody>
</table>

**"In country" Disclosure**
Lao People's Democratic Republic
06-Dec-2017

**Comments**
Disclosure of cleared EGEF in local language on the website: http://www.maf.gov.la of the Ministry of Agriculture and Forestry (MAF), and at Vangvieng District, Vientiane Province, with participation of MAF and Provincial Agricultural and Forestry Offices (PAFOs) of 5 project provinces prior to the appraisal mission.

### Pest Management Plan

<table>
<thead>
<tr>
<th>Was the document disclosed prior to appraisal?</th>
<th>Date of receipt by the Bank</th>
<th>Date of submission for disclosure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>08-Nov-2017</td>
<td>19-Dec-2017</td>
</tr>
</tbody>
</table>

**"In country" Disclosure**
Lao People's Democratic Republic
06-Dec-2017

**Comments**
Disclosure of cleared Pest Management Plan in local language on the website: http://www.maf.gov.la of the Ministry of Agriculture and Forestry (MAF), and at Vangvieng District, Vientiane Province, with participation of MAF and Provincial Agricultural and Forestry Offices (PAFOs) of 5 project provinces prior to the appraisal mission.
If the project triggers the Pest Management and/or Physical Cultural Resources policies, the respective issues are to be addressed and disclosed as part of the Environmental Assessment/Audit/or EMP.

If in-country disclosure of any of the above documents is not expected, please explain why:

C. Compliance Monitoring Indicators at the Corporate Level (to be filled in when the ISDS is finalized by the project decision meeting)

OP/BP/GP 4.01 - Environment Assessment

Does the project require a stand-alone EA (including EMP) report?
Yes

If yes, then did the Regional Environment Unit or Practice Manager (PM) review and approve the EA report?
Yes

Are the cost and the accountabilities for the EMP incorporated in the credit/loan?
Yes

OP 4.09 - Pest Management

Does the EA adequately address the pest management issues?
Yes

Is a separate PMP required?
Yes

If yes, has the PMP been reviewed and approved by a safeguards specialist or PM? Are PMP requirements included in project design? If yes, does the project team include a Pest Management Specialist?
Yes

OP/BP 4.11 - Physical Cultural Resources

Does the EA include adequate measures related to cultural property?
Yes

Does the credit/loan incorporate mechanisms to mitigate the potential adverse impacts on cultural property?
Yes

OP/BP 4.10 - Indigenous Peoples

Has a separate Indigenous Peoples Plan/Planning Framework (as appropriate) been prepared in consultation with affected Indigenous Peoples?
Yes

If yes, then did the Regional unit responsible for safeguards or Practice Manager review the plan?
Yes
If the whole project is designed to benefit IP, has the design been reviewed and approved by the Regional Social Development Unit or Practice Manager?
NA

**OP/BP 4.12 - Involuntary Resettlement**

Has a resettlement plan/abbreviated plan/policy framework/process framework (as appropriate) been prepared?
Yes
If yes, then did the Regional unit responsible for safeguards or Practice Manager review the plan?
Yes

**OP/BP 4.37 - Safety of Dams**

Have dam safety plans been prepared?
No
Have the TORs as well as composition for the independent Panel of Experts (POE) been reviewed and approved by the Bank?
Yes
Has an Emergency Preparedness Plan (EPP) been prepared and arrangements been made for public awareness and training?
No

**OP 7.50 - Projects on International Waterways**

Have the other riparians been notified of the project?
Yes
If the project falls under one of the exceptions to the notification requirement, has this been cleared with the Legal Department, and the memo to the RVP prepared and sent?
No
Has the RVP approved such an exception?
No

**The World Bank Policy on Disclosure of Information**

Have relevant safeguard policies documents been sent to the World Bank for disclosure?
Yes
Have relevant documents been disclosed in-country in a public place in a form and language that are understandable and accessible to project-affected groups and local NGOs?
Yes
All Safeguard Policies

Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies?
Yes

Have costs related to safeguard policy measures been included in the project cost?
Yes

Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies?
Yes

Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents?
Yes

CONTACT POINT

World Bank

Binh Thang Cao
Sr Agricultural Spec.

Konesawang Nghardsaysone
Economist

Borrower/Client/Recipient

Lao People's Democratic Republic
Phouang Parisak Pravongviengkham
Vice Minister - Ministry of Agriculture and Forestry
pppravongviengkham@yahoo.com

Implementing Agencies

Department of Planning and Finance
Xaypladeth Choulamany
Director - Department of Planning and Cooperation
Xaypladethchoulamany@yahoo.com
FOR MORE INFORMATION CONTACT

The World Bank
1818 H Street, NW
Washington, D.C. 20433
Telephone: (202) 473-1000

APPROVAL

| Task Team Leader(s): | Binh Thang Cao  
|                     | Konesawang Nghardsaysone |

Approved By

<table>
<thead>
<tr>
<th>Safeguards Advisor:</th>
<th>Peter Leonard</th>
<th>21-Dec-2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Practice Manager/Manager:</td>
<td>Nathan M. Belete</td>
<td>29-Dec-2017</td>
</tr>
<tr>
<td>Country Director:</td>
<td>Jean-Christophe Carret</td>
<td>12-Jan-2018</td>
</tr>
</tbody>
</table>