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**Report 136312-LA**

**INTERNATIONAL DEVELOPMENT ASSOCIATION**

**PROGRAM DOCUMENT FOR A PROPOSED CREDIT**

**IN THE AMOUNT OF SDR 28.9 MILLION (US\$40 MILLION EQUIVALENT)**

**TO THE LAO PEOPLE'S DEMOCRATIC REPUBLIC**

**FOR THE**

**SECOND PROGRAMMATIC GREEN GROWTH DEVELOPMENT POLICY OPERATION**

**April 30, 2019**

Macroeconomic Trade and Investment Global Practice  
Environment and Natural Resources Global Practice  
East Asia and Pacific

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**LAO PEOPLE'S DEMOCRATIC REPUBLIC GOVERNMENT FISCAL YEAR**

January 1 – December 31

**CURRENCY EQUIVALENTS**

(Exchange Rate Effective as of March 31, 2019)

Currency Unit = Lao kip (LAK)

US\$1.00 = 8,594.76 LAK

US\$1.00 = 0.7203 SDR

1 SDR = 1.388 USD

**ABBREVIATIONS AND ACRONYMS**

ANS	Adjusted net savings	M&E	Monitoring and Evaluation
BoL	Bank of the Lao PDR	NA	National Assembly
CPF	Country Partnership Framework	NDC	Nationally Determined Contribution
DOF	Department of Forestry	NGGS	National Green Growth Strategy
DOFI	Department of Forest Inspection	NEQS	National Environmental Quality Standards
DPF	Development Policy Financing	NPA	National Protected Area
DPO	Development Policy Operation	NSEDP	National Socio-Economic Development Plan
DRM	Disaster Risk Management	PDO	Program Development Objective
DSA	Debt Sustainability Assessment	PDR	People's Democratic Republic
EAP	East Asia and Pacific	PFA	Production Forest Area
EPF	Environment Protection Fund	PIMS	Personnel Information Management System
ESIA	Environmental and Social Impact Assessment	PIP	Public investment program
EU	European Union	PM	Particulate Matter
FDI	Foreign Direct Investment	PMO	Prime Minister's Office
FY	Fiscal Year	pp	Percentage point
GDP	Gross Domestic Product	PRSO	Poverty Reduction Support Operation
GFIS	Government Financial Information System	PSIA	Poverty and Social Impact Assessment
GGDPO	Green Growth Development Policy Operation	PSEA	Policy Strategic Environmental Assessment
GGNSC	Green Growth National Steering Committee	SAO	Supreme Audit Organization
GNI	Gross National Income	SCD	Systematic Country Diagnostic
GoL	Government of Lao PDR	SDG	Sustainable Development Goal
GRS	Grievance Redress Service	SDR	Special Drawing Rights
IDA	International Development Association	SEA	Strategic Environmental Assessment
IFC	International Finance Corporation	SFM	Sustainable Forest Management
IMF	International Monetary Fund	SOCB	State-owned Commercial Bank
IWRM	Integrated Water Resource Management	TLAS	Timber Legality Assurance System
LDC	Least Developed Country	TSA	Treasury Single Account
MAF	Ministry of Agriculture and Forestry	UN	United Nations
METT	Management Effectiveness Tracking Tool	UNFCCC	UN Framework Convention on Climate Change
MDG	Millennium Development Goal	VAT	Value Added Tax
MOF	Ministry of Finance	VPA	Voluntary Partnership Agreement
MOHA	Ministry of Home Affairs	WASH	Water Supply, Sanitation and Hygiene
MONRE	Ministry of Natural Resources and Environment	WBG	World Bank Group
MPI	Ministry of Planning and Investment	WMPA	Watershed Management Protection Authority
MPWT	Ministry of Public Works and Transport	WWF	World Wildlife Fund
		yoy	Year-over-year

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LAO PEOPLE'S DEMOCRATIC REPUBLIC  
SECOND PROGRAMMATIC GREEN GROWTH DEVELOPMENT POLICY OPERATION

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**SUMMARY OF PROPOSED CREDIT AND PROGRAM  
LAO PEOPLE'S DEMOCRATIC REPUBLIC  
SECOND PROGRAMMATIC GREEN GROWTH DEVELOPMENT POLICY OPERATION**

Borrower	Lao People's Democratic Republic (Lao PDR)
Implementation Agency	Ministry of Planning and Investment (MPI)
Financing Data	IDA Credit; SDR 28.9 million (US\$40 million equivalent)
Operation Type	Second in a series of three single-tranche programmatic DPF operations
Pillars of the Operation and Program Development Objectives	<p><b>The Program Development Objective of GGDPO2 is to achieve fiscal sustainability and financial sector stability, adopt green growth planning and monitoring, and introduce green growth tools and principles in priority sectors.</b></p> <p>The three pillars aim to (i) strengthen prospects for fiscal sustainability and financial sector stability; (ii) consolidate green growth principles across the national development strategy; and (iii) incorporate green growth in selected sectors.</p>
End of Program Result Indicators	<p><b>Pillar 1. Strengthening prospects for fiscal sustainability and financial sector stability</b></p> <ol style="list-style-type: none"> <li>1. Tax buoyancy (i.e., tax revenue as a share of GDP) increases Baseline: 12.4% of GDP (2016) Target: 12.9% of GDP (2022)</li> <li>2. Public sector wage bill (as a percentage of GDP) decreases Baseline: 6.9% of GDP (2016) Target: 6.2% of GDP (2022)</li> <li>3. Capable of recording and reporting of GoL's financial transactions consistent with the IMF-GFSM2014 by 2022 Baseline: No Target: Yes</li> <li>4. Percentage of central government agencies issuing tenders according to the new Public Procurement Law by 2022 Baseline: 0% Target: 100%</li> <li>5. Public debt (as a percentage of GDP) decreases Baseline: 58.5% of GDP (2016) Target: 57.9% of GDP (2022)</li> <li>6. Public reporting of compliance with regulations of the Capital Adequacy Ratio, by type of banks Baseline: Not reported (January 2017) Target: At least regulatory minimum (2022)</li> </ol> <p><b>Pillar 2. Consolidating green growth principles across the national development strategy</b></p> <ol style="list-style-type: none"> <li>7. Disclosure of M&amp;E results of the green growth priorities established in the National Green Growth Strategy, as part of the public consultation process of the 9th NSEDP (2021–2025) Baseline: No (2017) Target: Yes (2022)</li> <li>8. Increase in number of revenue sources of the EPF Baseline: 3 – contributions from development partners, contributions from business, endowment fund (January 2017) Target: 5 (2022)</li> <li>9. Disclosure of annual financial audit of the EPF Baseline: No (2017) Target: Yes (2022)</li> <li>10. Number of SEAs undertaken for public policies, programs, and strategic plans</li> </ol>

	<p>Baseline: 0 (2017) Target: 1 (2022)</p> <p>11. Share of investment projects in the mining, energy, and transport sectors that require an ESIA (Group 2 Projects listed in Ministerial Agreement No. 8056/MONRE 2013), with complete disclosure of relevant information (that is, screening, scoping, impact assessment, and approval), through the integrated database and public information platform, prior to approval.</p> <p>Baseline: 0 (2017) Target: 70% of group 2 projects (2022)</p> <p>12. Share of approved road maintenance projects with climate resilience and disaster risk considerations envisaged in the Annual Road Maintenance Plan and Budget that are verified by technical audits.</p> <p>Baseline: 0 (2017) Target: 50% of approved road maintenance projects (2022)</p>
	<p><b>Pillar 3. Incorporating green growth in selected sectors</b></p> <p>13. Number of river basins that establish the minimum flow requirements set out in their respective River Basin Plan</p> <p>Baseline: 0 (2017) Target: 1 (2022)</p> <p>14. Increase in number of hectares within PFAs with certified Sustainable Forest Management operations based on Lao PDR regulations</p> <p>Baseline: 10,949 hectares (2017) Target: 230,000 hectares (2022)</p> <p>15. Number of national parks established where progress in reaching management objectives is at least moderately satisfactory, as measured by the Management Effectiveness Tracking Tool (METT)</p> <p>Baseline: 0 (2017) Target: 2 (Nakai Nam Theun and Nam Et - Phou Louey) (2022)</p> <p>16. Number of inspections by MAF of pesticide sellers for compliance with pesticide regulations per year</p> <p>Baseline: 0 (2017) Target: 140 (2022)</p> <p>17. Number of Priority Pollution Watch Sites for which monitoring reports (including at least PM2.5, arsenic, lead, and pathogens concentrations) are updated and publicly disclosed annually</p> <p>Baseline: 0 (2017) Target: 3 (2022)</p> <p>18. Percentage of legally imported paint brands offering unleaded paint in the national market</p> <p>Baseline: 0 (2017) Target: 100% (2022)</p>
Overall risk rating	High
Climate and disaster risks	<p><i>Are there short and long-term climate and disaster risks relevant to the operation (as identified as part of the SORT environmental and social risk rating)?</i></p> <p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
Operation ID	P166839

**IDA PROGRAM DOCUMENT FOR A PROPOSED CREDIT  
TO THE LAO PEOPLE'S DEMOCRATIC REPUBLIC**

**1. INTRODUCTION AND COUNTRY CONTEXT**

1. **The comparative advantage of Lao People's Democratic Republic (Lao PDR) is its natural capital, which has fueled rapid growth averaging around 8 percent per annum since 2000.** Over half of its wealth is in its natural resource endowment.<sup>1</sup> Water resources provide a hydropower potential of up to 25,000 megawatts (MW), generating growth and poverty reduction opportunities, provision of reliable, clean, and affordable energy, higher exports, and government revenues. The Mekong River is the largest inland fishery in the world, and Lao's portion possesses the second-highest fish diversity in the world, which is the source of nearly half of the country's animal protein consumption. Forest cover declined 3.6 percent between 2005 and 2015<sup>2</sup> but Lao PDR still has among the highest forest cover percentage in the region, supporting a value of timber and non-timber forest products of US\$10,740 per capita. Lao PDR is also a global biodiversity hotspot, with protected areas covering 17 percent of the country's land area, and "natural sites" account for almost 60 percent of the nearly 2000 officially-designated tourism sites. Meanwhile, subsoil assets have added around US\$3,000 per capita; however, following the initial boom in the mid-2000s, the recent weak performance of low-grade copper and gold, and a sustained ban on new mines in place, renewable natural resources remain critical for continued economic growth and development.

2. **The country's past natural resource-based growth model is not sustainable in the long run.** Lao PDR has relied on the short-term liquidation of natural capital which also adversely affects human capital development. The 2018 Yale Environmental Performance Index ranked Lao PDR 153 of 180 countries, down from 148 in 2016, and among the lowest five countries for air pollution, which is significant as exposure to air pollution lowers cognition and labor productivity. The annual cost of certain types of pollution in Lao PDR was estimated by the Bank at 14.6 percent of GDP in 2017, up from 12.8 percent in 2015.<sup>3</sup> Environmental health risk factors have resulted in approximately 11,000 deaths in Lao PDR in 2017, which is equivalent to 22.7 percent of all deaths. Household air pollution, which disproportionately affects women and children, resulted in 45 percent of the deaths, while ambient air pollution resulted in 25 percent, and another quarter was due to drinking water pollution and inadequate sanitation and hygiene. Exposure to lead among adults caused the remaining deaths, while lead exposure among children causes the loss of 340,000 IQ points per year. Environmental health risk factors also caused nearly 60 million days (or 8.5 days per person) of illness in 2017.<sup>4</sup> Meanwhile, natural capital grew from US\$42 billion to 151 billion between 1995 and 2014, but the value for adjusted net savings (ANS)<sup>5</sup> has been low and volatile over time, reaching about 3 percent of gross national income (GNI) in 2003, falling to minus 18 percent in 2012, and minus 1 percent in 2016. Despite this recent improvement in ANS, natural capital depletion is

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<sup>1</sup> <https://datacatalog.worldbank.org/dataset/wealth-accounting>

<sup>2</sup> Ministry of Agriculture and Forestry (MAF) of Lao PDR, Forest Inventory and Planning Department (FIPD), 2018.

<sup>3</sup> World Bank 2019 (forthcoming), *State of Environment in Lao PDR*. This figure only includes selected impacts from air pollution; water pollution including arsenic, sanitation and hygiene; and lead exposure. Other costs are not included such as pesticide exposure, industrial hotspots, and toxic pollution (e.g. mining). Recent econometric research in China (PNAS 2018) shows a pronounced effect on cognition from air pollution, with the average equivalent impact being a lost year of education per person in terms of math and verbal test scores.

<sup>4</sup> Ibid.

<sup>5</sup> ANS is an indicator that assesses an economy's sustainability, evaluating the true rate of saving in an economy after considering investments in human capital, natural resource depletion, and pollution damages.

persistent.<sup>6</sup> The cost of natural resource degradation reached an equivalent of 4.7 percent of GDP in 2016.<sup>7</sup>

**3. The benefits of natural resource-based growth in Lao PDR have not been adequately captured by communities or by the state for redistribution and investment in the future.** The inability to capture natural resource rents and apply effective environmental fiscal instruments has deprived the budget of adequate revenues, which limits the ability of the Government of Lao PDR (GoL) to recover the costs of pollution and natural resource degradation. The value of Lao PDR's wood exports alone was estimated at nearly US\$1.7 billion in 2014, a five-fold increase from 2010 estimates.<sup>8</sup> Tax concessions provided also have adverse impact on tax collection. The GoL is in the process of rationalizing these by exploring the possibility of developing a tax expenditure statement.<sup>9</sup>

**4. As a result, Lao PDR's growth has not been as inclusive as needed for long-term sustainable development.** While rapid economic growth has supported poverty reduction, inequality has increased. The proportion of the population living below the national poverty line fell by nearly 50 percent, from 45 percent to 23 percent between 1992 and 2012/13.<sup>10</sup> GNI per capita reached US\$2,330 in 2018. In contrast, inequality worsened between 2002-2012, with the Gini coefficient increasing from 32.5 to 36.2, reflecting lower gains for the bottom 40 percent than for the rest of the population. The gap between urban and rural poverty rates areas widened. A gender gap is also notable. The earnings of female employees were reportedly 0.5 million kip (equivalent to US\$59) per month less than men, which partly reflects socioeconomic constraints for women in obtaining formal wage employment.

**5. The cost of persisting with the current growth model goes beyond the loss of potential economic output and disproportionately affects the poor and vulnerable, further entrenching poverty and inequality.** Fiscal pressures undermine the delivery and quality of basic services, with the poor being most affected. Environmental stress likewise undermines the ability of the natural resource base to provide livelihoods and buffers to natural hazards such as floods – again with the poor most affected. This is because over 70 percent of the population, and most of the poor, depend on forest resources, soil, wetlands, and fish for income and nutrition. For example, more than 39 percent of rural families' income is from non-timber forest products.<sup>11</sup> Poor people are also highly exposed due to their reliance on wood and charcoal for cooking (especially women and children), limited access to safe drinking water and inadequate sanitation, and tend to live closer to contaminated sites, as well as flood prone areas.

**6. Lao PDR's growth prospects also face a changing climate that is amplifying the challenges above.** Climate variability has resulted in volatile rainfall patterns and rising temperature with projections predicting further increases in temperature. The projections also reveal increasing intensity and frequency of extreme events, including higher rainfall and flooding risks during wet season and longer dry seasons accompanied by more severe water shortage. This will affect livelihoods and key sectors,

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<sup>6</sup> Years of negative ANS suggest that a country is running down its capital stock and is on an unsustainable growth trajectory (Lange et al. 2018).

<sup>7</sup> Ibid, accounting for the cost of deforestation, forest degradation, natural disasters, soil degradation and fish habitat destruction.

<sup>8</sup> Forestry in Lao PDR contributed an estimated 8-9 percent of GDP between 1990 and 2000, but only an estimated 4-5 percent between 2001 and 2015 due to high levels of illegal logging and forest products trade (World Bank 2017. Systematic Country Diagnostic) that were unrecorded as well as diversification of the economy. It is thought that estimates of forestry's contribution to GDP in Lao PDR are underestimated (World Bank 2019, forthcoming).

<sup>9</sup> The GoL has sought technical assistance from the Asian Development Bank to develop a tax expenditure statement.

<sup>10</sup> Based on Lao PDR Expenditure and Consumption Survey (LECS). Last available data is 2012/13. Lao Statistics has recently undertaken a LECS survey in 2018 and the results are expected to be available later in 2019.

<sup>11</sup> Ketpah et al., 2012.

including forestry, agriculture, fisheries, infrastructure, and hydropower generation. Changes in rainfall and temperature patterns are also associated with potentially higher public health risks from climate-sensitive diseases such as diarrhea, dengue and malaria. The poor often have limited means to cope and adapt to these climatic shocks, as observed in recent flooding. Building resilience to natural disasters and climate change helps vulnerable populations better prepare for shocks and withstand the impacts both from short-term extreme weather events, and from slow-onset climate-related hazards.

**7. Most recently, Lao PDR experienced widespread floods between July and September 2018, which significantly impacted its people and economy.** The combined impact has been severe, affecting over 616,000 people, with 56 lives lost. The post-disaster risk assessment (PDNA) led by the Bank estimated a total economic effect of US\$372 million (2.1 percent of projected GDP for 2018),<sup>12</sup> with the productive and infrastructure sectors most significantly affected. It is estimated that the floods exacerbated pre-existing inequalities faced by the poorer households, and that the loss of income due to the destruction of farms and microenterprises coupled with social services disruption will exacerbate nutrition, health and education challenges.

**8. To build long-term prosperity, Lao's growth pattern needs to continue shifting to a better-managed, more diversified and sustainable “green growth” model.**<sup>13</sup> The GoL has recognized that “growing now and cleaning up later” is not viable. In response, it has prioritized an ambitious long-term green growth vision centered on reforms that can leverage its comparative advantage in natural capital sustainably, while reducing the cost of environmental degradation that affects human capital formation critical for economic diversification, export sophistication, and moving up value chains. The vision for the future is that “green” can be a source of growth in Lao PDR. This transition has short-term costs, but these costs would be dwarfed by the long-term costs of not making the transition.

**9. Lao PDR faces many challenges in transitioning to a green growth model, including improving its macroeconomic fundamentals.** Key challenges stem from commercialization of the state, fragmentation of the government, and nascent institutional capacity, compounded by weak human capital. Weak governance has, in the past, resulted in vested interests and political capture, especially in financial affairs and natural resources. Recent efforts by the authorities, such as a ban on illegal logging and illegal timber exports and a more proactive stance against corruption, signal a departure from earlier practices. The relatively poor business environment is a challenge for the development of a green growth model. In particular, a lack of skilled labor and relatively low labor productivity limits the development of non-resource sectors. Overall labor productivity growth has been slowing and is still lagging the regional average. The moderate growth in overall labor productivity is related in part to the limited availability of skilled labor, reflecting the relatively lower level of educational attainment. This is confirmed by the enterprise survey finding in 2018 that a lack of skilled labor is one of the top constraints for doing business in Lao PDR. This underscores the importance of improving productivity through building human capital and skills as a factor in fostering diversification and improving the distribution of income. The issuance of Prime Minister Order No. 2 in February 2018 demonstrates the high-level commitment to addressing the challenges related to doing business in Lao PDR. In the recent past, relatively large fiscal deficits, partly due to weak revenue performance and high wage costs, have resulted in accumulation of public debt.

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<sup>12</sup> The scale is larger than in previous disasters, for which PDNAs were conducted, including 2009 (Typhoon Ketsana) and 2011 (Typhoon Haima), which resulted in damages and losses of US\$58 million and US\$170 million, respectively. The severe floods in 2013 caused damage and losses in excess of US\$270 million.

<sup>13</sup> Green growth is a growth pattern that is *efficient* in its use of natural resources, *clean* in that it minimizes pollution and environmental impacts, and *resilient* in that it accounts for natural hazards and the role of environmental management and natural capital in preventing disasters (World Bank 2012).

This has reduced fiscal space and limited the ability of the public sector to support development. In addition, financial sector vulnerability negatively impacts macroeconomic stability and constrains private sector development including non-resource sectors. For instance, while the capital adequacy of the banking sector is sufficient, the sector still faces relatively low profitability and a weak loan portfolio relative to regional peers.

**10. The GoL recognizes that a sound macroeconomic environment creates the platform for growth.** Strengthening the fiscal and financial framework safeguards against fiscal and financial crises that negatively impact growth, resilience, sustainability, and poverty reduction. Fiscal sustainability and financial sector stability contribute to growth by ensuring that (i) sufficient public resources are available for growth-enhancing policies, and (ii) the financial sector is secure and sufficiently sound to support private-sector led growth. Conversely, a greener growth path can contribute to macroeconomic stability by ensuring growth is sustainable and as such can generate a stable and robust stream of revenue for the government. Therefore, the GoL is focusing efforts on strengthening revenue and containing expenditure to ensure a sustainable fiscal framework.<sup>14</sup> Additionally, to promote financial sector stability, the Bank of the Lao PDR (BoL) is in the process of improving the regulatory and supervisory framework by, among other things, revising the BoL Law, commercial bank law and moving towards risk-based supervision.

**11. The World Bank is supporting Lao PDR's green growth transformation through analytic and advisory services and a series of three programmatic Green Growth Development Policy Operations (GGDPO).** The policy and institutional actions supported under the GGDPO series are measures that have been prioritized by the GoL in its 8<sup>th</sup> National Socio-Economic Development Plan (NSEDP), Vision 2030, and its new National Green Growth Strategy to 2030. The GoL is highly committed to this agenda and continues to deliver key policy actions. In close alignment with the Country Partnership Framework (CPF) for Lao PDR for the period 2017–2021 (Report No. 110813-LA), the GGDPO series supports key reforms needed for the country's on-going transition to clean, resource-efficient, and resilient growth.

**12. Genesis of the Green Growth DPO (GGDPO) series.** The GGDPO series was originally envisaged to focus on a reform program that promoted green growth principles and tools in targeted sectors. However, as the program was being prepared in 2016, the need for reforms to support fiscal sustainability and financial sector stability became evident. Subsequently the World Bank began to intensify its macroeconomic policy dialogue with the GoL in late 2016, resulting in the inclusion of a macroeconomic pillar in GGDPO1, and an increase in the number of prior actions for the GGDPO series. As the macroeconomic policy dialogue became more robust, GGDPO2 has been able to support more substantial macroeconomic reforms to improve revenue mobilization, public financial management, public debt sustainability and promote financial sector stability. The proposed Second Programmatic Green Growth Development Policy Operation (GGDPO2) continues on the reform momentum initiated under GGDPO1<sup>15</sup> to achieve fiscal sustainability and financial sector stability, adopt green growth planning and monitoring, and introduce green growth tools and principles in priority sectors. In particular, GGDPO2 focuses on concrete actions to strengthen financial sector stability, public debt and public procurement, while undertaking key reforms in tax administration to strengthen revenue mobilization and rationalize expenditure. Additionally, GGDPO2 focuses on forestry management, protected areas, water resources, climate resilient infrastructure, environmental assessment and pollution regulation.<sup>16</sup>

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<sup>14</sup> See Sections 2 and 4 for an illustration of some of these policy actions.

<sup>15</sup> GGDPO1 was approved by the World Bank Board in May 2017.

<sup>16</sup> See Section 4 and Annex 5 for a more detailed description on the stronger reform package put forward in GGDPO2.

**13. Close engagement with the GoL on the design of the program and this operation, and significant advisory services and associated investment operations, continue to mitigate the overall high risk of the operation.** The GGDPO series face high overall risks from political, governance and macroeconomic factors against a backdrop of on-going reforms and institutional modernization.<sup>17</sup> Bank-supported advisory services and investment operations in diverse sectors will help mitigate the risks posed by constraints in institutional capacity and the program's moderate complexity. Additionally, the robust dialogue on economic management continues to mitigate macroeconomic risks. Substantial dialogue across all participating sectors continues to help ensure solid ownership of the reforms. It is important for the World Bank to continue its deep policy dialogue and technical support to help sustain the reform momentum in Lao PDR.

## **2. MACROECONOMIC POLICY FRAMEWORK<sup>18</sup>**

### **2.1 RECENT ECONOMIC DEVELOPMENTS**

**14. Although decelerating from 6.9 percent the previous year, economic growth in 2018 remained robust at 6.5 percent.** The slowdown in growth in 2018 has been partly due to a combination of the following domestic factors: (i) the severe floods that hit the country between July and September 2018, which adversely affected agricultural production and damaged infrastructure in several provinces;<sup>19</sup> (ii) the weak performance of the mining sector despite higher commodity prices; and (iii) continued fiscal consolidation, which contributed to slower credit growth. These downside factors offset the gains from the industry sector driven by the expansion of construction activities and electricity exports, coupled with robust growth in wholesale and retail trade.

**15. The industry sector, which accounts for 32 percent of GDP, continued to be the main driver of growth in 2018 despite some moderation.** Although growth in industrial output remained robust at 9.6 percent in 2018, it is lower than the previous year (12 percent). Within industry, the power sector grew by 15 percent year-over-year (yoY) in 2018 compared to more than 30 percent in 2017. Despite this moderation, the power sector is a key driver of growth, contributing 1.9 percentage points of total real GDP growth. Greater rainfall in 2018, which allowed more power generation, coupled with the addition of an extra 300 MW from three medium hydropower projects, were responsible for the buoyant growth in the power sector.<sup>20</sup> The construction sector added 1.5 percentage points to total growth, supported by the ongoing construction of the Lao section of the Kunming-Singapore railway, several hydropower projects, commercial and residential buildings, and repair and some reconstruction of infrastructure affected by the recent floods. In contrast, for the first three quarters of 2018, performance of the mining sector remained weak. Copper output was at a similar level over the same period in 2017, while gold output declined over the same period. Weak performance of copper and gold production is related to low ore grade. However, higher average metal prices in 2018 helped support nominal growth and export earnings.

**16. The service sector, which accounts for the largest share of GDP, picked up mainly due to the expansion of wholesale and retail trade.** The service sector grew at 5.5 percent in 2018 compared to

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<sup>17</sup> See Section 6 for a detailed description of the risks to this operation.

<sup>18</sup> The analysis was conducted on information as of April 9, 2019. Some of the monetary and external data is available for the first three quarters of 2018 while preliminary fiscal data is available for the full year 2018.

<sup>19</sup> See Box 1.

<sup>20</sup> These include Nam Tha 1 (168 MW), Nam Kong 2 (66 MW), and Nam Phay (86 MW).

4.4 percent in 2017, contributing 2.2 percentage points to GDP growth. Wholesale and retail trade benefited from the expansion of construction activities. This is also reflected in the robust consumption of energy by the trade sector. Tourism sector performance remained flat in 2018 despite the GoL's marketing campaign (Visit Laos Year 2018).<sup>21</sup> To promote the competitiveness of green tourism in Lao PDR, it is important to pursue further policy and regulatory reforms, capacity strengthening for tourism management and promotion, access to well-managed natural assets with high demand, and quality of services in conservation landscapes including from good protected area management (supported by the GGDPO series).<sup>22</sup>

**17. In 2018, growth in the agriculture sector was adversely affected by the recent flooding and lower prices of some key commodities.** Ancillary infrastructure and services related to the sector, such as rural irrigation systems and road infrastructure, were negatively affected by the flooding between July and September 2018. This resulted in a moderation of agricultural growth to 2.1 percent in 2018 from 3.3 percent in 2017. Consequently, the agriculture sector is estimated to contribute 0.3 percentage points to GDP growth in 2018 compared to 0.5 percentage points the previous year.

**18. The fiscal impact of the floods coupled with the general slowdown in economic activity in 2018 adversely affected revenue mobilization.** The widespread flooding is estimated to result in a 350 billion kip loss in revenue due to the slowdown in business activity owing to the damage to transport infrastructure and the agriculture sector (see Box 1). The slowdown in general economic growth also contributed to the decline in tax revenue to 11.2 percent of GDP in 2018 from 12.0 percent in 2017. The 'other taxes' category experienced the largest decline in revenue due to: (i) a reduction in timber royalties; and (ii) the decrease in associated charges related to the domestic retail fuel price to mitigate the impact of the sharp rise in global oil prices in 2018.<sup>23</sup> Value-Added Tax (VAT) receipts (as a percentage of GDP) also declined in 2018 primarily due to the economic slowdown and partly owing to VAT exemptions on imports of capital goods related to some investment projects. Higher excise tax revenue due to the higher oil price partially offset the decline in VAT tax receipts.

**19. Much needed regulatory reforms and the modernization of revenue administration have improved tax efficiency.** Measures to improve revenue mobilization follow the approval of the Tax Strategy Development Plan (TSDP) by the Finance Minister in 2018. Currently, MoF is in the process of implementing the TSDP. Among other actions, TSDP stresses the importance of using ICT to improve tax administration. For instance, electronic tax payments through the banking system were introduced for road taxes at the end of 2017, resulting in a six-fold increase in road tax receipts from about 10 billion kip to almost 60 billion kip in 2018. An electronic payment system for land tax was also launched in December 2018. In addition, the tax department recently adopted a Tax Revenue Information System (TaxRIS), which is expected to improve the efficiency of tax collection, enable systematic monitoring of revenue collection and allow for better management of the tax database. The legal framework is also being strengthened with the passage of the amended value-added tax law. These measures are necessary given that Lao PDR's revenue performance remains below its regional peers.

**20. Measures to control spending in 2018 were able to contain public spending.** To contain public expenditure, the wage bill and other recurrent spending continues to be tightly controlled. The authorities reduced new staff intakes from 5000 in 2017 to 3000 in 2018 and placed a freeze on the public wage index. Considering retirements, this policy will limit the increase in the total number of civil servants,

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<sup>21</sup> Tourism revenues peaked at US\$725 million in 2015 (5 percent of GDP) as the number of visitors reached 4.7 million, with demand for natural heritage underpinning the tourism market.

<sup>22</sup> World Bank, Forthcoming: *Developing Nature-based Tourism in Lao PDR* (2019).

<sup>23</sup> In 2017, 'other taxes' increased to 1.4 percent of GDP from 0.8 percent in 2016 due to the increase in oil prices.

which already accounts for a relatively high percentage of the population (about 5.3 percent) compared to the 3 percent average for lower middle-income countries. As a result, the wage bill declined to 6.5 percent of GDP in 2018, from almost 10 percent in 2013. Despite this declining trend, wages account for a relatively high share of recurrent expenditure and revenues compared to regional peers. At the same time non-wage recurrent spending and transfers were cut.<sup>24</sup> These measures helped keep recurrent spending (excluding interest payments) at around 10 percent of GDP in 2018 versus 14 percent in 2016.

21. **The recent increase in the share of less concessional borrowing pushed up debt service payments.** Interest payments, as a share of domestic revenue, increased from 8.1 percent in 2016 to 11.9 percent in 2018, or as a percentage of GDP, from 1.2 to 1.7 percent. For comparison, interest spending in 2018 is almost as high as the planned public expenditure in health, and about half the expenditure in education. Additionally, on average, the share of interest payments in Lao PDR to domestic revenues and recurrent spending was higher than that of Cambodia and Thailand in 2018, but below that of lower middle-income countries.

22. **With much tighter control of spending, the fiscal deficit narrowed to 4.6 percent of GDP in 2018 from 5.5 percent in 2017.**<sup>25</sup> The main driver of the decline in the deficit in 2018 is the reduction in total expenditure to 20.3 percent of GDP from 21.6 percent of GDP the previous year. Although there was some improvement in selected non-tax revenue and tax revenue categories, the overall decline in domestic revenue coupled with the decline in grants contributed to the overall decline in revenue as a percentage of GDP to 15.7 percent in 2018 from 16.1 percent the previous year.

23. **Fiscal consolidation is estimated to slow the accumulation of public debt in the medium term, though not yet enough to reverse the debt-to-GDP ratio in 2018.** Despite the decline in the fiscal deficit, the cumulative impact of relatively high, successive fiscal deficits over the recent past has pushed the debt-to-GDP ratio upward. Public debt rose from 60.1 to 60.6 percent of GDP between 2017 and 2018, which is relatively high compared to regional peers, except Bhutan and Mongolia. Additionally, public external debt accounts for around 80 percent of total public debt.

24. **Moreover, the composition of external public debt has in recent years become less concessional and more dollar-denominated.** Most of the external public debt (65 percent) is concessional, with both a relatively high average grant element (57 percent of the loan's face value) and average grace period (7 years) compared to the other lower middle-income-country group averages (43 percent and 3.6 years, respectively). Nonetheless, the proportion of less concessional borrowing has increased, mostly to finance investment in projects that are expected to generate an economic return. Further, according to International Debt Statistics data, external public debt is predominantly denominated in USD (63 percent of total external public debt), but still below the average for developing countries in EAP (75 percent) and lower middle-income countries globally (71 percent).

25. **The improved trade balance helped to narrow the current account deficit to 11 percent of GDP in 2018 from 12 percent the previous year.** Despite higher oil prices, the moderation in import growth coupled with the buoyant export growth narrowed the trade deficit from 9.9 to 8.6 percent of GDP between 2017 and 2018. Increasing import substitution for some products such as cement, completion of some construction projects, and slowing import growth for some consumption and household goods have contributed to the moderation in import growth. Despite the adverse impact of the flooding on the agriculture exports, export growth remained buoyant.<sup>26</sup> Despite the reduction in the current account

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<sup>24</sup> Reducing non-wage recurrent spending has the unintended consequence of putting pressure on already underfunded operational expenditure to ensure adequate public service delivery.

<sup>25</sup> The fiscal analysis is based on preliminary 2018 fiscal data released in February, 2019.

<sup>26</sup> Exports growth continues to be driven primarily by the hydropower sector.

deficit, it remains relatively high and is primarily financed by FDI inflows and external borrowing, with the balance covered by foreign reserves.

**26. In 2018, FDI inflows remained at a historical high of 9.4 percent of GDP (around US\$ 1.6 billion).**<sup>27</sup> Almost 40 percent of the foreign investment inflows are related to the construction sector, particularly the construction of the Lao section of the Kunming-Singapore railway line, which has a high import content, like other large investments. However, a significant proportion of the foreign currency associated with FDI remains outside the country as only a part of the export receipts associated with large resource projects are remitted to Lao PDR.

**27. Foreign currency reserves, despite narrowing to US\$ 873 million from a record high in 2017, remained well above the 17-year average (US\$ 608 million).** In 2017, foreign currency reserves reached US\$ 1.016 billion, the highest it has ever been due to record FDI inflows (9.5 percent of GDP), partly due to inflows associated with the construction of the Lao section of the Kunming-Singapore railway line. In 2018, foreign currency reserves represented 1.1 months of total imports or 1.6 months of non-resource sector imports or 2.2 months of non-FDI-related imports compared to 1.5 months, 2.1 months, and 3 months in 2017, respectively.<sup>28</sup> This decline in reserves was due to external public debt amortization and interest payments.

**28. There is a large stock of foreign currency deposits in the banking system, supplementing the foreign currency reserves with the BoL.** The trend of increasing dollarization of the deposit has continued, with foreign currency deposits growing by 9 percent in 2018 compared to 7 percent for local currency deposits. This has led to foreign currencies accounting for 54.2 percent of total deposits in 2018 from about 53.7 percent in 2017. This reflects: (i) the continued implementation of the inflation-linked interest rate caps on kip deposit and lending rates;<sup>29</sup> (ii) holding of foreign currency deposits as a hedge against exchange rate movements; and (iii) the slight increase in the deposit rate for USD deposits.

**29. The BoL recently limited interventions in the foreign exchange market and allowed greater market influence in the setting of the exchange rate.** There has been an upward shift in the exchange rate band, resulting in a depreciation of the exchange rate in 2018.<sup>30</sup> The official nominal kip/U.S. dollar reference rate depreciated by almost 2 percent in 2018, while the kip/baht exchange rate depreciated by 7.8 percent. Similarly, based on available information, the real effective exchange rate for the first seven months in 2018 also depreciated by 5.6 percent. The pressure on the kip emanates from the rising demand for foreign currency as a hedge against exchange rate depreciation and the general strengthening of the USD against emerging market currencies. However, the kip/USD spread between the exchange bureaus and the commercial bank mid-rate averaged 1.4 percent in 2018, which is well below the annual average spread of 2.0 percent for 2017.

**30. The depreciation of the kip against the currencies of major trading partners, together with higher food and fuel prices, contributed to higher inflation in 2018.** Core inflation picked up from 0.9 percent to 2.3 percent between 2017 and 2018 due to higher prices for household furnishings, clothing and footwear, and restaurants and hotels. The headline inflation rate has edged upward, in line with regional trends, to an estimated 2.0 percent in 2018, up from 0.8 percent in 2017. The headline inflation

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<sup>27</sup> This is estimated based on three-quarter data for 2018.

<sup>28</sup> The total foreign exchange reserves for end-2018 is around 25 percent of foreign currency liabilities in banks or 17 percent of foreign currency deposits.

<sup>29</sup> After an internal review, the BoL in the first quarter of 2019 removed the interest rate cap. This is in line with recommendations of the IMF Article IV (2018).

<sup>30</sup> The exchange rate band is +/- 5 percent of the official mid-rate.

rate was driven by: (i) rising domestic retail fuel prices; (ii) a rise in fresh food prices due to the temporary disruption on food supply after the flooding; and (iii) the depreciation of the kip against the Thai baht and US dollar, which resulted in an increase in import prices by 3.8 percent in 2018.

**31. Credit growth moderated due to continued fiscal consolidation and general moderation in economic activity.<sup>31</sup>** Bank lending to the economy (the private sector and state-owned enterprises) declined to from 12 to 5 percent of GDP between 2017 and 2018. This was driven by a moderation in lending to the private sector, which accounted for 83 percent of total credit. This implies that real credit growth was only at about 3 percent. Lending in kip grew at 2.1 percent in 2018 compared to 17.1 percent in 2017. Growth in foreign currency lending also moderated in 2018 to 4.7 percent from 7.4 percent in 2017. Total credit to GDP slightly declined to 49.6 percent in 2018 from 52 percent of GDP in 2017. The decline in credit growth in 2018 is correlated with fiscal consolidation and lower GDP growth.

**32. Although the banking sector remains well capitalized, the sector still faces relatively low profitability and a high percentage of nonperforming loans compared to its regional peers.** Regulatory capital to risk-weighted assets rose to 18 percent in September 2018 from 16 percent at the end of 2017, well above the minimum requirement of 8 percent.<sup>32</sup> Banking sector assets grew at 11 percent in Q3-2018, slightly faster than a year ago, but much slower than a few years ago due to fiscal tightening, and the moderation in consumer demand and economic activity, in general. The return on assets gradually increased from 0.5 percent at the end of 2017 to 0.7 percent in Q3-2018. This figure is about the level in Vietnam, but about half that in Thailand (1.4 percent). Return on equity rose notably from 7.7 percent at the end of 2017 to 9.4 percent in Q3-2018. This is higher than in Cambodia (5.8 percent) and Vietnam (8 percent), but below that in Thailand (9.9 percent). However, the quality of the loan portfolio is mixed. Nonperforming loans for the sector have trended upward slightly, reported at around 3.1 percent of total loans, about the same level as in Thailand, but higher than in Cambodia (2.4 percent).

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<sup>31</sup> BoL has been lowering the policy rate since mid-2015 bringing the cumulative reduction to 100 bps from 5 to 4 percent.

<sup>32</sup> However, there continue to exist some state-owned commercial banks with relatively low capital adequacy. The BoL is making efforts to restructure these banks. Incidentally, the publication of a plan for the restructuring of two state-owned banks is an indicative trigger for GGDPO3.

**Table 1: Key Macroeconomic Indicators<sup>33</sup>**

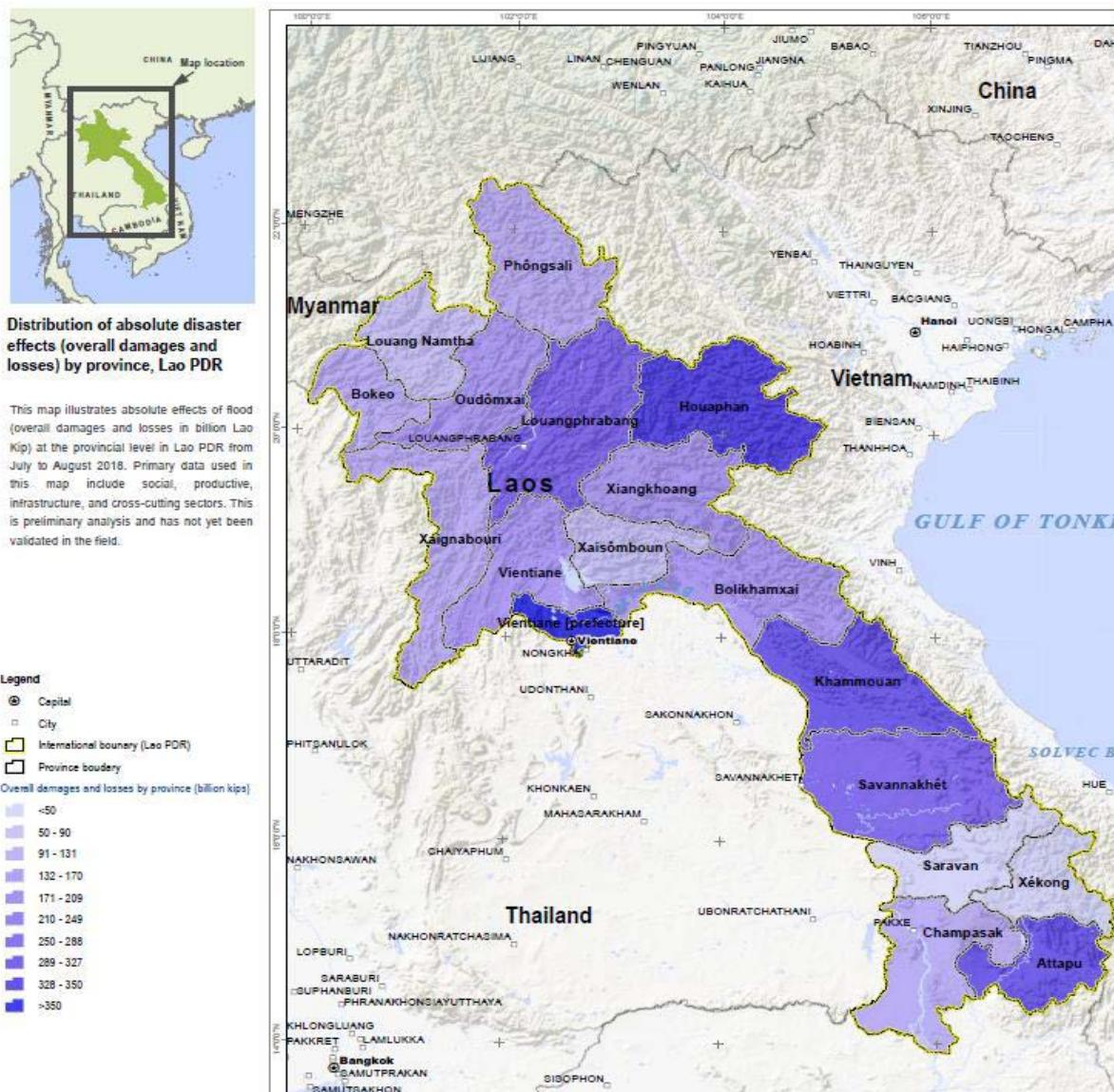
Lao PDR: Selected Economic and Financial Indicators (2016-2022)							
	2016	2017	2018	2019	2020	2021	2022
	Pre	Est				Proj**	
<b>Output and inflation</b>	<i>(Percentage change, unless otherwise stated)</i>						
Real GDP growth	7.0	6.9	6.5	6.6	6.7	6.6	6.5
<i>Real GDP growth by sector:</i>							
Agriculture and forestry	2.8	2.9	2.1	2.7	2.8	3.2	3.3
Industry	12.0	11.6	9.6	8.8	8.8	8.1	7.9
Services	4.7	4.4	5.5	6.1	6.1	6.3	6.3
Change in CPI	1.6	0.8	2.0	2.1	2.5	2.3	2.2
<b>Fiscal</b>	<i>(Percent of GDP, unless otherwise stated)</i>						
Revenue and grants	16.3	16.1	15.7	15.9	16.2	16.6	16.7
Expenditure and net lending	21.5	21.6	20.3	20.2	19.8	19.6	19.5
Overall balance	-5.2	-5.5	-4.6	-4.3	-3.6	-3.0	-2.8
Primary balance	-4.0	-4.1	-2.9	-2.4	-1.8	-1.3	-1.3
Public debt	58.5	60.1	60.6	60.3	59.5	58.3	57.9
Domestic	11.3	10.7	10.1	10.0	10.1	10.2	10.3
External	47.2	49.4	50.4	50.3	49.4	48.0	47.6
<b>Money and credit</b>	<i>(Percentage change)</i>						
Reserve Money	-1.4	9.5	5.0				
Credit to non-Government	20.9	10.8	3.0				
Policy Interest Rate	4.3	4.0	4.0				
<b>Balance of Payments</b>	<i>(Percent of GDP unless indicated otherwise)</i>						
Exports of goods and services	33.3	34.8	35.1	35.4	35.8	36.1	36.2
Imports of goods and services	45.3	46.2	45.0	44.7	44.5	42.8	41.2
Current account	-12.4	-12.1	-11.0	-12.1	-11.8	-11.1	-10.3
Gross Reserves (in millions of US dollars)	815	1016	873	945	1073	1242	1428
In months of imports	1.3	1.5	1.1	1.2	1.4	1.7	2.1
In months of non-resource imports	1.8	2.1	1.6	1.7	2.0	2.3	2.6
In months of non-FDI imports	2.5	3.0	2.2	2.4	2.7	3.2	3.6
Exchange Rate (per USD, average)	8,179	8,352	8,401				
<i>Other memo items</i>						-	-
GDP nominal in US\$ (millions)	15,806	16,853	18,144	19,130	20,575	22,071	23,654

<sup>33</sup> The analysis was conducted on information as of April 9, 2019.

## Box 1: Impact of the July-September 2018 Flooding

**Lao PDR was severely affected by flooding and heavy rains during July–September 2018.** On July 18–19, tropical storm Son-Tinh caused heavy rains and flooding in 55 districts covering 13 provinces. The areas that were most affected by the flood include Vientiane Capital, Huaphanh, Khammouane, and Attapeu provinces (Map 1). Flooding in Attapeu province was exacerbated by a breach in the Xe Pien Xe Namnoy hydropower saddle dam, which caused an unprecedented flash flood in Attapeu Province that severely affected many lives. In this context, a post-disaster needs assessment (PDNA), led by the government, was conducted covering the impacts on 17 provinces and Vientiane Capital.

**Map:** Distribution of absolute disaster effects (overall damage and losses by province, Lao PDR)



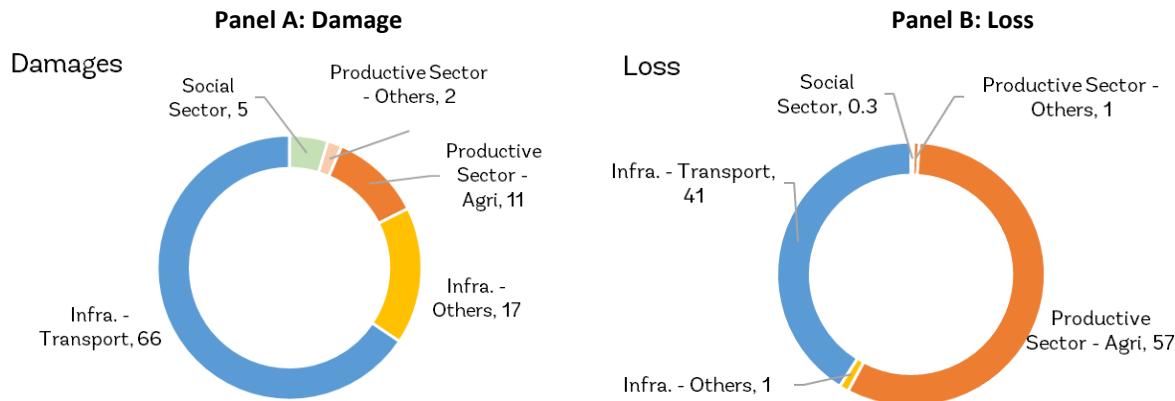
Source: United Nations Institute for Training and Research, Lao PDR (2018), cited in *Lao PDR Post Disaster Needs Assessment (PDNA)*.

**The PDNA estimated the total impact of the floods (damage and loss) on the economy at about 3,167 trillion kip (around US\$372 million),** of which the total damage accounted for 1,253 trillion kip (around US\$147 million) and the loss totalled 1,914

trillion kip (around US\$225 million). These costs are equivalent to 2.1 percent of losses in GDP in 2018. This makes the overall impact of the recent floods more significant than the two previous flood events in 2009 and 2011.

**The damage and losses due to the floods vary across sectors.** The agriculture (mostly crops, livestock, fishery, and irrigation) and infrastructure sectors (mainly land transport followed by water transport infrastructure such as waterways) were the most severely damaged, accounting for 94 percent of the total damage. This damage is estimated to cause the biggest losses in the agriculture and transport sectors (57 percent and 41 percent of total losses, respectively) (Figure A).

**Figure A:** Distribution of damage and loss (Percent)



Source: Lao PDR PDNA (2018).

**At the household level, the floods have had serious implications for people's livelihood and well-being.** Unless adequately addressed, loss of income from the destruction of farms and microenterprises, coupled with the disruption of social services, can exacerbate existing nutrition, health, and education challenges. As a relatively significant share of the population is just above the poverty line, disasters such as these can affect the livelihood and move vulnerable groups back into poverty. Establishing a social protection system and prioritizing the recovery of social service provision can help lessen the impacts on the poor.

**In addition to the impact on economic losses, there is an added fiscal burden, further challenging the government's fiscal consolidation efforts.** The floods are estimated to affect the budget in terms of foregone revenues and reprioritization of the expenditure toward the affected regions away from capital expenditure. As a result, these impacts contribute to an estimated budget deficit of 4.6 percent of GDP in 2018, compared to the pre-flood estimate of 4.3 percent.

**The short-, medium-, and long-term needs for flood recovery resources are considerable.** Total recovery and reconstruction needs are estimated at around 4.4 trillion kip (around US\$520 million or 10.1 percent of the 2018 budget). The needs are higher than damage and losses since they include, first, the application of a "build back better" approach to the reconstruction of damaged infrastructure that improves the weather-resilient consideration and reduces risks; and, second, the resumption of production, service delivery, and access to goods and services. Reconstruction of the infrastructure sector (mostly land and water transport infrastructure) is expected to account for about 55 percent of the total needs followed by crosscutting issues that account for 28 percent. The latter primarily pertains to the need for clearance of unexploded ordinance due to their possible relocation after the floods, to ensure the recovery of livelihood activities (Figure B).

## 2.2 ECONOMIC OUTLOOK AND DEBT SUSTAINABILITY

33. Notwithstanding the adverse economic and social consequences of the 2018 flooding (see Box 1), Lao PDR's macroeconomic conditions are broadly positive and significantly better than it was at the time of first GGDPO. Moreover, key indicators in the medium term exhibit significant improvement:

- i. **Economic growth** is expected to remain favorable, with GDP growth projected to rebound slightly to 6.7 percent by 2020, and subsequently converge to around 6.5 percent in the medium term. Economic growth will be driven by a combination of ongoing construction of the Lao section of the Kunming-Singapore railway; reconstruction and repair of infrastructure damaged by the flooding in 2018; expansion of electricity outputs and exports from some power projects, with a total installed capacity of about 2,200 MW by 2019-20;<sup>34</sup> and a rebound in the agriculture sector post-flooding. While the moratorium currently in place continues, the contribution to economic growth from the mining sector is expected to gradually decline as current investments mature. Growth in the service sector is also expected to remain buoyant in the coming years by, among other things, the promotion of Lao-China tourism in 2019.<sup>35</sup>
- ii. Although remaining elevated, the **current account** deficit as a ratio to GDP is expected to gradually decline over the medium term. Exports are expected to benefit from upcoming power projects, a rebound in agricultural exports and tourism. As the implementation of Prime Minister Order No. 2 which aims to improve the business environment gathers pace, it is anticipated to gradually facilitate investment in the non-resource sector, such as the continued positive trend in manufacturing exports. This will partly offset the expected rise in imports to support investments in infrastructure projects. Similar to historical trends, the current account deficit is expected to be largely financed by the investment inflows on these projects. In the medium term, after the completion of these investment projects, the current account deficit (as a percentage of GDP) is expected to improve.
- iii. **Based on the actions undertaken by the government, the medium-term fiscal framework is consistent with the path of fiscal consolidation.** The fiscal deficit is expected to decline to 2.8 percent in 2022 from 4.6 percent of GDP in 2018. To achieve this deficit target, actions will be taken by GoL to further improve revenue mobilization and public expenditure rationalization. The revenue improvement is expected to come from the implementation of the Tax Strategy Development Plan (TSDP),<sup>36</sup> which includes: (i) strengthening tax administration using ICT; and (ii) strengthening the legal tax framework through the recently approved value-added tax law and upcoming laws on tax administration, excise and income taxes under preparation for submission to the National Assembly in 2019. These measures are expected to increase tax revenue from 11.2 percent in 2018 to 12.9 percent of GDP in 2022. Meanwhile, public expenditure will be contained by implementing a new civil service quota which will further cut the number of new civil servants to 1500 in 2019 from 3000 in 2018. This results in civil service attrition rates surpassing the number of new recruits and the expenditure on wages and salaries declining to 39 percent of domestic revenue by 2022 from 45 percent in 2018.<sup>37</sup> The GoL will also postpone the increase in the public wage index in 2019. From 2019 onwards, the GoL has indicated to the National Assembly that it will focus on completing ongoing projects which have already begun to

<sup>34</sup> These include the Sayaboury Hydropower Project (1,285 MW), Nam Ngiep 1 (290 MW), Xe-Pian Xe-Namnoy (410 MW), and Don Sahong (260 MW).

<sup>35</sup> The GoL has declared 2019 Lao-China Tourism Year.

<sup>36</sup> The TSDP is a pre-cursor to the Medium Term Revenue Strategy (MTRS), which the GoL is developing with IMF assistance.

<sup>37</sup> This follows the IMF Article IV (March 2018) recommendation.

disburse and will limit new domestically-financed capital investments to disaster-relief projects and maintenance of existing infrastructure. These actions are expected to reduce capital expenditure gradually over the medium term and stabilize at 7.0 percent of GDP by 2022. Consequently, expenditure-to-GDP is expected to be contained to 19.5 percent of GDP in 2022 from 20.3 percent of GDP in 2018.

**34. Moderate credit growth, fiscal consolidation and the continuation of flexible exchange-rate policy within the band are expected to support macroeconomic stability.** Implementation of fiscal consolidation measures as well as improved supervision should keep credit growth at manageable levels and help lower pressures on the external balance and the exchange rate. While a sharp adjustment in the exchange rate could have a significant negative impact, given the foreign currency liabilities in the public and private sector, BoL should continue to use the flexibility of the current exchange rate regime (+/- 5 percent band), together with supportive monetary and fiscal policies. Once a more credible monetary framework is in place, Lao PDR would be better prepared to manage greater exchange rate volatility.<sup>38</sup> Under a scenario of gradual fiscal consolidation and sustainable credit expansion, inflationary pressures are expected to remain manageable, with inflation rates of around 2.5 percent.

**35. The BoL is in the process of strengthening the supervisory, regulatory and monetary framework.** The recently approved BoL Law strengthens the ability of BoL to undertake risk-based supervision. This law provides the legal framework for BoL to follow good international practices, including on management of BoL, relations with market participants and the government, modernizing the instruments of the central bank, and improving BoL's ability to regulate banks. There has also been progress on developing a cost-efficient payment system through the establishment of the Automated Clearing House. Reflecting an anti-money-laundering effort during 2017, the Lao PDR was also delisted from the grey list and is in the process of preparing a national risk assessment. A new capital adequacy regulation is in the process of being adopted in 2019, while a new Commercial Bank Law (expected in 2019) is expected to further strengthen the financial sector. Additionally, two state-owned banks are in the process of restructuring and BoL has recently removed the domestic interest rate cap. This should help keep risks manageable while implementation of risk-based supervision should ensure that all banks in the system meet the minimum required capital levels by 2020. The issuing of domestic bonds through the Lao Security Exchange in late 2018 will support the development of a benchmark yield curve. This is an important step in the process of moving towards strengthening the monetary policy framework.

**36. Although the latest (March 2018) WB-IMF Debt Sustainability Analysis (DSA) assesses Lao PDR to have a high risk of public debt distress, the cumulative impact of lower deficits from 2018 onward is expected to reduce the public debt/GDP ratio over the medium term.** Public debt is expected to decline from 60.6 in 2018 to 57.9 percent of GDP in 2022. Additionally, the government included in the 2018 Public Debt Management Law--and confirmed in its report to the National Assembly in November 2018--that it will borrow only on concessional terms for projects which do not have a high economic return. The GoL will suspend public projects that have not yet started to disburse and are assessed to have a low economic return. Furthermore, issuance of domestic bonds by MoF through the Lao Security Exchange is expected to support the gradual development of the domestic debt market and help to mitigate risks associated with external debt. These measures, together with implementation of the Public Debt Management Law, are expected to result in a decline in the debt-to-GDP ratio over the medium term. The Bank also supports GoL efforts by undertaking a Debt Management Performance Assessment at the request of MoF, providing DSA training and facilitating development of the Public Debt Management Strategy (Figure 1).

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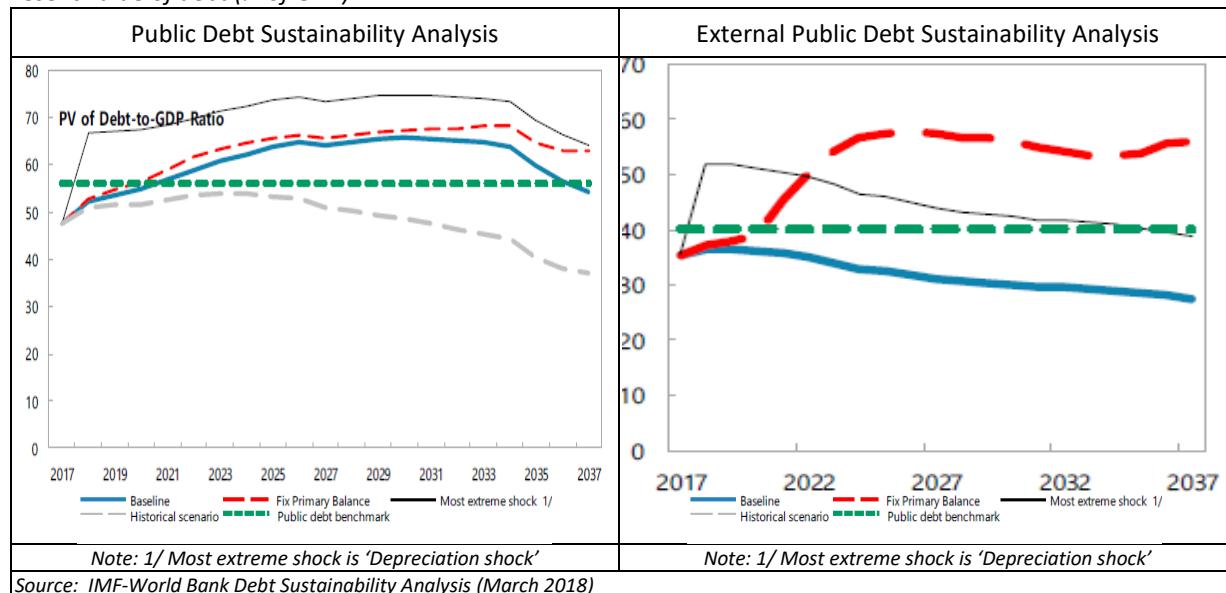
<sup>38</sup> IMF Article IV (March 2018) also argues for a stronger monetary policy framework to manage greater exchange rate flexibility.

37. **Nonetheless, macroeconomic outcomes remain subject to risks following the flooding.** These risks include: (i) prolonged trade protectionism, heightened geopolitical uncertainty, and continued tightening of global financing conditions could lead to disorderly financial market movements, and adversely impact demand for Lao PDR's exports and foreign direct investment into the region; (ii) a softening of commodity prices which could dampen mineral exports, GDP growth and increase pressure on the exchange rate, thereby increasing debt service costs; and (iii) more frequent flooding and other natural disasters, which can damage the local economy and create fiscal pressure. These risks are mitigated and managed by the GoL's ongoing efforts to boost revenue collection and consolidate public finances; improve the resilience of the financial sector; and promote greener growth, including climate risk management, tools and principles in priority sectors. These measures constitute important efforts to strengthen fiscal resilience, financial sector stability and support inclusive, resilient, and durable development. The support provided by development partners through financial and technical assistance is also a key mitigating factor expected, for instance, to help the GoL alleviate the impacts of natural disasters in the future.

38. **Despite the recent flooding and risks to the outlook, the macroeconomic policy framework is deemed adequate for this operation, based on the actions and policy commitments provided by the authorities.** The GoL's fiscal consolidation and reforms and its efforts to strengthen the financial sector underpin the World Bank's assessment of the macroeconomic policy framework. Lao PDR has taken decisive fiscal consolidation measures in 2018 and fiscal policy continues to be consistent with the prevailing economic conditions. The implementation of the Tax Strategy Development Plan will deliver improvements on the revenue side while expenditure is being curtailed by the strict control of the civil service wage bill and suspension of non-disbursing public projects. The Public Debt Management Law is providing the necessary legal framework to control debt while the BoL Law is increasing the stability of the financial sector. Going forward, the government is strongly committed to pursuing fiscal reform efforts over the medium term consistent with reducing the fiscal deficit and debt/GDP ratio. Therefore, based on the fiscal framework, Lao PDR should be on a path to return to moderate risk of debt distress. Moreover, the implementation of the fiscal and financial sector reform efforts of the GoL is being supported by this operation and technical assistance from the IMF.

**Figure 1: DSA Summary Charts**

*Present value of debt (% of GDP)*



## 2.3 IMF RELATIONS

39. The WB maintains close collaboration with the IMF on macroeconomic monitoring in Lao PDR with largely shared views on developments and outlook. The IMF Board discussed the latest Article IV in March 2018. The cooperation between World Bank Group and IMF teams in Lao PDR remains strong in the provision of technical assistance, including on tax policy and administration issues and the broader public finance management framework. The Bangkok-based IMF office was set up in September 2012 to facilitate technical assistance to Lao PDR. Over the past six years, the IMF has provided technical assistance in the areas of banking supervision and interbank market development; monetary operations; customs administration; tax and natural resource revenue administration; tax policy; public financial management; macroeconomic management; price statistics; external sector statistics; government finance statistics; and the national accounts.

**Table 2: Key Fiscal Indicators<sup>39</sup>**

Lao PDR: Key Fiscal Indicators (2016-2022)							
	2016	2017	2018	2019	2020	2021	2022
	Pre	Est			Proj		
<b>Total Revenues and Grants</b>	<b>16.3</b>	<b>16.1</b>	<b>15.7</b>	<b>15.9</b>	<b>16.2</b>	<b>16.6</b>	<b>16.7</b>
<b>Domestic revenue</b>	14.9	14.5	14.3	14.6	15.2	15.8	15.9
Tax Revenues	12.4	12.0	11.2	11.6	12.2	12.8	12.9
VAT	3.8	3.5	3.4	3.6	3.7	3.9	4.0
Excise	2.9	3.0	3.1	3.4	3.6	3.7	3.8
Resource royalties	0.8	0.9	0.7	0.6	0.6	0.6	0.5
Income and profit tax	2.6	2.5	2.5	2.5	2.7	2.9	3.0
Foreign trade tax	1.5	0.7	0.7	0.7	0.5	0.5	0.4
Other taxes	0.9	1.4	0.8	0.8	1.1	1.2	1.2
Non-tax	2.5	2.5	3.1	3.0	3.0	3.0	3.0
Grants	1.4	1.6	1.4	1.3	1.0	0.8	0.8
<b>Expenditures</b>	<b>21.5</b>	<b>21.6</b>	<b>20.3</b>	<b>20.2</b>	<b>19.8</b>	<b>19.6</b>	<b>19.5</b>
Wages and Compensation	7.1	7.0	6.5	6.4	6.3	6.3	6.2
Interest Payments	1.2	1.4	1.7	1.9	1.8	1.7	1.5
Capital Expenditures	6.1	9.2	8.2	7.3	7.2	7.0	7.0
Other current expenditure	7.1	4.0	3.9	4.6	4.5	4.6	4.8
<b>Overall Balance</b>	<b>-5.2</b>	<b>-5.5</b>	<b>-4.6</b>	<b>-4.3</b>	<b>-3.6</b>	<b>-3.0</b>	<b>-2.8</b>
Primary Balance	-4.0	-4.1	-2.9	-2.4	-1.8	-1.3	-1.3
<b>Government Financing</b>	<b>5.2</b>	<b>-5.5</b>	<b>4.6</b>	<b>4.3</b>	<b>3.6</b>	<b>3.0</b>	<b>2.8</b>
External (Net)	1.7	5.2	3.6	3.6	3.0	2.5	2.3
Domestic (Net)	3.5	0.3	1.0	0.6	0.6	0.5	0.5

Sources: Ministry of Finance, Bank of Lao PDR, IMF and World Bank

<sup>39</sup> The analysis was conducted on information as of April 9, 2019.

**Table 3: Balance of Payments Financing Requirements and Sources<sup>40</sup>**

US\$ millions	Balance of Payments financing requirements and Sources				
	Pre	Est	2020	2021	2022
			Projections		
<b>Financing requirements</b>	<b>2672</b>	<b>3140</b>	<b>3412</b>	<b>3413</b>	<b>3463</b>
Current account deficit	1973	2323	2424	2450	2436
Debt amortization	687	804	974	947	1011
Other capital outflows	12	13	14	15	16
<b>Financing sources</b>	<b>2672</b>	<b>3140</b>	<b>3412</b>	<b>3413</b>	<b>3463</b>
FDI (net)	1686	1779	1872	1942	2058
Debt disbursements	844	1486	1668	1642	1588
IMF credit	0	0	0	0	0
Change in reserves (increase -)*	143	-125	-128	-172	-182

Sources: Ministry of Finance, Bank of Lao PDR, World Bank estimates  
 \* Change in reserves: “-” denotes an accumulation; “+” denotes a reduction.

### 3. THE GOVERNMENT'S PROGRAM

40. The GoL continues to demonstrate commitment to its green growth vision as articulated in the 8th National Socio-Economic Development Plan (NSEDP, 2016-2020) and the new National Green Growth Strategy for 2030, including: (i) a macro-economic environment that facilitates growth and shared prosperity; (ii) forestry reforms with public and private investment in production and conservation; (iii) protected area management and tourism; (iv) the water/energy nexus; (v) environmental management including water, air and chemical pollution, with an increasing emphasis on waste management; (vi) climate risk management to address flooding, drought, and changing uses of landscapes; and (vii) livelihoods, jobs, income and human capital development dependent on natural capital, environmental security, and macro-economic stability.

41. The GoL continues to advance this green growth transformation by improving the policy environment for cleaner, more efficient and resilient economic growth. The GoL strategic planning process covers a five-year cycle and includes a 15-year Vision, a 10-year Socio-Economic Development Strategy, and 8<sup>th</sup> NSEDP, all approved by the National Assembly, as well as the new National Green Growth Strategy. The current strategic framework envisages LDC graduation by 2020 and achieving upper-middle-income country status by 2030, together with lower inequality and higher natural and human capital, industrialization, improved infrastructure, and strengthened rule of law and government effectiveness. The national development agenda is closely linked to the Sustainable Development Goals (SDGs) with Lao PDR being one of the first countries to localize the SDGs. Nearly 60 percent of the indicators of the 8<sup>th</sup>

<sup>40</sup> Ibid.

NSEDP are linked to SDG indicators, including many environmental and sector targets to track progress toward green growth. The green growth direction and priorities were confirmed in the mid-term review of the 8<sup>th</sup> NSEDP in December 2018 and the National Green Growth Strategy will inform the development of subsequent 5-year plans. Outcome 1 of the 8<sup>th</sup> NSEDP on *continued, firm, and inclusive growth* emphasizes the need for macroeconomic stability and improving investment quality by applying policies to reduce environmental degradation and ensure long-term environmental, climate, and development benefits. Outcome 3 states that *natural resources and the environment are effectively protected and utilized in line with green growth and sustainable principles*. The National Green Growth Strategy sets a longer engagement to 2030 and provides further granularity on priorities ready for more concerted and converged public and private investment, such as forestry, conservation, nature-based tourism, the water/energy nexus, environmental fiscal instruments, and pollution management.

**42. The continued commitment to address shortcomings in financial and fiscal management, natural resource governance, environmental management, and climate resilience have resulted in progress along a greener growth path that can generate jobs, income, and livelihoods.** The interplay of macro-economic stability and environmental security are key for Lao's economic and social sustainability. The GoL has undertaken concrete steps to improve its fiscal position by undertaking actions to, among other things, strengthen revenue mobilization, reduce and rationalize expenditure, improve public debt management and strengthen the stability of the financial sector.<sup>41</sup> Both the recently adopted Tax Development Strategy and the Public Finance Development Strategy (PDFS) provide the framework for reforms to improve tax revenue and public financial management. Lao PDR's economy has been characterized by strong demand for natural resources from a rapidly growing region against a backdrop of developing institutional capacity, weak natural resource governance and regulatory capacity, as well as limited attention to the safety and health of workers, communities, and environmental sustainability and resilience. The Government's awareness of the need to confront these issues holistically led to the development of the strong reform program anchored in a commitment to embed green growth principles across the economy, with a focus on priority sector actions.

**43. The commitment to green growth is also reflected in policies that contribute to global goals and agreements.** Lao PDR submitted its Nationally Determined Contribution (NDC) to the United Nations Framework Convention to Combat Climate Change (UNFCCC) and ratified the Paris Agreement in 2016. The country has action plans and commitments in line with the UN Convention on Biodiversity, Ramsar Wetlands Convention, and other multilateral agreements. Lao PDR's *Letter of Development Policy* describes the Government Program in more detail and is the basis for the GGDPO2 described below.

## 4. THE PROPOSED OPERATION

### 4.1 LINK TO GOVERNMENT PROGRAM AND OPERATION DESCRIPTION

**44. The Program Development Objective of GGDPO2 is to achieve fiscal sustainability and financial sector stability, adopt green growth planning and monitoring, and introduce green growth tools and principles in priority sectors.<sup>42</sup>** The program's three pillars complement one another to improve the growth prospects of the country and help make economic activities cleaner, more resource-efficient, and more resilient. **Pillar 1** supports economic management actions to address key macroeconomic risks.

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<sup>41</sup> Some of these actions are supported in the GGDPO2.

<sup>42</sup> The PDO has been revised since GGDPO-1 which was: "to support the GoL in achieving fiscal stability and consolidating its pathway towards green growth." The three pillars and their objectives remain the same as during GGDPO-1.

**Pillar 2** establishes policy-level instruments for green growth planning, financing, and monitoring. **Pillar 3** aims to incorporate green growth principles in selected sectors, including measures for sustainably using the country's key natural assets (water, forests, and biodiversity), building resilience of infrastructure to climate risks, and promoting cleaner, more efficient production and consumption by regulating pollution.

45. **The GGDPO series is supporting Lao PDR in achieving its objective of poverty eradication and promoting shared prosperity in a sustainable manner as outlined in the 8<sup>th</sup> NSEDP.** Green growth and macroeconomic stability are closely linked in Lao PDR. Maintaining focus on macroeconomic stability is critical to manage inflation, ensure adequate funding for public services and increase availability of credit from a healthier banking sector, as well as provide sufficient investment in environmental public goods important for economic expansion and more resilient and inclusive development outcomes. Natural resources are a key driver of economic growth, source of exports, provide livelihoods for a large part of the population through forestry, fisheries, and agriculture, and are buffers against climate and disaster risks. Growing levels of poorly monitored and regulated air, water and chemical pollution exact large economic and human costs by compromising human capital formation. Failure to make economic growth greener will reduce potential growth and could trigger instability.

46. **The transition to greener growth in Lao PDR is underway via key sector priorities supported by GGDPO2 including:** (i) sustainable expansion of the power sector enabled by river basin management, multisector strategic planning and enhanced environmental and social assessment; (ii) more sustainable, participatory and productive forestry including scaled up sustainable private investment; (iii) a more sustainable and resilient agriculture; (iv) evidence-based management of costly air, water, and chemical pollution that compromise human and environmental health and productivity; (v) more resilient and better maintained infrastructure; and (vi) better protection and economic use of Lao PDR's globally significant natural heritage for tourism and nutrition.<sup>43</sup>

47. **Green growth is good growth for the poor in Lao PDR who depend mainly on natural assets for their livelihoods and are disproportionately exposed to environmental and climate risks.** Key sector policy actions substantively address these challenges by bringing direct benefits for poorer groups while driving and protecting economic growth. Other policy measures can lead to increased government revenues that depend on well-managed natural capital, such as from tourism and forestry – which in the past was a significant source of government budget and will be again once the forestry policy reforms allow for the sector to once again deliver jobs, income, livelihoods, and resilience but on a more sustainable basis this time financially, environmentally, and socially.

48. **Lessons from earlier policy operations and green growth engagement in Lao PDR informed the design of the GGDPO series.** The lessons from the Poverty Reduction Support Operations (PRSO) series led the operation design to: (i) emphasize horizontal inter-ministerial cooperation; (ii) seek fluid vertical communication within ministries and departments; (iii) identify a lead agency in the Ministry of Planning and Investment (MPI) and build on high-level leadership from the Prime Minister's Office (PMO); (iv) keep adequate intervals between operations and take into account the time needed to achieve results from long-term policymaking; and (v) complement the DPF series with a package of advisory services, technical assistance, and investment projects to ensure active engagement and ownership by line ministries, (vi) target the appropriate level of policy reform.<sup>44</sup>

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<sup>43</sup> Lao PDR has the second-highest genetic diversity of rice globally, after India, and relies on fisheries and non-timber forest products for nutrition. It hosts a number of threatened species including the recently discovered large mammal, the Saola.

<sup>44</sup> As per the Law on Making Legislation, a ministerial instruction or decision is a legally binding document that is issued by the head of the relevant sectoral authority to regulate existing laws. For this reason, ministerial instructions/decisions are used by

## **4.2 PRIOR ACTIONS, RESULTS AND ANALYTICAL UNDERPINNINGS**

49. **There is good progress of the GGDPO series towards meeting the program development objective, and the second operation builds on achievements of the first operation while strengthening or accelerating some actions.** There is continuity in the policy matrix across the three pillars with several actions following up on GGDPO1, while the second operation also includes some stronger and accelerated actions compared to the GGDPO2 triggers envisioned at time of GGDPO1 appraisal (See Annex 5). Although the policy tracks remain the same, the individual changes in Prior Actions represent a more coherent program than originally envisioned at the time of GGDPO1 appraisal. Pillars 2 and 3, for instance, advance some of the GGDPO3 reforms forward into GGDPO2, and add approved new or higher-level policies and laws. For example, an environmental fiscal instrument is added; public disclosure on SEA has been expanded to deliver the full SEA regulation earlier; the ESIA action is now a Prime Minister level action; new laws on hydromet and water resources; a new groundwater management regulation; a Decree establishing Lao's first national park; accelerated delivery of 7 regulations for managing protected areas; and a Prime Minister's Decree on pesticides. In addition, Pillar 1 now includes revenue actions which explicitly focus on improving tax administration (by implementing an electronic payment system) and tax policy (amended VAT law which now allows for a refund mechanism), and are supported in the second and third operations. Further, the Public Debt Management Law strengthens public debt management while the BoL Law promotes financial sector stability. Both these laws further strengthen Pillar 1 as they were not originally triggers for GGDPO2. In addition, some End of Program indicators have been updated based on the revised policy matrix. Pillar 1 adds new indicators, and the expected results expressed as percentage of GDP have been changed due to recent GDP rebasing. Several indicators were clarified, and some targets raised compared to the targets anticipated during GGDPO1.

### **Pillar 1: Strengthening prospects for fiscal sustainability and financial sector stability**

#### ***Policy Track 1.1. Lowering the Risks to Macroeconomic Stability***

50. **GoL has made improving fiscal sustainability and financial sector stability among its top priorities.** It recognizes that without a sustainable fiscal policy framework that adequately strengthens its macro-fiscal framework, its ability to implement its program for economic development and poverty reduction will remain elusive. To this end, the GoL has embarked on several reforms which seek to strengthen and stabilize revenues; ensure improvements to the quality of expenditure; improve its debt management and sustainability; and promote financial sector stability.

51. **In response to a sharp decline in the tax-to-GDP ratio in the recent past, GoL has completed a comprehensive tax review (CTR) in 2018.** The CTR contains policy, legislative and administrative reforms aimed at increasing tax revenue as a share of GDP. These reforms aim to broaden the tax base, provide a roadmap to improve the tax legislative framework, and promote voluntary compliance through measures to improve revenue administration and higher quality services to taxpayers. The review draws substantially on the findings and recommendations of recent IMF technical assistance.

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line ministries to regulate the actions needed to implement laws or prime minister orders/decrees where a sectoral agency has been given a specific mandate. Through ministerial instructions, sectoral agencies introduce in the country's legal framework the details of existing laws, specifying their activities, methods, procedures, use of equipment, timeframe for the implementation, and coordination, among others.

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**Prior Action #1: To improve revenue mobilization:** (i) the Recipient, through the Ministry of Finance, has approved the Tax Strategy Development Plan (2018-2020); (ii) the Recipient, through the Ministry of Finance, has implemented an electronic payment system for Road Tax and Land Tax; (iii) the Recipient, through the National Assembly, has approved the amendments to the Value-Added Tax Law; and (iv) the Recipient, through the Ministry of Finance, has implemented the Tax Revenue Information System (TaxRIS) at: (a) the Department of Tax at the central level; (b) the provincial Tax Departments in 5 provinces; and (c) 5 district tax offices.

As evidenced by:

- (i) Ministerial Instruction No. 1781/MOF, approving the Tax Strategy Development Plan, dated 13 June 2018 (**Completed**)
  - (ii) Ministerial Instruction:
    - (a) No. 3455/MOF, implementing electronic payment system for Road Tax dated October 2017 (**Completed**)
    - (b) No. 3909/MOF, implementing electronic payment system for Land Tax dated December 2018 (**Completed**)
  - (iii) Approval by President of the National Assembly - No. 089/NA, dated June 2018 (**Completed**)
  - (iv) Ministerial Instruction No. 3532/MOF for the implementation of TaxRIS signed by Minister of Finance on 2<sup>nd</sup> November 2018 to implement TaxRIS by 5th November 2018 (**Completed**)
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52. **To enhance revenue mobilization, the Tax Strategy Development Plan (TSDP) sets out both the tax administrative and policy measures.** The CTR calls for the development of the TSDP. The TSDP aims to strengthen the tax legislative framework; modernize tax administration; and build staff and institutional capacity. In particular, the TSDP seeks to review existing legislation with a view to amend and/or draft new laws; improve tax compliance by reducing tax leakage; broaden the tax base; improve tax payer services while reducing costs of compliance to taxpayers; consolidate management of large tax payers; improve the use of technology to reduce the cost of tax administration; and strengthen the institutional framework to improve implementation of tax policy. Once again, the development of the TSDP also benefited from IMF technical assistance. The IMF is also currently providing technical assistance to the government on the Medium-Term Revenue Strategy, which is an extension of the TSDP and includes revenue measures pertaining to the Customs Department.

53. **In line with the TSDP, a key component of GoL's strategy is the use of technology to improve revenue administration and enhance compliance is the implementation of the electronic payment system for both Land and Road Tax.** As part of modernizing tax administration, MoF has implemented the electronic tax payment system for Road Tax in October 2017 and the same for Land Tax in December 2018. The GoL will allow people to pay road and land taxes online via BCEI, which works with other banks such as the Lao Viet Bank, Agriculture Promotion Bank, Lao Development Bank and the Joint Development Bank to roll-out the electronic payment system. Previously, the collection of road tax was a relatively inefficient and costly process both to the tax department and the tax payers. This was particularly true at the subnational level where anecdotal evidence reveals that the cost of paying the road tax and the loss in revenue was significant.<sup>45</sup> The electronic payment system for Road Tax has resulted in a 6-fold increase in Road Tax collection over the year, from around 10 billion kip to 60 billion kip. The likelihood of revenue leakage in the collection of Land Tax prior to the implementation of the electronic payment system is more severe. Previously, Land Tax was collected by the village head. This has resulted in poor enforcement, significant transactional costs associated with paying the tax, lack of efficiency and transparency, and associated loopholes. Moreover, prior to the establishment of the electronic payment platform, authorities were losing revenue from that would have been accrued from the sale of property. Therefore, like the Road Tax, the new electronic payment platform for the Land Tax is expected to significantly increase revenue collection as it strengthens enforcement, particularly since the system is linked to the land registry based at the National Land Management Authority (NLMA) within the Ministry of Natural Resources and Environment (MONRE). Currently, of the 3 million land titles, land taxes for 1.8

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<sup>45</sup> In some cases, anecdotal evidence reveals that stickers confirming payment of road tax were handed over by authorities at the sub-national level.

million land titles can be paid using the electronic platform while the remaining 1.2 million land titles are being processed so that taxes on these properties can also be paid electronically. Additionally, efforts are underway by NLMA to increase the speed at which land titles are awarded.

**54. A further component of GoL's strategy to improve revenue administration and enhance compliance are amendments to the Value-Added Tax Law.<sup>46</sup>** In June 2018, the National Assembly approved the amendments to improve VAT collections, which was subsequently promulgated in August of that year. The amended VAT Law redefines principles, regulations, methods and measures on the management and inspection of VAT. This Law ensures that VAT is charged on the increased value of imported goods and domestic supplies of goods and services which is borne by final consumers. A major change in this revision of the VAT Law is the provision of VAT refund to non-exporters having excess input VAT after three-month carried forward. This change puts Lao PDR's VAT system closer to international good practices, and it is expected to help attracting more businesses into the VAT net. Additionally, the amended VAT Law now clearly spells out the collection of VAT; calculation of VAT; deduction and refund of VAT; filing and payment of VAT; registration-deregistration for VAT; and inspection and management of VAT arrears. The implementing instructions for the VAT law are currently being drafted with TA support from the World Bank. Although in the short-term VAT receipts may decline due to refunds, it is expected that in the medium to longer term revenue receipts are likely to increase as compliance improves with a fully functional VAT system. The authorities are currently in the process of drafting the implementing instructions for the amended VAT Law for which the World Bank is providing technical assistance.

**55. The fourth component of GoL's strategy to improve revenue administration and enhance compliance is the implementation of the Tax Revenue Information System (TaxRIS). In November 2018,** as part of modernizing the tax administration with the support of the Republic of Korea, TaxRIS was launched to ensure more effective administration and remove several manual reporting requirements. The electronic platform initially covers: (i) the Department of Tax at the central level, (ii) the provincial tax departments in 5 provinces, namely Vientiane, Luang Prabang, Savannakhet, Champasak and Vientiane Capital; and (iii) 5 district tax offices, namely Vang Vieng, Paksun, Thakek, Pakse and Kaison Phomvuhane. Some of the online functions TaxRIS facilitates are: real-time taxpayer information management; tax filing management; tax collection management; and tax audit management. Additionally, TaxRIS allows for businesses to apply for a Tax Identification Number (TIN) when obtaining a Business Identification Number (BIN) from the Ministry of Industry and Commerce (MOIC). This ensures that businesses are simultaneously registered for tax when they are recognized as a business entity. This is expected to support improved revenue mobilization. However, as with any online platform, TaxRIS will need to be constantly updated to reflect amendments to existing legislation and new legislation. For instance, TaxRIS will need to be updated to reflect the amended VAT law to ensure refunds are accurately processed.

**56. Going forward, Lao PDR is expected to take further key steps to strengthen tax policy, and further improve revenue administration and enhance compliance.** The indicative trigger for the third operation in the series to support revenue mobilization has the following components: (i) submission to the National Assembly for approval the Excise Tax Law by the National Assembly; (ii) submission to the National Assembly for approval the Income Tax Law by the National Assembly; (iii) submission to the National Assembly for approval of amendments to the General Tax Administration Law by the National Assembly; (iv) the approval of the implementing instructions for the amended VAT by the Minister of

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<sup>46</sup> This component builds on GoL's efforts to improve enforcement of the value-added tax by adopting a new VAT Implementing Instruction, which was a component of Prior Action 1 under GGDPO1.

Finance; and (v) the adoption of a risk assessment criteria for audit planning and case selection of large taxpayers.

57. **Expected results:** Taken together, these reforms under prior action 1 are expected to increase tax buoyancy (i.e. tax revenue as a share of GDP). This will be measured by the tax revenue to GDP ratio [Baseline: 12.4 percent (2016); Target: 12.9 percent (2022)].<sup>47</sup>

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*Prior Action #2: To strengthen public financial management: (i) the Recipient, through the National Assembly and Ministry of Finance respectively, has approved the Public Procurement Law and associated implementing instructions; and (ii) the Recipient, through the Ministry of Home Affairs, has rolled out: (a) Smart Cards to at least 18 Government entities at the central level; and (b) the Personnel Information Management System (PIMS) to at least the Prime Minister's Office and MoHA.*

As evidenced by:

- (i) (a) Approval by President of the National Assembly of the Public Procurement Law No. 62/NA dated November 2017 (**Completed**); and (b) Ministerial Instruction for the Public Procurement Law No. 0477/MOF dated February 2019. (**Completed**)
  - (ii) Report No. 03/MoHA from the Minister of MoHA to the Prime Minister of Lao PDR, dated January 2019 (**Completed**).
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58. **Good public financial management is critical to the implementation of a government's program for economic development and poverty reduction, because it underpins effective allocation, control, accountability and transparency in the use of public funds.** Despite notable reform efforts during 2003-2012, Lao PDR's PFM system continues to face challenges. The 2010 Public Expenditure and Financial Accountability (PEFA) Assessment identified significant weakness in PFM systems (rated D or D+) across many dimensions, including transparency and accountability and internal control mechanisms. The World Bank is currently completing the 2019 PEFA Assessment, where early findings indicate that there has not been significant improvement since the 2010 Assessment, with respect to procurement and payroll controls. Poor pay roll control has contributed to the relatively high wage bill (at 6.5 percent of GDP in 2018) and the level of public employment (5 percent of the population),<sup>48</sup> compared to peer countries.

59. **Amongst the reasons for poor score for procurement is the absence of a solid legal and regulatory framework, and an institutional basis to monitor and oversee government procurement.** Until the end of 2017, Lao PDR had no procurement law. The PM Decree No. 03/PM, issued in 1995 and amended in 2004, was the only legal framework governing procurement. This decree proved insufficient to enforce transparent and accountable procurement as it only provided basic guidance on public procurement procedures and norms.

60. **The Public Procurement Law and associated implementing instructions/regulations provides a robust, legal framework for public procurement.**<sup>49</sup> This Law applies to ministries, agencies, local administrative authorities, state enterprises, local and foreign individuals, legal entities and organizations relating to public procurements in Lao PDR. The new Law defines the principles, regulations and measures regarding the management monitoring and performance of public procurement, including procedures for private-public partnerships, strengthens the Board of Tender; and introduces a complaints mechanism

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<sup>47</sup> Noting that the current 2018 tax revenue to GDP is 11.2 percent, this effectively implies an increase of 1.7 percentage points. This improvement in revenue coincides with the fact that most of the revenue actions undertaken to improve revenue mobilization occur from 2018 onwards and are supported in the second and third operations in the GGDPO.

<sup>48</sup> This includes the civil service, defense force and police. The civil service alone represents 2.8 percent of the population (184,871 personnel), which is the second largest proportion of civil servants among the 10 ASEAN countries, after Brunei.

<sup>49</sup> The National Assembly approved the Public Procurement Law in November 2017 and the associated instructions in February 2019. Given that GGDPO1 was approved by the Board in May 2017, the Public Procurement Law could not be included in the first series of this operation.

and measures on the establishment of e-governance. The new Law clearly defines procurement methods and the procedures and implementation guidelines for each procurement method will be set out in the subsequent regulations. Furthermore, the Law provides a legal framework for the rights and obligations of bidders, the tender committee and clearly sets out a legal pathway for the resolution of disputes. The associated implementing instructions provides the detailed guidelines for the implementation of the Public Procurement Law.

**61. Poor payroll control, poor management and integration of payroll data and personnel records both within MoHA<sup>50</sup> and between MoHA and MoF is one of the key reasons for this low PEFA score.** In the recent past, MOHA has not been able to provide enough oversight to limit the expansion of many government departments. In particular, there has been a proliferation of employment of state employees at the lower level and contract workers. The GoL, under Prime Minister Executive Order No.3, issued in 2018, sought to streamline and downsize the state organizational structure by requiring all departments to merge subordinate offices or divisions whose scope of work overlaps or are similar. Progress has been made in implementing the Order with MoHA completing a survey in eight ministries and submitting the findings to the government to seek guidance. The survey finds that although the number of civil servants in some departments are too few, overall the number of civil servants is significantly more than requirements. This adds a heavy burden on state expenditures on salaries and wages.

**62. The GGDPO2 continues to support improved wage-bill and civil service management.** Under GGDPO1, the intake of new civil servants was limited to 5,000 from more than 10,000 previously.<sup>51</sup> Moving beyond limiting the intake of new civil servants, GGDPO2 supports efforts to roll-out modern systems for civil service management. By December 2018, MoHA would have rolled out the “Smart Card” to 18 government entities at the central level. Once complete, this will enable physical verification of employment (envisaged during GGDPO1 preparation) and allow for digitization of several human resources management functions. Also, in December 2018, the authorities rolled out the Personnel Information Management System (PIMS) to staff in the Prime Minister’s Office and MoHA, with the PIMS expected to be rolled-out to at the central government (to ministries where MoHA controls HR) by end-2022. The advantage of rolling out PIMS is that MoHA can now verify and track civil servants in the respective government departments and thus eliminate the number of “ghost” workers, which according to anecdotal evidence has been a significant issue for GoL. Furthermore, the PIMS database allows auditing of staff and payroll and supports the enforcement of the principle of one position / one pay / one person. Moving forward, similar systems will need to be put in place for the police and armed forces, which fall under the Ministry of Public Security and Ministry of Defense, respectively, and not MoHA, as both they constitute a significant portion of the wage bill.<sup>52</sup>

**63. Going forward, the GoL, with technical assistance from the World Bank and other development partners, aim to strengthen key components of PFM based on the PEFA assessment.** The GoL has adopted a comprehensive PFM reform strategy in July 2017 under the Public Finance Development Strategy (PFDS) 2025 and Vision 2030. The PFDS provides the framework for medium to longer-term PFM reforms aimed at, among other things, strengthening the accounting, auditing, financial controls and related legal framework; and modernizing the public financial sector to align with regional and international standards. In particular, to support the PFDS, the World Bank and the IMF will help update

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<sup>50</sup> MoHA holds the responsibility for the policy and oversight of human resource management and records of the civil service.

<sup>51</sup> As discussed in Section 2.1, similar prudence has continued, with the intake of staff lowered to 3,000 and the wage index remaining unchanged.

<sup>52</sup> It is estimated that the police and armed forces, which account for up to 50 percent of the total government payroll, are excluded from these arrangements.

the Chart of Accounts (CoA) which will allow for the recording and reporting of GoL's finance statistics under the GFS Framework. Additionally, the MoF intends to prepare a set of revised standard bidding documents in accordance with the new Public Procurement Law.

64. **Expected results:** This operation, under prior action 2, is expected to reduce the wage bill, improve public procurement and enable the production of financial statements compliant with IPSAS. This will be measured by the following: (i) public wage bill to GDP ratio [Baseline: 6.9 percent (2016) Target: 6.2 (2022)]; (ii) MoF is capable of recording and reporting GoL's financial transactions (revenue, expenditure, assets and liabilities) consistent with the IMF-GFSM2014 by 2022; and (iii) the percentage of central government agencies issuing tenders according to the new Public Procurement Law by 2022 (baseline 0, target 100).

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*Prior Action #3: To improve public debt management, the Recipient, through the National Assembly, has approved the Public Debt Management Law.*

*As evidenced by:*

*Approval by President of the National Assembly of the Public Debt Management Law No.87/NA, dated June 2018 (Completed)*

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65. **While the announced fiscal consolidation would help stabilize public debt, the public debt/GDP ratio remains elevated, majority of which is external debt on increasingly less concessional terms.** This exposes Lao to significant foreign exchange risk as over 80 percent of the public debt is composed of external debt, majority of which is US dollar denominated. Further, while most of the external debt is concessional, the recent increase in the share of non-concessional external debt with variable interest rate, such as the issuance of market-based bonds in the Thai capital markets,<sup>53</sup> implies that both the debt service cost and the interest rate risk are non-trivial. Therefore, maintaining debt sustainability would require increased awareness of risks of non-concessional borrowing, ability to manage costs and risks as well as prioritization to ensure borrowing for priority and credible projects with the highest rates of return.

66. **The Public Debt Management Law (PDML) highlights the GoL's commitment to ensure fiscal and debt sustainability.** Prior to the passage of the PDML, there existed only a Presidential Decree on public debt management. The PDML was passed by the National Assembly in June 2018 and promulgated in August of the same year. The PDML is a step forward as it is largely in line with international sound practice, is a key pre-requisite for effective public debt management as it provides a solid legal platform for undertaking debt management reforms. The Law substantially strengthens the governance framework as it will require the development and publication of debt management strategies (see below) and regular reporting on debt and risks, including an annual report reviewing and assessing the implementation of the debt management strategy and the medium-term borrowing plan. Additionally, the law more clearly defines the following: (i) domestic and external debt based on currency exposure risk; (ii) the roles and decision roles for the National Assembly, MoF and line agencies; (iii) each type of public debt and criteria for contracting debt; and (iv) lays a basis for contracting public debt and contingent liabilities (including public guarantees and on-lending). To ensure effective implementation of the Law, MoF, with support of the Bank's Debt Management Facility, is currently drafting the regulations/implementing instructions.

67. **Going forward, the MoF is working on developing a Public Debt Management Strategy (PDMS) in accordance with the Public Debt Management Law.** Such a strategy operationalizes the country's debt management objectives by detailing the plan the GoL intends to implement over the medium term to

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<sup>53</sup> Lao PDR first issued bonds at the Thai capital market in 2013. By the end of 2017, the outstanding amount of bonds reached around US\$1.5 billion, or around 18 percent of the total external public debt stock. The maturities range from 3 to 15 years, with coupon rates ranging from 3.5 percent to around 6 percent.

achieve the desired composition of the GoL debt portfolio to capture the government's preferences regarding the cost-risk tradeoff. The other components of the trigger for GGDPO3 to improve public debt management are the publication of the implementing instructions for the PDML and the publication of a medium-term borrowing plan together with a bi-annual debt bulletin. Further, the World Bank is also currently completing a Debt Management Performance Assessment to further assess the shortfalls in public debt management in Lao PDR.

68. **Expected results:** Taken together, these reforms under prior action 3 are expected to improve debt sustainability. This will be measured by the public debt to GDP ratio [Baseline: 58.5 percent (2016); Target: 57.9 percent (2022)].

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*Prior Action #4: To promote financial sector stability: (i) the Recipient, through the Bank of the Lao PDR, has prepared and published a 7 core financial stability indicators for the banking sector; and (ii) the Recipient, through the National Assembly, has approved the amendments to the Bank of the Lao PDR Law in line with good practices, including restricting fiscal deficit financing by BoL, auditing of BoL accounts and limiting BoL lending to the financial sector.*

As evidenced by:

- (i) Data published on Bank of the Lao PDR's official website (**Completed**); and
  - (ii) Approval by President of the National Assembly of the amendments to the Bank of the Lao PDR Law No. 88/NA, dated June 2018. (**Completed**)
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69. **Strengthened financial sector stability is important to lower macroeconomic risks.** The BoL has outlined an ambitious 2025 Strategy and 2030 Vision to strengthen the stability and international competitiveness of the financial sector, with a concomitant improvement in the regulatory and supervisory functions of the BoL. To this end, the authorities have produced and published a set of core financial soundness indicators, and amended the BoL Law to enhance the role and operation of the BoL by aligning it with good practice.

70. **The publication of core financial soundness indicators by BoL improves financial sector stability by increasing the capacity of Banks, BoL and the public to monitor and assess the health of the financial sector.** The core financial soundness indicators proposed are: (i) Regulatory capital to risk-weighted assets (CAR); (ii) Regulatory Tier 1 capital to risk-weighted assets; (iii) Nonperforming loans net of provisions to capital; (iv) Nonperforming loans to total gross loans (NPL); (v) Sectoral distribution of loans to total loans; (vi) Return on assets (ROA); and (vii) Return on equity (ROE). These indicators are to be produced and published on a quarterly basis on the BoL's webpage.

71. **The amendments to the BoL Law, approved by the National Assembly in June 2018 and promulgated in August of the same year, specifically seeks to strengthen the financial stability.** Specifically, Article 49 of the BoL Law restricts fiscal deficit financing by BoL by explicitly stating that BoL may lend to the Government no higher than twenty percent of the annual state budget income such that it follows the public debt ratio as approved by the National Assembly and such lending is approved by the Prime Minister. Articles 63, 64, and 65 ensure auditing of BoL accounts under a new set of guidelines, which adheres to International Financial Reporting Standards (IFRS) for central banks. Additionally, Article 71 allows for the State Audit Authority to audit BoL's accounts according to the IFRS. Lastly, the amended BoL Law is certainly an improvement over its predecessor in terms of distinguishing Emergency Lending Arrangement, Lender of Last Resort and bail out. It also limits BoL lending, by providing conditions under which lending by BoL to the financial sector may be undertaken. Additionally, the Law, under Article 48, allows for a BoL guarantee for financial institutions on FX borrowing upon approval of the GoL, but no criteria is explicitly provided. However, Article 48 clearly states that the "terms, procedures and methods

of guarantee are set out in separate regulation.” This is not unusual in Lao PDR (and elsewhere) where the regulations/implementing instructions that follow a particular law detail the law’s various articles.

**72. Going forward, the authorities are undertaking several steps to further strengthen the stability of the financial sector.** The authorities aim to approve a plan to restructure two state-owned banks; the BoL will prepare and submit to the National Assembly amendments to the Commercial Bank Law, in line with Basle Core Principles; and the BoL will also prepare and publish a set of core financial indicators by type of banks. These are indicative triggers for GGDPO3.

**73. Expected results:** Taken together, these actions are expected to promote financial sector stability. This will be measured by public reporting of compliance with regulations of the Capital Adequacy Ratio by type of banks [Baseline: Not reported [2017]; Target: At least regulatory minimum by 2022].

## **Pillar 2. Consolidating green growth principles across the national development strategy**

### ***Policy Track 2.1. Building the foundation for green growth planning and monitoring***

**74. To support Lao PDR’s economic transition, green growth principles are being integrated into the country’s strategic and development framework to promote efficient, clean and resilient development.** This agenda received a strong boost in 2016 with the integration of green growth principles into the 8<sup>th</sup> NSEDP (which was re-confirmed in the December 2018 NSEDP mid-term review), and the establishment of the Green Growth National Steering Committee (GGNSC) mandated with overseeing green growth planning; implementation of programs, policies and projects; and monitoring and reporting (both GGDPO1 Prior Actions). Before this agenda began there were limited actions and limited convergence around the concept of green growth as a set of strategic principles for national development and therefore limited commitment to these principles. Since then, and specifically since the 8<sup>th</sup> NSEDP and GGDPO1 were approved, the transformation continues to gather momentum which is important to maintain through the series of 5-year plans and green growth development policy operations.

**75. GGDPO2 builds on these efforts, supporting the adoption of a National Green Growth Strategy (NGGS) that presents a multi-sector agenda through 2030 for implementing the transition to greener growth.** The stated objective of the NGGS is: “Promoting economic growth, poverty reduction and raising of living standards of the people in a comprehensive, inclusive and equitable manner in conjunction with increasing efficient natural resources utilization, decreasing pollution, wastes, greenhouse gas emissions, risks and vulnerability to climate change and natural disasters.” Key priorities across sectors include forestry and rural development, tourism and conservation, the water/energy nexus, climate change mitigation and adaptation, pollution, environmental fiscal instruments, science and technology, gender, as well as opportunities for financing the NGGS, and a monitoring and evaluation (M&E) framework for measuring progress toward the NGGS objective.

**76. With the NGGS, priorities can be consistently reflected programmatically in planning, budgeting and monitoring for national and sector annual development and investment plans spanning the next decade.** This longer time horizon is important to effect the inclusive green transformation at the scale needed. The initial short-term steps are promising. For example, the 8th NSEDP mid-term review was carried out through a green growth lens, which promotes further prioritization based on the NGGS. And as indicated in the NGGS itself, a Green Growth Promotion Center is being established under MPI and the National Institute for Economic Research to support implementation and M&E. The NGGS is a flexible document that can be enhanced to respond to new sector opportunities and trade-offs, and continuously

encourage coordinated action across sectors and stakeholders. With this action, the foundation for Lao PDR's green economy of the future is being solidified.

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*Prior Action #5: The Recipient, through the Prime Minister, has approved the National Green Growth Strategy (NGGS), including a monitoring and evaluation framework.*

As evidenced by:

*Prime Minister's Decree No 20/GoL Approving and Adopting the National Green Growth Strategy of Lao PDR to 2030, dated January 31, 2019. (Completed)*

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77. **Indicative GGDPO3 trigger.** The GoL, through the Prime Minister, has established and started implementing a transparent mechanism to: (i) report on progress toward the priorities in the National Green Growth Strategy, and (ii) set the basis for green growth planning in the 9<sup>th</sup> NSEDP (2021–2025). This trigger remains nearly identical to the indicative GGDPO1 trigger at GGDPO1 approval.

78. **Expected results** will be measured by the disclosure of M&E results of the green growth priorities established in the NGGS, as part of the public consultation process of the 9<sup>th</sup> NSEDP 2021–2025 [Baseline: No (2017); Target: Yes (2022)]. The M&E framework is designed for simple implementation based on existing relevant indicators in the 8<sup>th</sup> NSEDP, localization of the SDGs, and established sector programs.

79. **Expected climate co-benefits.** The policy action will generate both adaptation and mitigation benefits resulting from NGGS implementation. First, it will enable the country to better adapt to climate-induced risks such as floods, landslides, and drought by prioritizing actions to improve management of key natural resources including forests and water. Mitigation co-benefits derive from improved land use and management and greater resource use efficiency.

#### ***Policy Track 2.2. Strengthening country instruments for clean and resilient green growth financing***

80. **Sustainable financing and environmental fiscal instruments are both key to clean, efficient, and more durable economic growth.** The GGDPO series is supporting both areas to raise the quality and amount of financing for green growth objectives while promoting behavior change via fiscal instruments. One area of support concerns enhancing and modernizing the GoL's multi-sector Environment Protection Fund (EPF), and a second area concerns the development of environmental fiscal instruments.

81. **The GoL increasingly recognizes that environmental fiscal instruments raise revenues and create the right incentives and has taken preliminary steps to develop these pricing instruments with support under the GGDPO series.** Getting prices right is key to efficiency, and it is also good fiscal policy, since evasion is more difficult. Pricing instruments suit countries with weaker fiscal institutions, and the revenue generated can help finance the green growth transformation. Under GGDPO1, the GoL instituted a reform to allow revenues for the EPF to be channeled through the national treasury. Under GGDPO2, the GoL promulgated a major revision to the Water Law that establishes the legal basis for wastewater discharge fees, charges, and fines. The GoL is currently identifying the pollutants or activities to address, which links to Pillar 3. In parallel, the GoL has been considering introducing an environmental tax.<sup>54</sup> Lastly, the GoL has expressed interest in tracking public expenditures toward green growth objectives to support better-informed budgeting, investment prioritization, monitoring, and reporting, based partly on the experience of the Republic of Korea.

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<sup>54</sup> The Amended Tax Law No.05/NA dated December 20, 2011, introduces a possibility to establish an environmental tax based on the polluter pays principle and ascribes the environmental tax to the purpose of treatment, rehabilitation or cleaning of pollution and waste (Articles 58 and 59).

82. **The EPF is adding value by enhancing the efficiency, quality, and targeting of investment in line with green growth, and its continued strengthening forms one of the foundations of green growth financing.** Funding streams are most effective when composed of a wide number of sources, such as regular government budget, revenues from fiscal instruments (including environmental),<sup>55</sup> official development assistance, private investment, and instruments such as green bonds, payments for environmental services such as from hydropower companies to protect watersheds as in Nakai Nam Theun National Park (see Pillar 3), or carbon finance. Transparency in allocating and using funds also raises confidence that funding streams will be used for green growth objectives and can help attract further sources of financing.

83. **Efforts to increase the diversity and amount of financing for green growth priorities will be complemented by increased transparency and effectiveness in the use of EPF funds.** With the support of GGDPO1, the GoL strengthened the EPF as one of the financing vehicles for environmental protection and rehabilitation, through streamlining its operations in line with the Environmental Protection Law.<sup>56</sup> With the support of GGDPO2, the EPF Board of Directors, consisting of executives of various ministries approved updated by-laws that establish priorities for a range of sectors, implementers and environmental themes, including climate change, and defines the full subproject cycle procedures under EPF financing windows, including performance criteria for projects. The GoL also set up a transparency mechanism to disclose publicly, on a regular basis, the EPF resources collected through each revenue source and the selection and justification for resource allocation to green growth priorities (supported by GGDPO2). These reforms will together support increased and diversified financing available to a better-managed and more transparent EPF, and a more transparent prioritization process based on the country's green growth priorities.<sup>57</sup> Already, new providers of funds are taking note, and some have provided new funds while others are planning to do so. In addition, a land use carbon finance window is being prepared to help incentivize climate change mitigation action. EPF continues to position itself as part of the foundation for financing and incentivizing green growth in the country.

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**Prior Action #6:** *The Recipient has established the legal framework to increase revenue generation for environmental and green growth priorities (i) through the National Assembly, by establishing the mandate to levy wastewater discharge fees, fines and service charges, and (ii) through the EPF Board, by establishing mechanisms for EPF to prioritize its resource allocation.*

As evidenced by:

- (i) Decree of the National Assembly President on the Promulgation of the Law on Water and Water Resources 115/POR dated June 22, 2017; (**Completed**)
  - (ii) EPF By-law 004/EPF Board, dated 30 January 2018; (**Completed**)
  - (iii) Additional Decision on Amendment and Addition of some Articles of the Decision on Management of the EPF 001/EPF Board, dated 21 March 2019 (**Completed**)
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84. **Indicative GGDPO3 trigger.** To continue to strengthen country instruments for clean and resilient green growth financing, the third operation will support leveraging environmental fiscal instruments for

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<sup>55</sup> World Bank, IMF, OECD, DFID, GIZ DGIS, 2005. *Environmental Fiscal Reform: What should be Done and How to Achieve It.* World Bank Group, Washington, DC, USA.

<sup>56</sup> As per Environment Protection Law No. 29/NA dated December 11, 2012, Articles 52, 55 and 56 introduce obligations and responsibilities of natural resource users and entities implementing investment projects – including paying environmental royalties, ecosystem services and protection fees in accordance to specific regulations, and remunerating damages resulting from natural resource uses and investment activities.

<sup>57</sup> EPF currently has three revenue sources: (i) grants or credits from development partners, largely the World Bank until recently (which currently provides the vast majority of EPF funds); (ii) national budget, including resources from soft loans; and (iii) voluntary contributions by the private sector as compensation for infrastructure projects; however, only 1.9 percent of the EPF resources originated from the private sector between 2006 and 2010.

enhancing revenues and incentives. As such the indicative trigger is: The Recipient (i) based on the water law and through MONRE, has established regulations for levying wastewater discharge fees, fines and service charges, and (ii) through MOF, has amended the budget classification to facilitate identification of green growth expenditures.

85. **Expected results.** The results will be measured by the increase in number of revenue sources of the EPF [Baseline: 3 – contributions from development partners, contributions from business, and endowment fund (January 2017); Target: 5 (2022)] and disclosure of annual financial audits of the EPF [Baseline: No (2017); Target: Yes (2022)].

86. **Expected climate co-benefits.** The policy action will generate both adaptation and mitigation benefits resulting from implementation of environmental fiscal instruments and an enhanced EPF. First, wastewater discharge fees and fines can improve wastewater management, which can lead to greenhouse gas (GHG) reduction. An enhanced EPF with increased revenues, including via a new carbon finance window at EPF, will finance adaptation and mitigation priorities as established in its revised by-laws in line with the country's NDC and NGGS.

#### ***Policy Track 2.3. Shifting towards decision-making informed by priorities for environmental protection and climate resilience***

87. **Economic growth in Lao DPR can be stimulated and infrastructure and other assets made more resilient to climate and environmental risks by improving decision support systems for strategies, policies, programs, and projects.** Modernizing information systems and access to information, as well as standardizing engineering specifications, can generate reasonable returns on investment and lower costs over the lifecycle of critical public infrastructure by reducing outlays on maintenance and repair from environmental and climate risks.

88. **At the time of GGDPO1, it was recognized that the 2012 Environmental Protection Law aimed to mainstream environmental and climate considerations into policies, strategies, and plans using tools such as Strategic Environmental Assessment (SEA) and Environmental and Social Impact Assessment (ESIA), as well as climate-relevant information such as hydro-meteorological services.** Yet by 2016 such tools had not been fully developed, institutionalized, or were facing quality control, budgeting, and implementation challenges. Since 2016, considerable progress has been made with support under the GGDPO series, with recently observed stronger implementation of ESIA to balance conservation and energy production, which hints at the green transformation underway that needs to be maintained and gather momentum to be durable. To support this trajectory, three actions under GGDPO2 are highlighted below: (i) SEA, (ii) ESIA, and (iii) using hydrometeorological services to de-risk costly road maintenance.

#### ***Strategic Environmental Assessment (SEA)***

89. **Under GGDPO1, the GoL introduced the first stage of policy SEA reforms.** Prime Minister Order No. 55 (2016) and Ministerial Decision No. 483/MONRE (2017) introduced legal requirements for using policy SEA to integrate environmental and social sustainability, as well as SDGs, into all policies, programs, and strategies. This approach integrates key environmental considerations in policy formulation and implementation while focusing on institutions and governance. Conducting policy SEA requires analyzing institutional capacities and constraints and determining capacity strengthening measures to deliver environmental and climate objectives. Policy SEA positively strengthens institutions and influence decision making by promoting environmental and climate mainstreaming, addressing institutional gaps and improving social accountability.

90. **Under GGDPO2, the GoL established detailed regulations and procedures for conducting policy SEAs, including information disclosure and public participation.** This policy has been strengthened and accelerated since the time of GGDPO1 which had anticipated only the public consultation aspect of the policy. As such, the full set of SEA regulations are now ready to be implemented for a variety of policy-level topics, including the National Green Growth Strategy, and national sectoral policies (energy, water resources, mining, agriculture, transport, among others) for which the GoL has expressed interest. The policy SEA regulations will guide public servants and practitioners on the best practices for incorporating social and environmental considerations in the design and implementation of the National Green Growth Strategy, sectoral public policies, and national programs. The policy SEA regulations will also contribute to strengthening institutional capacity over time and supporting social learning in the design and implementation of public policies. By ensuring meaningful participation from relevant stakeholders, including vulnerable groups often excluded from decision-making such as women, the SEA will contribute to make growth both green, inclusive, and climate-informed.

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*Prior Action #7: The Recipient, through MONRE in consultation with MPI, has established detailed regulations and procedures for implementing SEAs, including information disclosure and public participation.*

*As evidenced by:*

*Ministerial Instruction No.6616/MONRE on Procedures for Implementing SEA, dated 31 December 2018 (Completed)*

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91. **Expected results.** The results will be measured through the number of SEAs undertaken for public policies, programs, and strategic plans [Baseline: 0 (2017); Target: 1 (2022)]. The target refers to the policy-level SEA of the National Green Growth Strategy (NGGS).

92. **Expected climate co-benefits.** The SEA action will generate both adaptation and mitigation benefits by providing decision making support and alternative options through the SEA tool when it is applied. SEA processes typically include consideration of options for integrating policies, plans or strategies to further address climate vulnerabilities and reduce or avoid GHG emissions.

#### ***Environmental and Social Impact Assessment (ESIA)***

93. **The GoL is adopting a regulation to strengthen the application of ESIA legislation that includes opening decision-making processes of investment projects to public scrutiny and improving coordination among key agencies during the review, approval, and monitoring of construction and operation, maintenance and decommissioning of infrastructure investment projects.** Through ESIA, the authorities can tailor environmental and social parameters and standards to specific investment projects while also reducing climate risks and emissions. Responsibility for environmental compliance is held by developers of relatively large infrastructure projects, and who must meet the ESIA requirements that are evaluated and enforced by the relevant government authority. The GoL has carried out a comprehensive review of the existing ESIA system and has issued regulations to improve its effectiveness. With the support of GGDPO2, the GoL has strengthened the ESIA system with provisions on screening, scoping, public participation, information disclosure, assessment requirements, reviewing, and budgetary allocation for compliance monitoring. The improved ESIA system will help make economic growth more resource-efficient, cleaner, and inclusive.

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*Prior Action #8: The Recipient, through the Prime Minister, has issued an ESIA Decree with provisions on screening, scoping, public participation, public information disclosure, assessment requirements, reviewing and approval of ESIA reports, and budgetary allocation for compliance monitoring.*

*As evidenced by:*

*Prime Minister's Decree No 21/GoL on Environmental Impact Assessment, dated 31 January 2019. (Completed)*

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94. **Indicative GGDPO3 trigger.** The Recipient, through MONRE—in consultation with MPI—has issued a ministerial decision creating an integrated database and public information platform to disclose relevant information on ESIA, such as screening, scoping, impact assessment, approval, and post-decision implementation.

95. **Expected results.** The results will be measured by the share of investment projects in the mining, energy, and transport sectors that require an ESIA (Group 2 projects listed in Ministerial Agreement No. 8056/MONRE 2013),<sup>58</sup> with complete disclosure of relevant information (i.e., screening, scoping, impact assessment, and approval), through the integrated database and public information platform, prior to approval [Baseline: 0 (2017); Target: 70% of group 2 projects (2022)]. This indicator has been slightly revised for clarity. The indicator refers to projects approved after 2019, when GoL expects to adopt the ESIA public information platform.

96. **Expected climate co-benefits.** The ESIA action will generate both adaptation and mitigation benefits by providing decision making support and alternative options through implementation of higher quality ESIA than before. The ESIA policy tool includes consideration of options for specific projects to further reduce or avoid climate risks and GHG emissions and can even result in rejecting alternative investments that could lead to significant environmental damage and climate risks. Similarly, approval of projects with the potential to generate significant environmental effects are conditioned to implement mitigation measures to reduce or avoid emissions and/or manage climate risks.

#### ***Climate-resilient infrastructure and investment***

97. **Despite increasing frequency and intensity of climate-related events and disasters, such risks are not yet systematically integrated into public investment program (PIP) planning including infrastructure maintenance.** The failure to account for such risks results in considerable impacts on projects and increased budget needs. These impacts are partly due to difficult access to hydro-meteorological information and data, and a lack of standard regulations and procedures for their use in prioritizing, preparing, and implementing PIP proposals. In the transport sector, providing adequate maintenance and improving climate vulnerable road sections can reduce climate and disaster impacts on the road system. A growing maintenance backlog and increased need for emergency repair account for roughly 30 percent of the Lao PDR road maintenance budget. Identification of the most climate and disaster risk prone segments of the road network and design of maintenance projects, including standards, materials and methods, will enhance the efficiency of PIP resource use. Proper maintenance of existing roads will also reduce public investment needs.

98. **The GGDPO series is helping fill the regulatory gaps that prevent the systematic integration of climate and disaster risks into PIPs, from the assessment of PIP proposals to the design and implementation of these investments, and informing them with actionable hydro-meteorological data.** Under GGDPO1, an MPI Ministerial Decision established requirements for inclusion of climate and disaster risk considerations into the assessment of project proposals for the annual PIP, including through modifications of the formats in the PIP manuals. Among other requirements, the regulation required the project proponent to describe how climate and disaster hazards are integrated in the preliminary selection of the project's location and area, as well as engineering designs. However, specific sector applications require more detailed technical guidelines and support. Also, there is a need for better information on weather and water to be disseminated and put into use for investment planning across multiple sectors.

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<sup>58</sup> Group 2 corresponds approximately to World Bank Category A projects.

**99. The GGDPO2 support focuses on improving the resilience and affordability of roads maintenance by incorporating hydrometeorological (i.e., hydromet) information into maintenance regulations and procedures.** GGDPO2 supports the adoption by MPWT of regulations and procedures that integrate climate and disaster risk considerations into the planning and budgeting for PIP proposals for road maintenance. The regulations and procedures include identification of climate-vulnerable and disaster-prone segments of the road network, and improved road design standards. GGDPO2 also includes a new stronger reform than what was anticipated at the time of GGDPO1 appraisal: a new Law on Meteorology and Hydrology, which mandates MONRE's provision of weather and water data for sector activities. Improved availability of hydro-meteorological information and regulations for prioritization and preparation of budget proposals for road maintenance will improve the planning processes for road maintenance and make the road system more resilient. GGDPO3 will ease access to and systematic use of hydromet information. An information platform is being established at MONRE that will allow improved storage, access and usage of such data. Guidelines and protocols for data use and sharing are needed to allow institutions to analyze and interpret such information.

**100. The policy track on climate and disaster risks management is expected to contribute to SDG No. 11 and to Lao PDR's NDC.** By making public infrastructure more resilient to natural disasters and climate effects, the policy actions will help reduce the number of deaths and people affected, and substantially decrease the direct economic losses caused by disasters (SDG Target 11.5). Regarding the NDC, the GGDPO series will contribute to realization of Adaptation Measure #4: "increasing the resilience of urban development and infrastructure to climate change."

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*Prior Action #9: The Recipient (i) through MPWT, has adopted road maintenance procedures that integrate climate resilience and disaster risk considerations into the planning and budgeting of PIPs, including identification of vulnerable sections and design; and (ii) through the National Assembly, has adopted the legal framework for collecting and disseminating hydrometeorological information.*

As evidenced by:

- (i) Ministerial Decision No. 28025/MPWT on Climate Resilient Road Maintenance dated 4 December 2018; (*Completed*)
  - (ii) Law on Meteorology and Hydrology No. 172/NA, dated December 2017 (*Completed*)
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**101. Indicative GGDPO3 trigger.** The Recipient, through MONRE, will issue a ministerial decision to establish a protocol for sharing and using hydrometeorological data to integrate climate and disaster risk considerations into the planning and budgeting of PIPs. The trigger remains nearly unchanged from that intended at the time of GGDPO1 approval. The measure will ease line ministries' access to and use of hydro-meteorological data available through an information platform set up by MONRE.

**102. Expected results.** The result will be measured through the share of approved road maintenance projects with climate resilience and disaster risk considerations envisaged in the *Annual Road Maintenance Plan and Budget* that are verified by technical audits. [Baseline: 0 (2017); Target: 50 percent of approved road maintenance projects (2022)].

**103. Expected climate co-benefits.** This action on climate-resilient infrastructure will generate adaptation benefits by first generating and improving access to hydromet information, and then putting that information into use to adapt vulnerable parts of the road network to anticipated higher rainfall, temperatures, erosion and landslides under a changing climate.

### **Pillar 3. Incorporating green growth in selected sectors**

#### ***Policy Track 3.1. Shifting toward integrated and sustainable water resources management and use***

104. While water resources are a key natural asset underpinning Lao PDR's economic growth, an organized regime to manage them sustainably has been lacking. Energy – in particular hydropower – is a current key growth driver and source of export earnings, and nature-based tourism is a key growth driver of the future, while fisheries provide about half of Lao citizens' protein intake. With growing demand and multiple transboundary users, the competition for water for power generation, irrigation, drinking water, fisheries, biodiversity, and cultural heritage is high and expected to grow significantly. Climate change will further amplify this risk as the frequency of extreme floods and drought intensifies. In the absence of a clear management regime, investment incentives are weakened due to limited predictability, but also the pressure on the quantity and quality of water will be exacerbated.

105. The GoL has embarked on a transformative governance regime that is based on integrated river basin management, which is a departure from earlier business as usual in which the government grants "water rights" to commercial users. At the same time, the GoL is embarking on an initiative to develop river basin management plans for priority basins, as indicated in the 8<sup>th</sup> NSEDP to resolve issues specific to river basins in a multi-sectoral manner. While the legal basis and capacity to support integrated management provided by the 1996 Water Law had been insufficient, the GGDPO series supported the development of the *Law on Water and Water Resources* which came into effect on June 22, 2017, significantly improving the policy context. This transformative new law was intended to be approved in time for GGDPO1 but instead is supported by GGDPO2.

106. The water law is a cornerstone of the country's green growth program, with implications on environmental fiscal instruments, water pollution and waste, energy, agriculture, forest, watersheds, wetlands, flood and drought risk, climate change, groundwater, information and data management, nutrition, and tourism – and managing trade-offs and harnessing mutual opportunities among these themes and sectors. This new legal framework is based on international best practice and assigns implementation responsibilities to MONRE while recognizing cross-sectoral imperatives. Implementation of the new water law has begun, with the development of one Prime Minister's Decree and four implementing regulations to be in place by the end of the GGDPO series, starting with a Ministerial Instruction on groundwater management, also supported under GGDPO2, as well as regulations for water quality monitoring supported under GGDPO2 Prior Action 14. For GGDPO3, a Prime Minister's Decree on River Basin Planning and Management is under development and will be a stronger action than the originally envisioned GGDPO3 trigger in at least two ways: (i) it will form an enforceable standard for river basin management, rather than a set of guidelines for planning; and (ii) it includes river basin coordinating committees, water allocation rules, minimum flows and water user permits, in addition to plans. Three water resource assessments are well underway and will inform regulations to be prepared to guide future water resource assessments.

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**Prior Action #10:** The Recipient, through the National Assembly and MONRE has established the legal and regulatory framework for integrated water resources management at the national level.

As evidenced by:

- (i) Decree of the National Assembly President on the Promulgation of the Law on Water and Water Resources 115/POR dated June 22, 2017. (**Completed**)
  - (ii) Ministerial Instruction on Groundwater Management 1509/MONRE, dated 21 March 2019. (**Completed**)
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107. **Indicative GGDPO3 trigger.** The Recipient, through the Prime Minister, has issued a Decree that regulates River Basin Planning and Management.

108. **Expected results.** The results will be measured by the number of river basins that establish the minimum flow requirements set out in their respective river basin plan [Baseline: 0 (2017); Target: 1 (2022)]. The target reflects the complex process required to establish minimum flow requirements, involving both basin planning and regulatory actions. The priority basin would be selected in 2019.

109. **Expected climate co-benefits.** This action on integrated water resource management will generate both mitigation and adaptation benefits. These benefits are generated through integrated water resource management that helps manage the trade-offs and complementarities among sector objectives such as hydropower, fisheries, nature-based tourism, irrigation, and water supply. This approach helps individual sector activities be more resilient by addressing climate-induced flood and water scarcity risks. In Lao DPR, as in many developing economies, changes in the climate are usually experienced as changes in water availability. In the case of hydropower development, the approach also allows for hydropower facility planning, operation and maintenance that can reliably power the country's low carbon grid.

#### ***Policy Track 3.2. Improving forest resources management for production and conservation***

110. **Healthy forests contribute directly to resilient economic growth, whether for production, conservation, or protection of infrastructure and strategic assets.** This policy track is supporting a transformation of the sector to re-emerge in a more financially, socially and environmentally sustainable form that can re-start and drive timber and other exports (and significant government revenues from them), create jobs and livelihoods from new private investment and renewed public investment, and secure ecosystem services important for other sectors and themes such as hydropower, agriculture, irrigation, tourism, nutrition and climate. The sector will add value, income and jobs to downstream sub-sectors such as furniture, construction, and new and innovative wood and fiber-based industries. In addition, other sectors can be made more resilient to climate and environmental risks by improving forest management which protects important economic assets such as watershed function, climate/weather regulation, and wildlife while also providing defenses against and resilience to flooding and erosion. On the conservation side, well-managed protected areas and wildlife – largely forest-covered in Lao PDR – can help meet tourism demand and provide income and jobs to local people.

111. **The policy track includes reforms covering the full forest estate** under the mandate of the Ministry of Agriculture and Forests (MAF): Production Forest Areas (PFA), Protection Forest, and Conservation Forest (i.e., national protected areas or NPAs). This policy track is organized into production-oriented policy actions and conservation policy actions which are presented respectively below in two Prior Actions under GGDPO2.

#### ***Production forest areas***

112. **Lao PDR is engaged in an ambitious reform agenda for its important forestry sector to contribute more economic growth and poverty reduction that is more financially and environmentally sustainable, more inclusive, and more resilient than has been possible under business as usual.** This reform agenda is happening at an auspicious time when the GoL is pursuing a greener growth model that seeks to expand forest cover to 70 percent from the current 58 percent, reduce poverty, create jobs and livelihoods, support local industry, and scale up participatory sustainable forest management (SFM) and forest restoration. It is also a time when credible commercial plantation investors are seriously considering scaling up investment in the country due to the on-going reforms being put in place.

113. **A vision of a 'new green forest economy' is emerging in Lao PDR that can deliver the objectives above.** Achieving these objectives can also help provide forest dependent people, including ethnic

minorities, with timber for building materials and non-timber forest products (NTFPs), as well as provide commercial wood for exportable finished products from downstream industries. The poor are most vulnerable to natural resource degradation and climate and environmental risks due to their reliance on forest ecosystem services for livelihoods, nutrition, and mitigation of climate and environmental risks such as floods and drought. These risks also threaten downstream infrastructure such as strategic reservoirs, investments and assets which can further impact economic development, food security, jobs and livelihoods. Forests help the country meet its Nationally Determined Contribution (NDC) to climate action by reducing these risks, and by reducing emissions of 60-69 MtCO<sub>2</sub>-e, according to the NDC.

**114. Business as usual is no longer viable for Lao PDR's economy and people to thrive. The forest estate has in the past been subject to inefficiencies, over-use, under-budgeting, and unsustainable and unscientific management, which has led to reduced forest cover, reduced resource sustainability and reduced natural wealth – as well as reduced public revenues.** Lao PDR's recent policy reforms, institution building, and community engagement are all critical for building the foundation of sustainability of the forest estate and the many sectors and people that depend on this estate, including wood products manufacturing, tourism, agriculture, energy, water and fisheries, and durable poverty reduction efforts.

**115. Forestry in Lao PDR contributed an estimated 8-9 percent of GDP<sup>59</sup> between 1990 and 2000, but only an estimated 4-5 percent between 2001 and 2015 largely due to high levels of illegal logging and forest products trade and economic diversification** (SCD 2017; World Bank 2019, forthcoming). The value of Lao PDR's wood exports was estimated at nearly US\$1.7 billion in 2014 (WWF, 2015), a five-fold increase from 2010 estimates, mainly destined for China (63 percent) and Vietnam (33 percent). Forestry royalties and fees were not often properly levied or collected, which reduced their potential fiscal contribution, and impacted GoL's capacity to manage forests sustainably for timber production and other livelihoods. About 67 percent of the Lao population are rural and dependent on forests and small-scale agriculture. More than 39 percent of rural families' income is from non-timber forest products (Ketpah et al., 2012).

**116. Deforestation has been mainly due to the expansion of agriculture, and clearing for hydropower projects, mining sites and other infrastructure development.** The latest national forest inventory (2015) indicates that natural forest cover experienced an average annual loss of about 45,300 hectares (about 0.19 percent) for the period 2000-2015. In the past 15 years, the net accumulated deforestation is 2.9 percent (approximately 680,000 ha). Forest degradation stems from poor or absent management, shifting cultivation, unsustainable wood and NTFP harvesting, as well as currently legal salvage operations from infrastructure construction. Illegal logging and cross-border trade have contributed to both deforestation and degradation and, until recently, were widespread.

**117. The GGDPO series has been supporting the GoL's policy transformation toward the new green forest economy.** The 2016 Prime Minister Order 15 (GGDPO1 prior action), and other regulatory instruments defined parameters for forest management and harvesting, wood processing industries and wood products trade, ceased round-wood and semi-processed wood exports, laid the basis for enforcement, and supported the development of SFM procedures in PFAs and forest plantations, and processes for legal timber harvesting and sale from forests converted for infrastructure. With PMO No. 15, log exports in 2016 decreased to 25 percent of the 2015 level, but nevertheless the policy provides a solid foundation on which to build participatory SFM for the future, including through timber legality and certification of both forest management and chain of custody, as well as a better enabling environment

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<sup>59</sup> These contributions are considerably underestimated according to the Lao Statistics Bureau.

for both smallholders and sustainable industrial plantations.

**118. Sustainable sector growth depends on access to important export markets that increasingly require proof of legality and sustainability via verification, SFM certification and chain of custody certification.** The GGDPO series is anticipated to Maximize Financing for Development (MFD) in Lao PDR by unlocking barriers to resuming legal timber production and exports under a more transparent and more environmentally, socially, and fiscally sustainable forest policy regime. The GGDPO series is supporting policies for private sector growth in well-planned, well-regulated plantations. Given the forest sector policy reforms directly supported by the DPO series (an effective timber export ban under GGDPO1, timber legality in GGDPO2, third-party certification of SFM on state lands in GGDPO3), an accompanying broader set of sector governance reforms and a renewed interest among responsible and credible international forest investors because of these reforms, it would be reasonable to conclude that within three years of the end of the GGDPO series, wood from PFAs and private sector investment in forest plantations from sustainably managed sources will be scaled up, and timber from infrastructure areas will be able to be verified as legal. This will build confidence to open new market opportunities, facilitate a gradual lifting of regulatory constraints placed on timber harvesting in PFAs and wood exports, and see increased revenues from the forest sector resume for GoL, smallholders, local communities, and private investors. In addition to the nearly 500,000 ha of plantations already established, a further 650,000 ha of degraded forestland inside PFAs has been identified for possible future investment by credible private sector companies (DOF, 2018).

**119. The Prime Minister's Office recommended “public-private-people partnerships” in PFAs as a potential solution for plantation investment,** while recognizing that legal, policy, technical, administrative frameworks and capacity barriers persist. GGDPO2 is supporting the stakeholder process to define “legality” in the context of international standards<sup>60</sup> for forest management and timber supply chains. The Ministry of Agriculture and Forestry (MAF), supported by GGDPO2, has issued a Ministerial Instruction that specifies: (i) the requirement for a timber legality assurance system (TLAS); (ii) a methodology for supply chain control and verification; (iii) the mandate of the Department of Forestry (DOF) as a body responsible for relevant international obligations; and (iv) the mandate of the Department of Forest Inspection (DOFI) as the implementation and enforcement body of the TLAS. Provisions for timber legality are expected to be included in the revised Forestry Law, expected to be promulgated in 2019 with the detail set out in the Voluntary Partnership Agreement (VPA), under the EU Forest Law Enforcement, Governance and Trade agenda.

**120. This policy action contributes to SDGs No. 6 and No. 15 and Lao PDR’s NDC,** specifically SDG Target 15.1 (*By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally*), and the climate mitigation and adaptation goals of the NDC.

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**Prior Action #11:** *The Recipient, through MAF, has required national implementation of a Timber Legality Assurance System that introduces a definition of legality for timber and timber products, and a methodology for supply chain control and*

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<sup>60</sup> “International standard” refers to “legality verification standards.” The EU Forest Law Enforcement, Governance and Trade (EU-FLEGT) Voluntary Partnership Agreement (VPA) has become one standard. Other standards include the Société Générale de Surveillance (SGS) standard. Timber legality verification under these standards can be used independently of, or together with, forest management and chain of custody standards like the *Forest Stewardship Council* or the *Program for the Endorsement of Forest Certification*, for which legality assurance is the first principle but which also impose broader principles of sustainability.

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*verification that meets relevant international standards, and mandates DOF as the body responsible for relevant international obligations and DOFI as the implementation and enforcement body for the TLAS.*

*As evidenced by:*

*Ministerial Instruction No. 76/MAF, dated 12 October 2018 (Completed)*

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121. **Indicative GGDPO3 trigger:** The Recipient, through MAF, has issued a ministerial decision that legally establishes an effective and transparent third-party SFM certification procedure for PFAs that includes group certification. This trigger has minor clarifying edits since GGDPO1.

122. DOF is testing certification models for SFM and is supporting the development of chain of custody certification led by Ministry of Industry and Commerce, supported by Pro-FLEGT, and other development partners. Reputable third-party certification is considered an effective means of demonstrating and reporting compliance with legality and sustainability standards and practices for the UN Principles for Responsible Investment purposes, which should increase access to more markets for Lao forest products. It is being promoted in PFAs and is gradually being adopted by credible companies. Smallholders and group certification systems need to be reformed with good incentives. By January 2019, 110,000 hectares of PFA lands had been independently certified for SFM. The MAF ministerial decision would provide the regulatory framework for implementation of forest certification at scale. During GGDPO3, the GoL is also expected to monitor and regulate logging in infrastructure conversion forests using legality verification.

123. **Expected results.** The results will be measured by the increase in the number of hectares within PFAs with certified Sustainable Forest Management (SFM) operations based on Lao PDR regulations [Baseline: 10,949 hectares (2017); Target: 230,000 hectares (2022)].

124. **Expected climate co-benefits.** This policy action focused on legal timber will generate both adaptation and mitigation benefits from maintained, restored and expanded forest cover especially in Production Forest Areas which is the main land use in the country. When implemented, the TLAS will reduce the impact of forestry activities. Adaptation benefits accrue from reduced flooding, erosion, and drought from intact forests, however forest production systems themselves will need to adapt to a changing climate to be able to continue delivering resilience services to the broader economy. Reforestation, afforestation, and restoration will contribute to both mitigation and adaptation benefits.

#### ***Protected Areas***

125. **The GoL recognizes that Lao PDR's conservation landscapes hold substantial potential for increasing tourism, enhancing local communities' livelihoods, and increasing protection of its well-recognized globally exceptional biodiversity. To achieve these objectives, the GoL is carrying out significant reforms for effective conservation management in the country.** Lao PDR's NPA system represents a respectable 15 percent of total land area and has an excellent representation of the country's distinct biogeographic regions. The biodiversity in this system is tremendous, with thousands of regionally endemic species of international conservation concern. In Nakai Nam Theun watershed alone, over 430 bird species are recorded, which represents approximately 5 percent of the global total. However, despite these natural assets, tourism remains rare and biodiversity is being rapidly degraded, with tigers, rhinoceros, and dolphins already extirpated or nearly extinct. Unlike many countries where a specialized national agency manages NPAs, Lao PDR has tended to delegate NPA management to district authorities and has started the process to modernize the system through centralization and proper budgeting and financing. Many NPAs cover multiple districts, and sometimes multiple provinces, making coordinated management challenging. Furthermore, district government officials can have negative perceptions towards NPAs despite the many benefits that can accrue.

126. **Nature-based tourism has been shown capable of reducing poverty empirically**, including in Thailand, where poverty rates are around 10 percent lower in villages next to NPAs, and in China, with >1 billion visitors to protected areas per year.<sup>61</sup> Poor NPA management puts potential tourism revenues at stake, and jeopardizes Lao's natural heritage, food security, livelihoods, and nutrition in the Lao context.

127. **The GGDPO series is supporting the GoL in putting in place a stronger institutional framework for protected area management for effective conservation and nature-based tourism.** Under GGDPO1, the GoL began a concerted effort to strengthen its national protected area system, establish a national park system, strengthen management of individual protected areas, and transfer the mandate back to MAF. At this time, the GoL made the necessary effort to begin piloting Nakai Nam Theun as a national park by revising Prime Minister's Decree No. 471 that originally established the Watershed Management Protection Authority (WMPA). GGDPO1 also supported Decree No. 122, which initiated the broader national park reform by establishing the legal process to raise the conservation standing of the Nam Theun 2 (NT2) NPA to a national park with a strong role for nature-based tourism, clarification of rights of enclave communities to resources in protected areas; clarification of WMPA's authority over sections of the reservoir, and centralizing the organizational structure of the WMPA to anchor its responsibilities under MAF. This reform was complemented in 2017 by WMPA also reforming its financial management systems and beginning an innovative partnership with a consortium of local and international NGOs to jointly deliver on management objectives. Although there are many challenges, due to the foundational policies set under GGDPO1, Nakai Nam Theun now has the best opportunity for success, and the reforms gathered momentum under GGDPO2.

128. **One of Lao PDR's first national parks: Nakai Nam Theun.** Early under GGDPO2, MAF established the Protected Areas Management Division under DOF.<sup>62</sup> Reporting to the new Protected Areas Management Division, WMPA became fully budgeted, staffed and centrally managed, helping secure the future of Nakai Nam Theun NPA. More recently under GGDPO2, in February 2019, the Prime Minister Decreed Nakai Nam Theun as Lao PDR's first national park in accordance with category II, up from category VI for an NPA according to the globally recognized categorization system of the International Union for the Conservation of Nature (IUCN). To facilitate the high-level policy reform and the broader development of Lao's new national park system and management of other individual parks, GGDPO2 also supported the development of seven of 12 planned implementing regulations<sup>63</sup> for managing NPAs and national parks. These implementing regulations—which were accelerated forward from GGDPO3—provide guidance on important components of implementing a national park and protected area system, including effective and centralized authority, delegated accountability, standardized and collaborative management, benefit sharing, and community and private sector partnerships for nature-based tourism. The remaining five implementing regulations (indicative GGDPO3 trigger) will regulate: (a) measurement criteria for assessing wildlife management effectiveness and conservation status; and (b) tourism development within national parks and NPAs.

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**Prior Action #12:** *The Recipient, (i) through the Prime Minister, has upgraded Nakai Nam Theun NPA as one of Lao PDR's first national parks in line with international conservation standards; (ii) through MAF, has approved a set of 7 implementing regulations for the management of national protected areas and national parks, including regulations for management*

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<sup>61</sup> Wang, G., J. L. Innes, S. W. Wu, J. Krzyzanowski, Y. Yin, S. Dai, X. Zhang, S. Liu, et al. 2012. "National Park Development in China: Conservation or Commercialization?" *AMBIO: A Journal of the Human Environment* 41: 247–61. Zhong, L., R. C. Buckley, C. Wardle, and L. Wang. 2015. "Environmental and Visitor Management in a Thousand Protected Areas in China." *Biological Conservation* 181: 219–25.

<sup>62</sup> Ministerial Decision No 3822 on organization and function of DOF, dated August 18th, 2017.

<sup>63</sup> These include guidelines on: i) management planning; ii) zoning; iii) outreach; iv) livelihood development; v) land use planning; vi) law enforcement and vii) collaborative management (stakeholder partnership arrangements).

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*planning, zoning, outreach, livelihood development, land use planning, law enforcement, and collaborative management; and (iii) through MAF, has established the structure, mandates, and activities of the new Protected Areas Management Division under the Department of Forestry, tasked with managing the system of national parks and protected areas, taking into account principles of effective and centralized authority, delegated accountability, standardized and collaborative management, benefit sharing, and community private sector partnerships for nature-based tourism.*

As evidenced by:

- (i) Prime Minister's Decree No. 36/GoL establishing Nakai Nam Theun as a National Park, dated 15 February 2019 (**Completed**)
  - (ii) Ministerial Instruction No. 145/MAF adopting 7 guidelines for managing protected areas, dated 13 February 2019 (**Completed**)
  - (iii) Ministerial Decision No 3822 on organization and function of DOF, dated August 18th, 2017 (**Completed**)
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129. **Expected results.** Results will be measured by the number of national parks established where progress in reaching management objectives is at least moderately satisfactory, as measured by the Management Effectiveness Tracking Tool (METT)<sup>64</sup> [Baseline: 0 (2017); 2022 Target: 2 (Nakai Nam Theun and Nam Et-Phou Louey (2022)]. With the 2019 Decree upgrading these two NPAs to Lao's first two national parks and regular METT scoring that continues to show management improvement, the end of program target has been achieved early; the METT target will possibly be revised to "Satisfactory" during GGDPO3 preparation.

130. **Expected climate co-benefits.** This policy action focused on protected areas will generate both adaptation and mitigation benefits resulting from retained forest cover and biosphere conservation over 15 percent of Lao PDR's territory, including primary and natural forests which are carbon-dense. Adaptation benefits accrue from reduced flooding, erosion, and drought from intact forest ecosystems.

#### ***Policy Track 3.3. Leveraging green growth policies to control non-point source pollution***

131. **Improper management of pests and toxic pesticides in agriculture hinders the access of Lao produce to markets and damages public health and the environment, undermining economic growth and disproportionately affecting the poorest and most vulnerable groups.** Effective pesticide management helps build the foundation for sustainable agricultural growth by reducing the cost of pollution on human health, therefore contributing to human capital formation.

132. **Sound pesticides management protects worker health, prevents associated labor productivity loss, and can help boost trade in foods that are safe and do not pose a risk to consumer health.** It is also useful to meet the increasing demand for organics in Lao DPR and internationally. However, pesticide application in commercial farms and plantations is often excessive, includes highly hazardous banned substances, and is carried out with insufficient or no protective gear, disproportionately affecting the poorest and most vulnerable groups. Waste packaging materials are disposed of, stored, or reused improperly, often within easy reach of children. Health impacts have been well documented; for example, blood tests have shown elevated levels of harmful substances, including in children. Food safety studies have found pervasive contamination of a broad range of fruits and vegetables with pesticide residues. Since Lao PDR does not produce any pesticides, these products are acquired from neighboring countries. Most pesticides on the market are labeled in foreign languages or even mislabeled to cover up

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<sup>64</sup> The Management Effectiveness Tracking Tool (METT) is used globally to analyze and score PA management. For the purpose of results measurement under the GGDPO, a METT score of 40 is moderately satisfactory. Details: [https://www.protectedplanet.net/system/comfy/cms/files/files/000/000/045/original/WWF\\_METT\\_Handbook\\_2016\\_FINAL.pdf](https://www.protectedplanet.net/system/comfy/cms/files/files/000/000/045/original/WWF_METT_Handbook_2016_FINAL.pdf)

banned substances, and often sold by non-licensed businesses. For example, MAF inspections in 2016 in four provinces found that 13 percent of 208 inspected agricultural suppliers had a license to sell pesticides.

**133. The GGDPO series is helping establish a stronger regulatory framework to reduce the availability of prohibited pesticides and facilitate their more efficient and appropriate application in agriculture.** GGDPO1 supported the adoption of the 2016 Law on Chemicals which established provisions on the management, monitoring, and inspection of chemicals for minimizing health risks and promoting cleaner production. This Law represents the first unified overarching framework for regulating chemicals in Lao PDR, including pesticides, and entrusts MAF with the responsibility to manage and monitor chemicals used as pesticides. GGDPO1 also supported the 2016 Law on Plant Protection and Quarantine which introduces international standards on phytosanitary measures, including pest management. In 2016, MAF also issued a regulation on labeling to counteract the pervasiveness in the pesticides market of inaccurate and/or foreign labelling. Under GGDPO2, the Prime Minister issued a new pesticides management Decree in August 2017 that demonstrates commitment to managing agricultural pollution and is complemented by a Ministerial Decision on Control of Pesticides Businesses which provides the specific regulations to implement the new law and Decree. The control of businesses involved in import, formulation, sale and distribution of pesticides provides MAF a legislative basis for regular inspections of pesticides businesses, which is the end of program result for this policy track.

**134. Once fully implemented, the reforms supported under the GGDPO series will help increase the export potential of Lao produce, reduce human exposure to environmental health risks, and reduce water and soil pollution.** It will also contribute to the achievement of SDG Target 3.9: "By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and oil pollution and contamination."

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*Prior Action #13: The Recipient, through the Prime Minister and MAF, has established legal provisions and procedures for regulating pesticides, including licensing businesses involved in import, formulation, sale and distribution of pesticides.*

As evidenced by:

- (i) Prime Minister's Decree No. 258/PM on Pesticide Management, dated 24 August 2017 (*Completed*)
  - (ii) Ministerial Decision 238/MAF on Control of Pesticides Businesses, dated 14 February 2019 (*Completed*)
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**135. Indicative GGDPO3 trigger.** MAF has issued a Ministerial Decision establishing the registration process for pesticides.

**136. Expected results.** Number of inspections by MAF of pesticide sellers for compliance with pesticide regulations per year [Baseline: 0 (2017); Target: 140 (2022)].

**Expected climate co-benefits.** According to the Intergovernmental Panel on Climate Change (IPCC) approximately 30% of global emissions leading to climate change are attributable to agricultural activities, including pesticide use contributions to nitrous oxide emissions. The active ingredients in agriculture pesticide include fumigants, which are among the most hazardous and greenhouse gas-producing pesticides. Fumigant use has been shown to contribute to nitrous oxide, a greenhouse gas 300 times more potent than carbon dioxide. In addition, reductions of fertilizers and pesticides use contribute to reductions of secondary fine and ultrafine particle matter (PM<sub>2.5</sub> and PM<sub>1</sub>). These fine and ultrafine particles include black carbon, one of the most damaging short-lived climate pollutants.

#### ***Policy Track 3.4. Strengthening Pollution Monitoring and Management***

**137. Lao PDR's pollution management agenda, an environmental priority for green inclusive growth, is rising fast. Poor environmental quality leads to serious health effects and contributes to trap people**

**in poverty.** Pollution causes illnesses that disproportionately affect low-income people especially women, children, the elderly, and other vulnerable groups. These illnesses reduce the productivity of adults and, in the case of children, affect their ability to attend school and learn, which subsequently limits their opportunities for professional and human development. Efforts to reduce pollution are thus an investment in human capital accumulation, in particular among women, leading to higher productivity and economic growth. Innovative pollution management can also help drive growth and promote circular economy approaches by supporting the use of waste as inputs for value addition. The first steps along this path to sustainably accumulate human, physical and natural capital include efficient evidence-based regulation of key pollutants, and the GGDPO series is helping catalyze this transformation.

138. **The GoL is beginning to act on pollution management, recognizing that pollution of all types are increasing, and imposed an equivalent cost of 14.6 percent on Lao PDR's GDP in 2017, causing up to 11,000 early deaths per year, and contributing to stunting in children.<sup>65</sup>** Household air pollution from the use of solid fuels caused 45 percent of the deaths, a quarter was from drinking water pollution (including arsenic) and inadequate sanitation and hygiene, and a quarter from outdoor PM2.5 air pollution. The remaining 5 percent of deaths was the result of lead exposure. Childhood lead poisoning can have lifelong health impacts, including learning disabilities, anemia, and disorders in coordination, visual, spatial and language skills. No safe blood lead level threshold has been identified for children.

139. **With the support of GGDPO1, the GoL established more stringent air and water quality standards as part of the National Environmental Quality Standards.** The GoL air quality standard for annual PM2.5 is set at 10 µg/m<sup>3</sup> in line with the World Health Organization. Long term exposure to ambient PM2.5 concentrations of only 5 and 10 µg/m<sup>3</sup> increases risk of ischemic heart and cerebrovascular disease (stroke) mortality by 5-8 percent and 10-14 percent respectively, while the mortality risk from pulmonary disease, lung cancer and lower respiratory infections reaches 6-12 percent at 10 µg/m<sup>3</sup>. One third of deaths from stroke, lung cancer and heart disease are due to air pollution. For lead a one-year air quality standard of 0.15 µg/m<sup>3</sup> is set, below levels that empirical research has associated with neuropsychological impairment in children.

140. **Under GGDPO2, MONRE promulgated two ministerial decisions to regulate standard procedures, methods, and parameters for sampling and analyzing key air and water pollutants.** These regulations established the basis for robust quality control and quality assurance systems for environmental monitoring. Standardized methods are critical for designing and implementing policies to address the clean dimension of greener growth. This reform will allow the thresholds set under GGDPO1 to be enforced. Additional air and water pollutants, such as lead in air, will be added to the regulated list over time. For GGDPO3, the GoL plans to strengthen policy measures to reduce air and water pollution, as well as precursors of toxic pollutants.

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*Prior Action #14: The Recipient, through MONRE, has regulated standard procedures and parameters of methods for sampling and analyzing PM2.5 and PM10 in air, as well as arsenic, cyanide, lead, manganese, mercury, fecal coliform and total coliform (as part of pathogens) in water.*

As evidenced by:

- (i) *Ministerial Instruction No 5688/MONRE on sampling and analysis of key water quality pollutants, dated 19 November 2018 (Completed)*
  - (ii) *Ministerial Instruction No 6439/MONRE on sampling and analysis of key air quality pollutants, dated 14 December 2018 (Completed)*
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141. **Indicative GGDPO3 trigger.** The Recipient, through MONRE, has issued ministerial decisions that

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<sup>65</sup> World Bank 2019 (forthcoming), *State of Environment in Lao PDR*. ASA.

(i) define the identification criteria of Priority Pollution Watch Sites (PPWS); (ii) establish a mechanism for public disclosure of monitoring results in PPWS; and (iii) reduce exposure to lead poisoning by phasing out manufacturing, import, sale, and use of lead-containing paints and children's products coated with lead-containing paints.

142. **Expected results.** The results will be measured by (i) the number of Priority Pollution Watch Sites for which monitoring reports (including at least PM2.5, arsenic, lead, and pathogens concentrations) are updated and publicly disclosed annually (Baseline: 0; Target: 3); and (ii) the percentage of legally imported paint brands offering unleaded paint in the national market [Baseline: 0 (2022); Target: 100 percent (2022)].

143. **Expected climate co-benefits.** This policy action will deliver significant climate mitigation co-benefits through reduced air pollution, in particular PM2.5, short-lived climate pollutants, and nitrous oxide emissions. Many air pollutants harmful to human health also damage the climate. Fine particles of black carbon<sup>66</sup> (soot) from diesel and biomass combustion and ground level ozone are leading examples.

#### **4.3 LINK TO CPF, OTHER BANK OPERATIONS AND THE WBG STRATEGY**

144. **The GGDPO series closely reflects the priorities for achieving the twin goals identified in the Lao PDR Systematic Country Diagnostic (SCD) and supported by the Country Partnership Framework (CPF).** The GGDPO supported reforms directly address two of the five top SCD priorities: (i) promoting strategic use of natural resources and responsible management of the environment; and (ii) putting public debt on sustainable path and strengthening financial sector stability. These priorities are also transposed in the CPF for FY17–FY21,<sup>67</sup> as the GGDPO series supports CPF objective 1.1 of putting public finances on a sustainable path and supporting financial sector stability, objective 3.1 of promoting environmental protection and sustainable natural resources management, and objective 3.2 of putting in place enhanced disaster risk management and climate and disaster resilience. More broadly, the GGDPO series is expected to improve the overall governance system by bringing multi-sectoral interests together towards a clear coordination mechanism, thus addressing a key cross-sectoral issue identified in both the SCD and CPF.

145. **A multi-sector portfolio of investment and technical assistance lending of the World Bank Group (WBG) supports the GGDPO agenda.** On economic management, the programmatic Lao PDR Economic Monitoring (P168469) and Lao PDR Financial Sector Development (P160715) activities complement the GGDPO. Support on the tax agenda is provided through the Public Financial Management project (P167661). On environmental management, WBG operations support improvement of the policy and regulatory framework for managing concession agreements, such as the IFC Environment and Social Standards in the Hydropower Sector Advisory Services, and the Second Lao Environment and Social Project (P128393) which supports the GoL on protected area management, wildlife law enforcement, and green growth planning. The Mekong IWRM Project (P148647, P159447) finances national and regional policy and institution building to introduce integrated river basin management. The Scaling-Up Participatory Sustainable Forest Management Project (P130222) is supporting over 900 villages, while also contributing to climate change mitigation as part of the country's program to Reduce Deforestation and Forest Degradation (REDD+) supported by the Bank's Forest Carbon Partnership Facility (P125082/P165751). A potential new project on Landscapes and Livelihoods (P170559) financed by IDA

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<sup>66</sup> Black Carbon is a short-lived climate pollutant that is a major component of PM2.5, particularly from diesel engines, coal and biomass stoves, and waste incineration. Since black carbon persists for only a short time in the atmosphere, reducing black carbon emissions can have significant near-term climate and health benefits and help slow the pace of near-term climate change.

<sup>67</sup> Report No. 110813-LA. Discussed by the Board of Executive Directors on April 27, 2017.

and the Global Environment Facility will expand support on forests and protected areas, and an upcoming operation on land registration aims to improve tenure. IFC complements by helping private sector forestry companies to establish viable forest-based business models. The DRM Project (P160930) and the second Lao Road Sector Project (P158504) include technical support on integrating climate vulnerability for planning climate resilient road maintenance. Furthermore, a Green Growth Programmatic Advisory Services and Analytics (PASA, P162394) includes nature-based tourism, forestry, environmental governance, and natural capital valuation, and a successor PASA is under design to continue to support the GoL's green growth policy agenda.

#### **4.4 CONSULTATIONS, COLLABORATION WITH DEVELOPMENT PARTNERS**

**146. Lao PDR's decision-making processes are increasingly benefiting from more intensive consultations with stakeholders.** The Law on Law Making envisages mandatory consultation in the drafting of policies, through face-to-face consultations, internet posting, print media and so on. In addition, government agencies are increasingly using hotlines allowing citizens to report grievances and provide feedback. These mechanisms are increasingly being utilized, with the authorities reaching out to the private sector and non-profit associations for feedback on proposed policies. Still, a nascent non-government sector, limited capacity, rigid and complex procedures, and a dominant focus on consultations within the public sector limit the benefits from some consultation efforts.

**147. The consultation process on the GGDPO process has been and continues to be robust.** The extensive engagement that underpinned the drafting of the 8<sup>th</sup> NSEDP, especially reactions to deforestation and growing costs of environmental degradation, prompted the shift towards green growth. The joint GoL-World Bank consultations as part of the SCD and CPF preparation confirmed the desire to transition to a greener economic development path. Consultations also took place on each of the specific policy actions supported by the GGDPO program. MPI organized consultations with public institutions on the findings of the poverty and social impact assessment and the environmental assessment. Importantly, once fully implemented, some of the GGDPO supported reforms, such as on SEA, ESIA, SFM certification, and public information disclosure will further strengthen the country's framework for consultations.

**148. The authorities have an operational framework for collaboration with development partners.** Underpinning the framework is the GoL's Roundtable Mechanism and its 10 working groups. Non-traditional development partners are increasingly invited to participate in the Roundtable. Specific policy interventions have been designed in collaboration with development partners. In planning and financing, the GGDPO support includes collaboration with the Republic of Korea which has partnered with the Bank on a global green growth learning platform and the Korea Green Growth Trust Fund which co-finances the Bank's PASA on Green Growth. Collaboration is also taking place with the Global Green Growth Institute, an NGO which provides technical assistance on green growth potentials and options for environmental fiscal policies. The support on SEA builds on the support by the Swedish International Development Cooperation, the Netherlands, and the UN Development Program. For the forest sector policy track, efforts are closely linked to International Finance Corporation (IFC) advisory services, and advisory and project support to the GoL from the European Union, Germany, Japan, UN Food and Agriculture Organization (FAO), and the Australian Centre for International Agricultural Research. EU, Germany, and France are also engaged in protected areas, and collaboration has been strong in this area with these partners and selected NGOs such as the Wildlife Conservation Society and World Wildlife Fund. In the water sector, the GGDPO series brings new momentum to the support in improving and implementing the Water Law provided by Australia and IFC. The agricultural pollution policy track builds on cooperation with FAO in developing a pesticide management system and drafting legislation on phytosanitary and sanitary measures under the Bank's Trade Development Facility.

## 5. OTHER DESIGN AND APPRAISAL ISSUES

### 5.1 POVERTY AND SOCIAL IMPACT

149. **The policy actions supported by the GGDPO series are expected to reduce poverty and have positive social impact.** The World Bank conducted a Poverty and Social Impact Assessment (PSIA) at the time of the preparation of the GGDPO1 and updated the analysis for GGDPO2. The Bank also developed a Social Accounting Matrix for Lao PDR, which allowed for simulation of the impacts of alternative policy options in key economic sectors – such as agriculture, forestry, mining, construction and tourism – on poverty reduction and income distribution. The PSIA was undertaken to better understand how: (i) the proposed policy actions of the series may affect poor and vulnerable people; and (ii) strengthen the country's systems to address potential negative impacts and maximize positive impacts that may arise from such policy actions. To inform the PSIA, the Bank identified key stakeholders that would potentially benefit or be affected by the GGDPO-supported policies (for example, rural communities, ethnic minority groups, and private companies) and carried out interviews and consultations. The PSIA also incorporated a gender analysis. As the GGDPO2 extends, accelerates, and strengthens the policy tracks supported under GGDPO1, the second operation of the series is not likely to have significant adverse effects.

150. **Under Pillar 1, Prior Actions #1, #2 and #3 are likely to have an indirect, positive effect on poverty reduction.** These actions are intended to support public service delivery. Given the strong correlation between delivery of key services and poverty reduction, these actions can have an indirect impact on reducing poverty. Moreover, delivery of key public services can be disproportionately important to women and children, with primary care and health outreach in all geographic areas critical to maternal, reproductive and child health, in particular. Specifically:

- i. **Prior Action #1** focuses on strengthening revenue mobilization. By increasing revenue mobilization, the GoL creates fiscal space to potentially expand or maintain coverage of key public services, including environmental and waste management, education, health, and improvement and resilience of transport infrastructure, social protection interventions (such as the on-going nutrition convergence approach and the efforts to put in place the building blocks of a Social Protection System) and other inclusive initiatives that would help close the inequality gap. Moreover, since the revenue actions focus on boosting compliance and reducing tax expenditure to generate revenue, these actions are unlikely to adversely affect the poor or poor women.
  - ii. **Prior Actions #2 and #3** aim to strengthen public financial management and public debt management. Over the medium term, improvement of procurement under the Public Procurement Law provides a solid legal framework and an institutional basis to monitor and oversee government procurement. Such legislation is expected to lead to improvement in public procurement processes and allow for more efficient spending of public resources to provide key public services. Similarly, tighter control of public expenditure on wages and salaries by implementing smart cards and PIMS will allow for more resources to be available for key public services such as schools and hospitals, and for the maintenance of existing public services. The Public Debt Management Law is expected to improve the management of public debt and associated interest payments. This will allow for a more sustainable fiscal framework which can help ensure that public resources are available for key public services. This is particularly important for Lao PDR with the recent increase in interest payments resulting in fewer public resources being available for sectors which directly impact poverty reduction.
151. **Prior Action #4 (Pillar 1) promotes a stable financial sector, which is expected to provide a basis**

**for greater financial inclusion and therefore indirectly reduce poverty.** The BoL Law promotes financial sector stability by strengthening international best practice in central bank operations. Additionally, the regular publication of core financial soundness indicators allows the BoL to monitor the health of the financial sector. By ensuring a stable and sound financial sector, where the central bank follows international best practice, an environment is created for increasing financial inclusion. Financial inclusion is expected to have positive impacts on poverty reduction, through access to finance for the poor, particularly women.

**152. In Pillar 2, by consolidating green growth principles in the national strategy, Policy Actions #5-9 are expected to generate significant positive social and poverty effects.** The Bank conducted analytical and advisory services for key sectors covered by the National Green Growth Strategy—for example, energy, road maintenance, environmental health, forestry and nature-based tourism—considering distributional effects of the proposed interventions. Based on this work, the Bank supported the GoL to prepare the NGGS (Prior Action #5), including by providing recommendations to the GoL on how to maximize the positive effects of the strategy on the poorest and most vulnerable groups, including women, who are often the most exposed to forest degradation and loss, biodiversity loss, climate risks such as floods and droughts, water degradation, and pollution. The NGGS will help the government prioritize investments and further policy development that will help improve environmental health outcomes that weight heavily on the poor, as well as improved natural resource management that will boost income and livelihoods opportunities particularly for poor and disadvantaged groups including women and other groups living in remote and vulnerable communities.

**153. Regarding Prior Action #6, increased revenue generation from the EPF and environmental fiscal instruments will have positive impacts by promoting the protection and sustainable use of environmental and natural assets that generate livelihoods and reduce economic and environmental health risks to the poor.** For example, EPF will continue to finance projects that support community livelihoods, such as through community conservation agreements in and around protected areas, which is a gap in current budgeting for protected areas and communities dependent on them. Wastewater discharge fees, fines and charges will help improve environmental health outcomes for poor people who are disproportionately dependent on freshwater bodies for livelihoods and drinking water. The new mandate for levying wastewater discharge fees and services charges, as provided under the new water law would be based on the volume and chemical concentration of the discharge, exempting households without severe impact from obtaining authorization of wastewater discharge, while incentivizing reduction of water pollution loads that would affect fisheries and water supply and therefore health and nutrition. Consequently, the GoL will avoid hardships of such fees on the poor and could invest revenues in green inclusive growth objectives in line with the NGGS and EPF priorities. Although some businesses may pass on the costs of wastewater discharge fees to consumers as higher prices, a potential price increase is not expected to be significant, especially for poorer groups due to their low level of integration in the market economy.

**154. The new legal framework on SEA and ESIA (Prior Actions #7 and #8) is likely to cause significant positive effects in the protection of natural assets and resources that are critical to livelihoods of the poor and vulnerable** by (a) assessing and managing environmental, social, environmental and human health risks linked to policies and investments; and (b) requiring public scrutiny and stakeholder participation in the decision making process, including women, ethnic groups, and other vulnerable people, as well as required disclosure protocols.

**155. Prior Action #9 on climate resilient infrastructure is expected to improve road life and reduce the cost of maintenance.** Safer roads through better and more widespread maintenance would reduce

the risks of loss of life and personal injury, reduce the disruption to essential services, reduce negative impacts on economic activity, and reduce financial costs of emergency response and recovery—particularly for poor and disadvantaged groups including women and other groups living in remote and vulnerable communities.

156. **Under Pillar 3, Policy Actions #10-14 contribute to multiple outcomes in favor of the poor and other vulnerable groups such as:** (i) better recognition of traditional use rights and better valuing of natural resources; (ii) participatory management and decision making and sustainable resource use; (iii) pollution control resulting in better community health outcomes, particularly for those more exposed to contamination and reliant on natural resources (for example, local waterways), such as women and children; and (iv) development of employment or livelihoods opportunities in sustainable activities required for more equitable growth and poverty reduction, as well as increased resilience to natural hazards and climate change, resulting in more sustainable development.

157. **The new legal framework for water resources management (Prior Action #10) establishes integrated water resource management** that will consider water quantity and quality, groundwater management, demand of multiple users, competition of water uses for multiple purposes (drinking, power generation, irrigation, among other), binding rules for water basin management, and criteria for granting water use rights. This legal framework, including recent implementing regulations on groundwater, can lead to cleaner and more reliable water supply to the population, which is crucial for adequate health and living conditions especially among the poor and the development of human capital. The policy will also ensure water resources for productive activities that generate more jobs, livelihoods, and tax revenues that also benefit the poor. The law also establishes increased public participation in water resources decision-making, such as in consultations during water resource assessments and in water basin coordinating committees, helping contribute to favorable outcomes for the poor and vulnerable.

158. **Under Prior Actions #11 and 12 on forest production and conservation, respectively, the analysis shows that the effects were mixed but predominately in favor of the poor and vulnerable.** Temporary short-term negative effects were identified from the stricter control over logging and protection of NPAs, particularly in terms of job losses and potential impacts on the livelihoods of local communities located in and around protected areas, who are currently reliant on unsustainable resource extraction for livelihoods and income generation. These policies can also affect the social organization and culture of local communities, particularly ethnic minorities, who are forest dependent. However, in both cases the adopted policies provide for protection of interest of vulnerable groups, sustainable livelihoods, and support creation of jobs and livelihoods from or related to sustainable forestry, protected area management, and nature-based tourism. Additionally, the regulations set forth prohibit, restrict, and promote activities in total protection zones, controlled-use zones, and buffer zones of protected areas. In controlled use zones, where enclave villages are typically located, the GoL will restrict—rather than prohibit—the customary utilization of natural renewable resources, agriculture and livestock raising, and development of housing and village infrastructure. Additionally, as part of the NGGS (Prior Action #5), the GoL established as a priority action the promotion of community-based activities for sustainable use of forest resources, such as: sustainable harvest of non-timber forest products, sustainable hunting, use of forest as community-managed nature-based tourism sites; processing and export of finished wooden products. These types of community-based projects are also eligible for funds from EPF (Prior Action #6).

159. **Prior Actions #13 and 14 on pollution management involve improvement of human health and work conditions, learning and productivity** (especially among poor and vulnerable groups) which is associated with improved environmental quality. Better regulation of air and water pollution and the use

of hazardous substances will lead to improved environmental health outcomes, helping build human capital. Women and children in particular are highly exposed to indoor air pollution, while children are disproportionately affected by lead. The poor are often not well placed to avoid or counter pollution and are disproportionately susceptible to its harmful health impacts.

## 5.2 ENVIRONMENTAL ASPECTS

160. **The policy actions supported by GGDPO2 will have positive effects on Lao PDR's environment, natural resources, and forests**, as detailed in Annex 6. The World Bank undertook a policy SEA that builds on the 2019 *State of the Environment Report for Lao PDR*.<sup>68</sup> The policy reforms supported by this operation are expected to contribute to improved environmental and natural resource governance, local benefits and opportunities – including livelihoods and jobs, improved ecosystem health, better quality of life through better health outcomes from reduced pollution, and more climate-resilient infrastructure. Lao PDR would also contribute to global climate change mitigation from improved forest management, protected area management, and measures that address air pollution. These benefits are a result of new or updated laws, policies and regulations on such issues as integrated water resource management, legal timber, protected area management and upgrading a key national protected area to a national park, SEA, ESIA, and measures to consistently monitor key pollutants according to good practice, as well as public disclosure requirements defined in a number of these policies. The public investments financed through EPF will also contribute to environmental sustainability, climate resilience, and low carbon growth in the country's key economic sectors. Likely positive effects also include increased forest quality and cover, improvement in biodiversity standing and wildlife populations; maintenance of environmental flows from regulated basins, more equitable use of water among users, improved groundwater management, decrease in pollution from pesticides and industrial discharges, and enhanced resilience of public infrastructure and production activities to natural disasters.

161. **Some of the prior actions supported under Pillar 1 are also expected to have some indirect positive effect on Lao PDR's environment.** For instance, Prior Action #1, by strengthening revenue mobilization, the GoL will have greater ability to (i) increase expenditures in environmental management and green growth priorities; and (ii) recruit staff at regulatory agencies; while more efficient payments systems for road and land taxes could also translate into strengthened enforcement for road transport and land management regulations.

## 5.3 PFM, DISBURSEMENT AND AUDITING ASPECTS

### *Accounting, Recording, and Reporting*

162. **The GoL is taking steps to improve accounting, recording and reporting, but there is need for further efforts.** The Public Finance Development Strategy to 2025 lays out the GoL's vision to strengthen public finances, ensure macroeconomic stability, support socio-economic development, modernize the budget process as well as improve debt management. The 2015 State Budget Law provides a solid foundation for the budget process, covering most budget-cycle issues, providing for a robust role for MOF and the NA, and requiring a medium-term macro-fiscal framework and greater information disclosure,

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<sup>68</sup> World Bank 2019 ASA, forthcoming: *State of Environment Report for Lao PDR*. As part of this, the policy assessment aimed to: i) identify whether the policies supported by the programmatic series are likely to cause adverse or positive significant effects on the environment, forests, and other natural resources; (ii) analyze the country's systems (including legal and institutional framework) for reducing significant adverse effects and enhancing significant positive effects, and identify potential gaps or shortcomings in these systems; and (iii) identify the actions that the GoL is undertaking or is planning to undertake to address the gaps identified in the systems.

including on public debt. However, capacity constraints result in deadlines and some steps (for example, setting of ceilings for budget users) not being met. Under the PFM project, the World Bank is supporting MOF's efforts to build capacity in this area.

163. **The budget execution systems have improved but require important upgrades.** The treasury single account (TSA) has been gradually rolled-out helping the National Treasury to better monitor budget users' accounts. However, there has been less progress in enforcing zero-balance accounting while some accounts remain out of the TSA. The Government Financial Information System (GFIS) provides execution, cash management and reporting functions, though important features (commitment module, full bank reconciliation) are lacking. The GoL is considering options for modernization of the system. The authorities use separate systems for customs operation and debt recording and analysis. A new tax revenue information system is expected in 2018.

164. **National accounting and reporting standards for the public sectors are yet to be fully developed.** The 2013 Amendments to the Accounting Law mandate the use of cash-basis International Public Sector Accounting Standards (IPSAS) (as a transition phase towards accrual-basis IPSAS); however, the actual implementation continues to lag. Technical assistance from the IMF is supporting the GoL's efforts in this area, but additional efforts will be needed over the medium-term.

165. **Budget transparency is improving, but more should be done.** The main aggregates of the budget are available to the public through print media at the time of their approval by the National Assembly. More details are contained in the State Budget Plan, published in the Official Gazette and available in print, though with some delay. According to the 2010 Public Expenditure and Financial Accountability assessment, 65 percent of the budget is disclosed by administrative and economic breakdown, a ratio that does not appear to have changed recently. MOF produces in-year budget execution reports; however, weaknesses in the TSA/GFIS limit their timeliness and accuracy. A set of annual financial statement (summary of budget execution) is prepared within six months of the end of the fiscal year and submitted to the Supreme Audit Office. The full budget execution report is prepared with a time lag of 1.5 years and published in the Official Gazette and on MOF's web-site. The GoL should do more to publish timely and comprehensive budget execution reports and end-of-year financial statements.

#### ***Public Sector Auditing***

166. **The Supreme Audit Organization (SAO) is the external auditor of the public sector.** Established in 2008, its capacity is gradually improving, and it currently performs financial audits only. Since the budget cycle for FY2008/09, SAO audits the set of financial statements prepared by MOF and submits its findings to the NA. A 2016 self-assessment of the SAO's 2009–2020 Action Plan identified improvements in SAO capacity and the ability to monitor and follow up on recommendations, while noting slower progress in the ICT strategy, still limited number of qualified staff, and the need to improve standards.

167. **Internal review of public sector arrangements is underdeveloped.** In the absence of internal audit function, the assessment of internal processes is performed through internal inspection bodies with a mandate largely focusing on prevention of corruption and investigation of alleged cases. A centralized inspection agency coordinates the activities of inspection bodies across the public sector.

#### ***Foreign Exchange Control Environment***

168. **With control mechanisms at the BoL in need of upgrading, the recipient will maintain a dedicated deposit account for the proceeds of the proposed GGDPO2.** The last IMF Safeguard Assessment of the BoL was conducted in 2003, and classified risks as medium to high in the five

categories.<sup>69</sup> The BoL is audited by the SAO with the reports submitted to the NA, but not made public. Bringing the BoL Law in line with good practice will improve the understanding of BoL processes.

#### ***Public Procurement***

169. **The framework for public procurement is evolving but remains basic.** The Decree on public procurement was upgraded into a Law in 2017. In addition, implementing regulations, a standard procurement manual, and standard bidding documents provide further details. The Procurement Monitoring Division, a unit under the Budget Directorate in the MOF is responsible for oversight and regulation of procurement for the whole country but lacks enough staff. There is therefore little oversight over public sector institutions, capacity is weak, and there is no institution to provide training. Lowering procurement related risks would require a stronger regulatory and legal framework, increased transparency, capacity building, and managing conflict of interest.

#### ***Disbursement and Auditing***

170. **The proceeds of the credit will be disbursed against satisfactory implementation of the policy program and the stipulated release conditions.** A single-tranche IDA credit of SDR 28.9 million (US\$40 million equivalent) will be available upon effectiveness of the GGDPO2 Credit Agreement. The recipient will maintain a dedicated deposit account in US dollars at the BoL, as part of the general foreign currency reserves of the GoL, and IDA will deposit the proceeds into that deposit account. An equivalent amount will be credited to a central treasury account used to finance budget expenditures within 30 days.

171. **The administration and accounting of the credit will be the responsibility of the MOF.** Through the MOF, the GoL will report to IDA the amount received in the US dollar deposit account at the BoL, the amounts withdrawn from the deposit account and the amounts credited to the treasury account available to finance budgeted expenditures. The report will also include the date and name/number of the GoL's bank account into which the amount has been deposited. MOF will prepare the report on receipts and disbursements from the deposit account; this report is to be submitted to IDA within 45 days of the final disbursement of the proceeds from the deposit account. The proceeds will not be tied to any specific purchases; however, such proceeds will not be used for ineligible expenditures. If the proceeds are used for ineligible purposes, as defined in the Financing Agreement, the World Bank will require the GoL to refund the amount to IDA. This sum will be cancelled from the credit. If considered necessary by IDA, the GoL will allow an independent external audit of the dedicated foreign currency deposit account in accordance with terms of reference acceptable to IDA.

### **5.4 MONITORING, EVALUATION AND ACCOUNTABILITY**

172. **An institutional structure to monitor progress on the GGDPO has been established, which is being integrated with the monitoring arrangements for the NSEDPA, which was carried out as part of the GoL's mid-term review of NSEDPA-8.** Under GGDPO1, a GGNSC was established, with a Secretariat function based in the MPI. The Secretariat is also responsible for monitoring the results indicators of the GGDPO series and is supported by a Working Group led by MPI's Department of Planning. The Working Group maintains a monitoring and evaluation (M&E) matrix based on regular reporting by implementing agencies on their progress toward the end-of-program results. The Working Group will prepare semi-annual reports on progress in the GGDPO series, including factors that constrain achievement of targets and recommended actions, for follow-up by the GG National Steering Committee. With MPI also in charge

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<sup>69</sup> These medium to high risk categories are external audit mechanisms, legal structures and independence, financial reporting framework, internal audit mechanism and internal control systems.

of the M&E framework for the 8<sup>th</sup> NSEDP, the two processes should become increasingly synchronized.

173. **Data availability and quality remains an issue in some tracks.** Careful selection of result indicators and provision of technical assistance to monitor outcomes help mitigate the risks.

174. **Grievance Redress.** Communities and individuals who believe that they are adversely affected by specific country policies supported as prior actions or tranche release conditions under a World Bank Development Policy Operation may submit complaints to the responsible country authorities, appropriate local/national grievance redress mechanisms, or the World Bank's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed to address pertinent concerns. Affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, because of World Bank non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit <http://www.worldbank.org/GRS>. For information on how to submit complaints to the World Bank Inspection Panel, please visit [www.inspectionpanel.org](http://www.inspectionpanel.org)."

## 6. SUMMARY OF RISKS AND MITIGATION

175. **The overall risk of the GGDPO series is high.** The overall risk rating reflects:

- i. **Political and governance risks are high.** These risks reflect the existence of vested interests albeit within an institutional framework which is trying to modernize. Recent efforts by the authorities include the implementation of the GGDPO-supported program, the continued enforcement of Prime Minister Decrees on illegal logging and banning timber exports, and cancellations of two proposed hydropower dams adjacent to national protected areas. These efforts signal a departure from earlier practices and the wish to rely more on a market economy and the rule of law, which can deliver significant pay-offs in the long term. However, the required adjustments, including the reduced ability to extract rents in the financial and natural resource sectors, could affect the quality and pace of reform efforts, slowing down their implementation. The GGDPO series and the measures it supports mitigates these risks by helping the Government design more robust monitoring and accountability mechanisms and strengthening the capacity of key government agencies involved in economic, environmental, and natural resources management and planning. This support across sectors is complemented by a significant portfolio of advisory services and investment operations.
- ii. **Macroeconomic risks are high.** Fiscal slippages and failure to control debt build up and to address financial sector risks, can cause instability and undermine the Government's appetite for maintaining the momentum for the green growth transition. Externally, a sharper adjustment in response to a growing list of potential shocks, including increasingly likely natural disasters, could have a similar impact. The actions to improve fiscal sustainability and financial stability through the GGDPO-supported measures and the additional parallel reforms the government is undertaking to strengthen the revenue mobilization, PFM and the financial sector with the support of the Bank, IMF and other development partners will help to mitigate these risks.
- iii. **The risks associated with the technical design of the program are substantial.** The analytical underpinnings of the measures supported by the proposed operation are adequate, and the technical design of the program is not excessively complex. Still, while the Government is committed

to promoting a green pattern of growth in Lao PDR, the concept remains relatively new and requires significant coordination across different sectors and ministries, posing a non-trivial challenge, notably at the decentralized level. The number of components in the program adds to the complexity of the operation but also: (i) reflects the level of ambition and aspiration for transformative action by the GoL both on the macroeconomic and environment fronts. While the risks are concrete, they are mitigated by: (i) the Government's commitment to the program demonstrated by the delivery of all prior actions for the first and second operations; (ii) a strong set of complementary Bank-supported investment and advisory services covering all policy tracks and sectors; and (iii) close cooperation with the Prime Minister's Office and participating line ministries, notably MPI which has a coordinating role.

- iv. **Institutional capacity risks are substantial.** Relatively low institutional capacity in Lao PDR may affect the ability to implement or sustain GGDPO-supported policies and thus constrain the achievement of the PDO. These risks are mitigated by: (i) the inclusion of appropriate and measurable results indicators; (ii) the setting of realistic targets; and (iii) the provision of relevant technical assistance and complementary investment financing to implementing agencies to achieve the policy actions. For example, the Prime Minister's establishment of Lao PDR's first national park faces weak—but improving—technical, institutional and financial capacity. The risks facing the new park are mitigated through: (i) on-going advisory services and Bank investment complemented by sustainable financing from Nam Theun Power Company through 2035; (ii) the establishment of a centralized park authority and an effort to improve capacity; and (iii) a ministerial instruction to implement 7 detailed regulations for managing protected areas.
- v. **The fiduciary risk is substantial.** The 2010 PEFA Assessment identified significant weakness in PFM systems (rated D or D+) across many dimensions, including transparency and accountability and internal control mechanisms. The IMF safeguard assessment of the BoL's control environment is outdated. The fiduciary risk of the proposed operation is being mitigated by the adoption of specific disbursement and auditing measures under the responsibility of the Ministry of Finance. These measures have successfully ensured that the fiduciary environment for the delivery of the GGPDO-1 remained appropriate. Specific to the GGDPO2, fiduciary arrangements are reasonable and able to provide sufficient assurance that proceeds will be channeled for eligible purposes. Additionally, the World Bank's on-going Public Financial Management Program in Lao PDR aims to strengthen PFM systems and thus mitigates the fiduciary risk.
- vi. **Vulnerability to disasters is substantial.** Lao PDR experiences regular natural disasters, such as the 2018 flooding. Temperature projections reveal increasing intensity and frequency of extreme events, including higher rainfall and flooding risks during wet season; and longer dry seasons accompanied by more severe water shortage. The 2018 flooding was the most expensive ever recorded in terms of damages and losses. As such, the cost of recurring natural disasters may periodically negatively affect the fiscal position of the country and reduce the estimated magnitude and pace of the fiscal consolidation plan. Although vulnerability to natural disasters cannot be completely eliminated, this risk is partially mitigated by key reforms supported by GGDPO2 that address climate and disaster risks, including *inter alia*: the hydromet law, water law, regulations for incorporating resilience standards into road maintenance; SEA regulation, ESIA Decree; and policies to improve forest and protected area management which reduce flooding intensity.

**Table 4: Summary Risk Ratings**

<b>Risk Categories</b>	<b>Rating (H, S, M, or L)</b>
1. Political and governance	High
2. Macroeconomic	High
3. Sector strategies and policies	Moderate
4. Technical design of program	Substantial
5. Institutional capacity for implementation and sustainability	Substantial
6. Fiduciary	Substantial
7. Environment and social	Low
8. Stakeholders	Moderate
9. Other: Vulnerability to disasters	Substantial
<b>Overall</b>	<b>High</b>

## ANNEX 1: POLICY AND RESULTS MATRIX

Policy Actions			End of Program Results Indicators (at the end of DPO series in 2021)	
GGDPO1: Prior Actions	GGDPO2: Prior Actions	GGDPO3 triggers (Indicative)		
<b>Pillar 1. Strengthening prospects for fiscal sustainability and financial sector stability</b>				
<i>Policy Track 1.1. Lowering the risks to macroeconomic stability</i>				
<p><b>Prior Action #1:</b> The Recipient, through the Prime Minister, has taken steps to support fiscal consolidation, through:</p> <ul style="list-style-type: none"> <li>(i) eliminating tariff exemptions on fuel imports for investment projects, as evidenced by <i>Notification No. 1152/PM dated 9 August 2016</i>;</li> <li>(ii) limiting the intake of civil servants to up to 5,000 in 2017, as evidenced by <i>Decision No. 73/PM dated 29 August 2016</i>; and</li> <li>(iii) has revised the Implementing Instructions for the Value-added tax as evidenced by <i>Instruction No. 0077/MF dated 11 January 2017</i>.</li> </ul>	<p><b>Prior Action #1: To improve revenue mobilization:</b></p> <ul style="list-style-type: none"> <li>(i) the Recipient, through the Ministry of Finance, has approved the Tax Strategy Development Plan (2018-2020);</li> <li>(ii) the Recipient, through the Ministry of Finance, has implemented an electronic payment system for Road Tax and Land Tax;</li> <li>(iii) the Recipient, through the National Assembly, has approved the amendments to the Value-Added Tax Law; and</li> <li>(iv) the Recipient, through the Ministry of Finance, implemented the Tax Revenue Information System (TaxRIS) at (a) the Department of Tax at the central level; (b) the provincial Tax Departments in 5 provinces; and (c) 5 district tax offices.</li> </ul> <p>As evidenced by:</p> <ul style="list-style-type: none"> <li>(i) <i>Ministerial Instruction No. 1781/MOF, approving the Tax Strategy Development Plan, dated 13 June 2018 (Completed)</i></li> <li>(ii) Ministerial Instruction: <ul style="list-style-type: none"> <li>(a) <i>No. 3455/MOF, implementing electronic payment system for Road Tax dated October 2017 (Completed)</i></li> <li>(b) <i>No. 3909/MOF, implementing electronic payment system for Land Tax dated December 2018 (Completed)</i></li> </ul> </li> <li>(iii) <i>Approval by President of the National Assembly - No. 089/NA, dated June 2018 (Completed)</i></li> <li>(iv) <i>Ministerial Instruction No. 3532/MOF for the implementation of TaxRIS signed by Minister of Finance on 2<sup>nd</sup> November, 2018 to implement TaxRIS by 5<sup>th</sup> November 2018 (Completed)</i></li> </ul>	<p><b>Trigger #1: To improve revenue mobilization:</b></p> <ul style="list-style-type: none"> <li>(i) the Recipient, through the Ministry of Finance, submits to the National Assembly for approval the Excise Tax Law;</li> <li>(ii) the Recipient, through the Ministry of Finance, submits to the National Assembly for approval the Income Tax Law;</li> <li>(iii) the Recipient, through the Ministry of Finance, has submits for approval amendments to the General Tax Administration Law;</li> <li>(iv) the Recipient, through the Ministry of Finance, publishes the implementing instructions for the amended VAT Law; and</li> <li>(v) the Recipient, through the Ministry of Finance, adopts a risk assessment criteria for audit planning and case selection of large tax payers at headquarter level.</li> </ul>	<p><b>Indicator #1:</b> Tax buoyancy (i.e., tax revenue as a share of GDP) increases: <b>Baseline:</b> 12.4% of GDP (2016) <b>Target:</b> 12.9% of GDP (2022)</p>	
	<p><b>Prior Action #2: To strengthen public financial management:</b></p> <ul style="list-style-type: none"> <li>(i) the Recipient, through the National Assembly and Ministry of Finance respectively, has approved the Public Procurement Law and associated implementing instructions; and</li> </ul>	<p><b>Trigger #2: To strengthen public financial management:</b></p> <ul style="list-style-type: none"> <li>(i) the Recipient, through the Ministry of Finance, prepares a set of revised standard bidding documents in accordance with the new Public Procurement Law; and</li> </ul>	<p><b>Indicator #2:</b> Public sector wage bill (as a percentage of GDP) decreases: <b>Baseline:</b> 6.9% of GDP (2016) <b>Target:</b> 6.2% of GDP (2022)</p>	

Policy Actions			End of Program Results Indicators (at the end of DPO series in 2021)
GGDPO1: Prior Actions	GGDPO2: Prior Actions	GGDPO3 triggers (Indicative)	
	<p>(ii) the Recipient, through the Ministry of Home Affairs, has rolled out (a) Smart Cards to at least 18 Government entities at the central level; and (b) the Personnel Information Management System (PIMS) to at least the Prime Minister's Office and MoHA.</p> <p>As evidenced by:</p> <p>(i) (a) <i>Approval by President of the National Assembly of the Public Procurement Law No. 62/NA dated November 2017 (Completed); and (b) Ministerial Instruction for the Public Procurement Law No. 0477/MOF dated February 2019. (Completed)</i></p> <p>(ii) Report No. 03/MoHA from the Minister of MoHA to the Prime Minister of Lao PDR, dated January 2019. <i>(Completed)</i></p>	<p>(ii) the Recipient, through the Ministry of Finance, approves the structure Chart of Accounts structure.</p>	<p><b>Indicator #3:</b> Capable of recording and reporting of GoL's financial transactions consistent with the IMF-GFSM2014 by 2022 <b>Baseline:</b> No <b>Target:</b> Yes</p> <p><b>Indicator #4:</b> Percentage of central government agencies issuing tenders according to the new Public Procurement Law by 2022: <b>Baseline:</b> 0% <b>Target:</b> 100%</p>
	<p><b>Prior Action #3: To improve public debt management,</b> the Recipient, through the National Assembly, has approved the Public Debt Management Law</p> <p>As evidenced by:</p> <p><i>Approval by President of the National Assembly of the Public Debt Management Law No.87/NA, dated June 2018 (Completed)</i></p>	<p><b>Trigger #3: To improve public debt management:</b></p> <p>(i) the Recipient, through the Ministry of Finance, produces a Public Debt Management Strategy; (ii) the Recipient, through the Ministry of Finance, produces a medium-term borrowing plan and publishes a bi-annual debt bulletin; and (iii) the Recipient, through the Ministry of Finance, publishes the implementing instructions for the Public Debt Management Law.</p>	<p><b>Indicator #5:</b> Public debt (as a percentage of GDP) decreases: <b>Baseline:</b> 58.5% of GDP (2016) <b>Target:</b> 57.9% of GDP (2022)</p>
	<p><b>Prior Action #4: To promote financial sector stability:</b></p> <p>(i) the Recipient, through the Bank of the Lao PDR, has prepared and published 7 core financial stability indicators for the banking sector; and (ii) the Recipient, through the National Assembly, has approved the amendments to the Bank of the Lao PDR Law in line with good practices, including restricting fiscal deficit financing by BoL, auditing of BoL accounts and limiting BoL lending to the financial sector.</p> <p>As evidenced by:</p> <p>(i) <i>Data published on Bank of the Lao PDR's official website; (Completed) and</i></p>	<p><b>Trigger #4: To strengthen financial sector stability:</b></p> <p>(i) the Recipient, through the Ministry of Finance and the Bank of the Lao PDR, approves a restructuring plan for two-state owned banks; (ii) the Recipient, through the Bank of the Lao PDR, submits to the National Assembly for approval the Commercial Banks' Law; and (iii) the Recipient, through the Bank of the Lao PDR, prepares and publishes a set of core financial stability indicators by types of banks.</p>	<p><b>Indicator #6:</b> Public reporting of compliance with regulations of the Capital Adequacy Ratio, by type of banks <b>Baseline:</b> Not reported (January 2017) <b>Target:</b> At least regulatory minimum (2022)</p>

Policy Actions			End of Program Results Indicators (at the end of DPO series in 2021)
GGDPO1: Prior Actions	GGDPO2: Prior Actions	GGDPO3 triggers (Indicative)	
	<i>(ii) Approval by President of the National Assembly of the amendments to the Bank of the Lao PDR Law No. 88/NA, dated June 2018, (Completed)</i>		
<b>Pillar 2: Consolidating green growth principles across the national development strategy</b>			
<i>Policy Track 2.1. Building the foundation for green growth planning and monitoring</i>			
<b>Prior Action #2:</b> The Recipient has incorporated the principles of green growth in national development planning through (i) the National Assembly adopting the 8 <sup>th</sup> NSEDP (2016-2020) that sets forth Outcome 3 and Outputs 1 to 3 associated with environmental protection and sustainable natural resources management <i>as evidenced by Resolution No. 9/NA dated 22 April 2016</i> ; and (ii) the Prime Minister establishing the National Green Growth Steering Committee to oversee the planning, implementation, monitoring, and evaluation of the country's green growth agenda, <i>as evidenced by Agreement No. 95/PM dated 8 December 2016</i> .	<b>Prior Action #5:</b> The Recipient, through the Prime Minister, has approved the National Green Growth Strategy (NGGS), including a monitoring and evaluation framework.  As evidenced by: <i>Prime Minister's Decree No 20/GOL Approving and Adopting the National Green Growth Strategy of Lao PDR to 2030, dated January 31, 2019. (Completed)</i>	<b>Indicative Trigger #5:</b> The Recipient, through the Prime Minister, has established and started implementing a transparent mechanism to (i) report on progress toward the priorities in the National Green Growth Strategy, and (ii) set the basis for green growth planning in the 9 <sup>th</sup> NSEDP (2021–2025).  (MPI DOP / NIER)	<b>Indicator #7:</b> Disclosure of M&E results of the green growth priorities established in the National Green Growth Strategy, as part of the public consultation process of the 9 <sup>th</sup> NSEDP (2021–2025) <b>Baseline:</b> No (2017) <b>Target:</b> Yes (2022)
<i>Policy Track 2.2. Strengthening country instruments for cleaner and resilient green growth financing</i>			
<b>Prior Action #3:</b> The Recipient, through the Prime Minister, has restructured the Environment Protection Fund (EPF) with provisions that (i) create an inter-ministerial governance mechanism to manage the EPF operations and resources, (ii) require revenues and expenditures to be operated by the National Treasury System, and (iii) specify eligible revenue sources, <i>as evidenced by Decree No. 94/PM dated 8 March 2017</i> .	<b>Prior Action #6:</b> The Recipient has established the legal framework to increase revenue generation for environmental and green growth priorities (i) through the National Assembly, by establishing the mandate to levy wastewater discharge fees, fines and service charges, and (ii) through the EPF Board, by establishing mechanisms for EPF to prioritize its resource allocation.  As evidenced by: (i) <i>Decree of the National Assembly President on the Promulgation of the Law on Water and Water Resources 115/POR dated June 22, 2017; (Completed)</i> (ii) <i>EPF By-law 004/EPF Board, dated 30 January 2018; (Completed)</i> (iii) <i>Additional Decision on Amendment and Addition of some Articles of the Decision on Management of the EPF 001/EPF Board, dated 21 March 2019 (Completed)</i>	<b>Indicative Trigger #6:</b> The Recipient (i) on the basis of the water law, has established regulations for levying waste water discharge fees, fines and service charges, and (ii) through MOF, has amended the budget classification to facilitate identification of green growth expenditures.	<b>Indicator #8:</b> Increase in number of revenue sources of the EPF <b>Baseline:</b> 3 – contributions from development partners, contributions from business, and endowment fund (January 2017) <b>Target:</b> 5 (2022)  <b>Indicator #9:</b> Disclosure of annual financial audit of the EPF <b>Baseline:</b> No (2017) <b>Target:</b> Yes (2022)

Policy Actions			End of Program Results Indicators (at the end of DPO series in 2021)
GGDPO1: Prior Actions	GGDPO2: Prior Actions	GGDPO3 triggers (Indicative)	
<i>Policy Track 2.3. Shifting towards decision making informed by priorities for environmental protection and climate resilience</i>			
<b>Prior Action #4:</b> The Recipient, through the Prime Minister, (i) has mandated MONRE to collaborate with key line sectors in the preparation of sectoral Strategic Environmental Assessments, as evidenced by Decree No. 445/PMO dated 19 December 2016, and, through MONRE, (ii) has required Strategic Environmental Assessments in the formulation of all policies, programs, and strategic plans, to incorporate environmental and social sustainability considerations, and the SDGs in public planning, as evidenced by Ministerial Decision No. 483/MONRE dated 6 February 2017.	<b>Prior Action #7:</b> The Recipient, through MONRE in consultation with MPI, has established detailed regulations and procedures for implementing SEAs, including information disclosure and public participation.  As evidenced by: <i>Ministerial Instruction No.6616/MONRE on Procedures for Implementing SEA, dated 31 December 2018 (Completed)</i>		<b>Indicator #10:</b> Number of SEAs undertaken for public policies, programs, and strategic plans <b>Baseline:</b> 0 (2017) <b>Target:</b> 1 (2022)
	<b>Prior Action #8:</b> The Recipient, through the Prime Minister, has issued an ESIA Decree with provisions on screening, scoping, public participation, public information disclosure, assessment requirements, reviewing and approval of ESIA reports, and budgetary allocation for compliance monitoring.  As evidenced by: <i>Prime Minister's Decree No 21/GoL on Environmental Impact Assessment, dated 31 January 2019. (Completed)</i>	<b>Indicative Trigger #7:</b> The Recipient, through MONRE—in consultation with MPI—has issued a ministerial decision creating an integrated database and public information platform to disclose relevant information on ESIA, such as screening, scoping, impact assessment, approval, and post-decision implementation.  (MONRE DNEP)	<b>Indicator #11:</b> Share of investment projects in the mining, energy, and transport sectors that require an ESIA (Group 2 Projects listed in Ministerial Agreement No. 8056/MONRE 2013), with complete disclosure of relevant information (that is, screening, scoping, impact assessment, and approval), through the integrated database and public information platform, prior to approval.  <i>Note:</i> The indicator refers to projects approved after 2019, when GoL expects to adopt the ESIA public information platform. <b>Baseline:</b> 0 (2017) <b>Target:</b> 70% of Group 2 projects (2022)
<b>Prior Action #5:</b> The Recipient, through MPI, has established the public investment project (PIP) review process that takes into account climate resilience and disaster risk considerations, as evidenced by Ministerial	<b>Prior Action #9:</b> The Recipient (i) through MPWT, has adopted road maintenance procedures that integrate climate resilience and disaster risk considerations into the planning and budgeting of PIPs, including identification of vulnerable sections and design; and (ii) through the National Assembly, has adopted the legal framework for	<b>Indicative Trigger #8:</b> The Recipient, through MONRE, has issued a ministerial decision establishing a protocol for sharing and using hydro meteorological data in the planning and budgeting of PIPs.  (MONRE DMH)	<b>Indicator #12:</b> Share of approved road maintenance projects with climate resilience and disaster risk considerations envisaged in the Annual Road Maintenance Plan and Budget that are verified by technical audits

Policy Actions			End of Program Results Indicators (at the end of DPO series in 2021)
GGDPO1: Prior Actions	GGDPO2: Prior Actions	GGDPO3 triggers (Indicative)	
<i>Decision No. 0645/MPI dated 28 March 2017.</i>	<p>collecting and disseminating hydrometeorological information.</p> <p>As evidenced by:</p> <ul style="list-style-type: none"> <li>(i) <i>Ministerial Decision No. 28025/MPWT on Climate Resilient Road Maintenance dated 4 December 2018; (Completed)</i></li> <li>(ii) <i>Law on Meteorology and Hydrology No. 172/NA, dated December 2017 (Completed)</i></li> </ul>		<b>Baseline:</b> 0 (2017) <b>Target:</b> 50% of approved road maintenance projects (2022)
<b>Pillar 3. Incorporating green growth in selected sectors</b>			
<i>Policy Track 3.1. Shifting towards integrated and sustainable water resources management and uses</i>			
	<p><b>Prior Action #10:</b> The Recipient, through the National Assembly and MONRE has established the legal and regulatory framework for integrated water resources management at the national level.</p> <p>As evidenced by:</p> <ul style="list-style-type: none"> <li>(i) <i>Decree of the National Assembly President on the Promulgation of the Law on Water and Water Resources 115/POR dated June 22, 2017. (Completed)</i></li> <li>(ii) <i>Ministerial Instruction on Groundwater Management 1509/MONRE, dated 21 March 2019. (Completed)</i></li> </ul>	<p><b>Indicative Trigger #9:</b> The Recipient, through the Prime Minister, has issued a Decree that regulates River Basin Planning and Management.</p>	<p><b>Indicator #13:</b> Number of river basins that establish the minimum flow requirements set out in their respective River Basin Plan</p> <p><b>Baseline:</b> 0 (2017)  <b>Target:</b> 1 (2022)</p>
<i>Policy Track 3.2. Improving forest resources management for production and conservation</i>			
<p><b>Prior Action #6:</b> The Recipient, through the Prime Minister, has strengthened strictness of timber harvest management and inspection, timber transport and trade in order to control illegal logging in infrastructure areas and timber harvesting, processing, and trade, <i>as evidenced by Order No. 15/PM dated 13 May 2016.</i></p>	<p><b>Prior Action #11:</b> The Recipient, through MAF, has required national implementation of a Timber Legality Assurance System that introduces a definition of legality for timber and timber products, and a methodology for supply chain control and verification that meets relevant international standards, and mandates DOF as the body responsible for relevant international obligations and DOFI as the implementation and enforcement body for the TLAS.</p> <p>As evidenced by:  <i>Ministerial Instruction No. 76/MAF, dated 12 October 2018 (Completed)</i></p>	<p><b>Indicative Trigger #10:</b> The Recipient, through MAF, has issued a ministerial decision that legally establishes an effective and transparent third-party Sustainable Forest Management certification procedure for Production Forest Areas (PFAs) that includes group certification.</p> <p>(MAF DOF)</p>	<p><b>Indicator #14:</b> Increase in number of hectares within PFAs with certified Sustainable Forest Management (SFM) operations based on Lao PDR regulations</p> <p><b>Baseline:</b> 10,949 hectares (2017)  <b>Target:</b> 230,000 hectares (2022)</p>
<p><b>Prior Action #7:</b> The Recipient, through the Prime Minister, has adopted the legal framework to pilot a national park reform by (i) establishing a process to upgrade the</p>	<p><b>Prior Action #12:</b> The Recipient, (i) through the Prime Minister, has upgraded Nakai Nam Theun NPA as one of Lao PDR's first national parks in line with international conservation standards; (ii) through MAF, has approved a</p>	<p><b>Indicative Trigger #11:</b> The Recipient, through MAF, has approved a second set of 5 detailed regulations for the management of national protected areas and national parks, on</p>	<p><b>Indicator #15:</b> Number of national parks established where progress in reaching management objectives is at</p>

Policy Actions			End of Program Results Indicators (at the end of DPO series in 2021)
GGDPO1: Prior Actions	GGDPO2: Prior Actions	GGDPO3 triggers (Indicative)	
<p>conservation standing of Nam Theun 2 (NT2) Watershed to a national park, (ii) establishing the legal status of enclave communities and their access rights to protected area resources, and (iii) adjusting the organizational structure of the NT2 Watershed Management and Protection Authority (WMPA) to anchor its responsibilities under MAF, as evidenced by Decree No. 122/PM dated 21 April 2017.</p>	<p>set of 7 implementing regulations for the management of national protected areas and national parks, including regulations for management planning, zoning, outreach, livelihood development, land use planning, law enforcement, and collaborative management; and (iii) through MAF, has established the structure, mandates, and activities of the new Protected Areas Management Division under the Department of Forestry, tasked with managing the system of national parks and protected areas, taking into account principles of effective and centralized authority, delegated accountability, standardized and collaborative management, benefit sharing, and community private sector partnerships for nature-based tourism.</p> <p>As evidenced by:</p> <ul style="list-style-type: none"> <li>(i) Prime Minister's Decree No. 36/Gol establishing Nakai Nam Theun as a National Park, dated 15 February 2019 (<b>Completed</b>)</li> <li>(ii) Ministerial Instruction No. 145/MAF adopting 7 guidelines for managing protected areas, dated 13 February 2019 (<b>Completed</b>)</li> <li>(iii) Ministerial Decision No 3822 on organization and function of DOF, dated August 18th, 2017 (<b>Completed</b>)</li> </ul>	<p>measurement criteria for assessing wildlife management effectiveness and conservation status, and tourism development within national parks and NPAs.</p> <p>(MAF DOF)</p>	<p>least moderately satisfactory, as measured by the Management Effectiveness Tracking Tool (METT)</p> <p><b>Baseline:</b> 0 (2017)</p> <p><b>Target:</b> 2 – Nakai Nam Theun and Nam Et-Phou Louey (2022)</p>
<i>Policy Track 3.3. Leveraging green growth policies to control non-point source pollution</i>			
<p><b>Prior Action #8:</b> The Recipient, through the National Assembly, has established legal provisions (i) for the management, monitoring, and inspection of chemicals for minimizing health risks and promoting cleaner production as evidenced by the Law on Chemicals, No. 07/NA dated 10 November 2016, and Promulgation Decree No. 202/President dated 12 November 2016, and (ii) on phytosanitary management, including pest management, as evidenced by the Law on Plant Protection and Quarantine, No. 13/NA dated 15 November 2016, and Promulgation Decree No. 197/President dated 28 November 2016.</p>	<p><b>Prior Action #13:</b> The Recipient, through the Prime Minister and MAF, has established legal provisions and procedures for regulating pesticides, including licensing businesses involved in import, formulation, sale and distribution of pesticides.</p> <p>As evidenced by:</p> <ul style="list-style-type: none"> <li>(i) Prime Minister's Decree No. 258/PM on Pesticide Management, dated 24 August 2017 (<b>Completed</b>)</li> <li>(ii) Ministerial Decision 238/MAF on Control of Pesticides Businesses, dated 14 February 2019 (<b>Completed</b>)</li> </ul>	<p><b>Indicative Trigger #12:</b> The Recipient, through MAF, has issued a Ministerial Decision establishing the registration process for pesticides.</p> <p>(MAF DOA)</p>	<p><b>Indicator #16:</b> Number of inspections by MAF of pesticide sellers for compliance with pesticide regulations per year</p> <p><b>Baseline:</b> 0 (2017)</p> <p><b>Target:</b> 140 (2022)</p>

Policy Actions			End of Program Results Indicators (at the end of DPO series in 2021)
GGDPO1: Prior Actions	GGDPO2: Prior Actions	GGDPO3 triggers (Indicative)	
<i>Policy Track 3.4. Strengthening pollution monitoring and management</i>			
<p><b>Prior Action #9:</b> The Recipient, through the Prime Minister and MONRE, has established national air quality, water quality, and vehicle emissions standards, including lead in air and water <i>as evidenced by Decree No. 81/PM dated 21 February 2017, and Ministerial Decision No. 0485/MONRE, dated 7 February 2017.</i> (MONRE PCD)</p>	<p><b>Prior Action #14:</b> The Recipient, through MONRE, has regulated standard procedures and parameters of methods for sampling and analyzing PM2.5 and PM10 in air, as well as arsenic, cyanide, lead, manganese, mercury, fecal coliform and total coliform (as part of pathogens) in water. As evidenced by:            (i) <i>Ministerial Instruction No 5688/MONRE on sampling and analysis of key water quality pollutants dated 19 November 2018 (Completed)</i>            (ii) <i>Ministerial Instruction No 6439/MONRE on sampling and analysis of key air quality pollutants dated 14 December 2018 (Completed)</i></p>	<p><b>Indicative Trigger #13:</b> The Recipient, through MONRE, has issued ministerial decisions that (i) define the identification criteria of Priority Pollution Watch Sites (PPWS); (ii) establish a mechanism for public disclosure of monitoring results in PPWS; and (iii) reduce exposure to lead poisoning by phasing out manufacturing, import, sale and use of lead-containing paints and children's products coated with lead-containing paints.  (MONRE PCD)</p>	<p><b>Indicator #17:</b> Number of PPWS for which monitoring reports (including at least PM2.5, arsenic, lead, and pathogens concentrations) are updated and publicly disclosed annually <b>Baseline:</b> 0 (2017) <b>Target:</b> 3 (2022)</p> <p><b>Indicator 18:</b> Percentage of legally imported paint brands offering unleaded paint in the national market. <b>Baseline:</b> 0 (2017) <b>Target:</b> 100% (2022)</p>

\* For this trigger, 'up to date' means that the latest monthly bank reconciliation to be completed is less than 3 months old – which aligns with the 'green' categorization of DoF's bank reconciliation monitoring platform.

**ANNEX 2: LETTER OF DEVELOPMENT POLICY**



People's Democratic Republic  
Peace Independence Democracy Unity Prosperity

Ministry of Finance

No. 1104 /MOF  
Vientiane, date: 10 April, 2019

**Letter of Development Policy**  
**Second Programmatic Green Growth Development Policy Operation**

To: His Excellency David Malpass  
President of the World Bank Group

From: Deputy Prime Minister of Lao People's Democratic Republic (Lao PDR)

Excellency,

The Government of the Lao People's Democratic Republic (PDR) would like to accord its highest respect and compliments to the World Bank Group for the ongoing assistance for sustainable economic development of Lao PDR.

I am writing, on behalf of the Government of the Lao PDR, to request the second programmatic Green Growth Development Policy Operation of US\$40 million to support our Green Growth program that aims to lower the risks to macroeconomic stability and initiate the transition to green growth that is intended to improve the sustainability, resilience, and quality of our economic growth.

Lao PDR has accomplished strong growth in the last two decades along with significant poverty reduction. This Letter of Development Policy sets out the key actions that our Government has taken, is taking, and will take to ensure strong, sustainable and inclusive growth in the future. Our growth has relied on our natural resources and we believe that more sustainable and efficient management of natural capital and environmental risk is needed to maintain, protect and fuel this engine of growth.

Investing in natural and human capital are together a foundation of greener and more resilient economic growth and poverty reduction. To help sustain such investment, we have prioritized maintaining macroeconomic stability to promote strong, sustainable and inclusive growth.

### **Country development goals**

The program is anchored in our broader national priorities and development objectives articulated in Lao PDR's Vision 2030, the ten-year Socio-Economic Development Strategy 2016-2025 and 8<sup>th</sup> National Socio-Economic Development Plan 2016-2020 approved by the National Assembly in April 2016.

Further, priorities are articulated in the first National Green Growth Strategy for 2030 approved by the Prime Minister in January 2019. The 2018 mid-term review of the 8<sup>th</sup> NSEDP re-confirmed several green growth priorities and the relevance of the National Green Growth Strategy, which will guide the preparation of the 9<sup>th</sup> NSEDP.

The Vision 2030 aims to transform Lao PDR into an upper-middle income country with innovative, green and sustainable economic growth. This transformation includes a strong system to support industrialization and modernization while systematically following a socialist market economy. The Vision for 2030 includes social justice, peace and order; people's livelihoods are improved and solidarity is promoted; there are reduced development disparities between urban and rural areas; there is improved human development that ensures all have access to quality social services; people's rights are protected under the effective rule of law; the administrative state is well capacitated; there is environmental protection and efficient utilization of the natural resources to ensure sustainability; there is political stability and strength; and the country is actively moving toward regional and international integration.

### **Recent economic developments**

Our country has been among the fastest growing economies in the world over the last decade. Our economy expanded by approximately 7 percent on average during 2005-2018, significantly outperforming global and developing country averages at a time when the global economy faced, and continues to face, numerous headwinds. The growth rate was driven by investment in mining and power sectors, but we are also seeing increasing signs of greater diversification and growth in agriculture, services (trade, tourism, financial sector) and manufacturing.

The growth rate of the economy moderated in 2018 year to 6.5 percent from 6.9 percent in 2017. The slowdown in growth in 2018 has been partly due to a combination of the following domestic factors such as the severe floods that hit the country during July September 2018. The floods adversely affected agricultural production and damaged infrastructure in several provinces. Additionally, the moratorium on investment in the mining sector and fiscal consolidation also contributed to the slower growth. These downside factors offset the gains from the industry sector driven by the expansion of construction activities and electricity exports, coupled with robust growth in wholesale and retail trade.

On July 18-19, tropical storm Son-Tinh caused heavy rains and flooding in 55 districts covering 13 provinces. The areas that were most affected by the flood include Vientiane Capital, Huaphanh, Khammouane, and Attapeu provinces. Flooding in Attapeu province was exacerbated by a breach in the Xe-Pien Xe- Namnoy hydropower saddle dam, which caused an unprecedented flash flood in Attapeu

Province that severely affected many lives. In this context, a Post-Disaster Needs Assessment (PDNA), led by the government, was conducted covering the impacts on 17 provinces and Vientiane Capital. The PDNA estimated the total impact of the floods (damage and loss) on the economy at about 3,167 trillion kip (around US\$372 million or 2.1 percent of GDP), of which the total damage accounted for 1,253 trillion kip (around US\$147 million) and the loss totaled 1,914 trillion kip (around US\$225 million). These costs are equivalent to 2.1 percent of losses in GDP in 2018. This makes the overall impact of the recent floods more significant than the two previous flood events in 2009 and 2011. The damage and losses due to the floods vary across sectors. The agriculture (mostly crops, livestock, fishery, and irrigation) and infrastructure sectors (mainly land transport followed by water transport infrastructure such as waterways) were the most damaged.

Notwithstanding the impact of the flood, much tighter control of spending contributed to a narrowing of the fiscal deficit to 4.6 percent of GDP from above 5 percent in 2017. In 2018, the main driver of the decline in the deficit is the reduction in total expenditure. Although there was some improvement in revenue for certain non-tax revenue and certain categories of tax revenue, the overall decline in domestic revenue coupled with the decline in grants contributed to the overall decline in revenue as a percentage of GDP. Meanwhile, public outlays have been rationalized through tighter control of the public wage bill and downward adjustment of non-wage current spending. These measures offset higher interest payments. Fiscal consolidation is estimated to have slowed the accumulation of public debt in 2018.

Monetary and exchange rate policies continue to be guided by the objective of stability and growth. Credit growth moderated owing to fiscal consolidation. With the appreciation of the US dollar, the value of the kip against the US dollar depreciated at a moderate pace over the year. This contributed to a pickup in inflation, which however continues to remain relatively low at around 2 percent.

The current account balance improved with the support of higher net exports. Key exports have driven the increase in export earnings: electricity, due to more generation; and minerals, due to relatively higher metal prices despite flat output. This helped compensate for the decline in agricultural exports due to the impact of floods, and lower agriculture commodity prices such as rubber. Additionally, import compression due to a moderation in the import of consumption goods despite higher oil imports, contributed to the current account deficit declining to 11 percent in 2018 from 12.1 percent in 2017.

### **Outlook and macroeconomic policies to support stability and green growth**

Despite the immediate challenges, the outlook for growth remains broadly positive in light of the recovering global economy and the ongoing proactive reforms the government is implementing to ensure fiscally responsible, sustained, and inclusive green growth. We fully appreciate the importance of macroeconomic stability for our green growth development agenda. In this regard, the fiscal, financial, and green growth principles and policies will aim to achieve sustainable inclusive green growth, low inflation, prudent debt levels and financial sector stability.

### **Fiscal policies and public financial management**

Fiscal policy aims to consolidate, notably, through strengthening the ongoing efforts and reforms towards achieving higher revenue trends and engineering sustainable and efficient public spending. Post-2018 flood, we revised our medium-term fiscal framework to reflect the adverse fiscal impact of

the flood. The framework envisages the fiscal deficit to decline from 4.6 percent in 2018 to 2.8 percent in 2022. The reduction in the fiscal deficit is expected to reduce debt/GDP ratio towards 50 percent by 2025. While we understand that the proposed adjustment is ambitious, we are confident that the set of policies considered make it credible and realistic through actions and policies undertaken by the GOL. In particular:

1. On the revenue side, the GOL has already made efforts to strengthen tax policy and administration. Specific actions include:
  - i. The development of the Tax Strategy Development Plan (TSDP), with the support of the IMF, based on the recently completed Comprehensive Tax Review. The Plan aims to strengthen the tax legislative framework; modernize tax administration; and build staff and institutional capacity;
  - ii. Implementation of the electronic payment system for both Land and Road Tax to improve revenue administration and enhance compliance;
  - iii. Amendments to the Value Added Tax Law which now specifically provides for provision of VAT refund to non-exporters having excess input VAT after three-month carried forward. Additionally, the amended VAT Law redefines principles, regulations, methods and measures on the management and inspection of VAT. This change puts Lao PDR's VAT system closer to international good practices; and
  - iv. The implementation of the Tax Revenue Information System (TaxRIS) which is another electronic platform which improves revenue administration. The platform allows real-time taxpayer information management; tax filing management; tax collection management; and tax audit management. Thus far, TaxRIS has been rolled out to (a) the Department of Tax at the central level; (b) the provincial tax departments in 5 provinces; and (c) 5 district tax offices.

Going forward we envisage completing all ongoing revenue reforms to improve the revenue performance. These include, submission of key pieces of legislation to the National Assembly such as the Excise Tax Law; the Income Tax Law; and amendments to the General Tax Administration Law.

2. To strengthen public financial management:
  - i. The National Assembly has approved the Public Procurement Law and the Ministry of Finance has published the associated implementing instructions. This is a significant development as previously only a Public Procurement Decree existed. In contrast, this Law provides the legal framework which governs public procurement across ministries, agencies, local administrative authorities, state enterprises, local and foreign individuals, legal entities and organizations; and
  - ii. The Ministry of Home Affairs has rolled out Smart cards to at least 18 Government entities at the central level and the Personnel Information Management System (PIMS) to the Prime Minister's Office and Home Affairs sectors. These actions have been undertaken to improve wage-bill and civil service management;
  - iii. Going forward, the GOL expects to reduce the wage bill by tighter control of size of the civil service. To this end, we have reduced the number of new intakes to 1500 in 2019 from 3000 in 2018. Further, under the Public Finance Development Strategy (PFDS) 2025, the Ministry of Finance prepare a

set of revised standard bidding documents according to the new Public Procurement Law; and approve the updated Chart of Accounts structure;

3. The Government of Lao PDR is committed to debt sustainability. To this end, the following actions have been undertaken:

- i. The National Assembly approved the Public Debt Management Law in June 2018. The Law provides a solid legal platform for undertaking debt management reforms. The Law substantially strengthens the governance framework as it will require the development and publication of debt management strategies and regular reporting on debt and risks, including an annual report reviewing and assessing the implementation of the debt management strategy and the medium-term borrowing plan. The Ministry of Finance, with support of the World Bank, is also developing the country's Debt Management Facility;
- ii. Additionally, the 2018 Public Debt Management Law states that it will borrow only on concessional terms for projects which do not have a high economic return. The Government of Lao PDR will suspend public projects that have not yet started to disburse and are assessed to have a low economic return;
- iii. On 18 March 2019, Prime Minister Instruction No. 467 placed a moratorium on any new projects in the power sector to allow for a reassessment of previously approved projects, identification of market, and reformulation of the strategic plan for the power sector. The Instruction states that the Ministry of Energy and Mines is to come up with a detailed demand forecast in domestic and neighboring markets. If the market for the electricity is not secured, such projects would be terminated or not extended. The moratorium will be in place for a duration of two years to make the assessment; and
- iv. The Government of Lao PDR is committed to ensuring debt transparency. The Debt Management and Financial Analysis System (DMFAS) has been adopted to record public debt and report debt statistics to the Debt Recording System of the World Bank on an annual basis for the past several years. The Government of Lao PDR intends to publish a debt bulletin as required by the Public Debt Management Law.

Going forward, we are working with the World Bank on the Public Debt Management Strategy and the implementing instructions for the Public Debt Management Law. As part of the efforts to improve public debt management, we will also introduce a medium-term borrowing plan.

The Government of Lao PDR would also like to thank the World Bank for providing technical assistance and training to our staff on the Debt Sustainability Framework through a variety of events and workshops organized by the World Bank.

#### **Financial sector policies**

We are committed to strengthening the resilience and effectiveness of the banking sector to ensure that our financial sector remains healthy and profitable. To this end:

1. The National Assembly approved the Bank of the Lao PDR Law which, among other things, restricts fiscal deficit financing by Bank of Lao PDR, provides for the auditing of Bank of the Lao PDR (BOL) accounts and limits BOL lending to the financial sector; and
2. The Bank of the Lao PDR has prepared and published 9 core financial stability indicators for the banking sector.

Going forward, to strengthen the banking sector, the BOL submits to the National Assembly for approval amendments to the Commercial Bank Law in line with Basel Core Principles and the BOL further prepares and publishes a set of core financial indicators by types of banks. The BOL is also working with the World Bank on a Deposit Insurance Scheme.

### **Monetary and exchange rate policies**

Monetary and exchange rate policies will continue to be focused on price stability. We are targeting growth rates of monetary aggregates of below 20 percent year-over-year, in line with the expected growth rates and inflation developments as well as gradual deepening of the financial sector. We are aware of the need to improve the functioning of the monetary transmission mechanism but, despite the best efforts of Bank of the Lao PDR, the significant level of dollarization continues to make this a challenging task. Our exchange rate policy will balance price stability and competitiveness of the private sector but also avoid disruptions to economic flows. We are aware that greater flexibility in the exchange rate could, on balance, lead in this direction and also help protect foreign exchange reserves and are committed to steps in this direction over the medium term. Still, decisions in this area would need to be taken in concert with strengthening the monetary policy framework to mitigate the impact of exchange rate pass-through to inflation. In this vein, we have removed the interest rate cap on kip denominated deposits in early 2019.

### **Green growth policies**

#### ***Building the foundation for green growth planning and monitoring***

The foundation for our green growth transformation continues to strengthen during 2017-2019. Lao PDRs consolidation of a green growth pathway began with the incorporation of green growth principles at strategic planning and monitoring levels. In April 2016, the National Assembly adopted the 8th NSEDP (2016-2020), which establishes concrete environmental protection and sustainable natural resources management outcomes and outputs, and lays the foundations for a transition to a clean, resource-efficient, and resilient growth. To further advance this transition, the Prime Minister in 2016 established the Green Growth National Steering Committee (GGNSC) to guide green growth planning, implementation, monitoring and reporting. The Deputy Prime Minister/Minister of Finance chairs the GGNCS, with the MPI as its Secretariat, and including the representatives from MONRE, MOF, MAF, MEM, MOIC, MPWT, MOST, PMO, NIER, and MOICT, among others based on the Prime Minister's Decision No 95/PM dated 8 December 2016. The GGNCS oversaw the development of the first Lao PDR National Green Growth Strategy for 2030 which was approved by the Prime Minister in January 2019, and which includes a monitoring and evaluation framework relevant for Lao PDR. The 2018 mid-term

review of the 8 th NSEDP re-confirmed several green growth priorities and the relevance of the new National Green Growth Strategy, which will guide preparation of the 9th NSEDP.

Going forward, the Government is establishing a "Green Growth Promotion Center" with a mandate to operationalize the strategy by incorporating its priorities in key planning and budgeting processes. We will also regularly report on progress made on implementing the Strategy based on the strategy's monitoring and evaluation framework.

#### ***Strengthening country instruments for cleaner and resilient green growth financing***

Our fiscal policy reforms will provide macroeconomic sustainability, as discussed above, but will also help enable Lao PDR's transition towards green and resilient growth. The GOL has taken preliminary steps to strengthen green fiscal policies. We are well advanced in the process of strengthening the Environment Protection Fund (EPF), one of the Lao PDR Government's key mechanisms for financing green growth. To this end, we have established inter-ministerial governance that will strengthen EPFs management and operations. We have also taken steps to increase EPPs transparency by requiring that all income sources be deposited and debited through the National Treasury System, that EPPs assets be recorded in the National Registry, and specifying the eligible revenue sources. We have also improved the transparency and results-based orientation of EPF's project cycle including identification, preparation, approval, implementation, closure and termination of projects financed by EPF. At the same time, and possibly as a result of these actions, EPF has started to successfully diversify its revenue sources including concession fees, international development assistance, and is developing a mechanism for channeling payments for environmental services such as from results-based financing for reduced emissions from deforestation and forest degradation and land use change.

To move forward on environmental fiscal instruments, we are considering additional actions for expanding the revenue base from environmental taxes as well as from pollution fees, fines and charges, building on the recent new Law on Water and Water Resources promulgated in June 2017 that provides the mandate for levying charges, fines, and fees for wastewater. We are also considering developing green growth budget tagging. These policy instruments will help incentivize better environmental performance in addition to generating revenue that can finance enforcement.

#### ***Shifting towards decision-making informed by priorities for environmental protection and climate resilience***

*Strategic environmental assessments (SEA):* Lao PDR remains fully committed to mainstreaming green growth principles across key economic sectors, particularly through tools such as policy-level strategic environmental assessments (SEA) that use analytical work and public participation to strengthen the design and implementation of policies and programs. While the 2012 Environmental Protection Law introduced SEAs into Lao PDR's legal framework, we recognized that additional steps were needed to ensure the effective use of SEAs. For this reason, in December 2016, the PM issued Decree No. 445/PMO, granting the Ministry of Natural Resources and Environment (MONRE) the mandate to collaborate with all sectors on SEAs. Furthermore, MONRE adopted in February 2017 a Ministerial Instruction requiring SEAs to incorporate environmental and social sustainability considerations in the formulation of all policies and strategies.

Since then, these reforms have been deepened, complemented with a new Ministerial Instruction issued in December 2018 defining detailed regulations and procedures for conducting policy SEAS, including information disclosure and public participation. This policy has been strengthened and its delivery accelerated so that we could begin to develop SEAS important for our green growth transformation. As such, the full set of SEA regulations are now ready to be implemented for a variety of policy-level topics, including the National Green Growth Strategy, and national sectoral policies such as for energy, water resources, mining, agriculture, and transport.

Going forward, we aim to carry out a SEA on the National Green Growth Strategy to enhance national development and sector planning and investment. The SEA regulations will guide public servants and practitioners on the best practices for incorporating social and environmental considerations in the design and implementation of the National Green Growth Strategy, cross-cutting and sectoral public policies, and national programs. The SEA regulations will also contribute to strengthening institutional capacity over time and supporting social learning in the design and implementation of public policies. By ensuring meaningful participation from relevant stakeholders, including vulnerable groups often excluded from decision-making, the SEA will contribute to make growth both green, inclusive, and climate-informed.

*Environmental and Social Impact Assessment (ESIA):* We also recognize the need to better integrate environmental and social considerations into investment projects, and are acting on this. Our Law on Environmental Protection introduced Environmental and Social Impact Assessment (ESIA) as a tool to identify, prevent, and mitigate the potential impacts of investment projects. After conducting a thorough review of Lao DPR's and other countries' experiences, in January 2019 the Prime Minister decreed a detailed ESIA regulation that incorporates international good practice in every stage of the ESIA process, including screening, scoping, public participation, information disclosure, assessment requirements, and criteria for approval of ESIA reports.

Going forward, to further increase accountability, transparency, and inclusiveness, we will establish a database and public information platform through which interested parties will be able to obtain relevant information on ESIAAs submitted for government approval and on the government's response. We will also continue to implement ESIAAs according to the set of laws and policies now in place.

*Climate-resilient infrastructure:* Lao PDRs active engagement in international climate change negotiations is evidenced by the submission of our Intended Nationally Determined Contribution (INDO) to the United Nations Framework Convention on Climate Change (UNFCCC) and our ratification of the Paris Agreement in September 2016. We have adopted ambitious and fair mitigation goals spanning several sectors. However, our Contribution also emphasizes that we will increase resilience of key economic sectors and natural resources to climate change and its impacts, as part of our climate change adaptation efforts.

To this end, the MPI approved in February 2017 a decision to establish a public investment project (PIP) review process that takes into account climate and disaster risk considerations to select a project's location and its engineering design. We focused on the transport sector, identified as a priority in our NDC because of its fundamental contributions to Lao PDR1s economy and its high vulnerability to climate hazards. In December 2018, MPWT adopted regulations and procedures that integrate climate and disaster risk considerations into the planning and budgeting for PIP proposals for road maintenance. The regulations and procedures include identification of climate-vulnerable and disaster-

prone segments of the road network, and improved road design standards. Our National Assembly has also approved a new Law on Meteorology and Hydrology in December 2017, which mandates provision of weather and water data for sector activities. Improved availability of hydro-meteorological information and regulations for prioritization and preparation of budget proposals for road maintenance will improve the planning processes for road maintenance and make the road system more resilient.

Going forward, we will ease access to and systematic use of hydromet information. An information platform is being established at MONRE that will allow improved storage, access and usage of such data. Regulations will be developed establishing protocols for data use and sharing to allow institutions to analyze and interpret such information to integrate climate and disaster risk considerations into the planning and budgeting of PIPS.

#### ***Shifting towards Integrated Water Resource Management and Uses***

Water resources are one of the most valuable natural resources driving Lao PDR's economic growth. Managing water resources more efficiently and sustainably is needed to address the diverse economic activities, ecosystems, and social groups that depend on them, particularly because water demand will continue to grow while climate change will alter the hydrological regime. In response to this challenge, in June 2017 the new Law on Water and Water Resources came into effect. The water law is a cornerstone of the country's green growth program, with implications on environmental protection, water pollution and waste, energy, agriculture, forest, watersheds, wetlands, flood and drought risk, climate change, groundwater, information and data management, nutrition, and tourism -- and managing tradeoffs and harnessing mutual opportunities among these themes and sectors.

This new water law constitutes a transformational shift for Lao PDR because it centers on an integrated water resource management (IWRM) approach that will help overcome institutional constraints for the use and exchange of data and information among different basin agencies and stakeholders; formulate river management plans; promote groundwater management; address water pollution through regulation and fiscal instruments such as waste water discharge fees, fines and service charges; and manage environmental flows. Implementation of the new water law has begun, starting with a Ministerial Instruction on groundwater management approved in March 2019, as well as regulations for water quality monitoring approved in November 2018.

The Ministry of Energy and Mines has a Policy on Sustainable Hydropower Development that stresses the need to consider hydropower within a broader water resources management framework. This premise has recently been strengthened by a revised Electricity Law in 2017 requiring hydropower planning at the basin level, which is a significant shift in sector management and requires multi-criteria (including criteria related to water and forest) to be explicitly considered in project selection.

Going forward, a Prime Minister's Decree on River Basin Planning and Management is under development and will be a strong action as it will (i) form an enforceable standard for river basin management, rather than a set of guidelines for planning; and (ii) includes river basin coordinating committees, water allocation rules, minimum flows and water user permits, in addition to plans. To help build the evidence base for implementing the new law and the upcoming river basin management plans, three Water Resource Assessments in river basins are underway to analyze water users

(ecological flows, hydropower, irrigation, domestic water supply, and recreational use) and evaluate water quality using standard methods.

#### ***Improving forest resource management for production and conservation***

As part of pathway toward a "new green forest economy," we continue to put in place and implement key policies for our forest estate to support jobs, income, livelihoods and economic growth and critical ecosystem services such as food, fiber, and freshwater. This vision includes (i) a vibrant, productive, and well-governed forestry sector and (ii) intact conservation landscapes centered on Lao PDR's protected areas which are a national and global treasure for biodiversity and which can respond to tourism demand as we diversify and green our economy.

***Production forests:*** Lao PDR's forests resources contributed meaningfully to our rapid economic growth and were one of our main exports, reaching a value of US\$ 1.67 billion in 2014. However, in the absence of an adequate regulatory and oversight framework, logging became a threat to our forests and the communities and biodiversity that depend on them. Infrastructure development in forested areas further aggravated this challenge. Protecting and restoring Lao PDR's forest ecosystems is a priority, as recognized in our NDC, which includes relevant actions that will contribute to both climate change mitigation and adaptation. To tackle this urgent issue, the Government in 2016 suspended the export of un-processed and semi-processed wood products through Prime Minister Order No. 15, 2016. This Order remains in place and effectively enforced. Through PM Order No. 15, the Government defined parameters to regulate timber exploitation in infrastructure development areas, enhance forest area management and planning, and bolster enforcement. We also adopted four regulations with provisions to intensify our fight against illegal logging and export, emphasize wood-processing and good manufacturing practice for the timber supply chain, and reform the National Wood Processing Industry Association and Lao Furniture Association to augment the value-added produced in Lao PDR.

Our aim is to use forest resources as a cornerstone of green, resilient and inclusive growth, job creation, and livelihoods through a well-functioning and diversified forestry sector, which can contribute to the economy in several ways through multiplier linkages, job creation, raw materials for construction, downstream wood and fiber processing, the provision of wood and non-wood products for subsistence and commercial uses, tourism, and the provision of ecosystem services, which make the actual GDP contribution larger than from timber sales alone which in the past was a considerable contribution to GDP and revenues.

As such our recently completed policy actions include the development of a Ministerial Instruction in October 2018 instituting a timber legality assurance system (TLAS) that, among others, introduces a definition of legality for forest products; and introduces a methodology for "supply chain control and verification" that meets international standards.

We are opening the sector to credible plantation investors, both domestic and international. In 2012, the Government temporarily suspended the granting of land concessions of large areas to domestic and foreign investors for industrial plantation crops in order to conduct an evaluation and review of the management system and the quality of these investments (Prime Minister's Order 12, 2012). This situation was updated in July 2018 by Prime Minister's Order 09 which lifted the ban on concessions for Eucalyptus, Acacia, Teak, Bamboo and other native species plantations, and allows the private sector access to Production Forest Areas (PFAs) to invest in lands requiring restoration and reforestation; it

called for immediate actions to assess and make available appropriate PFA lands and to enter into land concession agreements to support immediate implementation. Internationally reputable companies with appropriate corporate social and environmental records of responsible investing aim to scale up substantially and have raised funds to do so in partnership with Government and local people. PM Order No. 09 also requires the continued review of existing plantation projects including those involving out growers, and the development of supporting legislation with monitoring and enforcement;

Going forward, we will continue building on these reforms, we will then establish, through regulations, an effective and transparent third-party Sustainable Forest Management (SFM) certification procedure for Production Forest Areas (PFA). In fact, 1 10,000 hectares of PFAs have already been certified for SFM. These reforms are also aligned with our ongoing efforts to revise the Forest Law, which will provide the legal backbone to strengthen controls over salvage logging, implement certification of SFM and Chain of Custody through third parties and trained certified inspectors. Also, to ensure the inclusiveness of our reform agenda in the forestry sector, we will regulate logging in infrastructure areas by adopting a regulatory system based on the principles of good forest governance, rule of law, participatory management, management plans, and benefit sharing with communities. As part of our commitment to increase transparency in natural resource management, we will present a Report to the National Assembly showing progress on the control of logging in infrastructure areas and on pilot third-party forest certification in PFAs. A revised Land Law, with supporting regulations is also under development which will aim to improve and clarify land access and land use rights.

*Conservation Forests / Protected Areas:* As part of pathway toward a "new green forest economy," we envision biodiversity as the backbone of the development of nature tourism, which is a high priority in the National Green Growth Strategy. Tourism based on Lao's natural heritage can drive economic growth, provide revenues for the country's National Protected Area (NPA) system, enhance communities' livelihoods and generate incentives for biodiversity conservation.

In February 2019 the Prime Minister issued a Decree upgrading the Nakai Nam Theun NPA and Nam Et Phou Louey NPA as Lao PDR's first two National Parks, with higher conservation standing than before, now in line with IUCN Category II, up from VI. These parks are the two largest protected areas in Indochina, with globally significant biodiversity and important roles to play in protecting our natural heritage and our strategic infrastructure. In line with international good practice and following an August 2017 Ministerial Decision, the protected area system is located under the centralized authority of the Ministry of Agriculture and Forestry (MAF), specifically the Protected Area Management Division within the Department of Forests. This Division has the mandate to manage and conserve biodiversity and has adopted international best practices in areas such as and centralized authority, delegated accountability, standardized and collaborative management, benefit sharing, and community-private ecotourism. These reforms have been complemented by a February 2019 Ministerial Instruction promulgating regulations and procedures in 7 key areas important for good protected area management, including biodiversity monitoring, community outreach, law enforcement, livelihood development, land use zoning, protected area management planning, and village land use planning.

In addition, the Prime Minister issued Order 05 in late 2018, which strengthens management of wildlife and law enforcement to combat the illegal wildlife trade. Prime Minister's Order 05 has placed a ban on all activities related to the use of the most critically endangered wildlife species and reiterates the protection no measures for others.

Going forward, we will continue building on these reforms. We will develop an addition set of regulations and procedures in key areas important for good protected area management, while also continually developing institutional capacity for protected area management. We have also reviewed the 2007 Wildlife and Aquatic Resources Law with the aim to update it, building on Prime Minister's Order 05.

#### ***Leveraging green growth policies to control non-point source pollution***

Reducing pollution is a priority for our green growth pathway. Pollution affects Lao PDRs population and undermines the formation of human capital through multiple channels, including by causing premature deaths and increased illnesses, loss of income, and decreased productivity. The impacts are particularly dramatic among the poor and other vulnerable groups, including young children, women, and the elderly. The impacts of pollution on children can have lifelong consequences and rob them of opportunities for personal advancement. Agrochemicals are a pollution source of particular concern to Lao PDR, both because of their effects on human health and ecosystems, and because their unregulated use has economic consequences and reduces our competitiveness. Our country does not produce any pesticides, which means that they are introduced from neighboring countries, often without adequate control.

Lao PDR is determined to address this source of environmental health risks and promote cleaner production, as demonstrated by the National Assembly's adoption of a national Law on Chemicals in 2016 establishing clear provisions regarding management, monitoring, and inspection of chemicals. The Assembly also approved a Law on Plant Protection in 2016 that constitutes the legal backbone for phytosanitary management, including concrete provisions on pest management. Building on these legislative achievements, to begin to manage the issue we issued a Prime Minister's Decree on pesticides management in August 2017, followed by a February 2019 Ministerial Instruction to control pesticides businesses. MAF is currently developing procedures for the full pesticide chain of custody including registration and licensing, manufacturing, processing, import, distribution, and use of pesticides, as well as on inspection and disclosure of registered, prohibited and banned pesticides.

Lao PDR is also taking resolute actions to manage other costly types of pollution including air pollution, exposure to lead and arsenic, and inadequate water supply, sanitation, and hygiene. Air pollution, including in outdoor environments and within households, caused an estimated 7,800 in 2017 with over 97 percent of the deaths attributable to exposure to ambient fine particulate matter (PM2.5). This is over double the impact from water supply, sanitation and places a significant drag on GDP (12-16%) and the formation of human capital. Together, air and water pollution caused almost 35 million days of illness that same year. Lead is poisoning our children and poses the risk of causing multiple and long-lasting impacts, including learning disabilities, and disorders in coordination, visual, spatial and language skills that would limit children's opportunities to contribute to our nation's green growth when they grow up. No safe blood lead level threshold has been identified for children.

We have undertaken several actions to tackle these urgent challenges. The Government through MONRE issued a ministerial decision in 2016 establishing air quality standards, water quality standards, and vehicle emissions standards, including threshold parameters for air pollutants, chemical, and toxic substances in surface and underground water, and maximum concentration of lead in air and water. This includes an annual air quality standard for fine particulate matter (PM2.5) of 0.010 mg/m<sup>3</sup> ( 10 gg/m<sup>3</sup> ), as recommended in the World Health Organization's Air Quality Guideline, based on the

negative effects of air pollution on human health; as well as, an annual lead air quality standard of 0.15 gg/m<sup>3</sup>, based on scientific evidence indicating that lead can harm children even at very low exposure levels.

More recently, building on these new standards, the Government through MONRE has also issued two ministerial instructions in November and December 2018 to regulate standard procedures and parameters of methods for sampling and analyzing PM2.5 and PM10 in air, and arsenic, cyanide, lead, manganese, mercury, fecal coliform and total coliform (as part of pathogens) in water. These new regulations are essential to monitor compliance with the national pollution standards in a consistent and accurate manner which in turn will support better enforcement of environmental policy.

We are also committed to reduce pollution exposure and health effects. In particular, we envision centering our efforts in the coming years to tackle pollution in sites where environmental health risks are concentrated. We are currently identifying and analyzing the common pollutants parameters and characteristics inherent in a first set of Priority Pollution Watch Sites (PPWS). Based on this work, we will prepare a ministerial decision defining identification criteria of Priority Pollution Watch Sites (PPWS) and establishing public disclosure mechanisms to share the results of PPWS monitoring with potentially affected communities and other stakeholders. In addition, to reduce exposure to lead poisoning, we aim to issue regulations phasing out, import, sale and use of lead-containing paints and children's products coated with lead-containing paints and banning their manufacture in Lao PDR.

## **Conclusion**

In sum, I am writing, on behalf of the Government of Lao PDR, to request the Second Programmatic Green Growth Development Policy Operation of US\$ 40 million to support our country's green growth program.

Sincerely yours,



Somdy Douangdy

Deputy Prime  
Minister of Ministry of Finance,  
Ministry of Finance of the Lao People's Democratic Republic

### **ANNEX 3: POVERTY AND SOCIAL ASPECTS**

1. The World Bank Policy on Development Policy Financing requires the inclusion of a three-step set of analytical work on the operation's poverty and social effects, especially on poor people and vulnerable groups. First, the World Bank determines whether the DPF-supported policies are likely to cause significant poverty and social effects. Secondly, for policies with likely significant effects, the World Bank assesses in the Program Document the Member Country's systems (for example, policies and institutional framework) for reducing such adverse effects and enhancing positive effects. Thirdly, if there are significant gaps in the analysis or shortcomings in the country's systems, the World Bank describes in the Program Document how these aspects would be addressed before or during program implementation.
2. The World Bank conducted a Poverty and Social Impact Analysis (PSIA) that followed the three-step guidance provided by World Bank Policy on Development Policy Financing in preparation for the "Lao PDR: First Programmatic Green Growth Development Policy Operation" (P159956). In 2019, the analysis for GGDPO2 was updated, assessing the poverty, distributional and gender effects of the policies supported under the program. The Bank also developed a Social Accounting Matrix for Lao PDR, which allowed for simulation of the impacts of alternative policy options in key economic sectors – such as agriculture, forestry, mining, construction and tourism – on poverty reduction and income distribution. The PSIA aimed to help the GoL to better understand (i) how the proposed policy actions may likely affect poor and vulnerable people, and (ii) how to strengthen the country's systems to address potential negative impacts and maximize positive impacts that may arise from such policy actions. The PSIA also incorporated a gender analysis. As part of the PSIA, the World Bank identified key stakeholders that would potentially benefit or be affected by the DPF-supported policies (for example, rural communities, ethnic minority groups, and private companies). The processes for developing specific policies included consultations carried out by the client. To inform the PSIA, the World Bank discussed the policy tracks with key stakeholders.

#### **Context: The Need for Policy Reforms in Lao PDR**

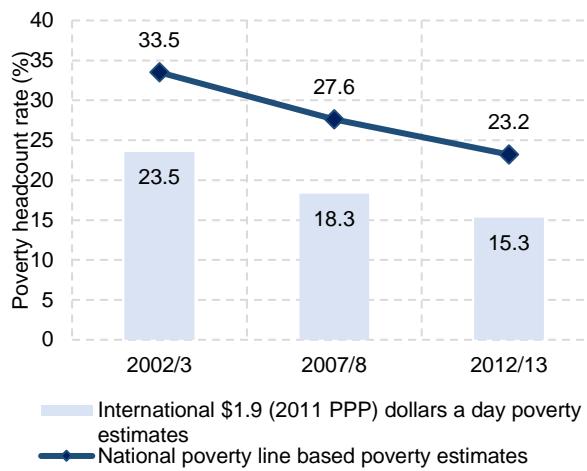
3. Lao PDR has made significant progress on economic growth in recent years – an average of 7.2 percent of annual GDP growth since 2000, one of the fastest expansions in East Asia. While still robust, GDP growth has decelerated recently reflecting the limitations of a growth pattern that relies on unsustainable natural resource management and fiscal expansion – growth rate moderated to 7 percent in 2016 and further to 6.9 percent in 2017. Economic growth has contributed significantly to the decline of overall poverty in the country: absolute poverty based on national standard declined from 33.5 to 23.2 percent of the population from 2002/03 to 2012/13 (see figure A4.1). However, poverty reduction is not distributed evenly. The poor and vulnerable groups, including rural households and ethnic minorities (for example, Mon-Khmer and Hmong-Mien, and households with predominately agriculture-based livelihoods) experienced only modest declines in poverty reduction. As a result, consumption, especially by the poor, grew slower than economic growth (see figure A4.2).

4. In general, access to several key public services is still lagging, impairing poor people's ability to participate in the growing economy. The Lao Socio Indicators Survey II 2017/18 (LSIS II)<sup>70</sup> found significant progress in several indicators related to the well-being of children and women – such as child mortality, stunting, skilled birth attendance, water and sanitation coverage, and primary education attendance. The

<sup>70</sup> UNFPA, 2018. *Lao Socio Indicators Survey II (LSIS II) 2017*. Lao Statistic Bureau, June 2018. Available at: [https://lao.unfpa.org/sites/default/files/pub-pdf/Lao%20Social%20Indicator%20Survey%20II%202017-18%20%28English%29\\_0.pdf](https://lao.unfpa.org/sites/default/files/pub-pdf/Lao%20Social%20Indicator%20Survey%20II%202017-18%20%28English%29_0.pdf)

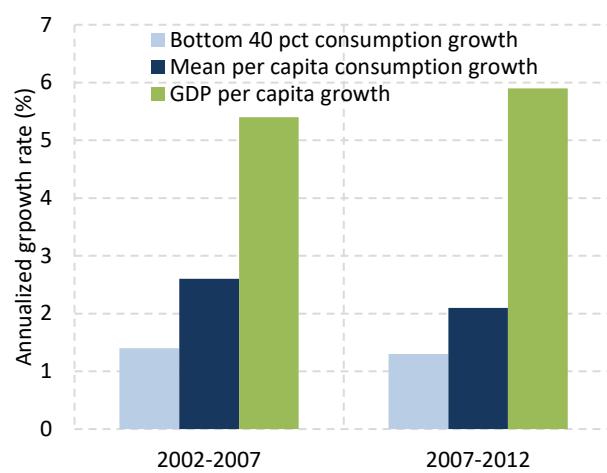
report found that chronic malnutrition in young children decreased from 44 to 33 percent between 2011 and 2017. Progress has also been made in life expectancy and under-5 mortality rates, which currently stands at 46 deaths per 1,000 live births. Facility-based delivery rates among women aged 15-49 increased from 37.5 percent (2011) to 64.4 percent (2017), although there are still important differences between urban (89.7 percent) and rural areas without roads (34.1 percent) and between socioeconomic groups, indicating challenges related to access to public services and social inclusion. Despite some progress, Lao PDR children still spend fewer years in school compared to peers worldwide and the quality of education is low. For example, two-thirds (67.9 percent) of the children under five years of age still do not have access to early childhood education. This rate is even higher among ethnic minority groups and disadvantaged communities. However, disparities persist between households from different geographical regions, rural and urban areas, households with different wealth and education level of mothers; and between ethnic groups.

**Figure A4.1 Poverty Trend in Lao PDR**



Source: LECS 5.

**Figure A4.2 Consumption Growth in Lao PDR**



Source: LECS 5 and National Accounts data.

5. Gender gaps persist in various social aspects, including health, education, and career opportunities. Maternal mortality, early marriage and teenage pregnancy are persistently high. Women and children have very high exposure rates to extremely harmful indoor air pollution. With an average fertility rate of approximately three, Lao PDR has one of the highest fertility rates in the East Asia and Pacific (EAP) region, posing health risks, reducing educational and employment opportunities for women, and contributing to a significant economic burden on the country. Lao PDR has the highest rate of adolescent pregnancies in Asia, with 4 in 10 Lao girls becoming pregnant before the age of 18. Women have lower literacy rates than men, especially among poor households in rural areas, for whom the literacy gap between males and females is 23 percentage points and girls constitute the majority of those who have never been to school.

6. Access to basic services has improved over time but challenges remain. The electrification program in Lao PDR gave access to electricity for more than 90 percent of households. In addition, access to improved water supply and sanitation is improving. However, the gaps disproportionately affect different socioeconomic groups: only 60 percent of primary schools have water supply and toilets; rural

areas still account for the majority of seasonally or year-round unconnected areas. Additionally, roads and villages are vulnerable to natural disasters including flooding and landslides.

### **Identifying the potential poverty and social effects of the policies supported by the GGDPO series**

7. The PSIA was based on the review of key policy reforms and other relevant literature; meeting with key informants from the government, World Bank, and other development partners; and an analysis of potential positive and negative poverty social impacts across five transmission channels: employment; prices (production, consumption and wages); assets (physical, natural, human, financial and social); transfers and taxes; and authority (changes in power, structures, and processes that govern formal and informal functions of public institutions).

8. In parallel, the Social Accounting Matrix represents and quantifies the interdependencies of the Lao economy and important policy trade-offs in production, income distribution, investments and trade policies. The Social Accounting Matrix provided a broad evaluation of the direct and indirect effects of key policies targeted by the NGGS on the country's main economic sectors and on income distribution across the household groups in the five income quintiles. The results suggested that the economy is dominated by agriculture and rents from natural resources, especially water resources, with locally developed value chains with significant connections. Factor markets also show strong connections, especially through their forward linkages as inputs in the production process. Income distribution is characterized, as in most countries, by higher income groups appropriating a large part of the rents. The Social Accounting Matrix allowed the Bank to proceed with sets of simulations to explore the potential of different investment and demand driven expansion policies as strategies for sustainable growth. The simulations showed that a low level of investment in agriculture has negligible effects on the economy and the rural sector itself, and a threshold of roughly 38 percent of current capital formation in the sector has to be reached before the value-added multiplier becomes greater than 1. For investment levels above this threshold, however, the effects on the poor, both in rural and urban areas, are significant, with more than 400,000 people crossing the poverty line. Other simulations suggested the following conclusions: (a) if investments increase, agriculture may be an engine of growth and appears well suited to provide immediate income and employment increasing opportunities with the most favorable balance for the poor; (b) unlike agriculture, construction and public works do not seem per se to constitute a major engine of growth, but their expansionary effects on aggregate demand suggest that they may be a useful component of a balanced growth pattern; (c) transfer policies aimed at increasing the inclusive component of growth appear to be important as a productive complement to any strategy to increase production and value added; and (d) a balanced growth between 6 and 6.5 percent of annual production rate in all sectors, and between 5 and 6 percent in annual income increase for households in all quintiles, except for those in the top quintile. A balanced growth strategy shows the highest payoffs in terms of an aggregate welfare function with a moderate premium for income redistribution in favor of the poor. However, in this balanced growth scenario, the sectors would require different levels of investment to reach a similar production rate – for example, investments in agriculture would be more than five times the amount of investment needed in tourism.

9. Based on the balanced growth model, the PSIA found that DPO-supported policies in sustainable forestry, water supply, and tourism (via improved conservation and protected area management) would contribute to social inclusion. Additionally, the prior action on SEA would contribute to inform policy-level decision-making in other key economic sectors, such as agriculture and mining, by considering both negative and positive social impacts of proposed policies.

10. Considering the Social Accounting Matrix simulations and inputs from stakeholders, the PSIA assessed whether the proposed policy reforms are likely to cause significant poverty and social effects, particularly the policies' distributional effects on the poor and vulnerable groups, such as rural communities, ethnic minority groups, women, and disadvantaged households. Table A4.1 presents a summary of key DPF support areas and their potential social and poverty impacts, indicating, when applicable, how these policies can disproportionately affect females.

**Table A4.1 Summary of Key GGDPO-supported Areas and Their Potential Poverty and Social Impacts**

Policy Actions	Potential Poverty and Social Effects
<b>Prior Action #1: To improve revenue mobilization:</b> <ul style="list-style-type: none"> <li>(i) the Recipient, through the Ministry of Finance, has approved the Tax Strategy Development Plan (2018-2020);</li> <li>(ii) the Recipient, through the Ministry of Finance, has implemented an electronic payment system for Road Tax and Land Tax;</li> <li>(iii) the Recipient, through the National Assembly, has approved the amendments to the Value-Added Tax Law; and</li> <li>(iv) the Recipient, through the Ministry of Finance, implemented the Tax Revenue Information System (TaxRIS) at (a) the Department of Tax at the central level; (b) the provincial Tax Departments in 5 provinces; and (c) 5 district tax offices.</li> </ul>	<p><b>Positive effects:</b></p> <p>By implementing these fiscal reforms, the GoL expects significant gains in tax collection and, consequently, revenue mobilization. Revenues from electricity generation and exports are also expected to increase. By improving revenue mobilization – and by allocating funds in accordance with the National Socio-Economic Development Plan (NSEDP) and the National Green Growth Strategy – the GoL may increase expenditures for the provision of public services and other pro-poor redistribution initiatives.</p> <p><b>Negative effects:</b></p> <p>No significant negative effects identified.</p>
<b>Prior Action #2: To strengthen public financial management:</b> <ul style="list-style-type: none"> <li>(i) the Recipient, through the National Assembly and Ministry of Finance respectively, has approved the Public Procurement Law and associated implementing instructions; and,</li> <li>(ii) the Recipient, through the Ministry of Home Affairs, has rolled out (a) Smart Cards to at least 18 Government entities at the central level; and (b) the Personnel Information Management System (PIMS) to at least the Prime Minister's Office and MoHA.</li> </ul>	<p><b>Positive effects:</b></p> <p>Over the medium term, improvement of procurement under the Public Procurement Law provides a solid legal framework and an institutional basis to monitor and oversee government procurement. Such legislation is expected to lead to improvement in public procurement processes and allow for more efficient spending of public resources to provide key public services.</p> <p>Similarly, tighter control of public expenditure on wages and salaries by implementing smart cards and PIMS will allow for more resources to be available for key public services such as schools and hospitals, and for the maintenance of existing public services.</p> <p><b>Negative effects:</b></p> <p>No significant negative effects identified.</p>

Policy Actions	Potential Poverty and Social Effects
<p><b>Prior Action #3:</b> To improve public debt management, the Recipient, through the National Assembly, has approved the Public Debt Management Law.</p>	<p><b>Positive effects:</b> The Public Debt Management Law is expected to improve the management of public debt and associated interest payments. This will allow for a more sustainable fiscal framework which is expected to ensure that public resources are available for key public services. This is particularly important for Lao PDR with the recent increase in interest payments resulting in less public resources being available for sectors which directly impact poverty reduction such as health and education.</p> <p><b>Negative effects:</b> No significant negative effects identified.</p>
<p><b>Prior Action #4:</b> To promote financial sector stability: (i) the Recipient, through the Bank of the Lao PDR, has prepared and published 7 core financial stability indicators for the banking sector; and (ii) the Recipient, through the National Assembly, has approved the amendments to the Bank of the Lao PDR Law in line with good practices, including restricting fiscal deficit financing by BoL, auditing of BoL accounts and limiting BoL lending to the financial sector.</p>	<p><b>Positive effects:</b> By ensuring a stable and sound financial sector, where the central bank follows international best practice, creates an environment for increasing financial inclusion. Additionally, the regular publication of core financial soundness indicators allows the BoL to monitor the health of the financial sector. Creating the enabling environment for financial inclusion is expected to have positive impacts on poverty reduction, through access to finance for the poor, particularly women.</p> <p><b>Negative effects:</b> No significant negative effects identified.</p>
<p><b>Prior Action #5:</b> The Recipient, through the Prime Minister, has approved the National Green Growth Strategy (NGGS), including a monitoring and evaluation framework.</p>	<p><b>Positive effects:</b></p> <ul style="list-style-type: none"> <li>• Protection of natural assets and resources critical to livelihoods of the poor and vulnerable through better recognition of traditional use rights, participatory management and decision making and sustainable resource use. These effects may disproportionately benefit women whose livelihoods are reliant on natural resources.</li> <li>• Protection of natural assets and resources through pollution control resulting in better community health outcomes, particularly for those more exposed to contamination and reliant on natural resources (that is, local waterways) – such as women and children.</li> <li>• Development of green jobs and livelihoods opportunities required (forestry, protected areas and nature-based tourism, sustainable agriculture, etc.) for more equitable growth and poverty reduction in the future.</li> <li>• Increased resilience to natural hazards and climate risks, resulting in more sustainable development outcomes.</li> </ul> <p><b>Negative effects:</b> No significant negative effects identified.</p>
<p><b>Prior Action #6:</b> The Recipient has established the legal framework to increase revenue generation for environmental and green growth priorities (i) through the National</p>	<p><b>Positive effects:</b></p> <ul style="list-style-type: none"> <li>• Protection of natural assets, associated livelihoods and human health through EPF-financed subprojects in the following priority areas: (i) policy and capacity enhancement, focused on social and environment</li> </ul>

<b>Policy Actions</b>	<b>Potential Poverty and Social Effects</b>
<p>Assembly, by establishing the mandate to levy wastewater discharge fees, fines and service charges, and (ii) through the EPF Board, by establishing mechanisms for EPF to prioritize its resource allocation.</p>	<p>monitoring, environmental education and awareness raising, environmental policy implementation, consultations with ethnic groups, environmental education and awareness raising; (ii) community and biodiversity development in protected areas, focused on protecting forests and improving livelihood of local communities; (iii) pollution management, focused on controlling pesticide use, water and air pollution, and managing waste in urban areas; (iv) water resource management; (v) sustainable land management and drought management, including activities on livelihood and land use planning with community participation; and (v) water resources management, focusing on integrated watershed and wetland management. The effects of EPF subprojects may disproportionately benefit women whose livelihoods are reliant on natural resources.</p> <ul style="list-style-type: none"> <li>• The new system of wastewater discharge fees and services charges is expected to be based on the volume and chemical concentration of the discharge, exempting household without severe impact from obtaining authorization of wastewater discharge. Consequently, the GoL will avoid hardships of such fees on the poor and will invest revenues in green inclusive initiatives – some of which will be implemented through the EPF.</li> </ul> <p><b>Negative effects:</b></p> <ul style="list-style-type: none"> <li>• No significant negative effects identified.</li> </ul>
<p><b>Prior Action #7:</b> The Recipient, through MONRE in consultation with MPI, has established detailed regulations and procedures for implementing SEAs, including information disclosure and public participation.</p>	<p><b>Positive effects:</b></p> <ul style="list-style-type: none"> <li>• More informed public policy development and decision making based on SEA including social aspects such as livelihood and health, culture and landscape, living standards, gender and ethnic minorities as well as the interrelationship between social and environmental aspects and managing sector trade-offs and mutual opportunities.</li> <li>• Increased public participation in public policy development and investment decision making through the SEA public participation mechanism and public disclosure (that is, published decision on the findings / recommendations of the SEA). The information and participation mechanisms will contribute to allow women greater participation in strategic consultation processes.</li> <li>• More-rigorous assessment, management, and monitoring of environmental and social aspects of development projects, resulting in better environmental and social outcomes to communities affected by policies and plans, particularly for poor and vulnerable groups (including women) often disproportionately affected.</li> </ul> <p><b>Negative effects:</b></p> <p>No significant negative effects identified.</p>
<p><b>Prior Action #8:</b> The Recipient, through the Prime Minister, has issued an ESIA Decree with provisions on screening, scoping, public participation, public information disclosure, assessment requirements, reviewing and approval of ESIA</p>	<p><b>Positive effects:</b></p> <ul style="list-style-type: none"> <li>• More informed investment development and decision making on individual projects based on ESIA, including social aspects such as livelihood and health, culture and landscape, living standards, gender and ethnic minorities as well as the interrelationship between social and environmental aspects and cross-sector trade-offs and opportunities.</li> </ul>

<b>Policy Actions</b>	<b>Potential Poverty and Social Effects</b>
reports, and budgetary allocation for compliance monitoring.	<ul style="list-style-type: none"> <li>• Increased public participation in investment development and decision making, through the ESIA mechanisms for information disclosure and public participation. The information and participation mechanisms will contribute to allow women greater participation in strategic consultation processes.</li> <li>• More rigorous assessment, management, and monitoring of environmental and social impacts of development projects, resulting in better environmental and social outcomes to affected communities—particularly for poor and vulnerable groups (including women) often disproportionately affected.</li> </ul> <p><b>Negative effects:</b> No significant negative effects identified.</p>
<b>Prior Action #9:</b> The Recipient (i) through MPWT, has adopted road maintenance procedures that integrate climate resilience and disaster risk considerations into the planning and budgeting of PIPs, including identification of vulnerable sections and design; and (ii) through the National Assembly, has adopted the legal framework for collecting and disseminating hydrometeorological information.	<p><b>Positive effects:</b> Public infrastructure, including roads, that is more resilient, resulting in reduced risk of loss of life and personal injury during disaster events, reduced risk of disruption to essential services, reduced risk of negative impacts on economic activity, and reduced financial costs of emergency response and recovery—particularly for poor and disadvantaged groups (for example, women and other groups living in remote and precarious communities) whose traditional resilience is often negatively affected by development and the increased intensity and frequency of natural hazards caused by or amplified by climate change.</p> <p><b>Negative effects:</b> No significant negative effects identified.</p>
<b>Prior Action #10:</b> The Recipient, through the National Assembly and MONRE has established the legal and regulatory framework for integrated water resources management at the national level.	<p><b>Positive effects:</b>        • Integrated water resources management will consider water quantity and quality, groundwater management, demand of multiple users, competition of water uses for multiple purposes (drinking, power generation, irrigation, among other), binding rules for water basin management, and clear priority criteria for granting water use rights. This policy, along with more recent implementing regulations on groundwater, can lead to cleaner and more reliable water supply to the population – which is crucial for adequate health and living conditions – while ensuring water resources for key productive activities that generate more jobs and tax revenues.     </p> <p>• Increased public participation in water resources decision-making, such as in consultations during water resource assessments and at water basin coordinating committees.</p> <p><b>Negative effects:</b> No significant negative effects identified.</p>
<b>Prior Action #11:</b> The Recipient, through MAF, has required national implementation of a Timber Legality Assurance System that introduces a	<p><b>Positive effects:</b>        • Timber legality is one important part of good forest sector governance and would contribute to the protection and sustainable management of forest resources through more effective control of     </p>

Policy Actions	Potential Poverty and Social Effects
<p>definition of legality for timber and timber products, and a methodology for supply chain control and verification that meets relevant international standards, and mandates DOF as the body responsible for relevant international obligations and DOFI as the implementation and enforcement body for the TLAS.</p>	<p>illegal and unsustainable forestry practices, support better recognition of customary use rights and participatory forestry management, and as a result, help generate long-term benefits for rural communities and particularly ethnic minorities and poor and vulnerable households reliant on forests for livelihoods and income generation.</p> <ul style="list-style-type: none"> <li>Timber legality assurance and third-party certification help to complement national legislation aimed at protection and sustainable management of production forests and ensuring beneficial outcomes for communities.</li> </ul> <p><b>Negative effects:</b></p> <p>There are limited negative effects from transitioning to legal timber as the new paradigm for logging in PFAs. Once the system is implemented, potential short-term transitional effects (that is, closure of logging and processing operations and loss of jobs) can be compounded by the ongoing suspension of logging in PFAs during GGDPO1. This could put greater pressure on vulnerable groups, particularly female household heads to generate income from alternative livelihoods but this is ameliorated by exceptions for local use of forest products for construction, energy, and livelihoods. Commercial use remains restricted in PFAs and a set of complementary new policies (including the TLAS in GGDPO2 and certification in GGDPO3), culminating in an upcoming new Forest Law will set the basis for resumed logging in PFAs and enabling communities to benefit and ideally profit from timber production.</p>
<p><b>Prior Action #12:</b> The Recipient, (i) through the Prime Minister, has upgraded Nakai Nam Theun NPA as one of Lao PDR's first national parks in line with international conservation standards; (ii) through MAF, has approved a set of 7 implementing regulations for the management of national protected areas and national parks, including regulations for management planning, zoning, outreach, livelihood development, land use planning, law enforcement, and collaborative management; and (iii) through MAF, has established the structure, mandates, and activities of the new Protected Areas Management Division under the Department of Forestry, tasked with managing the system of national parks and protected areas, taking into account principles of effective and centralized authority, delegated accountability, standardized and collaborative management, benefit sharing, and community private</p>	<p><b>Positive effects:</b></p> <ul style="list-style-type: none"> <li>Strengthening of protected area management and promotion of nature-based tourism, leading to better conservation and management of natural resources, and better recognition of traditional resource-use rights for the livelihoods of communities located in and around these areas—often some of the poorest and most vulnerable in the country. Job opportunities eventually generated within protected areas such as rangers, service providers, and construction and maintenance of trail and other park infrastructure.</li> <li>Nature-based tourism raising awareness of the value of protected areas, providing an economic alternative in some locations to unsustainable resource use practices and making a direct and positive contribution to poverty reduction for livelihoods of communities located in and around these areas.</li> <li>Large areas of protected forest cover reduce downstream flooding and landslides, can ameliorate the effects of drought, and can generate local rainfall, and reduce siltation of strategic reservoirs that generate jobs, power and revenues for many people and provide a sustainable supply of fish important for nutrition as fish provide approximately 50 percent of Lao people's animal protein intake.</li> </ul> <p><b>Negative effects:</b></p> <ul style="list-style-type: none"> <li>Potential negative impacts on local communities located in and around protected areas, who are currently reliant on non-sustainable</li> </ul>

Policy Actions	Potential Poverty and Social Effects
sector partnerships for nature-based tourism.	resource extraction for livelihoods and income generation. However, the regulations set forth prohibited, restricted, and promoted activities in total protection zones, controlled-use zones, and buffer zones of protected areas. In controlled use zones, where enclave villages are typically located, the GoL will restrict—rather than prohibit—the customary utilization of natural renewable resources, agriculture and livestock raising, and development of housing and village infrastructure.
<b>Prior Action #13:</b> Recipient, through the Prime Minister and MAF, has established legal provisions and procedures for regulating pesticides, including licensing businesses involved in import, formulation, sale and distribution of pesticides.	<p><b>Positive effects:</b></p> <p>Control of banned and extremely hazardous substances, the promotion of higher quality and safer products and the proper management of these products to (i) reduce the potential negative environmental and health impacts, and (ii) improve work conditions, particularly in the agriculture sector.</p> <p><b>Negative effects:</b></p> <p>No significant negative effects identified.</p>
<b>Prior Action #14:</b> The Recipient, through MONRE, has regulated standard procedures and parameters of methods for sampling and analyzing PM2.5 and PM10 in air, as well as arsenic, cyanide, lead, manganese, mercury, fecal coliform and total coliform (as part of pathogens) in water.	<p><b>Positive effects:</b></p> <ul style="list-style-type: none"> <li>Control of key pollutants leading to better protection of water, soil and air, improving health and livelihoods of people—particularly poor and vulnerable groups, including women and children who are highly exposed to indoor air pollution.</li> <li>Potential development of clean technology sector, including investments in clean technology and development of green jobs.</li> </ul> <p><b>Negative effects:</b></p> <p>No significant negative effects identified.</p>

11. The World Bank concluded that prior actions 5 - 8 are likely to cause significant positive poverty and social effects. Although prior actions 1, 11 and 12 may cause negative social effects, these potential implications are not significant due to additional interventions that the GoL will carry out to (i) better understand those effects, (ii) identify and design interventions to address the negative implications, and (iii) in the case of the two NPAs that have been upgraded to Lao PDR's first national parks, an existing Bank-financed IPF financing these protected areas requires safeguards (compliance has been satisfactory to date) that can serve as models for other protected areas in Lao PDR.

#### **Assessing Lao PDR Systems for Enhancing Significant Positive Poverty and Social Effects of the DPF-supported policies**

12. Pursuant to World Bank Policy on Development Policy Financing, the World Bank analyzed whether the Lao PDR systems were appropriate to maximize the significant positive effects of the DPF-supported policies, particularly prior actions 1 and 3. The PSIA looked into the legal framework and technical capacities of governmental agencies responsible for implementing those policy actions.

13. **Prior Action #5.** Overall, the GoL has been committed to the promotion of green growth and this commitment has gathered strength with the Green Growth DPO series. Its most recent 8<sup>th</sup> NSEDP introduced green growth and sustainable development principles into the overall goal statement in

Outcome 3, and the 2018 mid-term review of NSEDP-8 reconfirmed this direction and noted progress in implementing green growth principles. The GoL also established the Green Growth National Steering Committee (GGNSC), chaired by the Deputy Prime Minister, that is mandated with overseeing green growth planning; implementation of programs, policies and projects; and monitoring and reporting. Building on these efforts, the GoL adopted the National Green Growth Strategy (NGGS) in February 2019 that presents an agenda through 2030 for implementing the transition to greener growth, including priority actions and cross-sector interactions such as tourism/conservation, the water/energy nexus, and climate risk management, indicators to measure progress, and financing opportunities. As both the 8<sup>th</sup> NSEDP and NGGS include M&E frameworks with clear targets, implementing measures and responsibilities for ministries and other agencies, this approach will facilitate the implementation of key policy reforms supported by the GGDPO series.

14. The PSIA found that the institutional arrangements for implementing strengthened legislation needs to be improved. All agencies face challenges to implement the proposed policies (including Prior Action 5) due to limited capacity, budgetary constraints, data constraints, and lack of governance arrangements for stakeholder participation. To some extent, these shortcomings will be addressed by the NGGS as well as the emerging Green Growth Promotion Center, which is being established under the Ministry of Planning and Investment (MPI) to support implementation of the NGGS. The policies supported under the GGDPO series, the investments and capacity-building activities envisaged in the NSEDP, as well as other projects supported by the World Bank and other international development agencies will also contribute to enhance institutional capacity to implement these and other relevant policies.

15. **Prior Action #6.** The strengthening of the EPF's capacity and transparency on project financing decisions and financial management will help attract new funding sources and increase funding for green growth priorities, while improving effectiveness in use of funds. With the support of GGDPO2, the EPF Board approved updated by-laws and made decisions that define priority investment windows and themes and define the EPF project cycle to allow for project financing decisions based on performance as well as green growth priorities.

16. EPF-financed subprojects focus on the following priority areas: (i) policy and capacity enhancement, focused on social and environment monitoring, environmental education and awareness raising, environmental policies implementation, consultations with ethnic groups, environmental education and awareness raising; (ii) community and biodiversity development in protected areas, focused on protecting forests and improving livelihood of local communities; (iii) pollution control, focused on controlling pesticide use, water and air pollution, and managing waste in urban areas; (iv) water resource management; (v) sustainable land management and drought management, including activities on livelihood and land use planning with community participation; and (v) water resources management, focusing on integrated watershed and wetland management. EPF also supports subprojects to improve the government's capacity to implement green growth policies and, consequently, to address potential shortcomings in the country's system to maximize the positive social and poverty effects of this policy.

17. A new window is under preparation, in partnership with MAF, on performance-based financing for climate change results, specifically emissions reductions payments based on reduced deforestation and forest degradation.

18. The GoL also set up a transparency mechanism to disclose publicly, on a regular basis, the EPF resources collected through each revenue source and the selection and justification for resource allocation to environmental priorities. The national budget includes a budget code for EPF, to allow for expenditures to avoid being off-budget.

19. Taken together, these reforms should help EPF become a viable independent sustainable financing mechanism that can continue to promote green growth investment across ministries and provinces. Additionally, future reforms planned by the GoL would support increased and diversified financing available to a better-managed and more transparent EPF.

20. **Prior Actions #7 and #8.** The current planning and decision making on public policies and specific investments still lack vigorous integration of green growth considerations, due to not adequately internalizing environmental and social externalities. To design and implement key interventions envisaged in the NSEDPP and NGGS, the GoL needs to conduct thorough analytical work on environmental, poverty and social effects of policies and investments. Prior Actions 7 and 8 on SEA (for policies, programs and strategies) and ESIA (for projects), respectively, can play a key role in identifying those externalities and proposing interventions to address them, helping managing trade-offs and leveraging mutual opportunities across sectors. Those tools also now require, and have the potential to enhance, access to information and public participation – including women, members of ethnic groups, and other vulnerable groups – in decision-making process that affect their lives and livelihoods.

21. Since the GoL has recently regulated SEAs and made significant changes in ESIA regulations, GoL's institutions need to strengthen their capacity to implement the new instruments. As part of GGDPO2 preparation, the World Bank provided technical support to the GoL on options and methodologies for SEAs and ESIA. The Bank has provided additional technical support through the Second Lao Environmental and Social Project (LENS2), which has financed several capacity building activities for implementing the new SEA and ESIA regulations, such as trainings of governmental officials, a knowledge exchange with South Korea, preparation of manuals, and acquisition of information systems and other equipment.

22. **Prior Actions #11 and #12.** Although not significant, potential negative poverty and social effects were considered in the country's systems analysis for the production forest and conservation forest policies supported by the GGDPO series and specifically GGDPO2.

23. Concerning TLAS, there are limited negative effects from transitioning to legal timber as the new paradigm for logging in PFAs. Once the system is implemented, potential short-term transitional effects (that is, closure of logging and processing operations and loss of jobs) can be compounded by the on-going suspension of logging in PFAs during GGDPO1. Commercial use remains restricted in PFAs and a set of complementary new policies (including the TLAS in GGDPO2 and certification in GGDPO3), culminating in an upcoming new Forest Law will set the basis for resumed logging in PFAs and enabling communities to benefit and ideally profit from timber production. In addition, the third-party SFM Certification also includes requirements for companies to promote gender equality in employment practices, training opportunities, awarding of contracts, processes of engagement and management activities. As of February 2019, 110,000 hectares of state Production Forest Areas (PFA) have been certified for SFM. This, plus the new TLAS, are important steps toward the emergence of a well-governed forestry sector that can generate revenues, jobs and livelihoods.

24. Concerning protected areas, there are some shortcomings in the country's system to fully address the negative effects of improved management of protected areas, particularly in terms of job losses and potential impacts on the livelihoods of local communities located in and around protected areas, who are currently reliant on unsustainable resource extraction for livelihoods and income generation.

25. However, for both forest production and forest conservation policy regimes, the adopted policies provide for the protection of interests of vulnerable groups and creation of green jobs and livelihoods opportunities in sustainable forestry and nature-based tourism – especially when the full set of forest sector reforms are completed, a process that will also be reflected in the new Forest Law. Additionally, the regulations set forth prohibited, restricted, and promoted activities in total protection zones, controlled-use zones, and buffer zones of protected areas. In controlled use zones, where enclave villages are typically located, the GoL will restrict—rather than prohibit—the customary utilization of natural renewable resources, agriculture and livestock raising, and development of housing and village infrastructure. In this regard, the decree that created the two new national parks states the GoL will promote activities for community development and livelihood improvement in village enclave zones, ecotourism, and the environmentally friendly output of agricultural and forestry products and goods in village enclave zones. After piloting those initiatives, the GoL can replicate them, as applicable, in other protected areas.

### **Conclusion**

26. In conclusion, the proposed policy reforms reviewed in this PSIA are likely to have an overall positive impact on people including poor and vulnerable households. The potential impacts identified in this PSIA will mainly occur during the policy implementation phase. Key barriers to effective implementation have been taken into account and additional analysis is expected to be conducted to make sure that critical elements for socially equitable green growth are considered.

#### ANNEX 4: PRIOR ACTIONS AND ANALYTICAL UNDERPINNINGS

Prior action	Analytical underpinning
<i>Pillar 1. Strengthening prospects for fiscal sustainability and financial sector stability</i>	
<b>Prior Action #1:</b> To improve revenue mobilization: (i) the Recipient, through the Ministry of Finance, has approved the Tax Strategy Development Plan (2018-2020); (ii) the Recipient, through the Ministry of Finance, has implemented an electronic payment system for Road Tax and Land Tax; (iii) the Recipient, through the National Assembly, has approved the amendments to the Value-Added Tax Law; and (iv) the Recipient, through the Ministry of Finance, has implemented the Tax Revenue Information System (TaxRIS) at (a) the Department of Tax at the central level; (b) the provincial Tax Departments in 5 provinces; and (c) 5 district tax offices.	IMF Article IVs, the World Bank's Systematic Country Diagnostic, World Bank's Economic Updates and MOF's Comprehensive Tax Review Report: recommendations on focusing on improving tax revenue
<b>Prior Action #2:</b> To strengthen public financial management: (i) the Recipient, through the National Assembly and Ministry of Finance respectively, has approved the Public Procurement Law and associated implementing instructions (ii) the Recipient, through the Ministry of Home Affairs, has rolled out (a) Smart Cards to at least 18 Government entities at the central level; and (b) the Personnel Information Management System (PIMS) to at least the Prime Minister's Office and MoHA.	Public Expenditure Analysis Notes, PEFA (2010), PFM TF assistance, IMF Article IVs, the World Bank's Systematic Country Diagnostic, World Bank's Economic Updates: recommendations on improving public financial management, including management of the civil service pay and procurement.

<b>Prior Action #3:</b> To improve public debt management, the Recipient, through the National Assembly, has approved the Public Debt Management Law.	Public Expenditure Analysis Notes, PFM TF assistance, IMF Article IVs, the World Bank's Systematic Country Diagnostic and World Bank's Economic Updates: recommendations on reducing the public debt/GDP ratio by improving public debt management.
<b>Prior Action #4:</b> To promote financial sector stability: (i) the Recipient, through the Bank of the Lao PDR, has prepared and published a set of core financial stability indicators for the banking sector; and (ii) the Recipient, through the National Assembly, has approved the amendments to the Bank of the Lao PDR Law in line with good practices, including restricting fiscal deficit financing by BoL, auditing of BoL accounts and limiting BoL lending to the financial sector.	World Bank's Systematic Country Diagnostic, IMF Article IVs, World Bank's and financial sector monitoring by the World Bank teams identified weakness in the legal framework and general monitoring of the financial sector.
<b><i>Pillar 2: Consolidating green growth principles across the national development strategy</i></b>	
<b>Prior Action #5:</b> The Recipient, through the Prime Minister, has approved the National Green Growth Strategy (NGGS), including a monitoring and evaluation framework.	The World Bank's SCD highlights weak institutional arrangements as one of the main constraints to achieve the countries development goals and identifies enhancing governance and creating a rules-based environment as a main priority for the country (World Bank, 2016). There is a lack of specific institution to lead the agenda, the weaknesses of multi-sector coordination and the continuity and effectiveness of implementation, as particular challenges for achieving a more sustainable development path in Laos. <sup>71</sup> Global experience show that it requires political leadership, policy measures, financial resource mobilization, effective policy planning and implementation, as well as monitoring and evaluation to translate GG visions into actions on the ground. <sup>72</sup>
<b>Prior Action #6:</b> The Recipient has established the legal framework to increase revenue generation for environmental and	Countries can apply a number of fiscal instruments, such as taxes, fees and charges to stimulate the transition towards GG by providing the right price incentives. <sup>73</sup> At the same time, such instruments generate revenues that can be reinvested in environmental protection and other development goals. Tax schemes to reduce

<sup>71</sup> MONRE. 2012. *National Rio+20 Report for Lao PDR*.

<sup>72</sup> Green Growth Best Practice. 2015. *Green Growth in Practice. Lessons from Country Experiences*.

<sup>73</sup> World Bank. 2012. *Inclusive Green Growth: The Pathway to Sustainable Development*. Washington, DC: World Bank.

<p>green growth priorities (i) through the National Assembly, by establishing the mandate to levy wastewater discharge fees, fines and service charges, and (ii) through the EPF Board, by establishing mechanisms for EPF to prioritize its resource allocation.</p>	<p>environmentally harmful activities have been designed in various countries with different design elements.<sup>74,75</sup></p>
<p><b>Prior Action #7:</b> The Recipient, through MONRE in consultation with MPI, has established detailed regulations and procedures for implementing SEAs, including information disclosure and public participation.</p>	<p>As shown by the Lao Development Report 2010, uncoordinated planning and development of key productive sectors, such as mining and hydropower, can have negative environmental and social impacts.<sup>76</sup> Upstream and project-level planning processes need to be improved to minimize the environmental and social impacts of natural resource sectors.<sup>77</sup> SEAs are an important tool for incorporating environmental considerations into sectoral policies, plans and programs, such as those for hydropower development in the Mekong River Basin.<sup>78</sup></p>
<p><b>Prior Action #8:</b> The Recipient, through the Prime Minister, has issued an ESIA Decree with provisions on screening, scoping, public participation, public information disclosure, assessment requirements, reviewing and approval of ESIA reports, and budgetary allocation for compliance monitoring.</p>	<p>ESIAs are tools for incorporating environmental considerations in the decision making of public and private investments and have a key role in opening up decision-making processes to public scrutiny, promoting transparency and accountability. EIAs must, however, be accompanied by economically efficient environmental policy and regulatory framework in which different command and control regulations, market-based instruments, and information and disclosure tools complement one another (Lima et al. 2015; Sanchez-Triana et al, 2014; Hironaka, A.; and Schofer, E. 2002.)</p>
<p><b>Prior Action #9:</b> The Recipient (i) through MPWT, has adopted road maintenance procedures that integrate climate resilience</p>	<p>People and assets are exposed to high climate and disaster risks in South East Asia, including Lao PDR, which will increase further with climate change.<sup>79</sup> Three of the five costliest natural disasters have taken place since</p>

<sup>74</sup> Heine, D., Horregaard, J., & Parry, I., (2012). Environmental Tax Reform: Principles from Theory and Practice to Date. IMF Working Paper, WP/12/180/

<sup>75</sup> World Bank, IMF, OECD, DFID, GIZ DGIS, 2005. *Environmental Fiscal Reform: What should be Done and How to Achieve It*. World Bank Group, Washington, DC, USA.

<sup>76</sup> World Bank (2010). Lao PDR 2010 Development Report 2010: *Natural Resource Management for Sustainable Development: Hydropower and Mining*. World Bank, Washington, DC.

<sup>77</sup> Ibid.

<sup>78</sup> ADB (2015). *Integrating Strategic Environmental Assessments into Power Planning*. Asian Development Bank, Manila.

<sup>79</sup> World Bank. 2013. *Turn Down the Heat: Climate Extremes, Regional Impacts, and the Case for Resilience. A report for the World Bank by the Potsdam Institute for Climate Impact Research and Climate Analytics*. Washington, DC: World Bank.

<p>and disaster risk considerations into the planning and budgeting of PIPs, including identification of vulnerable sections and design; and (ii) through the National Assembly, has adopted the legal framework for collecting and disseminating hydrometeorological information.</p>	<p>2009, including two floods in a single year 2013.<sup>80</sup> The 2015–2016 El Niño has been one of the strongest on record and has affected Lao PDR through lower yields, reduced hydropower production and damages from storms. By 2030, the economic losses in the Lower Mekong region could accumulate to at least \$16 billion per year in damage to natural resource assets and infrastructure services, and an additional \$18 billion per year in potential infrastructure damage or loss from flooding and other extreme weather events.<sup>81</sup> In Lao PDR specifically, floods, storms, and droughts are the most prevalent hazards, and they are expected to become more pronounced and severe under the influence of climate change. Lao PDR's 2010 National Strategy on Climate Change (NSCC) estimated financial needs for implementing NSCC at approximately US\$2.4 billion until 2020. As most recently stated in Lao PDR's NDC, the transport sector is a priority area for adaptation as the increased intensity and frequency of climate events have shown growing maintenance backlog and increased need for emergency repair, which is estimated to account for roughly 30 percent of Lao PDR's road maintenance budget. Identifying climate and disaster risks and integrating risks mitigation measures in transport design including strengthening vulnerable road sections will help make infrastructure systems more robust to forthcoming shocks and changes.<sup>82</sup></p>
<b>Pillar 3. Incorporating green growth in selected sectors</b>	
<p><b>Prior Action #10:</b> The Recipient, through the National Assembly and MONRE has established the legal and regulatory framework for integrated water resources management at the national level.</p>	<p>The World Bank's SCD for Lao PDR identifies sustainable natural resource management as top priority. It also highlights weak institutional arrangements as one of the main constraints to achieve the countries development goals and identifies enhancing governance and creating a rules-based environment as a main priority for the country. Part of this concern is the management of water. There is increased focus on the main water users in the country, in particular the hydropower sector. While generating considerable economic benefits to the country, the rapid pace of development, uncoordinated planning and development and singular focus on energy output can have negative environmental and social impacts (World Bank 2010 -- Lao Development Report 2010). These concerns have been reflected in the proposed Electricity Law that calls for significant changes to better incorporate environmental and social concerns through competitive principles and multi-criteria evaluation of new hydropower investments. This new approach includes basin-wide planning for new facilities.</p> <p>In developing its Mekong Integrated Water Resource Management projects in Lao PDR, Cambodia and Vietnam, the World Bank identified the lack of a modern water law, calling for a more comprehensive legal framework to: establish processes and procedures, roles and responsibilities, and cross-sectoral management. Identified the need for more guidance on river basin planning, water rights and licensing, maintenance of quality and quantity of freshwater supplies, and international obligations. (Project Appraisal</p>

<sup>80</sup> CRED (Center for Research on the Epidemiology of Disasters). 2016. International Disaster Database.

<sup>81</sup> USAID (U.S. Agency for International Development). 2014. *Climate Change in the Lower Mekong Basin. An Analysis of Economic Values at Risk*. United States Agency for International Development Mekong Adaptation and Resilience to Climate Change.

<sup>82</sup> World Bank. 2015. *Moving Toward Climate-Resilient Transport: The World Bank's Experience from Building Adaptation into Programs*. Washington, DC: World Bank.

	<p>Document: Mekong Integrated Water Resources Management Project in support of the First Phase (APL-1) of the Mekong Integrated Water Resources Management Program, World Bank 2012.)</p> <p>Preparation of Water Resources Assessments follow international practice for integrated water resources management. Specifically, the assessment of water sources (supply) and water users (demand) is the very first step in preparing policy on water allocation and protection. Water Resources Assessments, therefore, provide the basis for many of the regulations and decrees to be established under the new Water Law.</p>
<p><b>Prior Action #11:</b> The Recipient, through MAF, has required national implementation of a Timber Legality Assurance System that introduces a definition of legality for timber and timber products, and a methodology for supply chain control and verification that meets relevant international standards, and mandates DOF as the body responsible for relevant international obligations and DOFI as the implementation and enforcement body for the TLAS.</p>	<p>Wood product exports from Lao PDR have historically been dominated by unprocessed and semi-processed products. In 2014 about 96 percent of Lao wood product exports were consumed by China (63 percent) and Vietnam (33 percent), and the value (legal and illegal) was estimated at almost US\$1.7 billion or over 14 trillion Kip (WWF, 2015)<sup>83</sup>. Forestry royalties and fees were not often properly levied or collected, and illegal logging reduced the potential contribution of this significant natural resource to government revenues even further. This fiscal impact motivated the strengthening of logging and timber export bans (PM Order No. 31 and PM Order No. 15, respectively).</p> <p>The World Bank's 2019 ASA on Sustainability of Lao PDR's Forests highlights that forestry revenues in Lao PDR have historically been a significant contributor to Gross Domestic Product (GDP) and have the potential to again be an important part of the national economy, ideally under a new policy regime with good governance, policy coherence, sustainability, inclusivity and profitability.</p> <p>Most major international wood markets such as the European Union, the United States, and other countries with green policies, increasingly demand proof of legality and/or sustainability of the wood products that they import by way of certified forest management and chain of custody across the supply chain. There is also emerging interest within Asia in legal and certified wood as China, Vietnam, and Thailand are all establishing national standards for timber legality and sustainable forest management (SFM) to meet, and in turn, export market requirements of their trading partners for legal and sustainable wood.</p> <p>International experiences demonstrate that highest financial benefits can be achieved if good forest governance is in place, with a timber legality assurance system (TLAS), certification throughout the value chain, and SFM. The GoL has imposed logging and timber export bans and has used this time to reform the Forestry Law and many supporting regulations, commit to and progress timber legality assurance and effectively invest in good forest governance in the country's Production Forest Areas (PFAs). The GoL has also increased support for investment in private forest plantations, forest management certification in 110,000 ha in PFAs in 2019, and certification of private sector chain of custody for proof of sustainability. Therefore, sustainable business potential for forest asset is significant: better managed forests, inventory of timber</p>

<sup>83</sup> WWF, 2015. Assessment of the Scope of Illegal Logging in Laos and Associated Trans-boundary Timber Trade, Working Paper, WWF (World Wildlife Fund).

	stock, legality across all forest types, increasing community engagement and an emerging national certification system across the full value chain.
<b>Prior Action #12:</b> The Recipient, (i) through the Prime Minister, has upgraded Nakai Nam Theun NPA as one of Lao PDR's first national parks in line with international conservation standards; (ii) through MAF, has approved a set of 7 implementing regulations for the management of national protected areas and national parks, including regulations for management planning, zoning, outreach, livelihood development, land use planning, law enforcement, and collaborative management; and (iii) through MAF, has established the structure, mandates, and activities of the new Protected Areas Management Division under the Department of Forestry, tasked with managing the system of national parks and protected areas, taking into account principles of effective and centralized authority, delegated accountability, standardized and collaborative management, benefit sharing, and community private sector partnerships for nature-based tourism.	<p>The World Bank's 2019 ASA on Nature-based Tourism in Lao PDR highlights that international experience demonstrates that national parks and protected areas with centralized management are most effective compared to decentralized models. Centralized authority allows for the prioritization of the top nationally trained staff, higher budgets, and are often able to resist the urge to de-gazette for infrastructure or extractive uses. This model is effectively used in many countries, including the USA, China, Russia, Nepal, Thailand, Bhutan, Cambodia, Canada, and South Africa, among others.</p> <p>Properly managed national parks offer an unparalleled combination of economic development and biodiversity conservation. National parks have been scientifically found to decrease poverty in Costa Rica (-10 percent) and Thailand (-30 percent) over 15+ years<sup>84</sup>. Across the world, national parks have shown the ability to generate millions of dollars in revenue, create long-term job opportunities, and promote visitor spending. In 2015, researchers estimated that protected areas globally received 8 billion visits and generated US\$600 billion of tourism expenditures, in contrast to only US\$10 billion being spent protecting them.<sup>85</sup> Growth in demand is increasing across the world. In China, visitors and revenue from protected areas increased annually by 20 and 43 percent respectively from 2000 to 2009 (despite the SARS outbreak). By 2009, there were 333 million annual visits to protected areas in China, generating nearly US\$3 billion in spending and creating 1 million jobs.<sup>86</sup></p> <p>The biogeographic design of the Lao protected area system is one of the best in the world incorporating a selection of all the country's different ecoregions and habitats. There are over 700 species of birds, 90 species of bats, 100 species of medium and large mammals, and at least 500 native species of freshwater fish. Duckworth et al. reviewed 1,140 species reported in Lao PDR and found that 319 were of national or global biodiversity significance. Nakai Nam Theun NPA alone hosts at least 430 species of birds, which is the highest bird diversity in Southeast Asia and accounts for 4 percent of all global bird species.</p> <p>Nature-based tourism generally depends primarily on: (a) presence of rare and/or charismatic species, (b) scenic values, and (c) infrastructure (ease of access from roads and accommodation). To generate the tourism benefits from national parks and protected areas, Lao PDR will require stronger effectiveness of park management to protect the natural assets that attract visitors. This includes good management that can protect or increase the presence of key species; build green, resilient infrastructure within national parks; oversee provision of interpretation services and other services in the protected area, connect the protected area to</p>

<sup>84</sup> Andam, K., et al. 2010. Protected areas reduced poverty in Costa Rica and Thailand. Proceedings of the National Academy of Sciences 107:22.

<sup>85</sup> Balmford, A., et al. 2015. Walk on the Wild Side: Estimating the Global Magnitude of Visits to Protected Areas. PLOS Biology 13(2).

<sup>86</sup> Wang, G., et al. 2012. National Park Development in China: Conservation or Commercialization? AMBIO: A Journal of the Human Environment 41: 247–61.

	nearby population centers, transport corridors, and services; and ensure good benefit sharing and partnerships with local communities and government.
<b>Prior Action #13:</b> The Recipient, through the Prime Minister and MAF, has established legal provisions and procedures for regulating pesticides, including licensing businesses involved in import, formulation, sale and distribution of pesticides.	Lao PDR's average application of pesticides rates grew by 55 percent per year since 2003 although from a very low base. In comparison, average application rate of registered quantities of imported pesticides per hectare of cropland is 0.1 kg/ha for Lao PDR, compared to 16.2 kg/ha for Vietnam, 8.4 kg/ha for Thailand, and 2.9 kg/ha for Cambodia. Some banned highly hazardous pesticides can still be found in the market and are frequently used in large amounts by commercial and contract farmers and plantations. In addition, appropriate protective gear is hardly used when applying pesticides and empty containers are often discarded at the border of fields or other inappropriate locations with easy access to children. Children accompanying parents on the fields are exposed. There is a need for stronger enforcement of existing regulations on pesticides, incorporation of pest and pesticide management in environmental impact assessments, inspections, and support to destroy pesticide packaging. <sup>87</sup> The success of farmer training in improving pesticide application behavior is questionable. Most farmers are taking calculated risks that produce quick returns. Consequently, there is a need for an integrated response, including consumer awareness and lobbying, support for development of organic and clean market systems, improved food safety regulations, monitoring of pesticide use, residues, health effects, enforcing pesticide regulations, education, land-use planning and zoning, education and training of farmers, and training of farmers to reduced risks. <sup>88</sup> The main challenges for the next five years in the management of pesticides include (i) consolidation of the inspection scheme, (ii) improvements to the licensing scheme for pesticide retailers, (iii) increasing the proportion of products with a label in the national language, (iv) increasing the proportion of registered products imported in accordance with government rules and requirements, (iv) stepping up farmer education in pesticide risk reduction (short 3-day courses), and (v) developing sustainable capacity within the government's extension services to provide Integrated Pest Management training through season-long Farmers Field Schools. <sup>89</sup>
<b>Prior Action #14:</b> The Recipient, through MONRE, has regulated standard procedures and parameters of methods for sampling and analyzing PM2.5 and PM10 in air, as well as arsenic, cyanide, lead,	Pollution of all types are increasing in Lao DPR, and in recent years have been estimated to impose a cost of 14.6 percent on Lao PDR's GDP in 2017, causing up to 11,000 early deaths per year, and contributing to stunting in children. <sup>90</sup> This figure is only for outdoor ambient air pollution; household air pollution, water including arsenic, sanitation, and hygiene; and lead exposure. There are others that are not included such as pesticide exposure, industrial hotspots (water and air), toxic pollution (e.g. mining).

<sup>87</sup> NAFRI (National Agriculture and Forestry Research Institute). 2016. *How Sustainable is Commercial Banana Production in Laos? A Case Study. Presentation on Research Findings by the Policy Think Tank*. NAFRI. [http://rightslinklao.org/wp-content/uploads/downloads/2016/05/Banana\\_research\\_findings\\_-\\_PTT310316\\_E\\_Final.pdf](http://rightslinklao.org/wp-content/uploads/downloads/2016/05/Banana_research_findings_-_PTT310316_E_Final.pdf)

<sup>88</sup> Bartlett, A. 2016. "Pesticide Use in Xieng Khouang." Paper presented at the Institut Français, "Research Week for Development," November 16–18.

<sup>89</sup> Louanglath, K., and H. van der Wulp. 2014. *Lao PDR. Pesticide Management Update*. Unpublished manuscript. Prepared with assistance of the Swedish-supported FAO project GCP/RAS/229/SWE on Pesticide Risk Reduction in South East Asia.

<sup>90</sup> World Bank 2019 (forthcoming), *State of Environment in Lao PDR*. ASA.

<p>manganese, mercury, fecal coliform and total coliform (as part of pathogens) in water.</p>	<p>Air pollution is the second-largest risk factor in Lao PDR in DALYs, and the fourth largest in deaths. Inadequate water, sanitation, and hygiene is the sixth-largest risk factor in DALYs and seventh in deaths.<sup>91</sup> Indoor air pollution is driven partly by the fact that about 76 percent of the population rely on wood and over 20 percent on charcoal as primary cooking fuels in Lao PDR according to the Lao Social Indicator Survey 2011–2012. A recent study in three villages in Savannakhet found high 48-hour PM2.5 kitchen concentrations in a sample of 72 households cooking with solid fuels.<sup>92</sup></p> <p>Recent longitudinal econometric research in China shows a pronounced effect on cognition from air pollution as well, disproportionately affecting men and hindering human capital development: the average impact equivalent was having lost a year of education per person. The gender gap is particularly large for the less educated. A narrow focus on the negative effect on health—which is what most cost of pollution studies have done—may underestimate the total cost of air pollution.<sup>93</sup></p> <p>A study in six provinces in central and southern Lao PDR found that arsenic concentrations exceeded the WHO guidelines of 10 ppb in 56 percent of the included tube wells.<sup>94</sup></p> <p>The cost of childhood lead exposure in Lao PDR is estimated at almost 3 percent of GDP.<sup>95</sup> Childhood lead poisoning can have lifelong health impacts, including learning disabilities, such as reduction in IQ, anemia, and disorders in coordination, visual, spatial and language skills. No safe blood lead level threshold has been identified for children.<sup>96</sup></p>
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<sup>91</sup> Forouzanfar, M., A. Afshin, L. Alexander, H. R. Anderson, et al. 2016. *Global, Regional, and National Comparative Risk Assessment of 79 Behavioural, Environmental and Occupational, and Metabolic Risks or Clusters of Risks, 1990–2015: A Systematic Analysis for the Global Burden of Disease Study 2015*. Lancet 388: 1659–724.

<sup>92</sup> University of California, Berkeley, and Berkeley Air Monitoring Group. 2015. *Air Pollution and Impact Analysis of a Pilot Stove Intervention: Report to the Ministry of Health and the Inter-Ministerial Clean Stove Initiative of the Lao PDR*.

<sup>93</sup> Xin Zhang, Xi Chen, and Xiaobo Zhang. 2018. *The impact of exposure to air pollution on cognitive performance*. Proceedings of the [US] National Academy of Sciences (PNAS) September 11, 2018: 115 (37) 9193-9197. <https://www.pnas.org/content/115/37/9193>

<sup>94</sup> Chanpiwat, P., S. Sthiannopkao, K. H. Cho, K. W. Kim, V., B. Suvanthong, and C. Vongthavady. 2011. “Contamination by Arsenic and Other Trace Elements of Tube-Well Water along the Mekong River in Lao PDR.” *Environmental Pollution* 159 (2): 567–76.

<sup>95</sup> Attina, T. M., and L. Trasande. 2013. “Economic Costs of Childhood Lead Exposure in Low- and Middle-Income Countries.” *Environmental Health Perspectives* 121: 1097–1102;

<sup>96</sup> Lanphear, B. P., R. Hornung, J. Khoury, et al. 2005. Low-Level Environmental Lead Exposure and Children’s Intellectual Functions: An International Pooled Analysis. *Environmental Health Perspectives* 113 (7): 894–99. Surkan, P. J., A. Zhang, F. Trachtenberg, et al. 2007. “Neuropsychological Function in Children with Blood Lead Levels < 10 µg/dL.” *NeuroToxicology* 28 (6): 1170–77. Jusko, T. A., D. R. Henderson, B. P. Lanphear, et al. 2008. Blood Lead Concentrations < 10 ug/dL and Child Intelligence at 6 Years of Age. *Environmental Health Perspectives* 116 (2): 243–48.

## ANNEX 5. CHANGES TO POLICY ACTIONS SINCE INDICATIVE TRIGGERS AT GGDPO1 APPRAISAL

Policy Action		
GGDPO2 at GGDPO1 appraisal	GGDPO2	Reason for change
<b>Pillar 1. Strengthening prospects for fiscal sustainability and financial sector stability</b>		
(Indicative) Trigger #1: The Recipient, through MOF, (i) approves the FY18 budget with a deficit target of up to 4.8% of GDP consistent with an MTFF with further consolidation (-3.5% of GDP in FY19); (ii) introduces in a stepwise manner higher excise tax rates on fuel, alcohol, and tobacco; (iii) completes audit of civil servants database; and (iv) completes comprehensive tax review.	<p><b>Prior Action #1:</b> To improve revenue mobilization:</p> <ul style="list-style-type: none"> <li>(i) the Recipient, through the Ministry of Finance, has approved the Tax Strategy Development Plan (2018-2020);</li> <li>(ii) the Recipient, through the Ministry of Finance, has implemented an electronic payment system for Road Tax and Land Tax;</li> <li>(iii) the Recipient, through the National Assembly, has approved the amendments to the Value-Added Tax Law; and</li> <li>(iv) the Recipient, through the Ministry of Finance, has implemented the Tax Revenue Information System (TaxRIS) at (a) the Department of Tax at the central level; (b) the provincial Tax Departments in 5 provinces; and (c) 5 district tax offices.</li> </ul>	<p>The reform program has been strengthened to include components related to improving revenue mobilization which the GoL has recently undertaken. Given that revenue performance has been on a downward trend, these revenue actions explicitly focus on improving tax administration (by implementing an electronic payment system) and tax policy (amended VAT law which now allows for a refund mechanism).</p> <p>The Comprehensive Tax Review (CTR) has been completed and out of that the Tax Strategy Development Plan (TSDP) was developed with support of the IMF. The TSDP is much stronger than the CTR and therefore replaces the CTR action.</p> <p>The MoF will be addressing the changes to the excise taxes in a comprehensive manner through the upcoming Excise Tax Law in 2019, which is a trigger for GGDPO3.</p> <p>Additionally, based on guidance received during the Concept Note review, the prior action on the fiscal deficit is a target and cannot be deemed a prior action. Nevertheless, in 2018, the GoL achieved a fiscal deficit of 4.6% of GDP, below the deficit target of 4.8%.</p>
	<p><b>Prior Action #2:</b> To strengthen public financial management:</p> <ul style="list-style-type: none"> <li>(i) the Recipient, through the National Assembly and Ministry of Finance respectively, has</li> </ul>	<p>The reform program has been strengthened as it now explicitly includes a prior action which focuses on public financial management:</p> <ul style="list-style-type: none"> <li>(i) The Public Procurement Law provides a robust, legal framework for public procurement. The Law covers up</li> </ul>

<b>Policy Action</b>		
<b>GGDPO2 at GGDPO1 appraisal</b>	<b>GGDPO2</b>	<b>Reason for change</b>
	approved the Public Procurement Law and associated implementing instructions; and (ii) the Recipient, through the Ministry of Home Affairs, has rolled out (a) Smart Cards to at least 18 Government entities at the central level; and (b) the Personnel Information Management System (PIMS) to at least the Prime Minister's Office and MoHA.	many of the loopholes existing in the Public Procurement Decree, which preceded this Law; and (ii) Smart cards and PIMs improve payroll control, management and integration of payroll data and personnel records. This will enable physical verification of employment and allow for digitization of a number of human resources management functions. The advantage of rolling-out PIMS is that MoHA can now verify and track civil servants, thereby helping to control the civil service wage bill.
<b>(Indicative) Trigger #2:</b> The Recipient, through MOF, strengthens public debt management through producing a Medium-Term Debt Strategy and a DSA and implementing a medium-term borrowing plan covering all public debt instruments consistent with lowering public debt to 65% of GDP.	<b>Prior Action #3:</b> To improve public debt management, the Recipient, through the National Assembly, has approved the Public Debt Management Law.	The reform program is strengthened in GGDPO2 by the proposed modification as it includes the approval of a Public Debt Management <u>Law</u> (PDML) by the National Assembly rather than a public debt management strategy. Previously, there existed only a Presidential Decree on public debt management. The PDML was passed by the National Assembly in June 2018 and promulgated in August of the same year. The PDML is largely in line with international sound practice, is a key pre-requisite for effective public debt management as it provides a solid legal platform for undertaking debt management reforms. The Public Debt Management Strategy, the implementing instructions for the PDML and the borrowing plan are indicative triggers for GGDPO3.
<b>(Indicative) Trigger #3:</b> The Recipient, through BoL, prepares and publishes a set of core financial stability indicators.	<b>Prior Action #4:</b> To promote financial sector stability: (i) the Recipient, through the Bank of the Lao PDR, has prepared and published 7 core financial stability indicators for the banking sector; and	The reform program is strengthened in GGDPO2 by the proposed modification with the inclusion of the BoL Law, which is in line with international best practice.

<b>Policy Action</b>		
<b>GGDPO2 at GGDPO1 appraisal</b>	<b>GGDPO2</b>	<b>Reason for change</b>
	(ii) the Recipient, through the National Assembly, has approved the amendments to the Bank of the Lao PDR Law in line with good practices, including restricting fiscal deficit financing by BoL, auditing of BoL accounts and limiting BoL lending to the financial sector.	
<b>Pillar 2: Consolidating green growth principles across the national development strategy</b>		
<i>Policy Track 2.1. Building the foundation for green growth planning and monitoring</i>		
<b>(Indicative) Trigger #4:</b> The Recipient, through the Prime Minister, has issued a decree establishing the National Green Growth Strategy, with a specific M&E framework for the green growth priorities established in the Strategy.	<b>Prior Action #5:</b> The Recipient, through the Prime Minister, has approved the National Green Growth Strategy (NGGS), including a monitoring and evaluation framework.	Minor edits to simplify.
<i>Policy Track 2.2. Strengthening country instruments for cleaner and resilient green growth financing</i>		
<b>(Indicative) Trigger #5:</b> The Recipient has established the legal framework to (i) increase the EPF revenue generation, and (ii) establish mechanisms for EPF to prioritize its resource allocation.	<b>Prior Action #6:</b> The Recipient has established the legal framework to increase revenue generation for environmental and green growth priorities (i) through the National Assembly, by establishing the mandate to levy wastewater discharge fees, fines and service charges, and (ii) through the EPF Board, by establishing mechanisms for EPF to prioritize its resource allocation.	The reform program is strengthened in GGDPO2 by the proposed modification. First, the modification emphasizes the need for multiple instruments for financing or budgeting for green growth, of which EPF is one domestic instrument. Second, the modification explicitly includes the legal basis for a new environmental fiscal instrument as defined in the new water law. Third, other environmental fiscal instruments can follow, and will allow for higher revenues and more sustainable domestic financing for greener growth, some of which will be channelled through EPF, which now has a line in the national budget at MOF.
<i>Policy Track 2.3. Shifting towards decision making informed by priorities for environmental protection and climate resilience</i>		
<b>(Indicative) Trigger #6:</b> The Recipient, through MONRE—in consultation with MPI—has issued a ministerial decision to establish detailed procedures for information disclosure and public participation on SEA.	<b>Prior Action #7:</b> The Recipient, through MONRE in consultation with MPI, has established detailed regulations and procedures for implementing SEAs, including information disclosure and public participation.	This Prior Action has been strengthened by the client's delivery of a comprehensive regulating policy by the Minister, not only the components on information disclosure and public participation. As such the full SEA policy instrument is ready for implementation, having advanced this policy achievement from GGDPO3 to GGDPO2, building on the Prime Minister level Prior

<b>Policy Action</b>		
<b>GGDPO2 at GGDPO1 appraisal</b>	<b>GGDPO2</b>	<b>Reason for change</b>
		Action delivered at GGDPO1 that set the mandate for MONRE on SEAs.
<b>(Indicative) Trigger #7:</b> The Recipient has issued regulations on ESIA with provisions on screening, scoping, public participation, public information disclosure, assessment requirements, reviewing and approval of ESIA report, and budgetary allocation for compliance monitoring.	<b>Prior Action #8:</b> The Recipient, through the Prime Minister, has issued an ESIA Decree with provisions on screening, scoping, public participation, public information disclosure, assessment requirements, reviewing and approval of ESIA reports, and budgetary allocation for compliance monitoring.	The reform is now stronger with a Prime Minister's Decree that establishes the detailed regulations to which all sectors must conform.
<b>(Indicative) Trigger #8:</b> The Recipient, through MPWT, has issued a ministerial decision to adopt road maintenance procedures that integrate climate resilience and disaster risk considerations into the planning and budgeting of PIPs, including identification of vulnerable sections and design.	<b>Prior Action #9:</b> The Recipient (i) through MPWT, has adopted road maintenance procedures that integrate climate resilience and disaster risk considerations into the planning and budgeting of PIPs, including identification of vulnerable sections and design; and (ii) through the National Assembly, has adopted the legal framework for collecting and disseminating hydrometeorological information.	The reform is now stronger with the complementary addition of the HydroMet Law approved by the National Assembly as an additional piece of legal evidence. The HydroMet Law provides the legal basis for information sharing, including using climate-relevant data in road maintenance procedures. Lack of access to information has been a barrier to this policy track.
<b>Pillar 3. Incorporating green growth in selected sectors</b>		
<i>Policy Track 3.1. Shifting towards integrated and sustainable water resources management and uses</i>		
<b>(Indicative) Trigger #9:</b> The recipient, through MONRE, has issued a ministerial decision to establish Guidelines for Water Resource Assessment in river basins, including analysis of water users (ecological flows, hydropower, irrigation, domestic water supply, and recreational use) and evaluation of water quality in accordance with standards methods.	<b>Prior Action #10:</b> The Recipient, through the National Assembly and MONRE has established the legal and regulatory framework for integrated water resources management at the national level.	<p>1. The Water Law – a much stronger and highly strategic action than the original indicative trigger – represents a transformation toward greener growth in that it establishes the legal basis for water management, including requirements to develop regulations for seven topics: river basin planning and management, flood and drought management, wetlands, water and water conservation areas, information and data management, groundwater</p>

<b>Policy Action</b>		
<b>GGDPO2 at GGDPO1 appraisal</b>	<b>GGDPO2</b>	<b>Reason for change</b>
		<p>management, and water quality. As such the Water Law is a central basis for managing the energy/water nexus, irrigation expansion, urban water use, pollution, tourism, climate resilience and mitigation, and disaster risk management.</p> <p>2. The original trigger component related to water quality monitoring is closely linked with GGDPO2 Prior Action #13 under policy track 3.4: Strengthening pollution monitoring and management. It is better managed under that policy track and so is dropped here from policy track 3.1.</p> <p>3. MONRE has developed a Ministerial instruction on Groundwater Management which, along with the water pollution measures, demonstrate the Government commitment to putting the Water Law into implementation with the necessary set of detailed policies and implementing regulations. A number of these are being prepared including a new Prime Minister Decree on River Basin Planning and Management. The ministerial instruction on water pollution under Prior Action #14 also demonstrates that the Water Law is moving to implementation.</p> <p>4. Three Water Resource Assessments in river basins are already underway and nearly complete. Guidelines will be prepared later but it was decided that this policy action was not at the same level of strategic importance and irreversibility as those described above.</p>
<i>Policy Track 3.2. Improving forest resources management.</i>		
<b>(Indicative) Trigger #10:</b> The Recipient, through MAF, has issued a legal instrument requiring a Timber Legality Assurance System.	<b>Prior Action #11:</b> The Recipient, through MAF, has required national implementation of a Timber Legality Assurance System that introduces a definition of legality for timber and timber products, and a methodology for supply chain control and verification that meets relevant international standards, and mandates	The proposed modification strengthens the reform by more accurately reflecting the sequencing and specificity of reforms. In addition, the TLAS is anticipated to be included in a new Forest Law that is under advanced preparation for National Assembly consideration in late 2019.

<b>Policy Action</b>		
<b>GGDPO2 at GGDPO1 appraisal</b>	<b>GGDPO2</b>	<b>Reason for change</b>
	DOF as the body responsible for relevant international obligations and DOFI as the implementation and enforcement body for the TLAS.	The result indicator phrasing was revised slightly for clarity and simplicity.
<b>(Indicative) Trigger #11:</b> The Recipient, through the MAF, has issued a Ministerial Decision on the Organization and Activities of a new department or authority tasked with the national park and wildlife conservation taking into account principles of effective and centralized authority, delegated accountability, standardized and collaborative management, benefit sharing, and community private sector partnerships for ecotourism.	<b>Prior Action #12:</b> The Recipient, (i) through the Prime Minister, has upgraded Nakai Nam Theun NPA as one of Lao PDR's first national parks in line with international conservation standards; (ii) through MAF, has approved a set of 7 implementing regulations for the management of national protected areas and national parks, including regulations for management planning, zoning, outreach, livelihood development, land use planning, law enforcement, and collaborative management; and (iii) through MAF, has established the structure, mandates, and activities of the new Protected Areas Management Division under the Department of Forestry, tasked with managing the system of national parks and protected areas, taking into account principles of effective and centralized authority, delegated accountability, standardized and collaborative management, benefit sharing, and community private sector partnerships for nature-based tourism.	<p>The proposed modification strengthens the reform in three ways:</p> <ol style="list-style-type: none"> <li>1. A National Protected Area important for the strategic Nam Theun reservoir has been upgraded to become one of Lao PDR's first two national parks as part of the emerging new centralized National Park and NPA system under MAF Department of Forestry.</li> <li>2. 7 or 12 planned regulations were accelerated from GGDPO3 to GGDPO2 to help advance progress on centralizing protected area authority and implementing the regulations in individual protected areas. The remaining 5 regulations are all accelerated as well but are not final at this point.</li> <li>3. The intent of the original indicative Trigger has been met through the August 2017 Ministerial Decision No. 3822/MAF on Organization and Function of the Department of Forestry, which already details the mandates of the new Protected Areas Management Division. This Ministerial Decision is now considered to be the authoritative policy on this topic, since a new Ministerial Instruction of the Ministry of Home Affairs limits the development of specific TORs for Division level, necessitating reliance on Ministerial Decision No. 3822/MAF dated August 2017 (Note: Within Ministries, Departments consist of numerous Divisions).</li> </ol> <p>The result indicator phrasing was revised slightly for clarity, strength, and ambition.</p>
<i>Result indicator:</i> number of national parks where progress in reaching management objectives is at least moderately satisfactory, as measured by the Management Effectiveness Tracking Tool (METT).	<i>Result indicator</i> revised as follows: number of national parks <i>established</i> where progress in reaching management objectives is at least moderately satisfactory, as measured by the Management Effectiveness Tracking Tool (METT).	

<b>Policy Action</b>		<b>Reason for change</b>
<b>GGDPO2 at GGDPO1 appraisal</b>	<b>GGDPO2</b>	
<i>Policy Track 3.3. Leveraging green growth policies to control non-point source pollution</i>		
<b>(Indicative) Trigger #12:</b> The Recipient, through MAF, has issued ministerial decisions to establish procedures for pesticide registration and licensing, and sanctions for violating those regulations.	<b>Prior Action #13:</b> The Recipient, through the Prime Minister and MAF, has established legal provisions and procedures for regulating pesticides, including licensing businesses involved in import, formulation, sale and distribution of pesticides.	The proposed modification (i) strengthens the reform via issuance of a Prime Minister's decree in line with good practice, and (ii) clarifies the sequencing of the steps for regulating pesticides businesses. This reform is now well sequenced for delivering on the indicative GGDPO3 trigger which is under preparation.
<i>Policy Track 3.4. Strengthening pollution monitoring and management</i>		
<b>(Indicative) Trigger #13:</b> The Recipient, through MONRE, has regulated standard methods for sampling and analysis of air and water quality data.	<b>Prior Action #14:</b> The Recipient, through MONRE, has regulated standard procedures and parameters of methods for sampling and analyzing PM2.5 and PM10 in air, as well as arsenic, cyanide, lead, manganese, mercury, fecal coliform and total coliform (as part of pathogens) in water.	The proposed modification strengthens the reform by specifying the priority compounds to be regulated by a Ministerial Decision. Standardized procedures and parameters covering additional pollutants will follow GGDPO2.

## **ANNEX 6. ENVIRONMENTAL ASPECTS**

1. The World Bank Policy for Development Policy Financing requires the consideration of environmental, forests, and other natural resource aspects. Building on the 2019 State of the Environment Report (SoER) for Lao PDR, the Bank conducted an assessment of the environmental implications of the policy actions supported by the GGDPO. The assessment includes Lao PDR's current institutional framework for environmental management, an economic valuation of natural resources degradation and environmental health risks, interventions to address environmental priorities and policy options for strengthening the country's institutional framework for green growth. Policies supported by this DPL will reinforce environmental governance and natural resource management. The actions supported by the GGDPO series including GGDPO2 are expected to improve forest and water resources management, decrease environmental health risks caused by pollution and enhance resilience to natural disasters. Climate change mitigation and adaption measures are expected to help achieve the country's NDC targets and strengthen disaster risk management.
2. The Bank estimates that environmental health risk factors have caused approximately 11,000 deaths in Lao PDR in 2017, which is equivalent to 22.7 percent of all deaths in the country. Additionally, risk factors also caused nearly 60 million days of illness in 2017. Household air pollution (HAP) from the use of solid fuels caused 45% of the deaths, while a quarter was from drinking water pollution and inadequate sanitation and hygiene, and a quarter from outdoor PM2.5 ambient air pollution (AAP). Exposure to lead among adults caused the remaining 5% of deaths, and lead exposure among children causes the loss of 340,000 IQ points per year. The monetized value of these factors accounted for more than 2.6 billion USD in 2017, equivalent to 14.6 percent of the GDP (Table A7.1) (World Bank 2019, forthcoming).

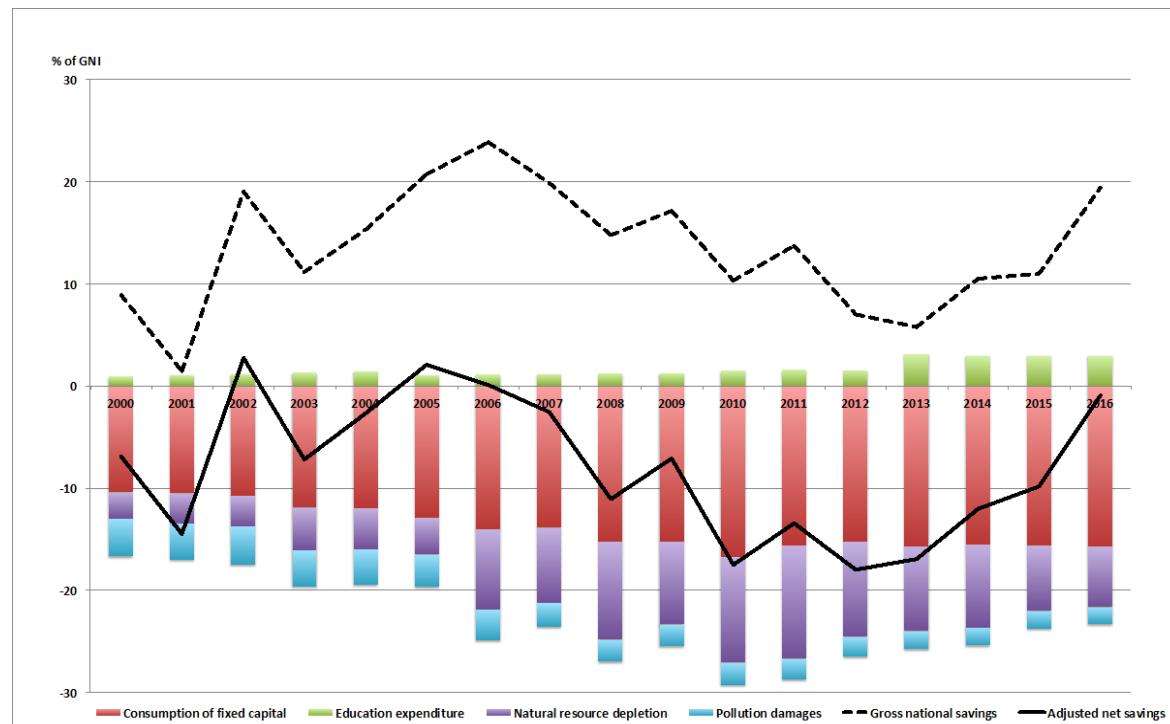
**Table A7.1. Summary Costs of Environmental Health Risks in the Lao PDR**

	Total, million USD	2017 GDP equivalence
<b>Household air pollution</b>	<b>997</b>	<b>5.7%</b>
<b>Water, sanitation and hygiene</b>	<b>568</b>	<b>3.5%</b>
<b>Ambient air pollution</b>	<b>552</b>	<b>2.9%</b>
Microbiological pollution	507	2.6%
Arsenic in groundwater	61	0.3%
<b>Lead (Pb) exposure</b>	<b>483</b>	<b>2.5%</b>
Lead (Pb) exposure - children	307	1.9%
Lead (Pb) exposure - adults	176	0.6%
<b>Total</b>	<b>2600</b>	<b>14.6%</b>

Source: Bank estimates, 2018

3. Lao DPR's wealth is its natural wealth. Natural capital grew from 42 billion USD in 1995 to 151 billion in 2014. Despite the natural capital increase, the value for adjusted net savings (ANS) has been low and volatile over time, reaching about 3 percent of gross national income (GNI) in 2003, falling to minus 18 percent of GNI in 2012, and reaching minus 1 percent of GNI in 2016 (Figure A7.1). ANS is an indicator that assesses an economy's sustainability, evaluating the true rate of saving in an economy after considering investments in human capital, depletion of natural resources and damages caused by pollution. Despite a recent increase in adjusted net savings, natural capital depletion is nonetheless persistent. Depletion of forestry and mineral resources, followed by pollution damages, are substantial (Figure A7.2). Years of negative ANS suggest that a country is running down its capital stock and is on an unsustainable growth trajectory (Lange et al. 2018).

**Figure A7.1. Adjusted Net Savings of Lao PDR, 2000 - 2016**



Source: Adjusted Net Savings Database. Lange et al. 2018

4. The unsustainable exploitation of resources has resulted in degradation of forests, land, fisheries, and loss of natural habitats and forests. The cost of natural resource degradation in Lao PDR reached US\$ 766 million in 2016 or the equivalent to 4.7 percent of its GDP (Table A7.2). This degradation accounts for the cost of deforestation, forest degradation, natural disasters, soil degradation cost and cost of fish habitat destruction (World Bank 2019, forthcoming).

**Table A7.2. Summary Costs of Natural Resources Degradation in the Lao PDR**

	Total, US\$ million	Portion of 2016 GDP equivalence
Cost of deforestation	275	1.7%
Cost of forest degradation	189	1.2%
Cost of natural disasters	165	1.0%
Soil degradation cost	101	0.6%
Cost of fish habitat destruction	36	0.2%
<b>Total</b>	<b>766</b>	<b>4.7%</b>

Source: World Bank estimates, 2019

#### **Identifying the potential environmental effects of the policies supported by the GGDPO series**

5. The Bank analysis identified the priority environmental issues as well as cost-effective interventions to tackle them. The analysis also provided recommendations to further strengthen governance and institutional capacity.

6. The Bank assessed whether the policy actions supported by GGDPO2 are likely to cause significant environmental effects. Table A7.3 presents a summary of key GGDPO support areas and their potential environmental impacts.

**Table A7.3 Summary of Key DPF-supported Areas and Their Potential Poverty Environmental Impacts**

Policy Actions	Potential Environmental Effects
<b>Prior Action #1: To improve revenue mobilization:</b> (i) the Recipient, through the Ministry of Finance, has approved the Tax Strategy Development Plan (2018-2020);	<b>Positive effects:</b> <ul style="list-style-type: none"> <li>• By improving revenue mobilization, the government can increase expenditures in environmental management and green growth.</li> <li>• Greater revenues can enhance the government's ability to recruit staff at regulatory agencies.</li> </ul>

Policy Actions	Potential Environmental Effects
<p>(ii) the Recipient, through the Ministry of Finance, has implemented an electronic payment system for Road Tax and Land Tax;</p> <p>(iii) the Recipient, through the National Assembly, has approved the amendments to the Value-Added Tax Law; and</p> <p>(iv) the Recipient, through the Ministry of Finance, implemented the Tax Revenue Information System (TaxRIS) at (a) the Department of Tax at the central level; (b) the provincial Tax Departments in 5 provinces; and (c) 5 district tax offices.</p>	<ul style="list-style-type: none"> <li>• More efficient payments systems for road and land taxes could also translate into strengthened enforcement for road transport and land management regulations.</li> </ul> <p><b>Negative effects:</b></p> <p>No significant negative effects identified.</p>
<p><b>Prior Action #2: To strengthen public financial management:</b> (i) the Recipient, through the National Assembly and Ministry of Finance respectively, has approved the Public Procurement Law and associated implementing instructions; and, (ii) the Recipient, through the Ministry of Home Affairs, has rolled out (a) Smart Cards to at least 18 Government entities at the central level; and (b) the Personnel Information Management System (PIMS) to at least the Prime Minister's Office and MoHA.</p>	<p><b>Positive effects:</b></p> <p>The Public Procurement Law is expected to support improved public procurement that can deliver environmental benefits, such as climate resilient infrastructure, in line with the National Green Growth Strategy.</p> <p><b>Negative effects:</b></p> <p>No significant negative effects identified.</p>
<p><b>Prior Action #3: To improve public debt management,</b> the Recipient, through the National Assembly, has approved the Public Debt Management Law.</p>	<p><b>Positive effects:</b></p> <p>No significant positive effects identified.</p> <p><b>Negative effects:</b></p> <p>No significant negative effects identified.</p>
<p><b>Prior Action #4: To strengthen financial sector stability:</b> (i) the Recipient, through the Bank of the Lao PDR, has prepared and published 7 core financial stability indicators for the banking sector; and (ii) the Recipient, through the National Assembly, has approved the amendments to the Bank of the Lao PDR Law in line with good practices, including restricting fiscal deficit financing by BoL, auditing of BoL accounts and limiting BoL lending to the financial sector.</p>	<p><b>Positive effects:</b></p> <p>No significant positive effects identified.</p> <p><b>Negative effects:</b></p> <p>No significant negative effects identified.</p>

Policy Actions	Potential Environmental Effects
<p><b>Prior Action #5:</b> The Recipient, through the Prime Minister, has approved the National Green Growth Strategy (NGGS), including a monitoring and evaluation framework.</p>	<p><b>Positive effects:</b></p> <ul style="list-style-type: none"> <li>The strategy will integrate principles of environmental protection and climate resilience into development planning and promotes initiatives for water resources management, sustainable forest management, pollution management, nature-based tourism, environmental fiscal instruments and resilient infrastructure.</li> <li>The NGGS will contribute to climate change adaptation and mitigation to support the country in meeting its NDC targets.</li> </ul> <p><b>Negative effects:</b></p> <ul style="list-style-type: none"> <li>No significant negative effects identified.</li> </ul>
<p><b>Prior Action #6:</b> The Recipient has established the legal framework to increase revenue generation for environmental and green growth priorities (i) through the National Assembly, by establishing the mandate to levy wastewater discharge fees, fines and service charges, and (ii) through the EPF Board, by establishing mechanisms for EPF to prioritize its resource allocation.</p>	<p><b>Positive effects:</b></p> <ul style="list-style-type: none"> <li>By implementing waste-water discharge fees, fines and other taxes, polluters will have incentives for efficient resources use, pollution prevention and cleaner production.</li> </ul> <p><b>Negative effects:</b></p> <ul style="list-style-type: none"> <li>No significant negative effects identified.</li> </ul>
<p><b>Prior Action #7:</b> The Recipient, through MONRE in consultation with MPI, has established detailed regulations and procedures for implementing SEAs, including information disclosure and public participation.</p>	<p><b>Positive effects:</b></p> <ul style="list-style-type: none"> <li>Implementation of SEAs will enable the integration of key environmental considerations in public policy design and implementation, and support management of trade-offs and complementarities among sector objectives. Enhanced public participation and information disclosure will help improve accountability and environmental and natural resource governance.</li> </ul> <p><b>Negative effects:</b></p> <ul style="list-style-type: none"> <li>No significant negative effects identified.</li> </ul>
<p><b>Prior Action #8:</b> The Recipient, through the Prime Minister, has issued an ESIA Decree with provisions on screening, scoping, public participation, public information disclosure, assessment requirements, reviewing and approval of ESIA reports, and budgetary allocation for compliance monitoring.</p>	<p><b>Positive effects:</b></p> <ul style="list-style-type: none"> <li>With the recent ESIA regulation, Lao PDR has comprehensive national environmental legislation that will open up governmental decision to public scrutiny, enhancing information disclosure, public participation and stakeholder engagement.</li> <li>The recent ESIA regulation strengthens the enforcement of ESIsAs for investment projects to prevent and mitigate potential environmental impacts.</li> </ul> <p><b>Negative effects:</b></p> <ul style="list-style-type: none"> </ul>

Policy Actions	Potential Environmental Effects
	No significant negative effects identified.
<p><b>Prior Action #9:</b> The Recipient (i) through MPWT, has adopted road maintenance procedures that integrate climate resilience and disaster risk considerations into the planning and budgeting of PIPs, including identification of vulnerable sections and design; and (ii) through the National Assembly, has adopted the legal framework for collecting and disseminating hydrometeorological information.</p>	<p><b>Positive effects:</b></p> <ul style="list-style-type: none"> <li>• By integrating climate change considerations and disaster risk management into public infrastructure, underpinned by better and more accessible hydrometeorological information, climate resilience measures and mitigation considerations will be included in the early stage of a project and later through the project cycle.</li> <li>• Costly road maintenance, landslides and erosion will be reduced, leading to greater efficiencies and longer road life, reduced demand for road materiel, and lower transport costs and emissions from transport.</li> </ul> <p><b>Negative effects:</b></p> <p>No significant negative effects identified.</p>
<p><b>Prior Action #10:</b> The Recipient, through the National Assembly and MONRE has established the legal and regulatory framework for integrated water resources management at the national level.</p>	<p><b>Positive effects:</b></p> <ul style="list-style-type: none"> <li>• is expected to lead to an increased awareness of the importance of sustainable development and the incorporation of environmental considerations into water management, with positive implications on environmental fiscal instruments, water pollution and waste, energy, agriculture, forest, watersheds, wetlands, flood and drought risk, climate change, groundwater, information and data management, nutrition, and tourism – and managing trade-offs and harnessing mutual opportunities among these themes and sectors.</li> <li>• Implementing the Integrated Water Resources Management (IWRM) framework will help protect the environment, foster economic growth and sustainable agricultural development.</li> <li>• The IWRM framework will enhance: i) planning of water use and the protection of surface water and ground water; ii) efficient production of food crops in irrigated agriculture; and iii) management of water quality.</li> </ul> <p><b>Negative effects:</b></p> <p>No significant negative effects identified.</p>
<p><b>Prior Action #11:</b> The Recipient, through MAF, has required national implementation of a Timber Legality Assurance System that introduces a definition of legality for timber and timber products, and a methodology for supply chain</p>	<p><b>Positive effects:</b></p> <ul style="list-style-type: none"> <li>• Timber legality is expected to reduce deforestation, encourage investments in forestland, protect water &amp; wildlife and promote responsible forestry as a preferred land use.</li> </ul>

Policy Actions	Potential Environmental Effects
<p>control and verification that meets relevant international standards, and mandates DOF as the body responsible for relevant international obligations and DOFI as the implementation and enforcement body for the TLAS.</p>	<ul style="list-style-type: none"> <li>• The system will contribute to biodiversity conservation and proper land use by assuring logging rights have been legally granted and timber has been legally-harvested.</li> <li>• Timber legality can enhance the value of forests, increasing the likelihood of retention of forested areas even in the face of competitive pressures for conversion to agriculture or other land uses.</li> </ul> <p><b>Negative effects:</b></p> <p>No significant negative effects identified.</p>
<p><b>Prior Action #12:</b> The Recipient, (i) through the Prime Minister, has upgraded Nakai Nam Theun NPA as one of Lao PDR's first national parks in line with international conservation standards; (ii) through MAF, has approved a set of 7 implementing regulations for the management of national protected areas and national parks, including regulations for management planning, zoning, outreach, livelihood development, land use planning, law enforcement, and collaborative management; and (iii) through MAF, has established the structure, mandates, and activities of the new Protected Areas Management Division under the Department of Forestry, tasked with managing the system of national parks and protected areas, taking into account principles of effective and centralized authority, delegated accountability, standardized and collaborative management, benefit sharing, and community private sector partnerships for nature-based tourism.</p>	<p><b>Positive effects:</b></p> <ul style="list-style-type: none"> <li>• National protected areas will help protect biodiversity and guarantee the sustainability of ecosystem services.</li> <li>• Reduction in deforestation will help maintain forest cover as a natural defense to flooding and landslides.</li> </ul> <p><b>Negative effects:</b></p> <ul style="list-style-type: none"> <li>• No significant negative effects identified</li> </ul>
<p><b>Prior Action #13:</b> The Recipient, through the Prime Minister and MAF, has established legal provisions and procedures for regulating pesticides, including licensing businesses involved in import, formulation, sale and distribution of pesticides.</p>	<p><b>Positive effects:</b></p> <ul style="list-style-type: none"> <li>• Pesticides regulation will prevent banned pesticides from entering the country and enforce proper management, labelling, registration, storing and disposal, ensuring their safe use for humans and ecological systems.</li> <li>• Production and use of pesticides will be controlled and monitored all through their lifecycle, including manufacturing and processing, import, export, distribution, transportation, storage, use, and disposal.</li> </ul>

Policy Actions	Potential Environmental Effects
<p><b>Prior Action #14:</b> The Recipient, through MONRE, has regulated standard procedures and parameters of methods for sampling and analyzing PM2.5 and PM10 in air, as well as arsenic, cyanide, lead, manganese, mercury, fecal coliform and total coliform (as part of pathogens) in water.</p>	<ul style="list-style-type: none"> <li>• <b>Negative effects:</b> No significant negative effects identified.</li> </ul> <p><b>Positive effects:</b></p> <ul style="list-style-type: none"> <li>• Monitoring and evaluation of key pollutants are the primary mechanisms to design, implement, monitor and evaluate pollution management plans. Quality control and quality assurance systems and their standard operating procedures ensure that the collected data is accurate and reliable. A robust quality control and quality assurance system enables performance to be monitored and corrective actions to be taken when required.</li> </ul> <p><b>Negative effects:</b> No significant negative effects identified.</p>

7. Based on the identification of environmental priority issues and the assessment of potential consequences of the policy actions, the assessment concluded that prior actions are likely to cause significant positive environmental effects. In addition, with the recent ESIA regulation, Lao PDR now has a comprehensive national environmental legislation that will allow the implementation of environmental assessments for investment projects with potential environmental impacts. The MONRE will be responsible for issuing environmental quality standards and for specifying procedures and standards to evaluate and mitigate environmental impacts caused by development projects.
8. In conclusion, the proposed policy reforms reviewed are likely to have significant positive impact in the environment, contributing to the sustainable use of natural resources and promoting a greener growth pattern.