Report Number: ICRR0023195

1. Program Information

Country Practice Area (Lead)

Lao People's Democratic Republic Environment, Natural Resources & the Blue Economy

Programmatic DPF

Planned Operations Approved Operations

Operation ID Operation Name

P159956 Green Resilient Growth DPF

L/C/TF Number(s) IDA-60490	Closing Date (Original) 30-Jun-2018	Total Financing (USD) 39,654,615.26
Bank Approval Date 31-May-2017	Closing Date (Actual) 30-Jun-2018	
	IBRD/IDA (USD)	Co-financing (USD)
Original Commitment	38,590,000.00	0.00
Revised Commitment	38,590,000.00	0.00
Actual	39,654,615.26	0.00

Country Practice Area (Lead)

Lao People's Democratic Republic Macroeconomics, Trade and Investment

Operation ID Operation Name

P166839 Lao PDR Green Resilient Growth DPO 2 (P166839)

L/C/TF Number(s) IDA-60490,IDA-64200	Closing 31-Dec-2	Total Financing (USD) 40160307.16					
Bank Approval Date 28-May-2019		Closing Date (Actual) 31-Dec-2020					
	IBRD/ID	IBRD/IDA (USD)					
Original Commitment	40,0	0.00					
Revised Commitment	40,0	40,000,000.00					
Actual	40,1	0.00					
Prepared by Chikako Miwa	Reviewed by Stephen Hutton	ICR Review Coordinato Christopher David Nelson	r Group IEGSD				

2. Program Objectives and Pillars/Policy Areas

a. Objectives

The Program Development Objective (PDO) of the first in the series of three operations of the Green Resilient Growth Development Policy Operation (GGDPO1) was to "support the Government of Lao PDR in achieving fiscal stability and consolidating its pathway towards green growth," according to the Program Document dated May 3, 2017 (hereafter PD 2017) (page v).

The PDO of the second operation in the series (GGDPO2) was revised to "achieve fiscal sustainability and financial sector stability, adopt green growth planning and monitoring, and introduce green growth tools and principles in priority sectors" (PD dated April 30, 2019, hereafter PD 2019, para 44). The financial sector stability aspect was added to the PDO to address emerging financial sector risks. The three pillars and their objectives remain the same as during GGDPO1.

Green growth was defined as "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" (PD 2019, footnote 13).

The PDO of GGDPO are parsed to the following three objectives for the purpose of the ICR Review:

Objective 1. Achieve fiscal sustainability and financial sector stability;

Objective 2. Adopt green growth planning and monitoring; and

Objective 3. Introduce green growth tools and principles in priority sectors.

The third planned operation in the series (P171431) was dropped in 2020 due to the serious deterioration of the macro conditions and the trends in debt and debt service. In addition, the COVID-19 pandemic had affected priorities in 2020 and beyond. In accordance with the harmonized guideline between OPCS and IEG, this ICR Review will assess the results of the program based on the series-level objectives and pillars. Therefore, this Review will also take account of the extent to which intended prior actions and program results for DPO 3 (as appraised by the Bank) were achieved despite the absence of Bank financing.

b. Pillars/Policy Areas

The objective of the program was to be achieved through three pillars that were mutually complementary (PD 2019, para 44):

Pillar 1. Strengthening prospects for fiscal sustainability and financial sector stability. This pillar aimed at supporting economic management actions to address key macroeconomic risks.

Pillar 2. Consolidating green growth principles across the national development strategy. This pillar aimed at establishing policy-level instruments for green growth planning, financing, and monitoring.

Pillar 3. Incorporating green growth in selected sectors. This pillar aimed at incorporating 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. The selected sectors included: power, forestry, tourism, and nutrition (PD 2019, para 46).

c. Comments on Program Cost, Financing and Dates

Program Cost. At appraisal, the costs of GGDPO1 and GGDPO2 were estimated to be US\$38.6 million and US\$40.0 million, respectively (PD 2017, page v, and PD2019, page vi). The actual costs for GGDPO1 and GGDPO2 were US\$39.7 million and US\$40.2 million, respectively (ICR, page 1).

Financing. For the first DPO, IDA disbursed a single tranche of SDR28.5 million (Financing Agreement dated June 7, 2017, page 1). For the second DPO, IDA disbursed SDR28.9 million (Financing Agreement dated May 31, 2019, page 1).

Borrower Contribution. There was no counterpart funding from the borrower.

Dates. The first DPO was approved on May 31, 2017, and became effective on June 26, 2017. It was closed on June 30, 2018, which was the original closing date. The second DPO was approved on May 28, 2019, and became effective on June 10, 2019. It was closed on December 31, 2020, as originally planned. The third DPO was cancelled in 2020 as described in 2.a.

3. Relevance of Design

a. Relevance of Objectives

Country Context. Lao PDR faced significant macroeconomic vulnerabilities, most evident in the levels of the fiscal deficit, the public debt, and the current account deficit that were projected to be 6.2 percent, 68.2 percent, and 14 percent, respectively, of GDP by 2016 (ICR, para 2). The 2016 Joint International Monetary Fund-World Bank Debt Sustainability Assessment rated the country to be at high risk of debt distress. At the same time, import demand from state-owned enterprises, fueled by direct lending from the Bank of Lao PDR. had kept the current account deficit very high. Additionally, the financial sector was concerned about the absence of good data on the financial soundness of banks, the low capital adequacy among some public banks, and the high non-performing loan ratios compared to regional peers. An equally important challenge was that of moving from a pattern of growth reliant on heavy exploitation of natural assets (minerals, forests and water) to a "green growth" model consistent with environmental sustainability. Key challenges to implementing this model lay in the absence of adequate legal and regulatory frameworks, the lack of mechanisms for coordination, monitoring, disclosure and stakeholder consultation, and low institutional capacity and governance. Faced with the above challenges, the government had begun to address known challenges systematically, beginning by enshrining green growth principles and goals into its national vision and strategy documents, such as Vision 2030 and the 8th National Social and Economic Development Plan (NSEDP, 2016-25). It was also reflected in the establishment of the National Green Growth Steering Committee (NGGSC), an intergovernmental body to coordinate planning, implementation, monitoring and reporting.

The Bank's Assistance Strategy. Throughout implementation, the GGDPOs were seen as a strategic opportunity to help Lao PDR transition towards a green growth development model, in line with the Bank's Country Partnership Framework (CPF) FY17-21. In particular, the GGDPOs aligned with the objective 1.1 of putting public finances on a sustainable path and supporting financial sector stability and the cross-cutting theme of strengthening institutions to establish a rules-based environment (CPF, annex 1, pages 48-56). The CPF (para 101) envisaged that the GGDPOs would support toward improving governance and accountability to sustainably manage natural resources.

The Government's Strategy. The GGDPOs were in line with the government's vision and strategy to facilitate the achievement of its green growth goals in the 8th National Social and Economic Development Plan (NSEDP, 2016-25) and the 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 (PD 2019, para 40). The GGDPOs also aligned with the Prime Minister Order No. 2, which was issued in February 2018 to demonstrate the high-level commitment to addressing the challenges related to doing business in Lao PDR (PD 2019, para 9).

Previous Sector Experience. The Bank had been supporting Lao PDR with green growth engagements and policy operations on poverty reduction (i.e., the Poverty Reduction Support Operations), which informed the design of the GGDPO series (PD 2019, para 48).

The relevance of objectives is rated satisfactory.

b. Relevance of Prior Actions

Rationale

1. Number and List of Prior Actions (PAs)

Table 1. Numbering and Listing Prior Actions in the GGDPOs

GGDPO1	GGDPO2
Objective 1. Achieve fiscal sustainability and finan	cial sector stability.
PA1. The Recipient, through the Prime Minister, has taken steps to support fiscal consolidation, through: (i) eliminating tariff exemptions on fuel imports for investment projects, as evidenced by Notification No. 1152/PM dated 9 August 2016; (ii) limiting the intake of civil servants to up to 5,000 in 2017, as evidenced by Decision No. 73/PM dated 29 August 2016; and through the Ministry of Finance; and (iii) has revised the Implementing Instructions for the Value-added tax (VAT) as evidenced by Instruction No. 0077/MF dated 11 January 2017.	PA2. 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 VAT Law; and (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. As evidenced by: (i) Ministerial Instruction No. 1781/MOF, approving the Tax Strategy Development Plan, dated 13 June 2018; (ii) Ministerial Instruction: (a) No. 3455/MOF, implementing electronic payment system for Road Tax dated October 2017, and (b) No. 3909/MOF, implementing electronic payment system for Land Tax dated December 2018; (iii) Approval by President of the National Assembly - No. 089/NA, dated June 2018; (iv) Ministerial Instruction No. 3532/MOF for the implementation of TaxRIS signed by Minister of Finance on 2nd November, 2018 to implement TaxRIS by 5th November 2018.
	PA3. 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 (MoHA), 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.

PA7. The Recipient, through the Prime Minister, has

restructured the Environment Protection Fund (EPF)

with provisions that (i) create an inter-ministerial

	As evidenced by: (i) (a) Approval by President of the National Assembly of the Public Procurement Law No. 62/NA dated November 2017; and (b) Ministerial Instruction for the Public Procurement Law No. 0477/MOF dated February 2019.; (ii) Report No. 03/MoHA from the Minister of MoHA to the Prime Minister of Lao PDR, dated January 2019.
	PA4. 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
	PA5. To promote financial sector stability: (i) the Recipient, through the Bank of the Lao PDR (BOL), 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.
	As evidenced by: (i) Data published on Bank of the Lao PDR's official website; 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.
Objective 2. Adopt green growth planning and mo	nitoring.
PA6. The Recipient has incorporated the principles of green growth in national development planning through (i) the National Assembly adopting the 8th NSEDP (2016-2020) that sets forth Outcome 3 and Outputs 1 to 3 associated with environmental protection and sustainable natural resources management as evidenced by Resolution No. 9/NA dated 22 April 2016; 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, as evidenced by Agreement No. 95/PM dated 8 December 2016.	PA10. 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.
DA7. The Desirious should be Drive Minister to a	DA44 The Desirient has established the law-

PA11. The Recipient has established the legal

framework to increase revenue generation for

environmental and green growth priorities (i) through

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, as evidenced by Decree No. 94/PM dated 8 March 2017.

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; (ii) EPF By-law 004/EPF Board, dated 30 January 2018; and (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.

PA8. The Recipient, through the Prime Minister, (i) has mandated the Ministry of Natural Resources and Environment (MONRE) to collaborate with key line sectors in the preparation of sectoral Strategic Environmental Assessments (SEAs), as evidenced by Decree No. 445/PMO dated 19 December 2016, and, through MONRE, (ii) has required SEAs in the formulation of all policies, programs, and strategic plans, to incorporate environmental and social sustainability considerations, and the Sustainable Development Goals in public planning, as evidenced by Ministerial Decision No. 483/MONRE dated 6 February 2017.

PA12. 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.

PA9. The Recipient, through the Ministry of Planning and Investment (MPI), has established the public investment project (PIP) review process that takes into account climate resilience and disaster risk considerations, as evidenced by Ministerial Decision No. 0645/MPI dated 28 March 2017.

PA13. The Recipient, through the Prime Minister, has issued an Environmental and Social Impact Assessment (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.

PA14. The Recipient (i) through the Ministry of Public Works and Transport (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; and (ii) Law on Meteorology and Hydrology No. 172/NA, dated December 2017.

Objective 3. Introduce green growth tools and principles in priority sectors.

PA15. 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, as evidenced by Order No. 15/PM dated 13 May 2016.

PA16. 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 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.

PA17. The Recipient, through the National Assembly, has established legal provisions (i) for the management, monitoring, and inspection of chemicals Protected Areas (NPA) as one of Lao PDR's first 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 (iii) through MAF, has established the structure, Promulgation Decree No. 197/President dated 28 November 2016.

PA19. 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; and (ii) Ministerial Instruction on Groundwater Management 1509/MONRE, dated 21 March 2019.

PA20. The Recipient, through the Ministry of Agriculture and Forestry (MAF), has required national implementation of a Timber Legality Assurance System (TLAS) 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 Department of Forestry (DOF) as the body responsible for relevant international obligations and the Department of Forest Inspection (DOFI) as the implementation and enforcement body for the TLAS.

As evidenced by: Ministerial Instruction No. 76/MAF, dated 12 October 2018.

PA21. The Recipient, (i) through the Prime Minister, has upgraded Nakai Nam Theun National Parks and 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 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; (ii) Ministerial
	Instruction No. 145/MAF adopting 7 guidelines for
	managing protected areas, dated 13 February 2019;
	and (iii) Ministerial Decision No 3822 on organization
	and function of DOF, dated August 18th, 2017.
	PA22. The Recipient, through the Prime Minister and
	, , ,
DA40. The Decinient through the Drive Minister and	MAF, has established legal provisions and procedures
PA18. The Recipient, through the Prime Minister and	for regulating pesticides, including licensing
MONRE, has established national air quality, water	businesses involved in import, formulation, sale and
quality, and vehicle emissions standards, including	distribution of pesticides.
lead in air and water as evidenced by Decree No.	
81/PM dated 21 February 2017, and Ministerial	As evidenced by: (i) Prime Minister's Decree No.
Decision No. 0485/MONRE, dated 7 February 2017.	258/PM on Pesticide Management, dated 24 August
	2017; and (ii) Ministerial Decision 238/MAF on Control
	of Pesticides Businesses, dated 14 February 2019.
	PA23 . The Recipient, through MONRE, has regulated
	standard procedures and parameters of methods for
	sampling and analyzing Particulate Matter (PM) 2.5
	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; and (ii)
	Ministerial Instruction No 6439/MONRE on sampling
	and analysis of key air quality pollutants dated 14
	December 2018.
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2. Assessing Relevance of Prior Actions

Objective 1. Achieve fiscal sustainability and financial sector stability.

• PA1, PA2. Fiscal consolidation and revenue mobilization. The relevance of PA1 and PA2 is Moderately Satisfactory.

Low revenues forced the country to make necessary public expenditures by depending on unsustainable public debts. PA1 (i) aimed to raise revenues by eliminating tariff exemptions on fuel imports for investment projects to reduce foregone revenues from exemptions, while PA1 (iii) revised the implementing instruction of the Value-Added Tax (VAT) law to simplify tax filing. PA1 (iii) was taken further in GGDPO2 with the National Assembly approving amendments to the VAT law to enable a VAT refund function (PA2 (iii)) to encourage

eligible businesses to comply. The results chain linking these measures to the objective was clear. The PAs were grounded in credible analytical work at the country level listed in annex 4 of PD 2019, which included the Comprehensive Tax Review Report by the Ministry of Finance. On the other hand, these measures would make only a minor contribution to the objective of fiscal stability, and were not sufficient to mobilize substantial revenue. The prior action of eliminating tariff exemptions on fuel imports for investment projects had a small revenue impact (ICR, page 22). Despite the VAT amendments, the enforcement of VAT law was weak, and many eligible businesses were still out of the VAT system (ICR, page 22).

PA1, PA3. Expenditure reduction on civil service workers. The relevance of PA3 is Satisfactory.

Both the wage bill and the civil service size were high in the country compared to regional peers. The prior action on limiting civil servant intake (PA1 (ii)) aimed to reduce fiscal pressure by reducing the expenditure on civil service workers. In addition, the rollout of the smart cards (PA 3 (ii) (a)) and the Personnel Information Management System (PIMS, PA3 (ii)(b)) enabled physical verification of employment and helped to eliminate the number of "ghost" workers. Thus, there was an explicit results chain linking the PAs to the achievement of fiscal sustainability in objective 1. The PAs were grounded in credible analytical work at the country level listed in annex 4 of PD 2019, which included the World Bank's *Economic Updates: recommendations on reducing the debt-to-GDP ratio by improving public debt management*. The PAs are postulated to make a major contribution to the achievement of objective 1.

• PA3. Public financial management. The relevance of PA3 is Satisfactory.

The Public Expenditure and Financial Accountability Assessment 2019 identified some weaknesses in procurement including the absence of a solid legal and regulatory framework and an institutional basis to monitor and oversee government procurement. The PA on the new procurement law and its implementing instruction (PA3 (i)) provided a legal and institutional framework for different types of procurement and processes. These actions supported in GGDPO2 were intended to pave the way for the development of harmonized Standard Bidding Documents (SBD). Thus, there was an explicit results chain linking the PA to the achievement of fiscal sustainability in objective 1. The PA was grounded in credible analytical work at the country level listed in annex 4 of PD 2019, which included *the Public Expenditure Analysis Notes*.

PA4. Public debt management. The relevance of PA4 is Moderately Satisfactory.

Lao PDR was at high risk of debt distress; however, the existing presidential decree on public debt management was inadequate to control public debts at appraisal. The PA on the new public debt management law (PA4) provided a solid legal platform for undertaking debt management reforms and strengthened the governance framework by requiring the Ministry of Finance (MoF) to develop and publish debt management strategies and regular reporting on debt and risks. Additionally, the law defined 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; and (iii) each type of public debt and criteria for contracting debt; thus, laying a basis for contracting public debt and contingent liabilities (including public guarantees and on-lending). The PA was grounded in credible analytical work at the country level listed in annex 4 of PD 2019, which included the Public Expenditure Analysis Notes. While there was an explicit results chain linking the PA to the achievement of fiscal sustainability in objective 1,it was implausible to postulate that this standalone PA would be sufficient to contain debt accumulation.

PA5. Financial sector stability. The relevance of PA5 is Satisfactory.

The financial sector lacked reliable data on the financial soundness of banks or systematic tracking and reporting. The revised Bank of Lao PDR (BOL) Law (PA5 (ii)) in 2018 strengthened good practice principles for BOL operations. Publishing the core financial stability indicators for the banking sector such as levels of capital adequacy (PA5 (i)) increased market transparency and allowing early detection of financial stress. A credible results chain linking the PA to achievement of financial sector stability in objective 1 was outlined, and the analytical underpinning was adequate. Thus, the contribution of the PA to the achievement of financial sector stability in objective 1 is assessed to be substantial.

Objective 2. Adopt green growth planning and monitoring.

• PA6, PA10. Building the foundation for green growth planning and monitoring. The relevance of PA6 and PA10 is Satisfactory.

One key foundational need was to get a consensus among relevant government agencies around the idea of green growth. This was done by the National Assembly's adoption of the 8th National Socioeconomic Development Plan (NSEDP (PA6 (i)) which stated objectives, principles, targets, and implementation arrangements related to green growth. Moreover, the Prime Minister established a high-level green growth steering committee (PA6 (ii)) and approved the National Green Growth Strategy (PA10). The description of the results chain linking the PAs to achievement of objective 2 was convincing, given the significant role that the development plan plays in the country context. The analytical underpinning was credible. The contribution of the PAs to the achievement of objective 2 is assessed to be substantial.

• PA7, PA11. Strengthening country instruments for cleaner and resilient green growth financing. The relevance of PA7 and PA11 is Satisfactory.

The Environment Protection Fund (EPF) to finance environment management activities required enhanced governance and additional funding. This was done by creating an intergovernmental mechanism to manage the EPF (PA7) and allowing EPF to levy wastewater discharge fees, fines, and service charges (PA11). Additional actions included the operation of revenue and expenditure by the National Treasury System; and the specification of eligible revenue sources to boost the transparency of the fund's operations. There was an explicit results chain linking the PAs to the achievement of objective 2, although the analytical underpinnings did not provide country specific analysis. The PAs are postulated to make a substantial contribution to the achievement of objective 2.

• PA8, PA9, PA12, and PA13. Shifting towards decision making informed by priorities for environmental protection and climate resilience. The relevance of PA8, PA9, PA12, and PA13 is Satisfactory.

Decision making on green issues was hampered by the absence of an environmental assessment tool and a preference for considering only financial costs and benefits. Prior actions mandated the use of Strategic Environmental Assessments (SEAs), which incorporated environmental and social considerations, for all policies, programs, and strategic plans (PA8). The implementation of SEAs was further strengthened through detailed regulations and procedures including information disclosure and public participation (PA12). Furthermore, environmental assessment for investment project was through a Prime Ministerial decree (PA13) that made provisions for screening, scoping, public participation, and public information disclosure requirements. These regulations provided guidance on best practices for the applicants of investment projects to prepare documents with environmental and social considerations. There was an explicit results

chain linking the PAs to the achievement of objective 2. The PAs are postulated to make a substantial contribution to the achievement of objective 2.

• PA9, PA14. Integrating climate residence and disaster risk considerations into public projects. The relevance of PA9 and PA14 is Satisfactory.

Lao PDR was increasingly affected by climate-related events and disasters, but no regulation required the integration of climate resilience and disaster risk into the public investment project review process. The MPI integrated climate and disaster risk issues into the public investment review process (PA9), while the MPWT did so for road maintenance procedures (PA14). The National Assembly established the legal framework for collecting and disseminating hydrometeorology information to support the public investment project review process. The results chain linking the PAs to the achievement of objective 2 was mostly convincing, though the analytical underpinnings did not provide country specific analysis. The PAs are postulated to make a substantial contribution to the achievement of objective 2.

Objective 3. Introduce green growth tools and principles in priority sectors.

• PA19. Shifting towards integrated and sustainable water resources management and uses. The relevance of PA19 is Satisfactory.

Increasing competition for water uses among hydropower generation, nature-based tourism, agriculture, drinking water, and fisheries required a new framework to ensure better services and more sustainable resource use. A new legal and regulatory framework was introduced (PA19) for integrated water resources management and coordination at the national level. This covered river basin and groundwater management as well. The results chain linking the PAs to the achievement of objective 3 was convincing and supported by the credible analytical underpinnings and incorporating lessons learned from similar operations (PD 2019, pages 89-90). The PAs are postulated to make a major contribution to the achievement of objective 3.

 PA15, PA20. Improving forest resources management for production and conservation. The relevance of PA15 and PA20 is Satisfactory.

Timber resource management required better control of illegal logging as well as rational timber harvesting, processing, and trade. An improved framework for this was introduced through a Prime Ministerial Order (PA15). Timber management was further strengthened through a Ministerial Instruction (PA20) requiring the implementation of a Timber Legality Assurance System (TLAS) which provided a clear definition of legality for timber and timber products, and a methodology for supply chain control and verification that met relevant international standards. The policy also clarified the mandates of the Department of Forestry which is responsible for international obligations and the Department of Forest Inspection for the implementation and enforcement of TLAS. The results chain linking the PAs to the achievement of objective 3 was convincing and supported by the credible analytical underpinnings. The PAs are postulated to make a major contribution to the achievement of objective 3.

 PA16, PA21. Improving livelihoods of local communities and maintaining biodiversity. The relevance of PA16 and PA21 is Satisfactory.

The legal status of national park and the access rights of the enclave communities to the protected area resources were not adequately recognized. PA16 and PA21 established the legal framework for national park reform in line with international conservation standards. These regulations provided a new governance

structure for protected areas and clarified the legal status and access rights of enclave communities. The new arrangements were to be applied on a pilot basis to the Nam Theun Watershed which was upgraded to the status of a national park. The results chain linking the PAs to the achievement of objective 3 was convincing

and supported by the credible analytical underpinnings. The PAs are postulated to make a major contribution to the achievement of objective 3.

• PA17, PA22. Leveraging green growth policies to control non-point source pollution. The relevance of PA17 and PA22 is Satisfactory.

The legal framework for the management of chemicals and pesticides was strengthened through two prior actions (PA17 and PA22). The first established legal provisions for the management, monitoring and inspection of chemicals as well as phytosanitary issues while the second did the same for pesticides. This was done to bring Lao PDR in line with good practices in these areas, with a view to minimizing public health risks as well as individual worker hazards. The results chain linking the PAs to the achievement of objective 3 was convincing and supported by the credible analytical underpinnings. The PAs are postulated to make a major contribution to the achievement of objective 3.

• PA18, PA23. Strengthening pollution monitoring and management. The relevance of PA18 and PA23 is Satisfactory.

Lao's increasing pollution of all types imposed an equivalent cost of 14.6 percent on Lao PDR's GDP in 2017, according to the 2019 ASA on *State of Environment in Lao PDR* (PD 2019, page 92). The largest environmental health risk factors in Lao PDR were air pollution, lead and arsenic pollution, and inadequate water, sanitation, and handwashing. PA18 and PA23 supported the establishment of more stringent air quality and water quality standards and monitoring methodology, which aimed to reduce the high level of key harmful pollutants to human health, particularly PM2.5 and lead. They required the adoption of stricter environmental standards, which was an important signal to industries to adjust their practices to avoid noncompliance. The results chain linking the PAs to the achievement of objective 3 was convincing and supported by the credible analytical underpinnings. The PAs are postulated to make a major contribution to the achievement of objective 3.

Of the 23 prior actions, 20 were rated satisfactory (5) and 3 were rated moderately satisfactory (4), leading to a total average rating of 4.87, and an overall relevance of prior actions rating of satisfactory.

The relevance of design is rated satisfactory, based on the satisfactory relevance of objectives and prior actions.

Rating

Satisfactory

4. Relevance of Results Indicators

Rationale

Pillar 1. Strengthening prospects for fiscal sustainability and financial sector stability.

Objective 1. Achieve fiscal sustainability and financial sector stability.

• RI1. Tax buoyancy (i.e., tax revenue as a share of GDP) increases. Associated with PA1 and PA2. The relevance of RI1 is Moderately Unsatisfactory.

The increase in the share of tax revenue in GDP is an important development outcome, but is affected by many more factors than the prior actions, and could not realistically measure their contribution, as it was implausible that the prior actions would lead to a significant change in overall revenue mobilization as the policy measures undertaken covered only a small part of total revenues (ICR, para 37). The program documents also did not clearly explain the calculation methodology and the data sources to measure the RI. The RI statement was reworded from "Fiscal consolidation supported by higher tax revenues" in DPO1 (PD2017, page 37) to "Tax buoyancy (i.e., tax revenue as a share of GDP) increases" in DPO2 (PD 2019, page 54). Better indicators might have been: the value of exemptions from fuel imports, and the revenue as a share of GDP from VAT, or the number of businesses complying with the VAT. Furthermore, although the ICR (footnote 1, page 9) reported that the unit of measurement remained the same as tax revenues to GDP ratio, the baseline data and the target changed from DPO1 to DPO2 without a clear explanation. DPO1 aimed to increase the share of tax revenues in GDP from the baseline of 14.6% (FY15/16) to the target of 16.7% (FY20) (PD 2017, page 37), while DPO2 aimed to increase it from 12.4% (2016) to 12.9% (2022) (PD 2019, page 54).

• RI2. Public sector wage bill (as a percentage of GDP) decreases. Associated with PA1 and PA3. The relevance of RI2 is Satisfactory.

The decrease in the share of public sector wage bill in GDP adequately measured the impact of PAs on progress towards reducing public expenditures and strengthening public financial management. On the other hand, the program documents did not clearly explain the calculation methodology and the data sources to measure the RI. The RI statement was reworded from "Fiscal consolidation supported by lower wage bill" in DPO1 (PD2017, page 37) to "Public sector wage bill (as a percentage of GDP) decreases" in DPO2 (PD 2019, page 54). Although the ICR (footnote 1, page 9) reported that the unit of measurement remained the same as tax revenues to GDP ratio, the baseline data and the target changed from DPO1 to DPO2 without a clear explanation. DPO1 aimed to decrease the share of public sector wage bill in GDP from the baseline of 8.4% (FY15/16) to the target of 7.2% (FY20) (PD 2017, page 37), while DPO2 aimed to decrease it from 6.9% (2016) to 6.2% (2022) (PD 2019, page 54).

• RI3. Capable of recording and reporting of GoL's financial transactions consistent with the IMF-Government Finance Statistics Manual (GFSM) 2014 by 2022. Associated with PA3. The relevance of RI3 is Moderately Satisfactory.

The RI was added during DPO2 preparation. Assessing the GoL's capacity of recording and reporting financial transactions consistent with the IMF-GFSM2014 partially measured the impact of PA on progress towards improving public financial management. The program document did not clearly explain the definition and the methodology to measure the actual achievement of the RI. The ICR (page 23) reported that the relevant PA required to revise the Chart of Accounts to be consistent with the IMF-GFSM2014.

• RI4. Percentage of central government agencies issuing tenders according to the new Public Procurement Law by 2022. Associated with PA3. The relevance of RI4 is Moderately Satisfactory.

The RI was added during DPO2 preparation. The share of central government agencies issuing tenders in line with the new public procurement law was mostly an adequate measure of progress towards improving fiscal sustainability through improved public financial management. On the other hand, the program document did not clearly explain the methodology and the data source to measure the actual achievement of the RI. At closing, it was proved difficult to measure adherence to all aspects of the law in all tenders due to limited human and IT system capacity (ICR, page 23).

• RI5. Public debt (as a percentage of GDP) decreases. Associated with PA4. The relevance of RI5 is Moderately Satisfactory.

The decrease in the share of public debt in GDP was an important development goal, but was affected by many more factors than public debt management (including revenues and expenditures), and so was a poor measure of the contribution of the prior actions. Although all the prior actions in the program were implemented, the absence of a credible fiscal framework to anchor budgetary discipline hindered the achievement of the RI (ICR, para 38). The program document did not specify the methodology regarding whether to include contingent liabilities to measure the achievements of the RI. The ICR (page 23) noted that public debt data was revised at various points during implementation and the public debt ratio to GDP varied depending on whether guarantees were included or not.

• RI6. Public reporting of compliance with regulations of the Capital Adequacy Ratio, by type of banks. Associated with PA5. The relevance of RI6 is Moderately Satisfactory.

The public reporting of compliance with regulations on the capital adequacy ratio was a key component of financial stability indicator and would contribute to an early detection of financial stress (ICR, para 22). On the other hand, in practice, disaggregating the capital adequacy ratio by type of bank was proved to be difficult and such data was not available by 2022 (ICR, page 24).

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

Objective 2. Adopt green growth planning and monitoring.

• RI7. 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 9th NSEDP (2021–2025). Associated with PA6 and PA10. The relevance of RI7 is Satisfactory.

Publishing the M&E results towards achievement of the green growth priorities was a direct measure of the results of the PAs. Credible data was available to measure achievement of the target.

• RI8. Increase in number of revenue sources of the Environment Protection Fund (EPF). Associated with PA7 and PA11. The relevance of RI8 is Moderately Satisfactory.

The increase in number of revenue sources was mostly adequate to measure the impact of PAs on progress towards achieving the outcome of strengthening green growth financing, although the volume of revenue for the EPF could have been a more comprehensive indicator. Credible data was available to measure achievement of the target.

• RI9. Disclosure of annual financial audit of the EPF. Associated with PA7 and PA11. The relevance of RI9 is Satisfactory.

The disclosure of annual financial audit was an adequate measure on the impact of the PAs on progress towards achieving objective 2. Credible data was available to measure achievement of the target.

• RI10. Number of Strategic Environmental Assessments (SEAs) undertaken for public policies, programs, and strategic plans. Associated with PA8 and PA12. The relevance of RI10 is Moderately Satisfactory.

The number of SEAs captured only a basic level of the impacts of the PAs on progress towards achievement of objective 2. While it would likely not have been feasible given the program timelines to capture the extent to which the findings of the SEAs on environmental and climate priorities were incorporated in public policies, a better indicator might have incorporated some quality measures on SEAs. Credible data was available to measure achievement of the target.

• RI11. Share of investment projects in the mining, energy, and transport sectors that require an Environmental and Social Impact Assessment (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. Associated with PA13. The relevance of RI11 is Satisfactory.

The share of projects that conducted and published ESIAs in the sectors with potential negative environmental impacts was adequate to measure the impact of PA on progress towards achieving objective 2. Credible data was available to measure achievement of the target. Assessment of the indicator on ESIA for investment projects in mining, energy and transport sectors was possible through regular monitoring by the Ministry of Natural Resources and Environment (MONRE) (ICR, para 35).

• RI12. 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. Associated with PA9 and PA14. The relevance of RI12 is Satisfactory.

The share of road maintenance projects verified by technical audits as having incorporated climate and disaster considerations mostly measured the impact of the PAs on progress toward achievement of the targeted outcome. Credible data was available to measure achievement of the target.

Pillar 3. Incorporating green growth in selected sectors.

Objective 3. Introduce green growth tools and principles in priority sectors.

• RI13. Number of river basins that establish the minimum flow requirements set out in their respective River Basin Plan. Associated with PA19. The relevance of RI13 is Satisfactory.

The number of river basins with minimum flow requirements is adequate to measure the impact of PA on progress towards achievement of the targeted outcome. The target reflects the complex process required to establish minimum flow requirements, involving both basin planning and regulatory actions (PD 2019, para 108). Reliable data was available to measure achievement of the target.

• RI14. Increase in number of hectares within Production Forest Areas (PFAs) with certified Sustainable Forest Management (SFM) operations based on Lao PDR regulations. Associated with PA15 and PA20. The relevance of RI14 is Satisfactory.

The increase in the coverage of PFAs with certified operations on SFM was adequate to measure the impact of PAs towards achieving sustainable timber production. Credible data was available to measure achievement of the target.

• RI15. 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). Associated with PA16 and PA21. The relevance of RI15 is Satisfactory.

The number of national parks with at least moderately satisfactory METT scores adequately measured the impact of PAs towards achieving the outcome. Credible data was available to measure achievement of the target.

• RI16. Number of inspections by Ministry of Agriculture and Forestry (MAF) of pesticide sellers for compliance with pesticide regulations per year. Associated with PA17 and PA22. The relevance of RI16 is Unsatisfactory.

The number of inspections by the MAF of pesticide sellers partly measured the impact of PAs on reducing banned and prohibited pesticides in the market. The RI did not specify geographical area and type of business to be targeted for the inspections. As a result, most of the inspections occurred in Vientiane and provinces next to Vientiane and focused on registered pesticide wholesalers (ICR, page 29). Inspectors faced challenges with the retailers as they were not registered with the Department of Agriculture (ICR, page 29). Additionally, the data source for the RI was vague in the PD. At program closing, data on actual inspections were not available and the ICR team had to rely on the number of inspectors recruited and their average inspection load to assess achievement (ICR, para 52). The project task team mentioned that the result indicator for the prior actions to leverage green growth policies to control non-point source pollution (policy track 3.3) could have been made stronger if there were sufficient time and policy dialogue with the government (TTLs' response to IEG's questionnaire provided during a meeting and by email, hereafter, TTL response).

• RI17. Number of Priority Pollution Watch Sites (PPWSs) for which monitoring reports (including at least PM2.5, arsenic, lead, and pathogens concentrations) are updated and publicly disclosed annually. Associated with PA18 and PA23. The relevance of RI17 is Moderately Unsatisfactory.

The RI would have adequately measured the impact of PAs on strengthening pollution monitoring and management had it been feasibly implemented. However, sources for data to calculate the RI were vague in the PD. At program closing, the RI could not be monitored and the ICR (page 30) instead counted the number of provinces covering PPWSs that updated monitoring reports and submitted them to the Pollution Control Department (PCD) at the MONRE for disclosure. However, no data was available regarding whether the monitoring reports would be published annually (ICR, page 30).

• RI18. Percentage of legally imported paint brands offering unleaded paint in the national market. Associated with PA18 and PA23. The relevance of RI18 is Moderately Unsatisfactory.

The percentage of unleaded paints in legally imported paints was partially adequate to measure the impacts of PAs on achieving objective 3. The indicator narrowly focused on the lead content in paints while the relevant

PAs targeted a broader concept of pollution monitoring and management for multiple pollutants. Additionally, the PD did not specify sources of data to calculate the RI. The endline data for the RI was collected by sampling paints in the market (ICR, page 31). While a reasonable approach, it provided the end-line data that was slightly different from what the RI originally intended to measure.

Of the 18 indicators, 8 were rated satisfactory (5), 6 were rated moderately satisfactory (4), 3 were rated moderately unsatisfactory (3), and 1 was rated unsatisfactory (2), leading to a total average rating of 4.17, and an overall relevance of indicators rating of moderately satisfactory.

Table 2. Results Indicators (RIs), the Prior Actions (PAs), baseline, target values, actual change in RI relative to target and RI achievement rating.

number to each		RI Relevance	units and date]	[including units and date]	Actual Value as of Target Date	RI Relative to	Available [if	RI Achievement Rating
Objective 1. Act	nieve fiscal	sustainabili [.]	ty and fina	incial sector s	tability.			
RI1. Tax buoyancy (i.e., tax revenue as a share of GDP) increases	PA1, PA2	MU	12.4% of GDP (2016)	12.9% of GDP (2022)	9.6% of GDP (preliminary estimate from MOF as of March 2022)	Actual value showed a negative change compared to the baseline.		Negligible
RI2. Public sector wage bill (as a percentage of GDP) decreases		S	6.9% of GDP (2016)	6.2% of GDP (2022)	6.0% of GDP (preliminary estimate from MOF as of March 2022)	129% of targeted change		High
RI3. Capable of recording and reporting of GoL's financial transactions consistent with the IMF-GFSM2014 by 2022	PA3	MS	No (2016)	Yes (2022)	Progressing	Target partially realized		Modest
	PA3	MS	0% (2016)	100% (2022)	0%	0% of targeted change		Negligible

				1	ı		
government agencies issuing tenders according to the new Public Procurement Law by 2022							
RI5. Public debt (as a percentage of GDP) decreases	PA4	MS	58.5% of GDP (2016)	57.9% of GDP (2022)	76.6% of GDP (2021)	compared to the	Negligible
RI6. Public reporting of compliance with regulations of the Capital Adequacy Ratio, by type of banks	PA5	MS		At least regulatory minimum (2022)	Capital adequacy ratio reported on quarterly basis at the aggregate sector level (2022).	partially	Modest
Objective 2. Add	opt green gi	owth plann	ing and m	onitoring.	,		
RI7. 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 9th NSEDP (2021–2025)	PA6, PA10		No (2017)	Yes (2022)	Yes (2022)	Target realized	Substantial
RI8. Increase in number of revenue sources of the EPF	PA7, PA11	MS	3 (2017)	5 (2022)	5 (2022)	100% of targeted change	Substantial

RI9. Disclosure of annual financial audit of the EPF	PA7, PA11	S	No (2017)	Yes (2022)	Yes (2022)	100% of targeted change	Substantial
RI10. Number of SEAs undertaken for public policies, programs, and strategic plans	PA8, PA12	MS	0 (2017)	1 (2022)	2 (2022)	200% of targeted change	High
RI11. 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.	PA13	S	0 (2017)	70% of Group 2 projects (2022)	100% (2022)	143% of targeted change	High
RI12. Share of approved road maintenance projects with climate resilience and disaster risk considerations envisaged in	PA9, PA14	S	0 (2017)	50% of approved road maintenance projects (2022)	100%, of which 50% verified by audits (2022)	100% of targeted change	Substantial

the Annual Road Maintenance Plan and Budget that are verified by technical audits Objective 3. Intr		n growth to	ols and pr	inciples in prid	ority sectors.			
RI13. Number of river basins that establish the minimum flow requirements set out in their respective River Basin Plan	PA19	S	0 (2017)	1 (2022)	0 (2022)	0% of targeted change		Modest
ILOTOST	PA15, PA20	S	l '	230,000 hectares (2022)	99,607 hectares (December 2021)	43% of targeted change	Another 152,043 hectares are under review for certification (2022). However, the government discontinued the certification after the program closure (2023).	Negligible
	PA21	S	0 (2017)	2 – Nakai Nam Theun and Nam Et- Phou Louey (2022)	2 (2022)	100% of targeted change		Substantial

the Management Effectiveness Tracking Tool (METT)							
RI16. Number of inspections by MAF of pesticide sellers for compliance with pesticide regulations per year	PA17, PA22	U	0 (2017)	140 (2022)	140 (2022)	100% of targeted change	Modest
RI17. Number of PPWS for which monitoring reports (including at least PM2.5,	PA18, PA23	MU	0 (2017)	3 (2022)	covering PPWSs updated and submitted	133% of targeted change. However, it remains to be seen whether these reports would be updated and disclosed annually.	Modest
RI18. Percentage of legally imported paint brands offering unleaded paint in the national market		MU	0 (2017)	100% (2022)	98% (December 2021)	98% of targeted change	Modest

Rating

Moderately Satisfactory

5. Achievement of Objectives (Efficacy)

OBJECTIVE 1

Objective

Achieve fiscal sustainability and financial sector stability. PA 1-5. RI 1-6.

Rationale

Theory of Change (ToC) of the objective 1 postulated that the prior actions including (i) eliminating tariff exemptions on fuel imports for investment projects and (ii) revising the Value-Added Tax (VAT) law would results in outputs/intermediate outcomes including a reduction in foregone revenues from exemptions and increasing enrollment of eligible businesses to the VAT system, contributing to the outcome of tax revenues mobilized. The ToC also postulated that the prior actions such as limiting civil servant intake and rolling out the Personnel Information Management System would result in improved management of the size and cost of the civil service managed, resulting in decreased expenditure on the public service. The ToC also postulated that the prior actions such as (i) establishing the new law on procurement management and (ii) recording and reporting the Government's financial transactions consistent with the IMF-GFSM2014 would result in outputs/intermediate outcomes including issuance of tenders following the new law and revision of the Chart of Accounts, contributing to strengthened public financial management. The ToC also postulated that approving the public debt management law would result in establishment of a legal framework to control contingent liabilities, contributing to a reduction in public debt. The ToC also postulated that the prior actions including (i) revising the Bank of Lao PDR (BOL) law and (ii) publishing financial soundness indicators (FSIs) including the capital adequacy ratio would result in outputs/intermediate outcomes including improved BOL operation and increased market transparency increased, contributing to reduced financial risks. The above outcomes were expected to contribute to achieve the objective on fiscal sustainability and financial sector stability.

Critical assumptions included that: (i) the risk of occurrence of external shock on macroeconomic stability is low; (ii) tax expenditures through exemptions and lack of VAT enrollment were major drivers of poor domestic revenue mobilization; (iii) the institutional capacity to implement the new public debt management law was adequate; (iv) poor public debt management especially for contingent liabilities was the main driver of lack of fiscal sustainability; and (v) lack of transparency was a major cause of financial sector instability.

Outputs/Intermediate Outcomes (ICR, paras 32-40 and annex 1):

- RI 3. The Government made some progress in recording and reporting financial transactions
 consistent with the IMF-GFSM2014; however, the revision of the Chart of Accounts (COA) was not
 completed by program closing. In May 2023, the Ministry of Finance approved 6 of the 7 new
 segments to be piloted in the government financial information system plus, while the 7th segment,
 economic one, is still being prepared by the IMF (TTL response). The achievement of the RI is rated
 modest.
- RI 6. The Bank of Lao started to publish the Capital Adequacy Ratio (CAR) on quarterly basis at the
 aggregate sector level but did not achieve the target of disaggregating the CAR by type of bank. The
 Government decided not to proceed with disaggregating financial soundness indicators until the
 restructuring of two distressed state-owned banks is completed (ICR, page 24). The achievement of
 the RI is rated modest.

Outcomes (ICR, paras 32-40 and annex 1):

- RI 1. Tax buoyancy (i.e., tax revenue as a share of GDP) did not increase to the target of 12.90 percent as postulated. In contrast, it decreased from the baseline of 12.40 percent to the actual of 9.60 percent. While the last two years of the operational series were affected by the COVID-19 pandemic, the steady decline since 2016 suggested that the prior actions were not strong enough to offset other forces acting upon tax revenues (ICR, page 22). The achievement of the RI is rated negligible.
- RI 2. Public sector wage bill (as a percentage of GDP) decreased from the baseline of 6.9 percent to the actual of 6.0 percent, achieving the target of 6.2 percent. The wage bill was successfully contained by: (i) the drastic decrease in new staff intake from more than 10,000 in 2013-14 to less than 1,300 in 2022; and (ii) the use of the same wage multiplier since 2017 (ICR, page 23). The achievement of the RI is rated high.
- RI 4. The share of central government agencies issuing tenders according to the new Public
 Procurement Law did not change from the baseline of 0 percent, making no progress towards the
 target of 100 percent. The Government endorsed tools for the implementation of the Public
 Procurement Law, conducted user training, and completed the Public Procurement website to monitor
 tenders using the new tools (ICR, page 23). Line ministries have started uploading information on the
 website, but it is an ongoing process and not fully complete yet (TTL response). The achievement of
 the RI is rated negligible.
- RI 5. Public debt (as a percentage of GDP) did not decrease to from the baseline of 58.5 percent to the target of 57.9 percent as postulated. On the contrary, the public debt (excluding guarantees) ratio increased from 46.8 percent in 2016 to 79 percent (projected) in 2022 (ICR, page 24). The ICR (page 24) listed some factors that contributed to the increase, such as a continued high fiscal deficit during the program period, a higher proportion of commercial borrowing, and a recent sharp depreciation of the Kip. Furthermore, the impacts of COVID-19 were mostly felt through lower revenue, and hence a higher fiscal deficit and debt levels. The economic impact of COVID offset any modest gains in revenue mobilization that could be expected from the implementation of program measures (ICR, para 37). On the spending side, COVID-related spending accounted for less than 0.1 percent of GDP since the start of the pandemic, which was one of the lowest levels in the world according to the IMF COVID-19 database (TTL response). The achievement of the RI is rated negligible.

One RI on the public sector wage bill was highly achieved. On the other hand, achievements of two RIs were modest and three RIs were negligible. Thus, the achievement of objective 1 was moderately unsatisfactory.

Rating

Moderately Unsatisfactory

OBJECTIVE 2

Objective

Adopt green growth planning and monitoring. PA 6-14. RI 7-12.

Rationale

Theory of Change (ToC) of the objective 2 postulated that the prior actions including adopting the 8th NSEDP, establishing a high-level steering committee, and approving the National Green Growth Strategy would result in various improvements monitored by the strategy's monitoring and evaluation system, strengthening the foundation for green growth planning and monitoring. The ToC also postulated that the prior actions such as creating an intergovernmental mechanism to manage the EPF and allowing the EPF to levy wastewater discharge fees, fines and service charges would expand its revenue sources of the EPF, and this along with improved transparency from disclosing the annual audit would contribute to strengthening of country instruments for green growth. The ToC also postulated that the prior actions on (i) preparing and implementing the Strategic Environmental Assessments (SEAs) for public interventions and (ii) integrating climate and disaster risks into the public investment review process and road maintenance procedures would result in outputs including the compliance to environmental regulations and the awareness on climate and disaster risks increased, contributing to enhanced decision making that was better informed by environmental priorities. The above outcomes were expected to contribute to achieving the objective on green growth planning and monitoring.

Critical assumptions included that: (i) establishing regulations and procedures to integrate climate considerations into public projects would adequately induce behavioral changes in the government agencies to change their priorities in decision making processes; and (ii) the EPF's capacity to manage the increased revenue sources and implement activities would be sufficient.

Outputs/Intermediate Outcomes (ICR, paras 32-40 and annex 1):

- RI 7. M&E results of the green growth priorities established in the National Green Growth Strategy
 were disclosed as part of the public consultation process of the 9th NSEDP (2021–2025), meeting the
 target. The achievement of the RI is rated substantial.
- RI 8. The number of revenue sources of the EPF increased from the baseline of 3 to 5, achieving the target of 5. The five sources available to the EPF were listed in the ICR (page 44). Regarding the amounts of revenues mobilized from these sources were: US\$7.12 million in 2018, US\$10.89 million in 2019, and US\$7.91 million in 2020, according to the EPF report dated June 2021 (TTL response). No revenue from the payment for ecosystem and the Global Climate Fund (GCF) yet, as the EPF is in the process of developing regulation to mobilize fund from the payment for ecosystem and being accredited for GCF (TTL response). The achievement of the RI is rated substantial.
- RI 9. Annual financial audit of the EPF was disclosed. The achievement of the RI is rated substantial.
- RI 10. Two SEAs were undertaken for the Hydropower Sector Strategy and the National Green Growth Strategy, meeting the target of two SEAs for public policies, programs, and strategic plans. The achievement of the RI is rated high.
- RI 11. 100 percent of category 2 investment projects (88 projects in total) in the mining, energy, and transport sectors required an ESIA with complete disclosure of relevant information through the integrated database and public information platform prior to approval, exceeding the target of 70 percent. The achievement of the RI is rated high.
- RI 12. 50 percent of approved road maintenance projects with climate resilience and disaster risk
 considerations envisaged in the Annual Road Maintenance Plan and Budget were verified by technical
 audits, meeting the target of 50 percent. All road maintenance projects incorporated climate resilience
 and disaster risk measures; however, only a half of these projects completed technical audits by the
 time of the ICR (ICR, page 46). The governmental procedures to reflect climate considerations in

public projects were helped by the establishment of a legal framework for collecting and disseminating hydrometeorology information (ICR, para 26). The achievement of the RI is rated substantial.

Achievements of two RIs were high, and that of four RIs were substantial. Thus, the achievement of objective 2 was satisfactory.

Rating

Satisfactory

OBJECTIVE 3

Objective

Introduce green growth tools and principles in priority sectors. PA 15-23. RI 13-18.

Rationale

Theory of Change (ToC) of the objective 3 postulated that the prior actions including introducing the new legal and regulatory framework for integrated water resources management and coordination at the national level would enable the development of River Basin Plans that incorporated minimum flow requirements for environmental flows, strengthening the integrated and sustainable water resources management and uses. The ToC also postulated that the prior actions including (i) establishing a Prime Ministerial Order and a Ministerial Instruction on timber resource management and (ii) establishing the legal framework for national park reform would enable the implementation of the Timber Legality Assurance System (TLAS) and the clarification of legal status and access rights of enclave communities in the governance structure for protected areas, improving forest resources management for production and conservation. The ToC also postulated that the prior actions including establishing legal provisions for the management, monitoring, and inspection of chemicals, phytosanitary issues, and pesticides would improve monitoring and control of non-point source pollution. The ToC also postulated that the prior actions including establishing the legal framework on air quality and water quality standards and monitoring methodology and would enhance monitoring of the pollution levels in PPWSs and the lead levels in imported pesticides, strengthening pollution monitoring and management. The above outcomes were expected to contribute to achieving the objective on green growth tools and principles in priority sectors.

Critical assumptions included that: (i) the enclave communities would have adequate capacities to use their legal rights for protected areas; and (ii) the government agencies would have sufficient financial and human resources to continue monitoring the air and water qualities and inspecting of imported pesticides after program closing.

Outputs/Intermediate Outcomes (ICR, paras 32-40 and annex 1):

 RI 13. No river basin completed River Basin Plans with the minimum flow requirements established in the plans, not meeting the target of one river basin. Eight river basin management plans (RBMP) with the value of minimum flow requirements were developed and likely to be approved by the end of 2022 by the Minister (ICR, page 46). The achievement of the RI is rated modest.

- RI 14. PFAs with certified Sustainable Forest Management (SFM) operations based on Lao PDR
 regulations increased from the baseline of 10,949 hectares (ha) to 99,607 ha, not meeting the target
 of 230,000 ha (43 percent of the target). According to the project team, after the operations were
 closed, the government has decided to suspend the certification as the government shifted its strategy
 to developing a national standard instead. The achievement of the RI is rated negligible.
- RI 15. Two national parks were established, where their management objectives were rated satisfactory by the Management Effectiveness Tracking Tool, meeting the target of two national parks with their management objectives rated at least moderately satisfactory. The new arrangements were to be applied on a pilot basis to the Nam Theun Watershed which was upgraded to the status of a national park. On the other hand, the emergence of potential development projects and mining activities in and around protected areas and national parks generated concerns over the effectiveness of conservation efforts (ICR, para 54). The achievement of the RI is rated substantial.
- RI 16. The Ministry of Agriculture and Forestry (MAF) conducted 140 inspections of pesticide sellers for compliance with pesticide regulations per year, meeting the target of 140 inspections per year. On the other hand, the data used to measure the achievement of RI faced some limitations in their coverage, as described in section 4. Additionally, there have been recent complaints of health effects and pollution of land and water resources due to elevated use of pesticides and other agrochemicals (ICR, page 30), which implied that the policy reforms on pesticides inspection were insufficient to prevent the pollution. The achievement of the RI is rated modest.
- RI 17. Monitoring reports for four provinces (Vientiane, Bolikhamxay, Savannakhet and Champasack) covering Priority Pollution Watch Sites (PPWSs) with parameters including PM2.5, arsenic, lead, and pathogens concentrations were updated, only partially meeting the target of 3 PPWSs updating and publicly disclosing reports with the above parameters annually. At the time of the ICRR, the reports are not disclosed in website of the Ministry of Natural Resources and Environment annually, except for PM2.5 which is published daily in the website covering 7 provinces (TTL response). Although the government adopted stringent standards for ambient air quality and key interventions to reduce exposure to lead and other harmful pollutants, environmental health and pollution management were not given appropriate priority, thus environmental agencies were unable to monitor pollutant discharges to ensure the national standards (ICR, para 54). The achievement of the RI is rated modest.
- RI 18. 98 percent of imported paints in the market selected through sampling contained less lead
 elements than the standard, almost achieving the target of 100 percent. The 2019 PCD report
 assessed 150 paint brand samples in the market and reported that, of 95 imported paint brands in the
 sample, only two exceeded the standard of 90 ppm (ICR, page 30). The non-compliant cases could be
 attributed to old stocks or illegal imports (ICR, page 30). The achievement of the RI is rated modest,
 largely due to the limited scope of the indicator.

One RI on national park management was substantially achieved. On the other hand, the achievements of three RIs on pesticides inspections, pollution monitoring, and lead paints inspections were modest. The achievements of RIs on river basin management plans and PFAs were negligible. Thus, the achievement of objective 3 was moderately unsatisfactory.

Rating

Moderately Unsatisfactory

Overall Achievement of Objectives (Efficacy)

Rationale

The efficacy of objective 1 is rated moderately unsatisfactory. The achievement of objective 2 is rated satisfactory. The efficacy of objective 3 is rated moderately unsatisfactory. Overall, the achievement of objectives is rated moderately satisfactory, based on the harmonized guideline between OPCS and IEG.

Overall Efficacy Rating

Moderately Satisfactory

6. Outcome

Rationale

The PDO was relevant to the Government and Bank strategy for the Lao PDR. The prior actions had appropriate analytical underpinnings and were appropriate first steps along the results chain for realizing the intended objectives. The DPF series made substantial progress in terms of establishing a sound legal framework to enable the country to further follow the green growth path. The results indicators were adequate to measure the pillars' achievements and could be verified, except for some indicators for objectives 1 and 3. The relevance of prior actions is rated satisfactory as prior actions made substantial contribution to the achievement of outcomes in general. The low achievements of objective 1 on achieving macroeconomic stability and objective 3 on introducing green growth tools and principles in priority sectors were mostly compensated by the satisfactory achievement of objective 2 on adopting green growth planning and monitoring across the national development strategy. By achieving objective 2, the DPF operations made solid contribution on implementing the government's strategies to enhance green growth to address key development challenges described in section 3.a. Thus, the overall outcome is rated moderately satisfactory.

a. Rating

Moderately Satisfactory

7. Risk to Development Outcome

Macroeconomic risk. Many of the macroeconomic vulnerabilities identified at appraisal further intensified; in particular, the debt stock and the servicing burden were high at program closing (ICR, para 53). The decrease in fiscal deficit in the recent years were driven by expenditure compression given that growth was much lower on average than five years ago (ICR, para 53). To mitigate the risk, the Bank agreed with the GOL to continue a dialogue on debt management under the auspices of the Sustainable Development Finance Policy (SDFP) framework.

Government ownership/commitment risk. There was a potential risk that the legal framework and administrative process improved by the operational series might not be replicated and strengthened across a wide range of natural resource management concerns (ICR, para 54). To mitigate the risk, in the forestry sector, the Bank prepared the Policy Note on Sustainable Forest Management to suggest that all relevant government agencies share the same understanding of national commitments to international conventions, instruments and agreements, and reflect in their strategy documents commonly agreed objectives and definitions (ICR, para 54).

Environmental risk. The GOL's policy direction regarding coal-fired power plants might have potential negative impacts on the environment and the sustainability of development outcomes on green growth (ICR, para 54). Additionally, the institutional capacity strengthening at local government levels, which were often at the interface of environmentally sensitive actions, remained to be challenges (ICR, para 54).

8. Assessment of Bank Performance

a. Bank Performance - Design

Rationale

The World Bank staff drew on lessons from the previous DPF series in the country, the Poverty Reduction Support Operation (PRSO), and other World Bank financed environmental DPF to design the specific policy actions for this DPF series, as described in detail in the PD 2017 (para 34). This DPF series was based on the World Bank Group's experience on providing support to the country's green growth agenda for about two decades through a multi-sector portfolio of investment and technical assistance, as shown in the PD 2017 (table 5, page 28). This DPF series adequately drew on consultations with government ministries and agencies, development partners, and Bank staff from different sectors, which resulted in contributions of other development partners on the macroeconomic dialogue and the green growth policies (ICR, paras 47-48). The analytical underpinnings of the operations were generally strong, and the series included a large number of prior actions that had significant relevance. The prior actions included the passing of laws and regulations, not merely intermediate steps along the way to doing so.

On the other hand, the risk identification and mitigation at appraisal were not adequate, especially for the macro pillar (pillar 1) (ICR, para 46). According to the ICR (para 46), "the assessment of the adequacy of the macroeconomic policy framework and projections turned out to hinge on overly optimistic assumptions about the authorities' ability to address accumulated fiscal and external imbalances with the prior actions in the DPOs, particularly at the time of DPO2 appraisal when the macroeconomic condition had clearly deteriorated." The prior actions under pillar 1 were not adequate to achieve the macroeconomic stability as envisaged at appraisal

(ICR, para 46). Furthermore, the M&E design and arrangements were not adequate. Some indicators were infeasible to measure the contribution of the prior actions in a credible manner, as described in section 4.

The quality of Bank performance at the design stage, thus, is rated moderately satisfactory.

Rating

Moderately Satisfactory

b. Bank Performance - Implementation

Rationale

The stakeholder and donor coordination were adequate. Throughout the operational series, the Bank maintained a constructive dialogue with a range of government counterparts and development partners to facilitate implementation (ICR, para 51). The World Bank's task team followed up regularly with the government team and brought technical assistance as needed, including in the areas of tax administration, public financial management, debt management and financial sector stability (ICR, para 51). Complementary IPF and ASA instruments supported sectoral reforms under the green growth pillar and the progress towards achievements of the RIs on river basin planning and pollution monitoring and management (ICR, para 60). On the other hand, the DPF series did not identify or resolve the unavailability of credible data for the RIs on revenues, public debt, and pesticides inspection (ICR, para 51). Moreover, at appraisal of the second operation, the changes in macroeconomic risks were not adequately identified. The PD 2019 (para 13) noted that "robust dialogue on economic management continues to mitigate macroeconomic risk," even though the trends of revenues and public debt were off track since 2016 (ICR, para 51 and table 3 in page 21). The tracking of progress was disrupted by the absence of formal supervision missions after May 2019 and the lack of ISRs for the second operation recorded in the Bank's Operation Portal (ICR, para 51). The change in the Bank's task team leadership might explain these missed opportunities (ICR, para 51).

The quality of Bank performance at the implementation stage, thus, is rated moderately satisfactory.

Rating

Moderately Satisfactory

c. Overall Bank Performance

Rationale

The DPF design was built on specific lessons and experience accumulated from of the World Bank's prior support in the environmental sector in the country. The stakeholder and donor coordination were adequate from the preparation stage throughout implementation. On the other hand, some shortcomings in the program design described in section 8.a. were not adequately addressed during implementation, negatively affecting the

monitoring of progress toward achievement of targets, especially for objective 1. Overall, the Bank performance is rated moderately satisfactory.

Overall Bank Performance Rating

Moderately Satisfactory

9. Other Impacts

a. Social and Poverty

Positive effects. At appraisal, the Poverty and Social Impact Assessment noted that several of the prior actions under pillars 2 and 3 were likely to have direct benefits for low-income communities; however, no specific impacts were assessed at program closing (ICR, para 41). The ICR envisaged that the prior actions under the green growth pillar were likely to have potential positive effects to the poor and vulnerable groups (ICR, para 42), but did not report any actual impact observed at program closing.

Negative effects. At appraisal, the PD 2017 (pages 66-67) and the PD 2019 (pages 81-82) identified that the prior actions on timber harvest management and the national park reform might potentially cause short-term closure of logging and processing operations and loss of jobs and decreases in livelihoods and incomes of local communities reliant on non-sustainable resource extraction. Relevant mitigation measures were stated in the PDs. At program closing, no information was provided whether the mitigation measures were implemented, and the potential risks were mitigated. However, the program documents did not identify potential negative effects from reducing expenditure on civil service workers, or from the potential for reducing water use for agriculture or other purposes. Nor did it identify or assess the potential for stricter pollution standards to increase costs.

b. Environmental

Positive effects. At program closing, the Country Environmental Analysis (CEA) published in 2021 (page 4) reported that the DPF series "contributed to the adoption of policy reforms that already represent important steps in confronting Lao PDR's priority environmental challenges." The CEA described positive effects of the policy reform, which was supported by the DPF series and their prior actions, presented opportunities to address the priority environmental challenges (see the ICR [para 43] for details). No specific positive environmental effects that were plausibly attributable to the operations were reported (TTL response).

Negative effects. At appraisal, the PD 2017 (page 74) identified that the prior action on fiscal consolidation might cause potential constraints to adequately staff key environmental management agencies. At program closing, no information was provided whether this risk was mitigated. Moreover, the ICR (page 30) mentioned about "recent complaints of health effects among banana plantation workers and pollution of land and water resources due to elevated use of pesticides and other agrochemicals."

c. Gender

The ICR (para 42) mentioned only potential positive effects of the DPF series to women as part of a larger discussion on potential effects to the poorest and most vulnerable groups. No actual impact specific to women were reported.

d. Other

The ICR (para 45) reported that the European Union (EU), Finland, France, Germany, Hungary, Ireland, Luxembourg, and Switzerland, committed an estimated EUR 550 million in support of a green and inclusive economy, human capital development, and good governance, within the framework of the 9th NSEDP (see details in ICR, annex 7). The DPF series supported strengthening the NGGS to present a strong vision with substantial actions and government vision, which resulted in paving the way for other actors such as the EU to provide support (ICR, para 45).

10. Quality of ICR

Rationale

The ICR presents a coherent account of the program that flows logically. The quality of analysis is adequate. The lessons in the ICR are supported by the evidence and findings of the ICR. The lessons focus on what can be derived from experience with the operation and clearly presented what should be done differently in the future to improve impact. The ICR presents a sufficient and credible evidence based on critical information to support the achievements reported, except for objective 1 as described in sections 4 and 5. The report followed most of the ICR guidelines and methodology. The World Bank's task team/ICR team provided supplemental information on the operation in response to IEG's request. In sum, the quality of ICR is rated substantial.

a. Rating

Substantial

11. Ratings			
Ratings	ICR	IEG	Reason for Disagreement/Comments
Outcome	Moderately Satisfactory	Moderately Satisfactory	
Bank Performance	Moderately Satisfactory	Moderately Satisfactory	
Relevance of Results Indicators		Moderately Satisfactory	
Quality of ICR		Substantial	

12. Lessons

The ICR (paras 56-60) presented four lessons. Two of them are presented below rephrasing as these might be relevant for the future operations aiming to achieve macroeconomic growth and environmental resource management and protection.

Relatively weak actions on revenue mobilization and debt management may be insufficient to address broader issues of fiscal sustainability. The debt-related concern had been signaled at the time of appraisal of both the first and second operations in the DPF series. In each case, debt sustainability analysis had led to an assessment of the country being at high risk of debt distress. However, while the risk was recognized, the measures devoted to mitigating it turned out to be incommensurate with the scale of the risk. While the COVID-19 exacerbated macroeconomic difficulties starting in 2020, the underlying challenge of unsustainable debt dynamics predated the pandemic. The ICR (para 57) suggested a list of potential fiscal and debt management actions to be considered in the future similar operations, while noting that these actions would require strong government commitment to undertake macro-fiscal reforms.

Engaging high-level government officials can ensure successful delivery of the green part of the agenda. Such engagement was reflected in the 8th NSEDP and the NGGS which set out goals, principles, strategies, measures, and mechanisms to deliver on the agenda. The policy matrix for each DPO was developed in close coordination with line ministries and was endorsed by the Prime Minister. Similar high-level engagement was reflected in the role of the MPI. The cross-sectoral NSEDP platform led by MPI appears to be an effective model to support dialogue, coordination, monitoring, and reporting of policy reforms. The inclusion of the DPO policy dialogues into the 8th NSEDP review process, and later on into the 9th NSEDP process, enhanced the participation and commitment of line ministries and avoided the risk of individual policy actions being watered down.

IEG draws the following additional lesson from this operation.

Designing outcome indicators that are too high a level can cause a missed opportunity to credibly measure the contribution of the prior action. The ICR (para 37) noted: "Indicator #1 (tax revenue to GDP) was too ambitious to be substantially affected by the policy measures undertaken, namely, the elimination of some tariff exemptions and the rationalization of some VAT procedures, as these only covered a small part of total tax revenues." The results indicator on the overall share of public debt had the same problem, in that debt was driven by revenue and expenditure, and was not able to capture the effectiveness of improvements in public debt management. In these cases, the RI was not able to measure the contribution of the prior action, because the indicator would be affected by many other factors.

13. Project Performance Assessment Report (PPAR) Recommended?

No