OECD Development Pathways

Multi-dimensional Review of Lao PDR

FINANCING SUSTAINABLE DEVELOPMENT

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Foreword

Economic growth is important, but it is just one aspect of development. Policy makers are required to reconcile economic, social and environmental objectives in order to ensure that their country's development path is sustainable and that the lives of its citizens improve. At the same time, achieving these economic, social and environmental objectives requires strategies for reform that factor in any complementarities or trade-offs across policies that may be needed. It requires the mobilisation of financial resources from various sources and directing these resources towards activities that promote sustainability across different sectors.

The Multi-dimensional Country Reviews (MDCRs) of the Organisation for Economic Co-operation and Development (OECD) provide governments with reliable policy advice for their national development strategies. They also identify the transitions necessary for more equitable and sustainable national growth, and they propose priorities for policy intervention. This report aims to provide guidance to Lao People's Democratic Republic (Lao PDR) in relation to financing its sustainable development plan and achieving the ambitions set down in the country's *9th Five-Year National Socio-Economic Development Plan (2021-2025)* and the associated Financing Strategy.

This report combines a diagnostic approach to development with consideration of how that development can be financed. It also provides suggestions for priorities and policy actions for both aspects. Chapter 1 provides an overview of the report. Chapter 2 combines participatory visioning and foresight methods with traditional development analytics, including the OECD Framework for Measuring Well-Being and Progress, as well as benchmarking and comparison of the results and experiences of other countries. This diagnostic proposes transitioning from commodity-driven growth to a more inclusive prosperity paradigm that emphasises the creation of broad-based opportunities, human capital development and green sustainability.

Based on the above, this report discusses priorities and recommendations for financing Lao PDR's sustainable development. The diagnostics and recommendations in these chapters build on the OECD's established Transition Finance Toolkit, country tax policy analysis, investment policy framework and foreign direct investment quality indicators, and the Climate Change Data Ecosystem approach by the Partnership in Statistics for Development in the 21st Century (PARIS21). Chapter 3 reviews Lao PDR's financing trajectory and provides recommendations for ensuring sustainable flows of financing; Chapter 4 provides recommendations for a radical overhaul of Lao PDR's tax system and how the country translates investments and economic revenue into resources for development; Chapter 5 identifies actions for attracting the type of investment that can underpin sustainable and balanced growth; and Chapter 6 lays out a road map for building green data and statistics as a core capacity for mobilising green finance flows.

Benchmarking and comparing results and experiences with other countries are key elements of the OECD method. For each MDCR, a set of comparator countries is designed to include regional peers, countries from other regions with similar structural characteristics, and OECD member countries. Throughout this report, depending on data availability, Lao PDR is compared with a set of benchmark countries in Asia (Cambodia, Korea, Thailand and Viet Nam), with averages for Association of Southeast Asian Nations (ASEAN) Member States and beyond (Albania, Plurinational State of Bolivia (hereafter Bolivia), Botswana, Colombia, Czech Republic (hereafter Czechia), Ghana and Paraguay), as well as with averages for OECD member countries.

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The review was produced under the guidance of Ragnheiður Elín Árnadóttir, Director of the OECD Development Centre. The review was led and co-ordinated by Jan Rielaender, Head of Country Diagnostics and Strategy, together with Agnes Stenström, Policy Analyst.

Chapters 1 and 2 were drafted by Jan Rielaender and Agnes Stenström. Chapter 3 was drafted by Abdoulaye Fabregas, Economist, with support from Clémence Decisy, Policy Analyst, under the supervision of Olivier Cattaneo, Team Lead and Senior Policy Analyst, all at the Unit for Architecture and Analysis at the Development Co-operation Directorate. Chapter 4 was drafted by Bert Brys, Head of Country Tax Policy Unit, together with Mariona Mas Montserrat and Yannic Rehm, both Tax Policy Economists in the Tax Policy and Statistics Division, all at the OECD Centre for Tax Policy and Administration. Chapter 5 was drafted by Kerstin Schopohl, Economist, under the supervision of Martin Wermelinger, Head of Unit, and Fares Al Hussami, Head of Foreign Direct Investment Qualities and Impact Team, all at the Sustainable Investment Unit of the OECD Directorate for Financial and Enterprise Affairs. Chapter 6 was drafted by Paz Patiño, Inter-Regional Advisor, together with Karina Cázarez -Grageda (consultant), with support from Ladin Akkaymak (intern), under the supervision of Johannes Jütting, Executive Head, all at the Partnership in Statistics for Development in the 21st Century (PARIS21) at the OECD Statistics and Data Directorate. Håvard Halland, formerly Senior Economist at the OECD Development Centre, provided intellectual and analytical support to the project's inception. Vita Volgemut, Junior Economist at the OECD Development Centre, provided excellent statistical and analytical inputs throughout the preparation of the report, Vatlana Boupha provided support in data collection as well as translation and logistical support during missions, and Myriam Andrieux (OECD Development Centre) provided secretarial assistance.

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Abbreviations and acronyms

AAAA	Addis Ababa Action Agenda
ADB	Asian Development Bank
AEOI	Automatic Exchange of Information
AI	artificial intelligence
AMRO	ASEAN+3 Macroeconomic Research Office
APEC	Asia-Pacific Economic Cooperation
APTF	Asia-Pacific Tax Forum
ASEAN	Association of Southeast Asian Nations
BEPS	base erosion and profit shifting
BoL	Bank of the Lao PDR
BPO	business process outsourcing
BRI	Belt and Road Initiative
CAD Trust	Climate Action Data Trust
CbC	country-by-country
CEO	Chief Executive Officer
CFC	controlled foreign company
CIT	corporate income tax
COP	Conference of the Parties
CPTPP	Comprehensive and Progressive Agreement for Trans-Pacific Partnership
DAAD	Deutscher Akademischer Austauschdienst (German Academic Exchange Service)
DoES	Department of Environment and Stability Statistics
DRM	domestic resource mobilisation
DSSI	Debt Service Suspension Initiative
ECCIL	European Chamber of Commerce and Industry in Lao PDR
EDL	Électricité du Laos
EIA	environmental impact assessment
EOIR	Exchange of Information on Request

EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FCPF	Forest Carbon Partnership Facility
FDI	foreign direct investment
FDES 2013	Framework for the Development of Environment Statistics
GDP	gross domestic product
GGGI	Global Green Growth Institute
GFCF	gross fixed capital formation
GHG	greenhouse gas
GIS	geographic information system
GIZ	Gesellschaft für Internationale Zusammenarbeit (Society for International Cooperation)
GloBE	Global Anti-Base Erosion
GMS	Greater Mekong Subregion
GSSS	green, social, sustainable and sustainability-linked
GVC	global value chain
ICOR	incremental capital output ratio
ICT	information and communication technology
IDA	International Development Association
IDR	issuer default rating
IFAD	International Fund for Agricultural Development
IFC	International Finance Corporation
ILO	International Labour Organization
IMF	International Monetary Fund
INGO	international non-governmental organisation
INFF	Integrated National Financing Framework
IOM	International Organization for Migration
IPA	investment promotion agency
IPD	Investment Promotion Department
ISCED	International Standard Classification of Education
ITMO	internationally transferred mitigation outcome
KHM	Cambodia
KPI	key performance indicator
Lao PDR	Lao People's Democratic Republic
LAK	Lao kip
LDCs	least developed countries

LMIC	lower middle-income country
LNCCI	Lao National Chamber of Commerce and Industry
LSB	Lao Statistics Bureau
MAF	Ministry of Agriculture and Forestry
MDCR	Multi-dimensional Country Review
MEM	Ministry of Energy and Mines
MICT	Ministry of Information, Culture and Tourism
MLSW	Ministry of Labour and Social Welfare
MOF	Ministry of Finance
MOH	Ministry of Health
MOIC	Ministry of Industry and Commerce
MONRE	Ministry of Natural Resources and Environment
MPI	Ministry of Planning and Investment
MSME	micro, small and medium-sized enterprise
MNE	multinational enterprise
MRV	measurement, reporting and verification
NCD	non-communicable disease
NDC	nationally determined contribution
NEM	New Economic Mechanism
NHI	National Health Insurance
NSEDP	National Socio-Economic Development Plan
NSS	National Statistical System
ODA	official development assistance
ODF	official development finance
OECD	Organisation for Economic Co-operation and Development
OOP	out-of-pocket
PAPI	Public Administration Performance Index
PEFA	Public Expenditure and Financial Accountability
PES	Payments for Environmental Services
PFM	public financial management
PPA	power purchase agreement
PPG	public and publicly guaranteed
PPP	public-private partnership
PCI	Provincial Competitiveness Index
PDP	Power Development Plan

R&D	research and development
RBC	responsible business conduct
RIA	regulatory impact assessment
REDD+	reducing emissions from deforestation and forest degradation in developing countries
SAA	skills assessment and anticipation
SDG	Sustainable Development Goal
SEA	Strategic Environmental Assessment
SEZ	Special Economic Zone
SFM	sustainable forest management
SME	small and medium-sized enterprise
SOCB	state-owned commercial banks
SOE	state-owned enterprise
SSC	social security contribution
STS	Smooth Transition Strategy
SWF	sovereign wealth fund
SDNSS	Strategy for the Sustainable Development of the National Statistical System
tCO_2eq	tonne of carbon dioxide equivalent eq
TFP	total factor productivity
TIF	tax increment financing
TLIC	Turning Land into Capital
TVE	township and village enterprise
TVET	technical and vocational education and training
UK	United Kingdom
UN	United Nations
UNCDF	United Nations Capital Development Fund
UNDP	United Nations Development Programme
UNDESA	United Nations Department of Economic and Social Affairs
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFPA	United Nations Population Fund
UNIDO	United Nations Industrial Development Organization
US	United States
USD	United States dollars
VAT	value added tax
VDCAP	Vientiane Declaration Country Action Plan

VNM	Viet Nam
WHO	World Health Organization
WTO	World Trade Organization

Facts and figures of Lao PDR

People: Towards better lives for all					
Population (millions)	7.5		Life expectancy (years)	68.1 (2021)	(78.7) (2021)
Under 15 (%)	30.6	(17.2)	Men	66.2 (2021)	(75.9) (2021)
Over 65 (%)	4.5	(18.0)	Women	70.1 (2021)	(81.8) (2021)
Urban population (% of total)	37.6	(81.5)	Current health expenditure (% of GDP)	2.7 (2020)	(13.9) (2020)
Income inequality (Gini coefficient)	38.8 (2018)	(32.5) (2021)	Lower secondary completion rate, total (% of relevant age group)	58.0	(95.1)
Poverty headcount ratio at $6.85 a day (2017 PPP) (% of population)	70.5 (2018)	(3.3) (2021)	Government expenditure on education (% of GDP)	1.4	(5.0) (2021)
Unemployment rate (% of total labour force, national estimate)	1.2	(5.1)	Labour force participation rate (% of total population aged 15-64)	62.0	(72.8)
Firms with female top manager (% of firms)	43.1 (2018)	(17.3) (2021)	Vulnerable employment, total (% of total employment)	78.3	(12.6)
Prosperity: Boosting productivity					
GDP in current USD billion	15.5		Share of GDP:		
GDP growth (annual %)	2.7	(2.8)	Agriculture, forestry and fishing (%)	14.9	(1.4) (2021)
GDP per capita, PPP (constant 2017 international $)	7947.7	(46234.4)	Industry, including construction (%)	34.1	(21.9) (2021)
GDP per capita growth (annual %)	1.3	(2.4)	Services (%)	40.3	(70.1) (2021)
Exports of goods and services (% of GDP)	33.2 (2016)	(30.8)	Share of employment:		
Imports of goods and services (% of GDP)	41.9 (2016)	(31.8)	Agriculture, forestry and fishing (%)	69.6	(4.7)
Current account balance (% of GDP)	-0.1		Industry, including construction (%)	7.2	(22.3)
			Services (%)	23.2	(73.0)
Planet: Conserving nature					
Forest area (% of land area)	71.8 (2021)	(32.9)	Agricultural land (% of land area)	8.8 (2021)	(33.9) (2021)
Total primary energy supply (TPES) per capita (toe)	0.1 (2021)	(0.1)	CO_2 emissions from fuel combustion per capita (tonnes)	2.6 (2020)	(7.7) (2020)
Renewables (% of TPES)	75.6 (2020)	(11.7) (2021)	CO_2 emissions (kg per PPP $ of GDP)	0.3 (2020)	(0.2) (2020)
Renewables, excluding hydropower (% of total energy production)	45.8 (2020)	(7.8) (2021)	Fine particulate matter concentration (PM2.5, g/m3), mean annual exposure	20.5 (2019)	(13.8) (2019)
Financing sustainable development:					
Tax revenue (% of GDP)	9.7 (2021)	(16.3)	General government gross debt (% of GDP)	134.5	(79.2)
Net FDI inflows (% of GDP)	4.1	(1.4)	General government total expenditure (% of GDP)	14.7	(45.2)
Net ODA per capita (current USD)	72.7	(2.6) (2021)	Total reserves (% of total external debt)	6.5	-

Note: Voice and Accountability captures perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media. Estimate gives the country's score on the aggregate indicator, in units of a standard normal distribution, i.e. ranging from approximately -2.5 to 2.5. 2. Index ranges from 0 (highly corrupt) to 100 (very clean). Figures refer to 2022. Latest year available when other than 2022 or explicitly mentioned in parenthesis. Numbers in parentheses refer to the OECD average or total OECD.

Source: Calculations based on data extracted from the databases of the following organisations: (OECD, 2023[1]), *Database*, https://stats.oecd.org/; (Gallup Organisation, 2023[2]), *World Poll: 2006-2023*, https://www.gallup.com/analytics/318875/global-research.aspx; (IEA, 2023[3]), *Database*, https://www.iea.org/data-and-statistics/data-tools; (Transparency International, 2023[4]), *Corruption Perceptions Index*, https://www.transparency.org/en/cpi/2022; (World Bank, 2023[5]), *World Development Indicators*, https://databank.worldbank.org/; (IMF, 2023[6]), *World Economic Outlook*, https://www.imf.org/en/Publications/WEO.

Executive summary

Lao People's Democratic Republic (Lao PDR) has made significant headway on its development path, combining high economic growth with poverty reduction. Sustained economic growth of more than 7% annually between 2000 and 2019 was led by booming commodity exports and substantial inflows of external financing, notably from large investment projects in hydropower, mining and transport. Many Laotians experienced significant improvements in their well-being. Poverty declined as household income increased, and many important development gains in education and health were achieved.

After three successful decades, Lao PDR is now grappling with the shortcomings of its current model of development. While debt-financed investments have supported growth, government revenue has not followed suit, undermining the country's capacity to cope with a fast-mounting debt service burden and causing debt distress and pressure on the national currency. At the same time, past growth and investment were highly concentrated in a few sectors and dominant state-owned enterprises (SOEs). More than 90% of workers are still employed in sectors dominated by informal employment, with more than 50% working in the agricultural sector, generating limited income, added value and tax revenue. Past development has also come at the expense of natural wealth: Lao PDR has lost nearly 23% of its tree cover since 2000 and is also grappling with high levels of air pollution.

Looking ahead, Laotians are hoping for more broad-based and sustainable development. During foresight exercises undertaken in the context of preparing this report, strong education systems, good governance and the rule of law, a clean environment, and a dynamic economy that offers opportunities for many were all highlighted as the main elements of a desired future for Lao PDR. Laotians hope for middle-class family lives and the opportunity to contribute to society, achieve good health, live in green cities with attractive public spaces, have access to clean water, and experience minimal air pollution and waste.

Focusing on four strategic pillars would help Lao PDR to step up its efforts to deliver on these aspirations. These four strategic pillars are:

1. *Prosperity*: creating the conditions for opportunities to emerge in all sectors and for all citizens
2. *People*: making human capital development a priority
3. *Planet*: preserving Lao PDR's abundant natural wealth, fighting air pollution and mobilising green finance
4. *Financing*: building solid management and revenue capacity and focusing on sustainable investment.

In order to establish a foundation for delivering on these four pillars, Lao PDR must tackle two urgent tasks, the first of which is to reduce the debt burden and re-establish macroeconomic stability. Seeking debt relief is a crucial step towards freeing up fiscal space that must be combined with enhancing spending efficiency. Managing fiscal risks related to public-private partnerships and SOEs involves auditing existing entities, enforcing strict criteria for government guarantees and implementing quick-win reforms in those SOEs that present the highest-risk profiles. Public debt management should be centralised, with clear authority and validation processes for all public debt.

The second of Lao PDR's urgent tasks is to boost revenue generation and taxation capacity. Lao PDR stands out because of its low capacity to raise tax, having the lowest tax-to-gross domestic product ratio among the members of the Association of Southeast Asian Nations. Insufficient revenues are an important element of the country's current debt crisis, and public funds are currently insufficient to pay for the necessary investments in human capital and sustainable development. Lao PDR must address tangible design and administration flaws across all types of taxes and investment incentives by:

- increasing revenues gradually while also transforming the tax system into a positive force that helps address rising inequality, high informality and environmental degradation
- reforming those aspects of the tax system that introduce distortions or contribute to low revenues and limited equity of the tax system, and moving from profit-based to expenditure-based investment incentives
- building a consistent international taxation framework in order to reduce revenue leakages.

Once this foundation has been established, Lao PDR should focus on fostering a thriving private sector and sustainable investment. Attracting more sustainable investment that contributes to economic diversification and helps achieve environmental and social goals requires improving the overall enabling environment for investment. This includes improving access to land through better co-ordination in land administration and management structures, as well as establishing an improved legal framework for land titling, better transportation infrastructure, and a more advanced and competitive financial sector.

Lao PDR should also invest in human capital. A shift away from the current trajectory of capital-intensive investments in natural resource extraction and energy generation and towards a wider range of sectors – such as manufacturing, agri-business, tourism and services – will necessitate an increase in the amount of qualified labour available. It is essential to invest in education and skills development, but funding must also be made available for healthcare and a minimum level of social services. However, there is a gap between these development priorities and the total amount of resources currently allocated to them.

Increasing efficiency and predictability for investors requires the adoption of a whole-of-government approach to investment policy. Improved co-ordination between different government entities and between the public and private sectors can facilitate the development of policies and services for investors that are more closely aligned with their needs. In addition, a predictable regulatory framework for investment and an independent court system can provide a firm basis for reducing opportunities for corruption.

Unlocking Lao PDR's abundant potential for green and climate finance will necessitate improvements in data availability and increased institutional capacity. Climate finance depends on high-quality, reliable data to measure emissions reduction or removal and allow third-party verification of such measurements. Building these Measurement, Reporting and Verification (MRV) mechanisms requires the availability of accurate, harmonised and regularly updated environment statistics.

Finding ways to overcome fragmentation and a lack of co-ordination between branches of Lao PDR's government can have significant benefits for all policy areas. A shared and well co-ordinated governance of the sustainable development financing agenda with active involvement of development partners is fundamental for achieving long-lasting results. There is also scope for better inter-institutional co-ordination and alignment of Lao PDR's strategic objectives and priorities among the different government entities involved in the design and implementation of the country's tax and investment policies. Better data sharing and harmonisation with regard to methodologies, data collection processes and definitions are also essential for improving access to climate financing.

1 Overview: Pathways for financing the sustainable development of Lao PDR

Lao People's Democratic Republic (Lao PDR) has made significant headway on its development path over the past three decades. The country's sustained economic growth has been led by booming commodity exports and substantial inflows of external financing. Many Laotians have seen significant improvements in their well-being. Poverty has declined as household income has increased, and many important development goals in education and health have been achieved. In the face of macroeconomic challenges, a shift from commodity-driven growth to a more inclusive prosperity paradigm that emphasises the creation of broad-based opportunities, human capital development and green sustainability can unlock Lao PDR's future development. This overview summarises the report and presents priorities for overcoming the country's current fiscal constraints and finding ways to fund this shift. Recommendations address strengthening Lao PDR's sustainable finance, revenue generation and tax reform, investment promotion, and data capacity in order to tap into green finance mechanisms.

Lao PDR is striving to realise an ambitious development agenda that is centred on human capital, well-being and safeguarding the country's tremendous natural resources. These objectives are outlined in the *9th Five-Year National Socio-Economic Development Plan (2021-2025)*. Lao PDR's ambitions build on a very successful development path that has seen rapid economic growth and steady social progress since the 1990s.

Today, Lao PDR faces a challenging fiscal and debt situation and pressure to update its development model towards a more balanced and sustainable development pathway. Public revenues from economic activity are low, while debt service is poised to increase further. In order to realise its ambitions and enable the necessary investments for development given this situation, Lao PDR has developed a Financing Strategy for the 9th National Socio-Economic Development Plan (NSEDP).

This Multi-dimensional Country Review (MDCR) is being undertaken in order to support Lao PDR in financing its sustainable development and achieving its ambitions. It builds on joint workshops and policy discussions held in Vientiane between April and December 2023, as well as a review process with the Organisation for Economic Co-operation and Development (OECD) Development Centre's Mutual Learning Group in February 2024.

The report's development diagnostic (Chapter 2) builds on the MDCR methodology, which combines participatory visioning and foresight with traditional development analytics, including the OECD Well-being Framework, the Sustainable Development Goals (SDGs), benchmarking and comparison of Lao PDR's results and experiences with those of other countries. For each MDCR, a set of comparator countries is designed to include regional peers, countries from other regions with similar structural characteristics (for example, being landlocked, level of gross domestic product (GDP) per capita, and the structure of the economy) and OECD member countries. Depending on data availability, Lao PDR is compared with a set of benchmark countries (Albania, Plurinational State of Bolivia [hereafter "Bolivia"], Botswana, Cambodia, Colombia, Czechia, Ghana, Korea, Paraguay, Thailand and Viet Nam) as well as the average for Association of Southeast Asian Nations (ASEAN) Member States throughout this report.

Building on this diagnostic, this MDCR provides priorities and recommendations for financing Lao PDR's sustainable development. Chapter 3, "Opportunities and challenges in Lao PDR's sustainable development financing landscape", reviews Lao PDR's financing trajectory and provides recommendations for ensuring sustainable flows of financing; Chapter 4, "Generating sustainable fiscal revenue", provides recommendations for a radical overhaul of Lao PDR's tax system and how the country translates investments and economic revenue into resources for development; Chapter 5, "Stimulating sustainable investment in Lao PDR", identifies actions for attracting the type of investment that can underpin sustainable and balanced growth; and Chapter 6, "Strengthening environment statistics in order to support sustainable development", sets out a road map for building green data and statistics as a core capacity for mobilising future green finance flows.

This overview chapter begins with a brief history of Lao PDR's development and a summary of the development diagnostic and priorities, including a future vision and the Lao PDR government's development strategy. It then presents recommendations for improving sustainable development finance, which are drawn from the subsequent four thematic chapters. The overview concludes with a focus on implementation.

A brief history of Lao PDR's development

Lao PDR has a proud history, shaped by its strategic location at the centre of mainland Southeast Asia and along the Mekong River The country dates back to the emergence of the *Kingdom of Lan Xang (literally "million* elephants") in the 14th century, which marked a significant era of power and cultural influence (Pholsena, 2004[1]). Following centuries of both peaceful and violent evolution in interplay with its neighbours and foreign powers, the modern-day Lao PDR was established in 1975. The Mekong River, which flows through Lao PDR, serves as a connecting link to Thailand in the west and Cambodia in the south. It has remained a vital source of livelihood and economic activity throughout Lao PDR's history.

Lao PDR initially applied a centrally planned economic system according to communist doctrine. Most economic activity was nationalised, prices were administratively determined and trade between provinces was highly regulated. The emphasis was primarily on modernising production technology, and on attaining self-sufficiency through food and rural reforms centred on the collectivisation of agriculture (OECD, 2017[2]; Fujita, 2006[3]). The results were disappointing and Lao PDR found itself facing shortages and high inflation.

In the mid-1980s, the government began to shift towards market-oriented reforms known as the "New Economic Mechanism" (NEM). The government of Lao PDR began opening up the economy, liberalising domestic and foreign trade, encouraging foreign investment, and initiating policies to promote private enterprise. This period marked a turning point in Lao PDR's economic strategy, as it brought dynamism to the economy and set the stage for Lao PDR's subsequent development success and integration with the global economy.

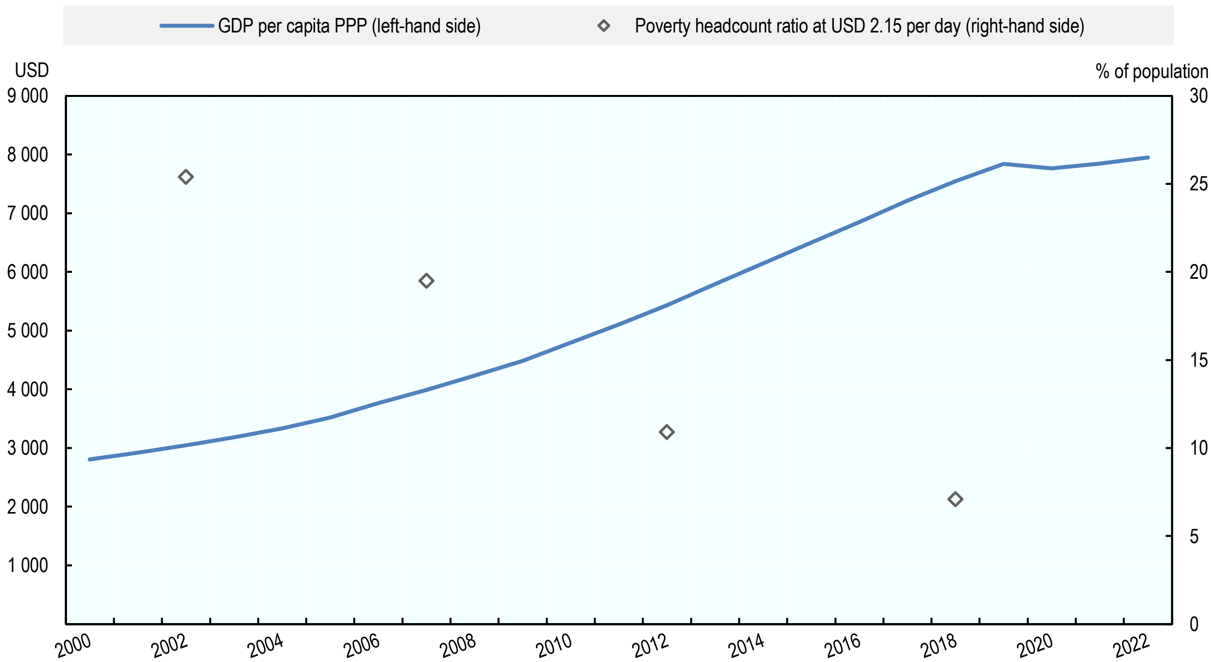
The 1990s were marked by rapid regional integration and trade expansion. Lao PDR joined the Greater Mekong Subregion in 1992 and the ASEAN in 1997 (ASEAN, 2024[4]). The strengthening of regional trade institutions stimulated the swift integration and expansion of trade within regional markets. Between 1990 and 1998, trade grew from 36% to 84% of Lao PDR's GDP (World Bank, 2024[5]). Endowed with abundant natural resources, Lao PDR's export growth was led by agricultural and forestry products, and subsequently more and more by hydropower and minerals.

In the first two decades of the 2000s, Lao PDR's economy was one of the fastest growing in the world, with an average annual growth rate of 7.1% (World Bank, 2024[5]) (Figure 1.1). The country reached middle-income status in 2011 and joined the World Trade Organization in 2013. Booming investment was an important driver of Lao PDR's economic success, spurring large-scale infrastructure projects and a continued push into the mining and energy sectors.

Between 2006 and 2017, foreign direct investment (FDI) inflows grew almost tenfold, from USD 187.4 million (United States dollars) to USD 1.69 billion. Investment in Lao PDR's Special Economic Zones (SEZs) reached a cumulative USD 7.6 billion in 2021 (Dalavong, 2021[6]; SEZO, 2023[7]). Exports have grown almost fourfold since 2010, reaching USD 9.2 billion in 2021. Exports of ores and metals including gold, silver, copper and iron boomed as well, followed by agriculture- and forestry-based products such as cassava, rubber, paper and pulp.

Figure 1.1. Lao PDR experienced significant growth and poverty reduction between 2000 and 2020

GDP per capita, adjusted by purchasing power parity (constant 2017 international dollars) and poverty headcount ratio at USD 2.15 per day (2017), % of population



Source: (World Bank, 2024[5]), *World Development Indicators* (database) (accessed on 15 November 2023).

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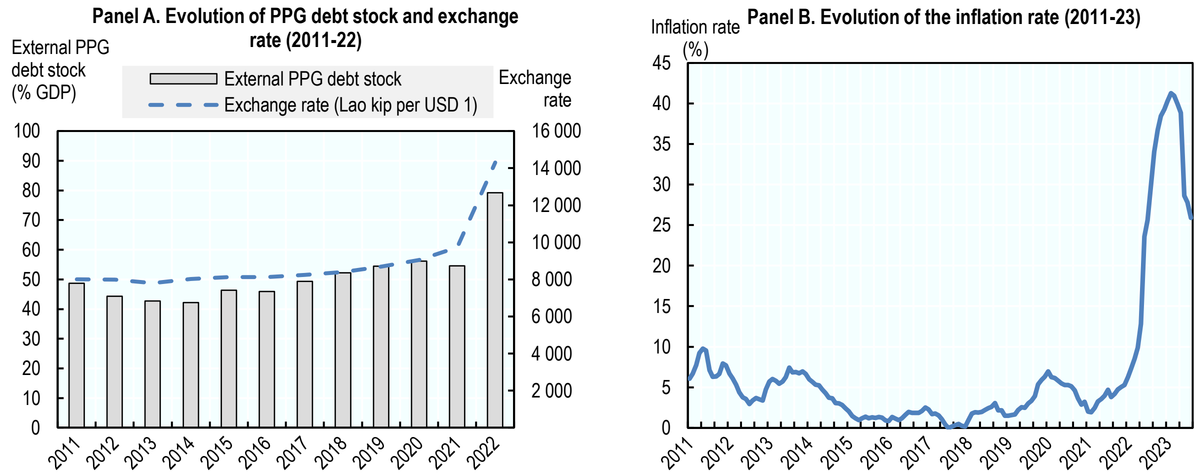
Adding to its success, Lao PDR was able to translate its economic growth into many important development gains in relation to household income, poverty reduction, education and health. Extreme poverty fell from 25.4% to 7.1% between 2002 and 2018 (Figure 1.1). Lao PDR has made steady progress in expanding access to education and achieving nearly universal primary education, making primary school in Lao PDR compulsory and free through the fifth grade. Progress in health outcomes has been equally significant. Maternal mortality dropped from 284 deaths per 100 000 births in 2010 to 126 deaths per 100 000 births in 2020, and the mortality rate for children aged under 5 years improved from 61 deaths per 1 000 births in 2010 to 44 deaths per 1 000 births in 2020 (World Bank, 2024[5]).

After three successful decades, Lao PDR now faces a challenging economic situation. Triggered by the COVID-19 pandemic's sudden halt to the global economy and a drop in prices for many of Lao PDR's exports, the country's impressive growth streak has come to an end. While economic growth did not turn negative in 2020, it has remained between 2% and 3% since then, a visible deviation from the previous trend. Public debt has reached unsustainable levels and the burden of servicing existing debt is high (IMF, 2023[8]). High inflation and currency depreciation have put pressure on incomes (Figure 1.2).

Figure 1.2. Macroeconomic imbalances materialised in 2022, notably because of a depreciation of the Lao kip and rapid inflation



Note: In Panel A, data for 2022 are preliminary. PPG stands for publicly guaranteed debt.

Source: (Government of Lao PDR, 2022[9]), *Public and Publicly Guaranteed Debt Bulletin of Lao PDR*, https://www.mof.gov.la/wp-content/uploads/2023/07/2022-Public-and-Publicly-Guaranteed-Debt-Bulletin-of-Lao-PDR-Final.pdf; (Lao Statistics Bureau, 2023[10]), *Lao Statistical Information Service (database)* https://www.https://laosis.lsb.gov.la; and (World Bank, 2024[5]), *World Development Indicators (database)* https://data.worldbank.org/indicator/DT.DOD.DPPG.CD?end=2021&locations=LA&start=2010 (accessed on 23 October 2023).

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Elements of the current difficulties were apparent during previous years of high growth and investment. Beyond the challenges of the COVID-19 pandemic and changing global macroeconomic conditions, the decrease in growth is also the result of a rapid build-up of government debt throughout the 2010s, fuelled by large current account deficits and a high share of external finance in investment projects without the generation of commensurate revenues or the existence of sufficient foreign exchange reserves to pay for debt service. Although the country reduced its external borrowing in recent years, it still faced growing difficulties in meeting its debt service obligations. As commonly seen in countries facing debt issues, the financial strain ultimately caused the local currency (the Lao kip) to depreciate by more than 50% against the United States dollar in 2022. Largely because of the Lao kip's depreciation, the PPG debt stock rose from 88% of GDP in 2021 to 112% of GDP in 2022. The country is now in "debt distress" (IMF, 2023[11]).

Development diagnostic and priorities

Development is not about getting everything right, but about getting right what matters most. This pertains to both objectives and the actions necessary in order to achieve those objectives. MDCRs have been developed based on the understanding that development is not just about money and growth but also about sustainability and good stewardship of natural resources, as well as human well-being and providing all citizens with the opportunity to reach their full potential. The implementation of Lao PDR's 9th NSEDP and its associated Financing Strategy offers an important opportunity to deliver on these objectives.

In order to continue its success story, Lao PDR must overcome the current macroeconomic crisis, shift into a higher gear and address the shortcomings of its current development model. The development diagnostic of this report builds on the MDCR methodology, which combines exploring a citizens' vision of the future (Box 1.1) with an assessment of constraints and opportunities applying the OECD Well-being Framework (Box 1.2) and the "prosperity", "people", "planet" and "financing (partnership)" pillars of the SDGs. This diagnostic serves to inform priorities during the ongoing implementation of the Lao PDR government's own development strategies. Building on these priorities, this report's recommendations then focus on addressing the current situation and on mobilising the financial means necessary in order to fund Lao PDR's future sustainable development.

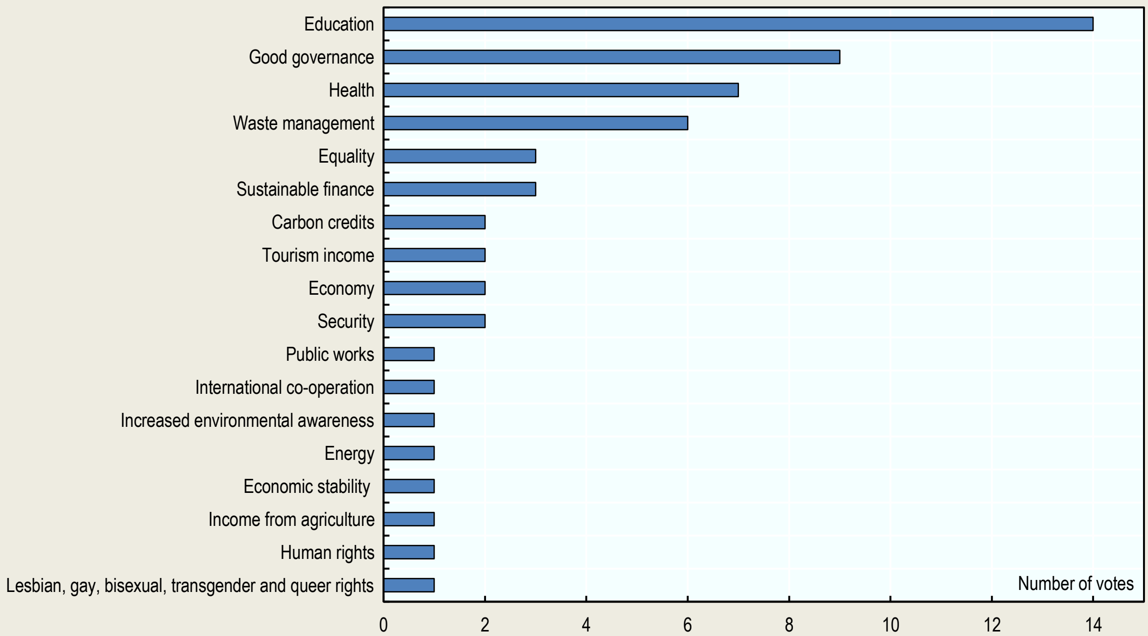
Box 1.1. Vision workshop: Lao PDR: Green Perspectives for 2040

As part of the MDCR process, a vision workshop, Lao PDR: Green Perspectives for 2040, was jointly organised by the OECD and the Ministry of Planning and Investment (MPI) in Vientiane in September 2023. It gathered around 40 stakeholders representing different perspectives (government, academia, the private sector and civil society) in order to capture the aspirations and perspectives of different groups. Narratives of the lives of future citizens were the basis for the vision statement for a green future for Lao PDR.

The future narratives of Lao PDR highlighted aspirations for citizens' high awareness and engagement in protecting the environment. Most narratives of the lives of future citizens focused on highly educated citizens actively contributing to greening their respective communities, both through their work as teachers or civil servants and through activities in their daily lives in the use of public transportation and electric vehicles, and reducing waste. All have middle-class family lives; decent, stable work; good health; and access to quality education. They live in green cities and enjoy leisure time in green, clean public spaces. An environment with clean water and minimal air pollution and waste, with infrastructure that allows for green transportation, were included in the desired future stories.

Strong education systems, good governance and the rule of law, a clean environment, and a dynamic economy offering abundant opportunities were all highlighted as the main elements of a desired future for Lao PDR. Following the formulation of narratives and vision statements, workshop participants voted on the most important dimensions of a positive green future. Quality education was ranked highest in the workshop, followed by issues related to good governance (Figure 1.3). Access to (and quality of) healthcare services, functional waste management, sustainable finance, and equality were also ranked high as important dimensions for achieving a desired green future for citizens.

Figure 1.3. Dimensions of a green vision for 2040 in Lao PDR



Source: Vision workshop: Lao PDR: Green Perspectives for 2040.

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Selected vision statements for a desired green future in Lao PDR:

- "Citizens have high awareness and engage in environmental protection",
- "All stakeholders including government, private sector and communities contribute, engage and benefit from carbon credit trading in agriculture, forestry, renewable energy as well as supporting organic farming."
- "We have successfully built good governance and institutions through effective and efficient co-ordination among multiple stakeholders, specifically effective law and legal enforcement mechanisms from central to local levels, a system that is based on fair, equal, just and transparency, with strong responsibility and commitment. Enhanced institutional research and human resource capacity meet the needs for policy transformation and effective implementation."

Prosperity: Moving from booming commodities to broad-based opportunities

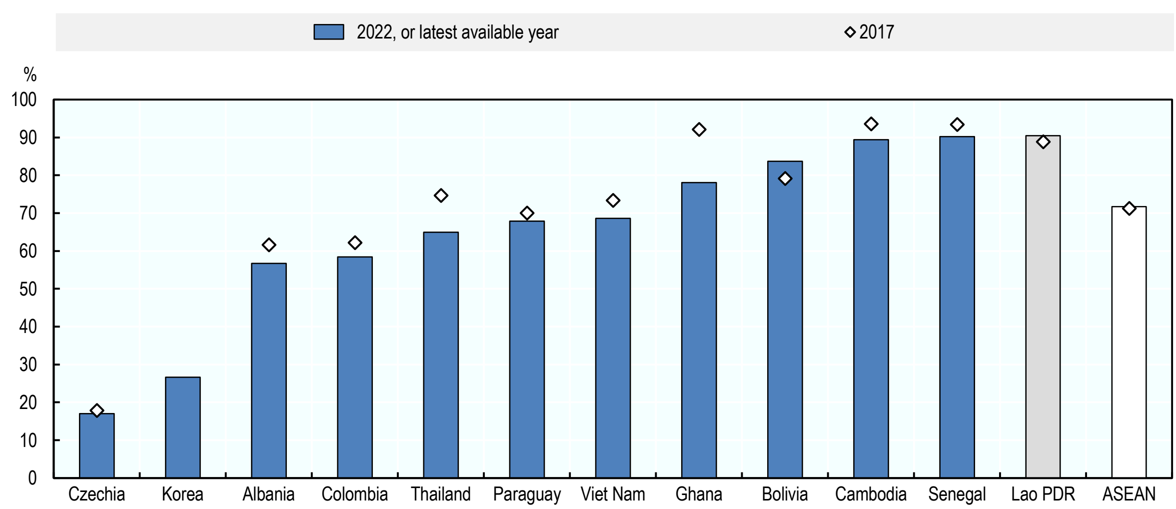
Past growth and investment in Lao PDR was impressive, but also highly concentrated in a few sectors and dominant state-owned enterprises (SOEs). Lao PDR's remarkable economic growth has mainly been attributed to capital-intensive sectors such as mining and energy, which have created limited employment opportunities. More than 90% of workers are still employed in sectors with labour productivity below the national average, with more than 50% working in the agricultural sector, generating limited income. A more balanced growth path could generate broader economic opportunities for Laotians. A more diversified economy would also be more resilient to shocks and, possibly, more capable of limiting the rapid loss of natural resources.

In its present state, Lao PDR's pre-COVID-19 growth model, which was largely reliant on large infrastructure projects funded through public debt accumulation, is no longer viable. In this context, efforts to diversify the economy and bolster sectors beyond infrastructure (such as tourism and agriculture) can pave the way for a more balanced, diversified and resilient economic landscape in the future. In order to be successful, such efforts will need to be accompanied by an endeavour to establish conditions that are conducive to attracting and mobilising the right financing sources.

The share of informal employment in Lao PDR stands out in international comparisons and illustrates the concentration of opportunity for only a small proportion of the population (Figure 1.4**).** Informal enterprises exhibit significantly lower productivity when compared with their formal counterparts, achieving only 13% of the sales per worker that formal enterprises achieve (World Bank, 2019[12]). Informal workers are more likely than employees and employers to experience low job and income security, as well as lower coverage of social protection systems and less protection from employment regulation. The formal sector, which accounts for only 9.5% of employment in Lao PDR, is dominated by government employment and public services (48.4% of formal employment) and by the few larger enterprises that are operating in Lao PDR.

Figure 1.4. Lao PDR's economy remains informal

Informal employment as a proportion of total employment



Note: Data for Bolivia, Colombia, Lao PDR, Paraguay and Viet Nam are from 2022; data for Albania, Cambodia, Korea and Senegal are from 2019; data for Thailand are from 2018; and data for Ghana are from 2015. No data were available for Korea for 2017. For the ASEAN average, no data were available for Malaysia and the Philippines for 2022 or 2017, and no data were available for Cambodia for 2017.
Source: (ILO, 2023[13]), ILO modelled estimates database, ILOSTAT [database], https://ilostat.ilo.org/data/.

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A thriving private sector that promotes employment and productivity across multiple sectors would be key to creating more broad-based economic growth. Currently, In 2020 Lao PDR had 276 enterprises with more than 100 employees, equivalent to 0.2% of all enterprises in Lao PDR (Lao Statistics Bureau, 2020[14]). Creating a level playing field and a more attractive business environment, developing a supportive financial sector, and addressing skills and human capital shortages would be important in order to support the development of enterprises that can provide opportunities and support innovation.

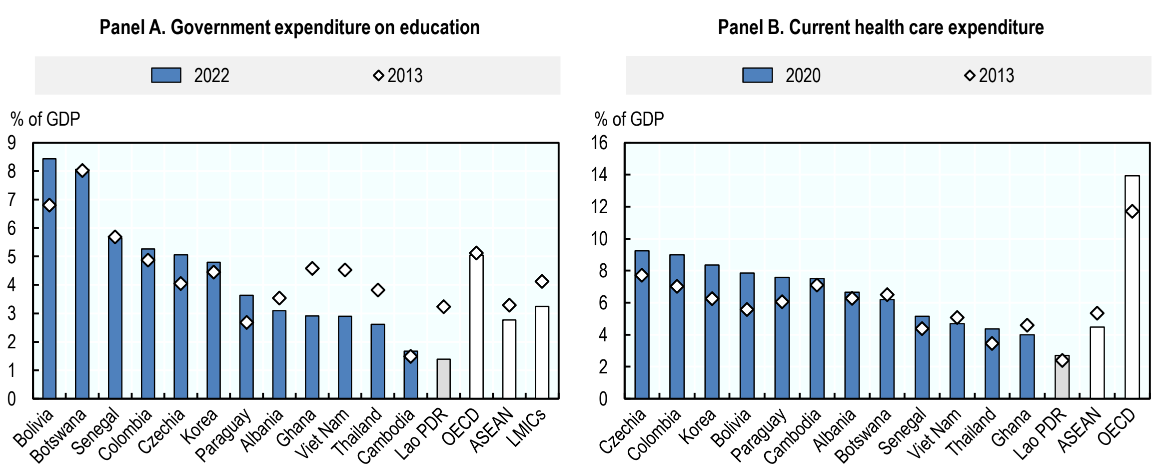
Investment can play an important role in supporting more broad-based growth. Lao PDR experienced an impressive increase in FDI inflows between 2006 and 2017, which has been one of the main drivers of economic growth. However, the country would benefit from attracting more sustainable investment that advances environmental and social goals. This requires, first and foremost, improving the overall enabling environment for investment in the country. It would also be important for Lao PDR to integrate environmental and social considerations into investment policies and strengthen the implementation of social and environmental safeguards for investment projects.

People: Making human capital development a priority

A more balanced growth path would increasingly rely on human capital. While capital-intensive investments in natural resource extraction and energy generation require limited skilled labour, an economic model with more emphasis on sectors such as manufacturing, agri-business, tourism and services requires larger numbers of qualified workers. Beyond education and skills development, human capital also requires adequate funding for healthcare and a minimum level of social services.

However, human capital development is a pressing development need for which funding capacity must be strengthened. Although Lao PDR has made significant progress in expanding access to primary and secondary education, the quality of education remains low, and enrolment levels for both primary and secondary have started to decline. Completion rates and student performance on international comparison tests are also cause for concern. One particular concern is that Lao PDR exhibits low spending on social services as well as for environmental protection. Government expenditure on education stands at around 1.4% of GDP in Lao PDR compared with 3.2% for the average lower middle-income country (LMIC), and healthcare expenditure represents a mere 2.7% of GDP (compared with 3.9% on average in LMICs) (World Bank, 2024[5]). Similarly, government expenditure on healthcare, which totalled 1.2% of GDP in 2020, remains far from the 4% of GDP recommended by the World Health Organization (ADB, 2023[15]) (Figure 1.5).

Figure 1.5. Government expenditure in social sectors in Lao PDR ranks among the lowest in the world



Note: Panel A: Data for Korea are from 2015 instead of 2013; data for Bolivia, Botswana, Colombia and Korea are from 2020 instead of 2022; and data for Albania, Cambodia, Czechia and OECD member countries are from 2021 instead of 2022. Panel B: Data for Albania are from 2018 instead of 2020.

Source: (World Bank, 2024[5]), *World Development Indicators* (database), https://databank.worldbank.org/source/world-development-indicators(accessed on 15 January 2024).

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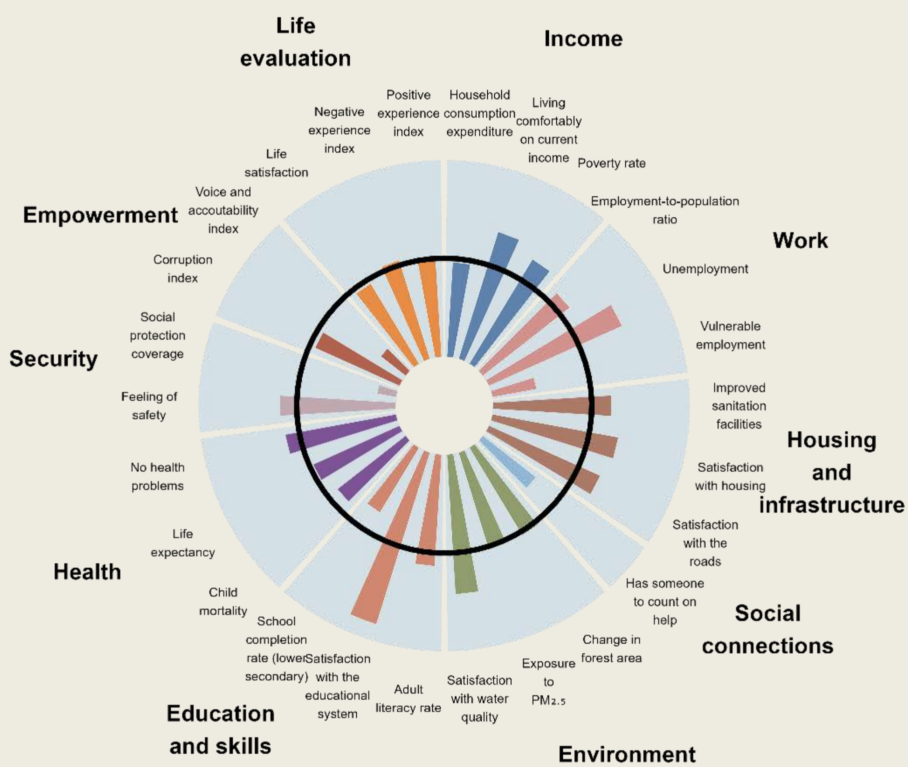
Box 1.2. How is life in Lao PDR? Viewed through the OECD well-being lens

The OECD Framework for Measuring Well-Being and Progress uses a mix of objective and subjective indicators to account for people's well-being (OECD, 2017[16]). A well-being lens allows countries to identify areas where their performance is better or worse than other countries at similar levels of GDP per capita. Comparing Lao PDR with countries that have similar levels of GDP per capita (Figure 1.6) shows the country's performance across outcome indicators in ten dimensions of well-being (bars longer than the black circle represent better performance, whereas bars shorter than the black circle represent worse performance).

Figure 1.6. Current and expected well-being outcomes for Lao PDR: Worldwide comparison



Note: The observed values falling inside the black circle indicate areas where Lao PDR performs poorly in terms of what might be expected from a country with a similar level of GDP per capita. Expected well-being values (the black circle) are calculated using bivariate regressions of various well-being outcomes on GDP using a cross-country dataset of around 150 countries with populations of more than 1 million people. All indicators are normalised in terms of standard deviations across the panel. M2.5 = particulate matter with a diameter of 2.5 microns or smaller.

Source: IQAir, (2023[17]) *World's most polluted countries & regions (2018-2022)*, https://www.iqair.com/world-most-polluted-countries; (World Bank, 2024[5]), *World Development Indicators* (database), https://databank.worldbank.org/; (Gallup, 2023[18]), *World Poll: 2006-2023*, https://www.gallup.com/analytics/318875/global-research.aspx; Transparency International (2023[19]), *Corruption Perceptions Index 2023* (database) https://www.transparency.org/en/cpi/2022; FAO and UNEP (2020[20]), *The state of world's forest 2020*, https://www.fao.org/state-of-forests/en/; WHO (2023[21]), *Global Health Observatory*, https://www.who.int/data/gho/data/indicators/indicator-details/GHO/population-using-improved-sanitation-facilities-(-); UNESCO (2023[22]), *UNESCO Institute for Statistics*, http://data.uis.unesco.org/index.aspx?queryid=3803.

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Overall, Lao PDR performs at a level comparable to other countries at the same level of economic development. It performs slightly better with regard to poverty, income, unemployment, housing, and satisfaction with education and water quality. However, the share of informality in employment is much higher in Lao PDR than in other countries with a similar level of GDP per capita. The same holds true for secondary school completion rates, for social protection coverage and for empowerment.

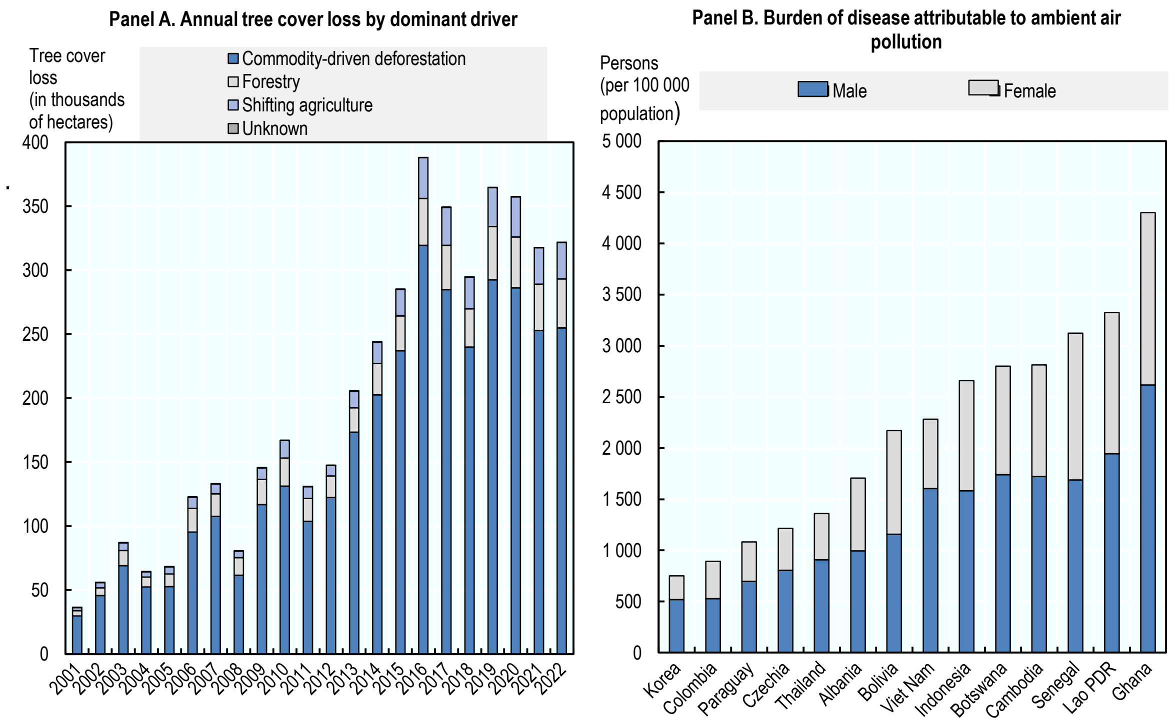
Planet: Preserving Lao PDR's abundant natural resources and fighting air pollution

The current growth model has put pressure on the environment and biodiversity at a cost for the economy, and for the well-being of Lao PDR's citizens and nature. Lao PDR's abundant natural resources have historically fuelled the country's prosperity, particularly in the agricultural, tourism, mining and hydropower sectors. However, the current growth model has put pressure on the country's environment and biodiversity. Forests, grasslands and other terrestrial habitats are being degraded, fragmented and lost as a result of the expansion of industrial agriculture and commercial timber extraction, which also threatens biodiversity (Figure 1.7) (World Bank, 2020[23]). "Slash-and-burn" agriculture, where farmers clear and burn forests in order to create ash-fertilised soil, is another major driver of forest degradation in Lao PDR. Estimates suggest that forest loss alone causes annual damage equal to 3% of Lao PDR's GDP (World Bank, 2021[24]). In addition, large-scale hydropower dams have been associated with negative effects on the environment and local communities, with impacts on water quality and sediment flows, hydrology and water levels, aquatic ecosystems, and food security. Mining projects and hydropower dams are also frequently located in protected areas or close to important tourism and natural sites; such projects and dams can have adverse effects on the environment and scenery, and can discourage tourism.

Air pollution is a significant challenge and poses health risks. Air pollution (measured in particulate matter (PM), and especially particulate matter with a diameter of 2.5 microns or smaller ($PM_{2.5}$)) in Lao PDR exceeds national and international air quality standards, and Lao PDR's burden of disease caused by ambient air pollution is high compared with its peers (Figure 1.7). Chronic exposure to $PM_{2.5}$ considerably increases health risks, particularly the risk of respiratory and cardiovascular diseases (OECD, 2024[25]). Estimates suggest that 22% of all deaths are related to environmental pollution and 27% of these deaths are from ambient air pollution. Health costs related to ambient air pollution amounted to 3.5% of Lao PDR's GDP, and environmental health costs amounted to 15% of Lao PDR's GDP in 2017 (World Bank, 2021[24]).

With regard to climate change, Lao PDR is simultaneously increasing emissions that contribute to climate change and becoming more vulnerable to the effects of climate change, especially floods and droughts. Lao PDR's 2019 carbon dioxide emissions per unit of GDP (0.339 kilogrammes (kg) per 2017 purchasing power parity USD) were among the highest in the ASEAN region and were above the average for LMICs (0.236 kg per 2017 purchasing power parity USD). The commissioning of the 1 878 megawatt lignite-fired power plant in Hongsa in 2015 is the main driver of the increase in emissions; the plant produces electricity that is predominantly (95%) exported to Thailand. Furthermore, there are additional coal-fired plants in the pipeline – specifically in Xekong, Lamam, Houaphan and Boualapha – which could further increase Lao PDR's carbon emissions intensity (Asian Development Bank, 2019[26]). Lao PDR's vulnerability to climate change has been growing with the increase in extreme weather events. Climate change is increasing the frequency and intensity of extreme rainfall events, resulting in more frequent and more severe flooding in vulnerable and rapidly growing cities along the Mekong River (UNEP GRID Geneva, 2024[27]).

Figure 1.7. Lao PDR's current economic development model has caused a decline in natural assets and affected people's health



Note: Panel A: The methods used to collect these data have changed over time, especially after 2015 (Global Forest Watch, 2021[28]), *Assessing Trends in Tree Cover Loss Over 20 Years of Data*. "Commodity-driven deforestation" refers to large-scale deforestation linked primarily to commercial agricultural expansion. "Shifting agriculture" refers to the temporary loss of forest cover or permanent deforestation due to small- and medium-scale agriculture. "Forestry" refers to the temporary loss of forest cover from plantation and natural forest harvesting, with some deforestation of primary forests. The commodity-driven deforestation represents permanent deforestation, while tree cover affected by the other categories often regrows. The dataset does not indicate the stability or condition of land cover after the tree cover loss occurs. Panel B: Age-standardised data.
Source: Panel A: (Global Forest Watch, 2023[29]), *Tree Cover Loss by Dominant Driver*, www.globalforestwatch.org. Panel B: (World Bank, 2024[5]), *World Development Indicators* (database), https://databank.worldbank.org/source/world-development-indicators (accessed on 23 September 2023).

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Lao PDR's abundant nature holds the potential for green and climate finance at scale, if the necessary capabilities are put in place. Mechanisms such as carbon credits show increasing potential, with an estimated global market potential of more than USD 50 billion by 2030 (McKinsey, 2021[30]). Most green finance instruments require robust monitoring and reporting mechanisms and strict transparency and verification processes, and environment statistics are crucial to both. In order to support Lao PDR's efforts to harness innovative financing such as carbon credits, the country's statistical systems and data collection methods need to be strengthened, especially in the areas of environmental protection and climate adaptation and mitigation.

Lao PDR's development strategy framework reflects many of the priorities of this report's diagnostic. The country's sustainable development agenda is anchored in two overarching documents: *Vision 2030 and 10-Year Socio-Economic Development Strategy (2016-2025)*, published in 2016, and the *National Green Growth Strategy of the Lao PDR until 2030*, adopted in 2019. This vision is backed by subsequent strategic documents, in particular the *9th Five-Year National Socio-Economic Development Plan (2021-2025)* (which received a mid-term review in 2023) and the associated Financing Strategy, which was released in 2023 (Box 1.3). In addition, the country has developed a Smooth Transition Strategy

(STS) for its graduation from the United Nations (UN) list of least developed countries (LDCs) in 2026. Moreover, the National Green Growth Strategy (NGGS) defines green growth in the context of Lao PDR as "raising the efficiency, effectiveness and sustainability of the utilization of limited natural resources" (Lao People's Democratic Republic, 2018[31]) and sets green growth objectives for different sectors and policy areas . In addition, Lao PDR's Ministry of Agriculture and Forestry has published a *Green and Sustainable Agriculture Framework for Lao PDR to 2030* (MAF, 2021[32]).

Box 1.3. Lao PDR's sustainable objectives: The 9th NSEDP and the associated financing strategy

Lao PDR's 9th NSEDP

Lao PDR's 9th NSEDP emphasises green and sustainable economic growth. It also seeks to develop the country's full potential to grow its manufacturing and service sectors in line with green and sustainable development principles, in the context of preparing for Lao PDR's graduation from the UN's LDC list. The NSEDP's overall directions include striking a balance between economic and social development and environmental protection, effectively implementing the NGGS, and progressing towards the SDGs. The 9th NSEDP emphasises the importance of both a comprehensive economic transformation based on the country's potential and of a climate change response strategy and disaster risk preparedness. In order to achieve the overall directions of the 9th NSEDP, efforts are focused on implementing the following six main outcomes:

- Outcome 1: Continuous quality, stable and sustainable economic growth achieved
- Outcome 2: Improved quality of human resources to meet development, research capacity, science and technology needs, and to create value-added production and services
- Outcome 3: Enhanced well-being of the people
- Outcome 4: Environmental protection enhanced and disaster risks reduced
- Outcome 5: Engagement in regional and international co-operation and integration is enhanced with robust infrastructure and effective utilisation of national potential and geographical advantages
- Outcome 6: Public governance and administration is improved, and society is equal, fair, and protected by the rule of law.

The 9th NSEDP Financing Strategy

- The financing needs for the sustainability-related aspects of the 9th NSEDP are substantial. The 9th NSEDP Financing Strategy identifies 19 policy directions and 54 practical actions focusing on priority sectors that are vital to Lao PDR's sustainable development progress: human capital (health and education), green and climate-resilient growth, a focus on outcomes for people, and environmental sustainability. Within this comprehensive reform framework, several priorities emerge, as follows:
- The relinking of fiscal policy with inclusive growth is the most important precondition to continued development progress without risking the environmental and climate objectives specified in Lao PDR's nationally determined contributions (NDCs).
- Broadening the tax base in order to ensure sufficient revenues for development is paired with the need for public and foreign financial flows to contribute more directly to Lao PDR's development objectives.

The mid-term review of the 9th NSEDP

- The priority is to build a solid foundation for Lao PDR's economic recovery. This foundation could include an emphasis on the country's demographic transition and the comparative advantages that brings. At the same time, the severe impacts of Lao PDR's current macroeconomic issues on the most vulnerable citizens must continue to be recognised and the risks to vulnerable communities mitigated.
- Short-term prospects for pro-poor growth are clouded by the threat of continued macroeconomic instability and the further reduction of developmental expenditures as a result of unsustainable debt obligations. The immediate objective is to protect purchasing power and access to public services from macroeconomic instability and fiscal pressure on social spending.
- Medium-term prospects for poverty reduction and shared prosperity are impeded by stagnant job creation, which creates non-pro-poor growth. Therefore, the next objective is to improve the labour opportunities and incomes of vulnerable households. A third objective could be to strengthen sustainable livelihoods through better management of natural resources.

Source: (Government of Lao PDR, 2021[33]) *9th Five-Year National Socio-Economic Development Plan*; (Government of Lao PDR, 2023[34]) *The 9th national Socio-Economic Development Plan Financing Strategy (2023-2025)*; (Government of Lao PDR, 2024[35]), *9th Five-year National Socio-Economic Development Plan (2021-2025). Mid-Term Review.*

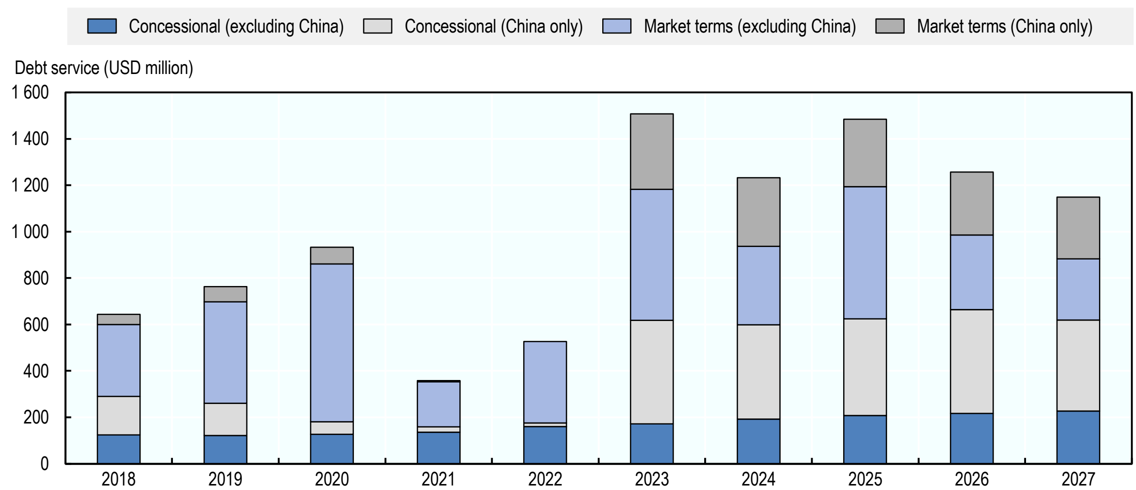
Financing sustainable development in Lao PDR: Diagnostic and recommendations

Financing sustainable development: Doing what it takes

Looking ahead, Lao PDR faces a challenging financing landscape. Debt service is projected to surge over the coming years (Figure 1.8). Low levels of government revenue, combined with increasingly restrictive global financing conditions, have made it more challenging for the country to fulfil its financing needs, jeopardising its financial stability. This is reflected in the slow recovery of financing flows to the country. Exacerbating this problem are the elevated interest rates that Lao PDR faces as a result of increasingly restrictive global financing conditions and the downgrade of its sovereign credit rating in 2022.

Figure 1.8. Lao PDR confronts a surge in debt service costs beginning in 2023

External PPG debt service (2018-27)



Source: (Government of Lao PDR, 2022[9]), *Public and Publicly Guaranteed Debt Statistic Bulletin*, https://www.mof.gov.la/wp-content/uploads/2023/07/2022-Public-and-Publicly-Guaranteed-Debt-Bulletin-of-Lao-PDR-Final.pdf.(accessed on 13 October 2023).

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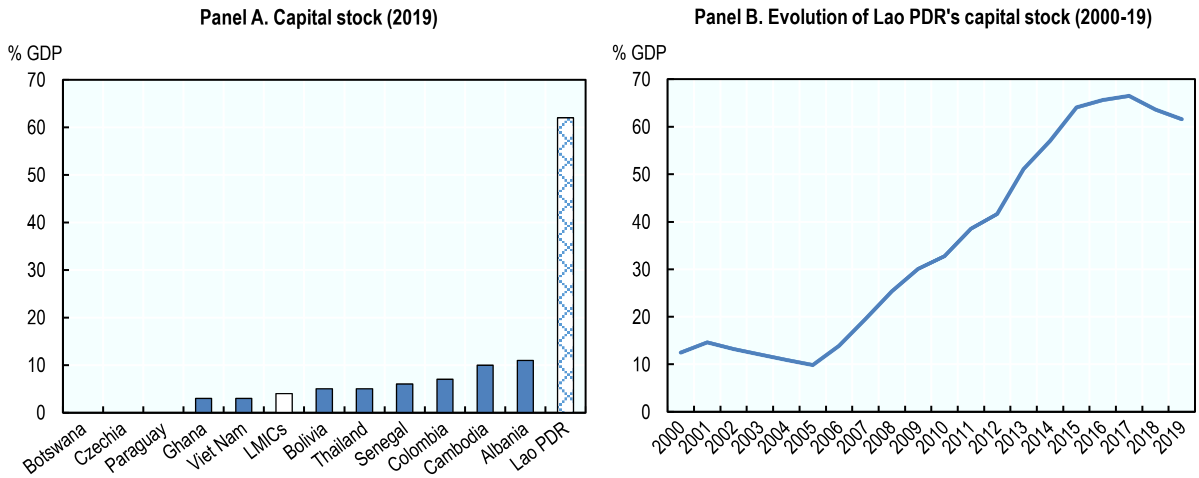
Lao PDR's fiscal situation has adversely affected its sovereign credit rating, constraining the country's ability to secure new financing. The decline in the country's fiscal position is expected to pose challenges for debt servicing in the coming years, given the limited options for Lao PDR to roll over and refinance its debt. According to the latest World Bank/International Monetary Fund Debt Sustainability Analysis, Lao PDR is now in debt distress. The country is grappling with significant financing needs and liquidity pressures that are expected to persist for years to come. The suspension of debt service negotiated with the People's Republic of China (hereafter "China") prevented a default during the COVID-19 crisis, but this merely postponed the underlying debt issue. Debt service was projected to surge by 186% in 2023 compared with 2022, reaching USD 1.51 billion, and it is expected to remain above USD 1 billion through at least 2027 (Government of Lao PDR, 2022[9]).

Lao PDR's reliance on public-private partnerships (PPPs) for major investments has contributed to the country's fiscal challenges. In fact, Lao PDR has the highest volume of PPP capital stock in the world as a proportion of GDP. While the government's extensive use of PPPs has been successful in attracting investment, it has also introduced fiscal challenges and risks that have contributed to the country's debt problems. These challenges include forgone revenue from tax exemptions, fiscal commitments and contingent liabilities. The fact that Lao PDR exhibits low PPP regulatory quality for PPPs is an added concern considering the fiscal significance of such partnerships. Heavy reliance on PPPs seems unsustainable in the long term as a way of encouraging investment and economic growth. PPPs have stimulated the rapid growth of the country's capital stock, making it a global outlier due to the outsized volume of its PPP capital stock as a proportion of GDP (Figure 1.9).

Figure 1.9. Lao PDR has become an outlier in terms of capital stock arising from public-private partnerships



Source: (IMF, 2021[36]), *Investment and Capital Stock Dataset* (database), https://data.imf.org/?sk=1ce8a55f-cfa7-4bc0-bce2-256ee65ac0e4 (accessed on13 October 2023).

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The NSEDP Financing Strategy acknowledges the gap between the Lao PDR government's development priorities and actual allocations of public resources. A strategic focus on healthcare, education and the environment in the 9th NSEDP and its Financing Strategy reflects the government's commitment to sustainable development and inclusive growth, and is designed to address the interlinked challenges of reducing poverty, improving the quality of life for Lao PDR's citizens and safeguarding natural resources. However, some of the sectors with negative social and environmental effects account for a sizeable share of public expenditure. For example, energy, mining and public works together made up more than 20% of Lao PDR's public spending in 2020. On the other hand, Lao PDR presents low spending in social sectors and environmental protection. A sustained underinvestment in these areas not only affects immediate well-being but can also hinder human capital formation, which is crucial for Lao PDR's overall growth trajectory and competitiveness on the global stage. Similarly, insufficient financial support for environmental protection and climate action could ultimately pose a threat to the implementation of the NGGS.

In order to effectively pursue its ambitious sustainable development agenda, Lao PDR must address its debt issues and the fragmented governance of its financing framework. Tackling these challenges is fundamental for building the type of sound environment required in order to harness additional and innovative resources in support of the country's development goals. This necessitates efforts to boost tax revenues, diversify investments and develop the domestic financial sector. Given Lao PDR's current financial constraints, sustained international support is essential in order to safeguard investments in key development areas, such as healthcare and education. In parallel, designing preventive strategies is crucial to ensuring long-term financial stability and avoiding future debt issues.

Meeting Lao PDR's development ambitions will require better generation of revenue. Lao PDR's tax-to-GDP ratio remains stuck at a level that is too low to support development despite significant economic growth. The significant debt service burden further exacerbates this situation. A radical change to the design, evaluation and administration of the tax system is a necessary condition for a sustainable way forward. A robust revenue system would provide a steady stream of resources that can be channelled into crucial public services and infrastructure. It also reduces the country's dependency on external finance, ensuring that domestic priorities can be consistently met.

In order to address the immediate needs of the current economic situation, multilateral development partners have coined the "Vital 5". These five suggestions summarise a reform road map prepared by the World Bank and the Asian Development Bank in support of the Lao PDR government's National Agenda on Addressing Economic and Financial Difficulties, covering the period from 2021 to 2023 (which has been extended until 2025) (World Bank and Asian Development Bank, 2022[37]):

- Cut costly tax exemptions in order to raise public revenue and protect social spending.
- Improve the governance of public and public-private investment.
- Restructure public debt through ongoing negotiations.
- Strengthen the financial sector's stability through legal and regulatory tools.
- Enhance the business environment via effective regulatory reforms.

Key recommendations in order to strengthen sustainable development financing in Lao PDR

In the short term, Lao PDR should deleverage in order to reduce the debt burden and re-establish macroeconomic stability:

- **Address the country's fiscal challenges in order to break the vicious cycle of escalating debt, currency depreciation and high inflation:**
    - Seek debt relief from the country's primary lender (i.e. China) in order to free up fiscal space and alleviate short-term payment pressures.
    - Co-ordinate and communicate transparently with development partners in order to avoid moral hazard concerns, ensuring that any new concessional financing results in additional investment in development.
    - Gradually shift the emphasis of fiscal consolidation efforts from expenditure reduction to increased revenue generation and spending efficiency in order to ensure the sustainability and credibility of the fiscal adjustment.
- **Mitigate mounting fiscal risks arising from contingent liabilities associated with PPPs and SOEs:**
    - Audit existing SOEs and PPPs in order to evaluate their fiscal risk profiles and identify urgent threats to macroeconomic stability.
    - Define and enforce strict criteria for government guarantees in order to minimise fiscal exposure, ensuring that such guarantees are only issued when absolutely necessary.
    - Identify and enact quick-win reforms (such as cost-cutting and operational efficiency improvements) in those SOEs that present the riskiest profiles in order to stabilise SOE finances.
    - Communicate clearly with development partners and the public about the short-term fiscal risks identified in SOEs and PPPs, and about the measures being taken to address them.

In the medium term, Lao PDR should establish a sound framework in order to secure financing for the country's development goals:

- **Address the current fragmentation and lack of co-ordination in the country's sustainable development financing landscape:**
    - Establish a shared and well-co-ordinated governance of the sustainable development financing agenda among the multiple government stakeholders involved, including the co-chairing of key committees.
    - Ensure adequate resourcing of, and institutional engagement in, the sector and subsector working groups of Lao PDR's Round Table Process.

  - Secure the active participation of, and garner contributions from, all relevant development partners in strategic development and aid co-ordination mechanisms, including the Integrated National Financing Framework.
  - Develop a clear and coherent governance framework for sovereign carbon finance in order to promote a co-ordinated approach across the government, avoiding inefficiencies and reputational risks that could jeopardise this new financing source.
- **Take steps to safeguard the impact and effectiveness of development co-operation:**
  - Reinvigorate the multi-stakeholder dialogue around the *Vientiane Declaration on Partnership for Effective Development Cooperation (2016-2025)*, as well as efforts to monitor the implementation of the *Country Action Plan for the Implementation of the Vientiane Declaration on Partnership for Effective Development Cooperation (2016-2025)*.
  - With a view to maximising international support for sustainable development, use existing aid co-ordination platforms in order to consult partners on key governance and institutional issues constraining development co-operation flows to Lao PDR.
- **Enhance spending efficiency and build greater capacity for revenue collection:**
  - Explore opportunities with key development partners for enhanced support on public financial management and domestic resource mobilisation appropriate to Lao PDR's fiscal context and challenges.
  - Develop and implement a comprehensive action plan to increase government revenue, with clear and credible revenue targets.
  - Review the current investment promotion framework in order to assess its costs and benefits, factoring in the effect of tax incentives on government revenue.
- **Create and strengthen a centralised public debt management function with authority over public debt issuance:**
  - The legal framework should clarify which body has the authority to borrow and to issue new debt; to invest; and to undertake transactions on the government's behalf.
  - Credit risk assessment and validation should be centralised for all public debt issuance, including by SOEs.

In the long term, Lao PDR should lay the foundations to shift away from the current growth model that generates fiscal burdens and take preventive measures in order to avoid debt issues in the future:

- **Strengthen the business environment in order to encourage greater private sector development, reducing the strong reliance on public investment:**
  - Carry out an in-depth review of the role, governance and performance of the country's SOEs, which can help inform an action plan to tackle the negative implications of their dominant position in Lao PDR's private sector development.
  - Strengthen the local banking sector in order to reduce financial sector vulnerabilities and fiscal liabilities while promoting enhanced credit provision to the private sector.
  - Identify new drivers for foreign private investment, and seek development partner support in order to design an integrated and cross-cutting investment promotion strategy that considers the impacts on various sectors of the economy and aligns with Lao PDR's sustainable development objectives.
  - Engage with South-South partners and regional platforms in order to exchange knowledge and experiences with regard to maximising the development impact of remittances, including through policies supporting increased human capital and productive investments.

- **Promote sustainable borrowing policies and practices, and design formal mechanisms for contingency planning:**
    - Continue the policy dialogue on debt management initiated with the main international financial institutions and identify key functions of government that require additional technical support.
    - Seek technical support and capacity building from development partners in key areas of sustainable development finance, specifically in order to better harness finance opportunities and to design sound frameworks allowing Lao PDR to tap into innovative or nascent financing instruments in the future, including carbon and biodiversity finance.
    - Explore and assess the benefits for Lao PDR of mechanisms to stabilise and sustainably manage future revenues from commodity exports such as hydropower and mining.
- **Develop a knowledge base and robust country systems in order to harness innovative financing sources:**
    - Strengthen the country's statistical systems and data collection processes – especially with regard to environmental protection and climate adaptation and mitigation – in order to support Lao PDR's efforts to harness innovative financing such as carbon credits.
    - Keep abreast of developments and the experiences of regional peers with regard to green, social, sustainable and sustainability-linked bonds as possible instruments to consider in the future, once Lao PDR is back to sustainable debt levels.

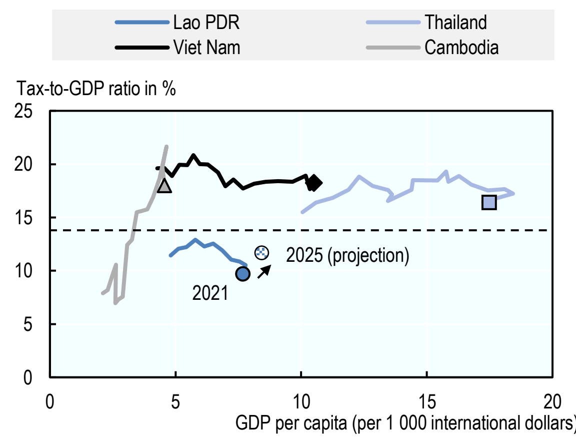
Lao PDR presents vast scope for improving the mobilisation and use of government revenue

The strong and sustained economic growth experienced by Lao PDR has not translated into an increasing tax-to-GDP ratio. While most countries enhance their revenue mobilisation capacity as their economies mature, Lao PDR's tax revenue has shown little responsiveness to the country's economic growth. As a result, Lao PDR stands out for its low capacity to raise taxes, having the lowest tax-to-GDP ratio out of all ASEAN Member States. Lao PDR's tax-to-GDP ratio in 2021 was less than 10%, in contrast to Thailand's 16%, Viet Nam's 17% and the OECD average of almost 35% (Figure 1.10).

The decline in the tax-to-GDP ratio reflects a lack of tax revenue "buoyancy". Tax revenue buoyancy refers to a state in which tax revenues grow faster than GDP on average, generating more resources and a higher tax-to-GDP ratio as a country develops. Buoyant tax revenues can indicate that it may be sufficient for a developing country to maintain its current tax policy path because future GDP growth will result in a growing tax-to-GDP ratio. This is not the case in Lao PDR. The significant debt service burden in addition to the very high inflation rate further exacerbate this situation. The high level of informality further limits the revenue-raising potential of taxes and reduces the reach of the social protection system in Lao PDR.

Figure 1.10. Evolution of tax revenue and GDP in Lao PDR and peer countries until 2021

GDP per capita and tax-to-GDP ratio (2001-21)



Note: Tax-to-GDP ratio and GDP per capita paths until 2021. The lines represent values prior to 2021. The dots refer to the value for each country in 2021. The dashed line represents the revenue target that the Lao PDR government specified in the NSEDP (14%).
Source: (OECD, 2022[38]) *Revenue Statistics 2022: The Impact of COVID-19 on OECD Tax Revenues*; (OECD, 2023[39]) *Revenue Statistics in Asia and the Pacific 2023: Strengthening Property Taxation in Asia;* GDP data from (IMF, 2023[40]), *World Economic Outlook Database* (accessed on 5 September 2023); (World Bank, 2023[41]) *Lao PDR Economic Monitor*; (Government of Lao PDR, 2021[33]), *9th Five-Year National Socio-Economic Development Plan 2021-2025.*

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Without reform, Lao PDR will miss its 2025 tax revenue target. According to its 9th NSEDP, Lao PDR aims to increase the tax-to-GDP ratio from 11.05% in 2020 to 14.00% by 2025 (i.e. by 2.95 percentage points) (Government of Lao PDR, 2021[33]; World Bank, 2023[41]). On its current path, with a declining tax revenue ratio despite economic growth, Lao PDR will fail to meet this target. Revenue Statistics 2022: The Impact of COVID-19 on OECD Tax Revenues

In addition, the country's acute macroeconomic and governance challenges create issues for tax policy. Addressing Lao PDR's acute debt-servicing challenges will bind tax revenue and require additional revenue if large spending cuts are to be avoided. A credible debt-servicing and repayment plan needs to be developed that will increase transparency and reduce government debt to a sustainable level. In addition, Lao PDR's large debt-servicing obligations could potentially make it more difficult for the country to pass revenue-raising tax reforms because taxpayers may be less willing to pay taxes if the revenue is used to service debt that would otherwise be deferred. Ensuring that economic growth translates to higher tax revenues – not only in total amounts but also as a percentage of GDP – is a crucial element of a strategy that puts government debt on a sustainable downward trajectory. Inflation has eroded the net income of a large share of Lao PDR's population, and there has likely been an uptick in poverty (World Bank, 2023[41]), which reduces the ability of lower- and middle-income taxpayers to afford additional tax increases.

These acute challenges come in addition to structural difficulties, which require additional government revenues and a well-designed tax system. Lao PDR has significant unmet spending needs. Financing gaps are particularly significant if Lao PDR wants to achieve universal social protection by 2030. The formal social protection system (which is funded through social security contributions (SSCs)) only covers 300 000 workers out of a total population of more than 7 million. Economic inequality is on the rise in Lao PDR, and the tax system has so far been unsuccessful in stopping this trend. Evidence from private household expenditure data indicates growing inequality in consumption expenditure (Warr, Rasphone and Menon, 2018[42]).

In addition, most workers and enterprises operate in the informal economy, and the tax system is not conducive to business and worker formalisation. Only 10-20% of employment in Lao PDR occurs in the formal economy and more than 70% of businesses in Lao PDR are not registered, according to the latest estimates (ILO, 2023[43]). The high level of informality limits the revenue-raising potential of taxes and reduces the reach of the social protection system in Lao PDR. The design of the current tax system contributes to a polarised economy that generates too little revenue for the government.

Weak human capital development is another major structural vulnerability with implications for tax policy. Lao PDR will not be able to grow its economy sustainably without investing in a skilled domestic workforce (which requires public resources) and without ensuring that skilled workers find good-quality jobs that pay well. Lao PDR has to balance its need to increase revenue in order to invest in human capital development with ensuring that the tax burden on labour does not become so large that it entices more skilled workers to leave the country.

The tax system has a larger role to play in safeguarding the environment and ensuring that economic growth is sustainable. Environmental degradation comes at a significant economic and societal cost. Estimates suggest that forest loss alone caused annual damage to Lao PDR's economy equal to 3% of its GDP (World Bank, 2021[24]). In the future, the tax system needs to play a central role in: (i) ensuring that society benefits in the form of tax revenue when natural resources are exploited; (ii) mitigating environmental damage; and (iii) steering the economy towards a more sustainable growth model.

Key recommendations for generating sustainable fiscal revenue

Strengthen the buoyancy of the tax system in order to ensure that the tax-to-GDP ratio increases when the economy grows:

- Address concrete tax design flaws across all types of taxes and change the approach to designing, administering and evaluating the tax system.
- Identify a set of reforms that gradually increase tax revenue buoyancy (and raise tax revenue) while also turning the tax system into a positive force that helps address other developing challenges, such as high inequality, inadequate social protection, high informality or the lack of investment.

Reconsider the suboptimal tax incentive strategy in SEZs and the corporate income tax (CIT) system based on differentiated rates by sector:

- Grant tax incentives according to predetermined, uniform and clearly declared criteria; the authority to grant tax benefits should lie exclusively with the Ministry of Finance (MOF).
- Shift the focus away from profit-based tax incentives and towards expenditure-based ones.
- Move away from providing reduced CIT rates according to economic sector.
- Levy a "top-up tax" on certain businesses in SEZs, bringing their effective tax rate to the new global minimum tax rate of 15%.
- Make tax benefits in SEZs more conditional on the employment or training of local workers and on complying with other laws, such as registering workers for social security.
- Assess the tax revenue impact of interactions between SEZs and the national economy.
- Launch a thorough cost-benefit evaluation of the SEZ regime's impact on investment.

Gradually work towards a consistent international taxation framework in order to reduce revenue leakages:

- Consider transitioning to a worldwide tax regime for personal income in order to tax the foreign-sourced income of individuals who are Lao PDR tax residents.
- Conversely, consider switching to a territorial tax system for business income in order to reduce the administrative burden linked to a worldwide business tax regime.

- Implement transfer pricing guidelines.
- Sign up for international tax information sharing in order to gain access to information about financial accounts held by Lao PDR residents in foreign jurisdictions (which will be relevant if the country decides to switch to a worldwide tax system for personal income).
- Analyse the tax revenue risk from other tax planning strategies that are potentially being employed by multinational enterprises (for example, through gaining access to country-by-country reports).

Reform other features of the tax system that introduce distortions or that contribute to low revenues and the limited equity of the tax system:

- Introduce an official land register and better-defined land property rights.
- Devise a mechanism to link property taxes to the evolution of land prices, and increase the land tax.
- Consider an upward adjustment of the personal income tax and SSC maximum contribution thresholds and index the thresholds to inflation.
- Maintain the increased CIT rate for the natural resource sector, but evaluate whether it is effective at taxing resource rents or entirely undermined by tax incentives or profit shifting.
- Enhance customs procedures and border checks in Lao PDR in order to reduce high levels of fraudulent behaviour and reduce the administrative cost faced by importers.
- Reduce the number of different taxes and levies to be paid when importing goods and services.
- Increase the effective taxation of harmful products (health taxes) and develop a consistent tobacco tax strategy.
- Refrain from pursuing further untargeted tax cuts; instead, prioritise improving the design and enforcement of the tax system in order to increase tax buoyancy.
- Co-ordinate with neighbouring countries in order to avoid or limit harmful tax competition.

Improve the design of the presumptive tax regime in order to increase its effectiveness at encouraging formalisation and to limit tax revenue loss:

- Lift the presumptive tax regime's three-year eligibility limit.
- Remove the additional eligibility rule based on asset ownership.
- Include SSCs in the scheme.
- Introduce a transition path between the presumptive and the standard tax system.
- Evaluate the introduction of sector-specific taxes on turnover.
- Offer a one-stop tax office.
- Limit abusive practices.

Increase the role of the tax system as a tool to promote the formalisation of workers and businesses:

- Abolish fees to register workers for social security.
- Make social security forward-looking in order to help ensure that enterprises do not have to pay SSCs retroactively if they register workers.
- Disallow enterprises from deducting the labour cost of workers as a business expense if the workers are not registered with the social security administration.
- Make investment tax incentives conditional on compliance with other legal obligations, including registering workers for social security.
- Advertise that future "insurance-type" government benefits are conditional on registration as a formal worker or business and having contributed to social security.

- Consider introducing a progressive SSC schedule with reduced rates for lower-income workers that are matched by government contributions.
- Allow workers to view the contributions that they have made to social security and their accumulated pension rights (e.g. through an online portal) in order to counter the perception that these contributions are "lost".

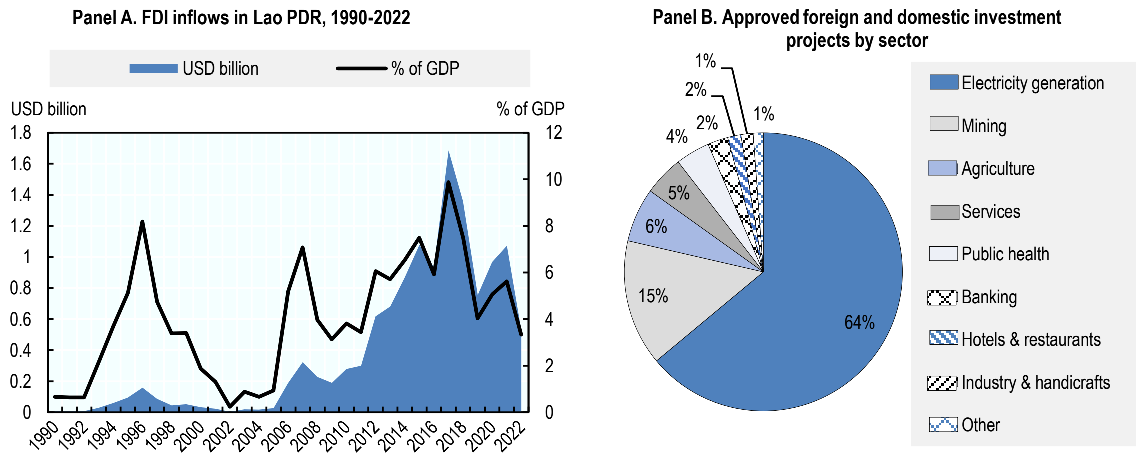
Overhaul the approach to designing, evaluating and administering the tax system:

- Increase collaboration among ministries and other government institutions.
- Strengthen the MOF's position as the key actor in tax policy making and make the MOF's consent mandatory for any tax policy change.
- Unify all legal provisions pertaining to one type of tax in one tax law that is made available online for taxpayers to consult.
- Consider establishing an independent tax revenue agency that would be responsible for revenue collection.
- Devise a formal dispute resolution mechanism in order to resolve tax disputes.
- Increase efforts to prioritise non-cash payments in order to settle tax bills.
- Maintain and strengthen recent initiatives to modernise and digitalise the tax administration.
- Establish and strengthen a stand-alone tax policy analysis unit within the MOF that evaluates and assesses tax policy.

Stimulating sustainable investment in Lao PDR

Lao PDR experienced an impressive increase in FDI inflows between 2006 and 2017, from USD 187.4 million to USD 1.69 billion (Figure 1.11, Panel A). This strong growth in FDI can be attributed to the government's Turning Land into Capital (TLIC) (*nayobay han din pen theun*) policy, which facilitated large concession investment projects (World Bank, 2006[44]) in hydropower (64% of investment in Lao PDR between 2017 and 2021), mining (15% of investment) and agriculture (6% of investment) (Figure 1.11, Panel B). The amount of FDI as a share of GDP is also considerably higher compared with other ASEAN Member States. Lao PDR's FDI stock amounts to 80% of GDP. Between 2020 and 2022, FDI inflows to Lao PDR as a share of GDP were three times those of Thailand and almost twice the ASEAN average. China is the main country of origin of FDI in Lao PDR: it accounted for 66% of FDI inflows and for 63% of Lao PDR's FDI stock in 2021 (IMF, 2023[45]). More recently, FDI inflows into Lao PDR decreased in the context of the COVID-19 pandemic in 2020 but remain significant.

Figure 1.11. FDI inflows into Lao PDR have increased impressively since 2006, largely in the country's natural resources sectors



Source: Panel A: (UNCTAD, 2023[46]), *Bilateral FDI database on flows and stocks* (database), https://unctadstat.unctad.org/datacentre/dataviewer/US.FdiFlowsStock (accessed on 15 October 2023). Panel B: (IPD, 2021[47]), *Statistics (database)*, https://investlaos.gov.la/resources/statistics/ (accessed on 15 October 2023).

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FDI has been an important driver of economic growth in Lao PDR. Between 2006 and 2017, when FDI inflows into Lao PDR grew significantly, annual GDP growth averaged 7.7%. This compares with only 5.4% GDP growth on average in ASEAN, 3.5% in Thailand and 6.3% in Viet Nam. Among ASEAN Member States, only Myanmar experienced higher average GDP growth during this period (8.9%) than Lao PDR (World Bank, 2024[5]). FDI in Lao PDR contributed to economic growth mainly through capital accumulation and the exploitation and export of Lao PDR's natural resources (OECD, 2017[2]; CDE/University of Bern/MRLG, 2019[48]).

However, Lao PDR would benefit from attracting more sustainable investment that advances environmental and social goals. The bulk of FDI inflows into Lao PDR are directed towards natural resource sectors such as mining and hydropower, which are capital intensive and typically create few jobs or business linkages with domestic enterprises. At the same time, these sectors are highly susceptible to generating environmental and social risks if environmental safeguards are not respected. In Lao PDR, large-scale hydropower dams have been associated with negative effects on the environment and local communities. Additionally, as a result of their impact on the scenery and natural sites, power plants and mining developments can also discourage tourism. Agriculture, on the other hand, has been linked to deforestation, soil pollution and land degradation (Sylvester, 2018[49]; Village Focus International/National University of Laos, 2019[50]; CDE/University of Bern/MRLG, 2019[48]).

Key recommendations for harnessing FDI in order to support Lao PDR's sustainable development

Improving the enabling environment for investment and integrating environmental and social considerations into investment policies could allow Lao PDR to attract more sustainable investment that advances environmental and social goals. This includes investments that create a significant number of good-quality jobs; generate local linkages and spillovers such as technology and skills transfers; contribute to skills development; and adhere to strict environmental and social standards (OECD, 2022[51]). By reducing the cost and complexity of investing in Lao PDR, a better enabling environment for investment could allow more investors to make the additional effort and invest the additional resources required in order to limit the negative social and environmental impacts of their investment projects. Improving the enabling environment first and foremost requires a whole-of-government approach to investment. It also involves improving access to skilled labour and to land, upgrading transport infrastructure, reducing opportunities for corruption, and strengthening the regulatory framework. In addition, it would be important to strengthen the implementation of social and environmental safeguards for investment projects and to more actively advance environmental and social goals through investment promotion policies, tax incentives and a better policy framework for responsible business conduct (RBC).

Improve co-ordination between different government entities and between the public and private sectors. A whole-of-government approach can facilitate the development of public policies and services for investors that are integrated and correspond to their needs rather than being defined by siloed administrative structures (OECD, 2015[52]). This requires improving inter-institutional co-ordination and the alignment of strategic objectives and priorities among the different government entities involved in the design and implementation of investment policies in Lao PDR.

Improve the availability of skilled labour through in-house training in private enterprises and the provision of better information on those skills that are in demand in the labour market. Different policies – such as tax incentives for training, for example – could encourage more in-house training by private enterprises. In addition, improved co-ordination between the private sector, the government and educational institutions could help better align Lao PDR's educational offering with those skills that are in demand in the labour market. This process could be facilitated through the regular engagement of relevant stakeholders in a dedicated council or committee. Finally, an effective skills assessment and anticipation system could identify the types of occupations, qualifications and fields of study that are currently in demand in the labour market in Lao PDR, or that may become so in the future (OECD, 2019[53]).

Improve institutional capacity and inter-institutional co-ordination in land administration and management, and accelerate the implementation of the 2019 Land Law. A significant share of land in Lao PDR is not formally registered, and the responsibility for land use management is divided among a large number of institutions (National Assembly, 2019[54]) that lack sufficient co-ordination (MRLG/LIWG, 2021[55]). This can create challenges for investors in accessing land. While a World Bank project is already in the process of significantly expanding formal land registration (World Bank, 2023[56]), going forward, it would be beneficial to simplify the institutional set-up for land management and to enhance inter-institutional co-ordination between the Ministry of Natural Resources and Environment (MONRE) and line ministries. In addition, in order to ensure clarity for investors on land rights in rural areas that are governed by customary land rights and in state forest areas, it would be important to accelerate the implementation of the 2019 Land Law. Finally, additional reforms to Lao PDR's legal framework for land rights are required in order to add further clarity to existing legislation on customary land rights and formal tenure documents in relation to state forest land (Derbidge, 2021[57]; Derbidge, 2021[58]; Derbidge, 2021[59]).

Enhance Lao PDR's capacity for PPP delivery, strengthen infrastructure planning and improve the management of fiscal risks related to PPPs. This could allow for making use of PPPs in order to improve Lao PDR's transportation infrastructure in the long term. In order to improve the value for money of PPPs, it would be important to strengthen Lao PDR's capacity to prepare, procure and manage PPP projects. In order to ensure that those projects with the greatest benefits are implemented first, Lao PDR requires a medium- to long-term infrastructure plan, including a pipeline of infrastructure and PPP projects with clear prioritisation based on a cost-benefit analysis. In light of the negative impact that past PPPs have had on public finances in Lao PDR, which account for almost one-half of the country's PPG debt stock, it would also be important to improve the management of PPP-related fiscal costs and risks throughout the project life cycle. Allowing for effective risk sharing with private investors requires reducing the country's high amount of public debt (OECD, 2017[2]; OECD, 2012[60]).

Improve the predictability of the regulatory framework for investment and the effectiveness of the court system while introducing policy tools that promote integrity among public officials. Gift-giving and informal payments, both on a small scale and in order to buy political support, can affect the efficiency of enterprises operating in Lao PDR (GAN Integrity, 2020[61]; ECCIL, 2022[62]). In order to reduce opportunities for corruption, first and foremost, Lao PDR requires a more stable, clearer, more predictable and more consistently applied regulatory framework for investment and an effective, impartial and independent court system. An effective public procurement system that disburses public funds sustainably and efficiently is another critical element (OECD, 2015[52]). In addition, improved human resource management, training and counselling could enhance the integrity of lower-ranking public officials in Lao PDR. Integrity tools and mechanisms in high-risk areas such as conflict of interest and lobbying, as well as political whistle-blower mechanisms, could also enhance public officials' integrity (OECD, 2015[52]).

Simplify Lao PDR's institutional and regulatory framework for starting an investment project. A large number of institutions are involved in this process, and there are three different avenues for obtaining an investment licence, depending on the sector and type of investment. Combining the responsibility for issuing investment licences for different types of investments under the umbrella of a single institution and reducing the number of institutions involved in the allocation of investment licences could speed up the licensing process, enhance efficiency, increase transparency and solve co-ordination problems between entities.

Strengthen the implementation of social and environmental safeguards for investment projects. Lao PDR's Law on Investment Promotion contains detailed social and environmental obligations for investors. In addition, two types of environmental impact studies exist in Lao PDR, and environmental impact assessments (EIAs) are mandatory for most investment projects. However, it has been reported that EIAs are treated as just a formality, with limited follow-up or impact on project design. In addition, the monitoring and inspection of environmental obligations could be improved.

Develop more sophisticated and better targeted policies, activities and tools for investment promotion, which should include a greater focus on environmental and social sustainability. Lao PDR would benefit from a clear and coherent inward investment promotion strategy that articulates the government's vision on the contribution of investment towards environmental protection and social development. More targeted investment promotion efforts, including investor targeting and lead generation, could attract greater investment in Lao PDR's nine priority sectors, many of which advance social and environmental goals. It would also be important to introduce more key performance indicators (KPIs), both for selecting priority investments and for monitoring and evaluating the activities of the Investment Promotion Department (IPD) of the MPI, including KPIs linked to the environmental and social impacts of investment projects. Finally, in order to allow the IPD to develop these tools and activities, it would be beneficial to gradually endow it with more and better human and financial resources, as well as technical and managerial skills.

Increase positive spillovers from SEZs to the local economy and improve SEZs' social and environmental performance. Investment in Lao PDR's SEZs has increased impressively since 2014. SEZs can facilitate access to land for investors in Lao PDR and offer spaces for policy experimentation. They can generate FDI, create jobs, contribute to economic diversification and upgrading, and allow for the transfer of knowledge, technology and skills. However, SEZs also generate costs, including administrative costs, forgone tax revenues as a result of tax incentives, and the cost of resettling local communities. Potentially significant profits earned by SEZ developers combined with discretion in granting approval for new SEZs could also create opportunities for rent seeking. Lao PDR could increase the positive impacts and spillovers from SEZs to the local economy through the right policy and regulatory mix, by encouraging local business linkages, and through skills development. At the same time, comprehensive and strategic planning of SEZ development could reduce opportunities for rent seeking. There is also scope to improve the regulation of the social and environmental aspects of SEZs in order to limit their negative effects on the environment and local communities.

Redesign tax incentives to be based on expenditure rather than income and to more actively advance social and environmental goals. A good enabling environment is more important for attracting and retaining investors than generous tax incentives are. While investment tax incentives can be complementary to a good enabling environment for investment, Lao PDR could consider phasing out the use of income-based incentives in favour of expenditure-based incentives, such as accelerated depreciation and tax allowances or credits. Income-based tax incentives generally attract investments that are already profitable early in the tax relief period, while expenditure-based tax incentives reduce specific costs, thereby encouraging investments that might not occur without the incentives. In addition, incentives should be designed to encourage positive spillovers to the economy and society, such as local linkages, training and skills development, and environmental protection. Incentives for investors that offer training could potentially contribute to bridging Lao PDR's skills gap. It would also be important to reduce discretion in the allocation of incentives for concessions, which creates avenues for corruption, and to improve the monitoring and evaluation of investment tax incentives.

Intensify efforts aimed at promoting and implementing international RBC and due diligence standards in the local context. First and foremost, this includes developing an institutional and policy framework for RBC, including a special dedicated RBC body or government focal point and a national RBC policy or action plan. RBC efforts should also be incorporated more systematically into investment promotion activities. In addition, homegrown RBC programmes targeted at specific high-risk industries, such as the mining, hydropower and agricultural sectors, could be developed in order to raise awareness and encourage the implementation of due diligence in business practices. Lao PDR would also benefit from better access to remedy and grievance mechanisms for addressing the negative impacts of investment projects (particularly the environmental and social impacts). RBC for concession investments could be improved through including stronger safeguards in concession agreements and making these agreements public.

Opportunities to unlock green and climate financing as a result of strengthened environment statistics

Innovative financing sources are in their infancy in Lao PDR, but they hold potential to reconcile its twin agenda of resource mobilisation and natural capital preservation. Instruments such as carbon credits offer attractive and credible options for generating additional revenue by monetising the country's natural capital. In order to fully capitalise on innovative financing sources, Lao PDR must satisfy specific conditions, including strengthened statistics capacity in order to produce accurate, harmonised and regularly updated environment statistics.

The functioning of carbon markets relies on carbon credits, which are tradable certificates representing one tonne of carbon dioxide equivalent (tCO_2eq) that has been either prevented from being emitted (e.g. due to the use of renewable energy sources) or removed from the atmosphere (e.g. via forest restoration). Therefore, high-quality and trustworthy data to measure and monitor emissions are crucial for the functioning of carbon markets. Carbon registries are also needed in order to track carbon credit issuance, transfer and use. A carbon registry is a system or database that tracks and records information related to greenhouse gas (GHG) emissions and carbon offset projects.

Apart from quality environmental data, a common data system and strong data infrastructure are needed in order to collect, manage and structure openly accessible data throughout the life cycle of carbon credits and to enhance transparency, trust and integrity (CADTrust, 2023[63]). Such a system should measure the amount of emissions – whether emitted, removed or prevented from being emitted – over a set period of time, and should report the findings to an accredited third party which then verifies the results so that these can be certified and an emissions reduction credit can be issued (World Bank, 2022[64]). Carbon registries serve as a platform for enterprises and organisations to participate in the carbon market, facilitating the transparent exchange of carbon assets.

Although carbon registries track carbon credits, the mechanism used in order to prove that an activity has actually avoided or removed harmful GHG emissions so that actions can be converted into credits with a monetary value is the measurement, reporting and verification (MRV) system (World Bank, 2022[65]). The MRV system refers to the multistep process used in order to measure the amount of GHG emissions reduced by a specific mitigation activity over a set period of time and report these findings to an accredited third party (World Bank, 2022[64]).

An MRV process is the key to unlocking climate finance, but the process is costly and requires data and technical capacity. In terms of data, every emissions reduction programme must determine a baseline against which performance is measured periodically. This requires granular statistics so that accounting methodologies can be used in order to calculate emissions reductions, which vary by sector and programme scale. The emissions report can then be produced and subjected to third-party verification. The measurement and analysis process requires technical expertise and data infrastructure capacity, which many low-income countries lack. Expanding the use of smart sensors, satellites and drones, cloud computing, artificial intelligence, and blockchain encryption will help to reduce the cost of emissions reduction credit issuances (World Bank, 2022[65]). Not only are carbon registries and MRV systems necessary for entering the carbon market and upholding a transparent process but they also play an essential role in reporting on the progress of NDCs, particularly under Article 6 of the Paris Agreement.

The creation of the Department of Environment and Stability Statistics in the Lao Statistics Bureau (LSB) provides a clear institutional structure for environment statistics. Based on the data gap analysis conducted by the Partnership in Statistics for Development in the 21st Century (PARIS21), environmental data and statistics underpin Lao PDR’s 9th NSEDP and the associated Financing Strategy, but significant information gaps persist. Overall, the 9th NSEDP’s monitoring and evaluation indicators generally align with the policy objectives proposed in the plan. However, certain limitations are observed, such as a lack of coverage of certain topics, inadequate indicators, actions without indicators and a lack of granular information. Process indicators focus heavily on government processes and services but provide little information on whether the monitored actions affect environmental outcomes. Data gaps are identified by comparing the data demanded across the 9th NSEDP, the SDGs and the NGGS (98 unique indicators) against the data produced across the National Statistical System (NSS) (60 indicators).

Recommendations to strengthen environment statistics in Lao PDR in order to unlock opportunities for climate financing

Short-term recommendations are as follows:

- **Define an initial core set of environmental data needed to activate climate financing** aligned to the climate financing mechanisms that will be implemented. A useful guideline for prioritising data production might be to consider the subsectors where carbon finance has the most potential. For example, in the case of Ghana, carbon finance was first introduced in the area of sustainable agriculture, specifically for the rice industry. This type of information will indicate what data and statistics decision makers might request”.
- **Map the key sectors and actors – including non-government actors – related to the immediate climate financing mechanisms that will be implemented**. This could facilitate the identification of key producers and users of environment statistics and the role they can play in improving the production, dissemination and use of environment statistics. The leading agency on climate financing should co-operate in identifying data demands so that the LSB, MONRE, the Ministry of Energy and Mines, and other agencies can identify the data sources available or required and start to harmonise information across the system.
- **Enhance the sharing and harmonisation of environment statistics across the NSS.** A one-stop shop for environment statistics is crucial for building certification and verification systems in order to access climate financing. The current data quality assurance and data harmonisation

practices are insufficient to create an interconnected system across institutions that provides the same figures for all indicators. A first step towards achieving that goal would be to use harmonised data templates for data sharing, particularly with the LSB, and committing to sharing raw data for quality assurance. Better data sharing and harmonisation on methodologies, data collection processes and definitions of variables are prerequisites for setting up the digital data systems (such as carbon registries) needed for climate financing.

- **Use existing co-ordination mechanisms in order to liaise with policy makers and data users in general**. Existing mechanisms can enable a space for dialogue and consultations with selected data users, particularly those in the most strategic climate financing sectors, in order to learn about their policy plans and existing monitoring frameworks. Such dialogue and consultations can also provide an opportunity to evaluate data demands and determine whether current data production is aligned.
- **Use the momentum of climate finance opportunities to advocate for statistics and mobilise funding for data infrastructure, core systems and capacity development.** A high demand for environment statistics provides an excellent opportunity to use these statistics as the key to unlocking climate financing and mobilising resources (both internal and external) in order to strengthen the NSS and better serve the emerging needs of data users, particularly of policy makers.

Medium-term recommendations are as follows:

- **Develop statistical capacity holistically across the NSS for climate financing**. Data systems needed for climate financing (such as carbon registries and MRV systems) require data, technical capacity, and a strong infrastructure for innovation and technology in all relevant institutions where climate financing initiatives will be established.
- **Identify opportunities for collaboration between government and non-government actors.** Non-government actors (such as the private sector, civil society or academia) can often be strategic partners in mobilising resources, advocating for using environmental data, or leveraging innovative data sources and techniques in order to make current data collection processes more efficient through the use of technology. Collaborations with these actors could help the NSS explore the use of smart sensors, satellites, drones and artificial intelligence for the development and improved functioning of carbon registries and MRV systems.

It all comes down to implementation

Implementation is everything. Without it, any policy, law or regulation, as well as the strategic recommendations of this report, will simply remain proof of good intentions. Implementation is also the most challenging part of any strategy. While Lao PDR's ambition in improving its sustainable finance systems is commendable, it raises questions about the country's capacity to implement these multiple strategies simultaneously, considering its difficult economic and financial context. Responsibilities related to Lao PDR's sustainable development agenda are dispersed across multiple institutions. Adding to this fragmentation, Lao PDR's primary creditor, China, has so far shown limited involvement in the country's strategic development co-ordination mechanisms. Recent budget constraints and increased competition for scarce resources risk further weakening co-ordination and joint approaches that limits implementation capacity. This is especially true for new and innovative financing sources (which often lack a pre-existing policy and governance framework), with clear roles and responsibilities being defined across government and other development stakeholders. As the economy becomes increasingly complex and a multi-dimensional perspective of development becomes more important, the government of Lao PDR needs to develop in sync between departments and strengthen its own capabilities for effective implementation and for delegation to and co-operation with other actors.

In order to improve the capacity to deliver on strengthened sustainable finance, Lao PDR should prioritise implementation

Addressing the current fragmentation and lack of co-ordination is key in order for Lao PDR to achieve a strengthened sustainable development financing system. A fragmented governance framework prevents a holistic and unified understanding of the multi-dimensional impacts and trade-offs of government strategies and policies related to sustainable development. This will require Lao PDR to comprehensively evaluate the trade-offs of prioritising economic growth sectors (such as mining or hydropower) when such decisions might negatively affect environmental or social goals. Another issue is the highly prevalent trend of using tax incentives as the primary tool for promoting private investment, which can be effective in drawing private sector interest but often results in a significant reduction in government revenue. Balancing the positive and negative implications of such policy decisions requires the establishment of mechanisms for direct engagement and co-ordination among all relevant institutions: for example, between the MOF, the MPI, relevant line ministries and provincial governments.

Improve co-ordination between different government entities. There is scope for better inter-institutional co-ordination and alignment of strategic objectives and priorities among the different government entities involved in the design and implementation of investment policies. This could be achieved through the establishment of more formal channels for co-ordination between the MPI, the Ministry of Industry and Commerce, MONRE, and sectoral ministries. One possibility would be establishing an advisory board to the IPD that includes representatives both from these government entities and from the private sector. A whole-of-government approach can facilitate the development of public policies and services for investors that are integrated and correspond to their needs rather than being defined by siloed administrative structures.

Ensure adequate resourcing of, and institutional engagement in, the sector and subsector working groups of Lao PDR's Round Table Process and aid co-ordination mechanisms. Key development partners' active engagement and participation in the country's aid co-ordination mechanisms and strategic dialogues is paramount to curbing some challenges in aid management and governance, such as the risk of fragmentation and duplication. This involves ensuring that their contributions are complementary and do not lead to the duplication of effort or to fragmented approaches within the government that could undermine country ownership. Concurrently, the government of Lao PDR should ensure that all relevant development partners (including China and Lao PDR's partners among developing countries) actively participate in the country's aid co-ordination mechanisms. Revitalising the sector and subsector working groups under Lao PDR's national Round Table Process could further support this endeavour.

Overhaul the approach to designing, evaluating and administering the tax system. There is too little dialogue and co-ordination on tax matters among ministries and government institutions in Lao PDR. This has contributed to the tax system's lack of coherence. More dialogue across government bodies would lead to an improved understanding of the functioning of the tax system as a system. The role of the MOF as the central institution in formulating tax policy needs to be strengthened. Coherence would also increase if Lao PDR were to unify all tax provisions pertaining to one type of tax into a single tax law (e.g. the income tax law) instead of allowing for the coexistence of multiple pieces of legislation that change the original tax law for certain taxpayers. In addition, tax policy should be evaluated regularly by a dedicated analytical unit within the MOF. Proper evaluation ensures that tax policies are effective and efficient, and that policy errors are not repeated over time. It is best practice that the tax policy analysis functions as a data hub to which different entities inside and outside the MOF deliver tax-related data.

Improve public-private dialogue. There is also a need for more and better communication between the public and private sectors in Lao PDR. An effective and institutionalised public-private dialogue process at a high level could allow for more easily solving investors' grievances and for better prioritising the reforms required in order to facilitate doing business in Lao PDR.

Simplify the institutional set-up for land management. The responsibility for land use management and planning in Lao PDR is divided among a large number of institutions that lack sufficient co-ordination. This has resulted in overlapping land use plans. Going forward, it would be beneficial to simplify the institutional set-up for land management and to enhance inter-institutional co-ordination between MONRE and the line ministries involved in land management.

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2 Development diagnostic: Prosperity, people, planet

This chapter provides a development diagnostic of Lao People's Democratic Republic (Lao PDR), focusing on the "prosperity", "people" and "planet" pillars of the United Nations' (UN's) Sustainable Development Goals (SDGs). It examines the impressive economic advancements fuelled by investments, commodity exports and tourism, juxtaposed with the challenges of stagnant structural transformation and unequal distribution of opportunities. Emphasising the need for a vibrant private sector in fostering employment and productivity across diverse sectors, this chapter underscores the necessity of stimulating broader-based economic growth. Under the "people" pillar of the SDGs, it highlights the imperative of prioritising human capital development and stresses the need to bolster funding capacity. Addressing environmental concerns, this chapter underscores the urgency of preserving Lao PDR's natural wealth amid escalating environmental pressures, particularly air pollution and carbon emissions. Finally, it explores the nation's increasing vulnerability to climate change, highlighting the need to develop integrated approaches to sustainable development.

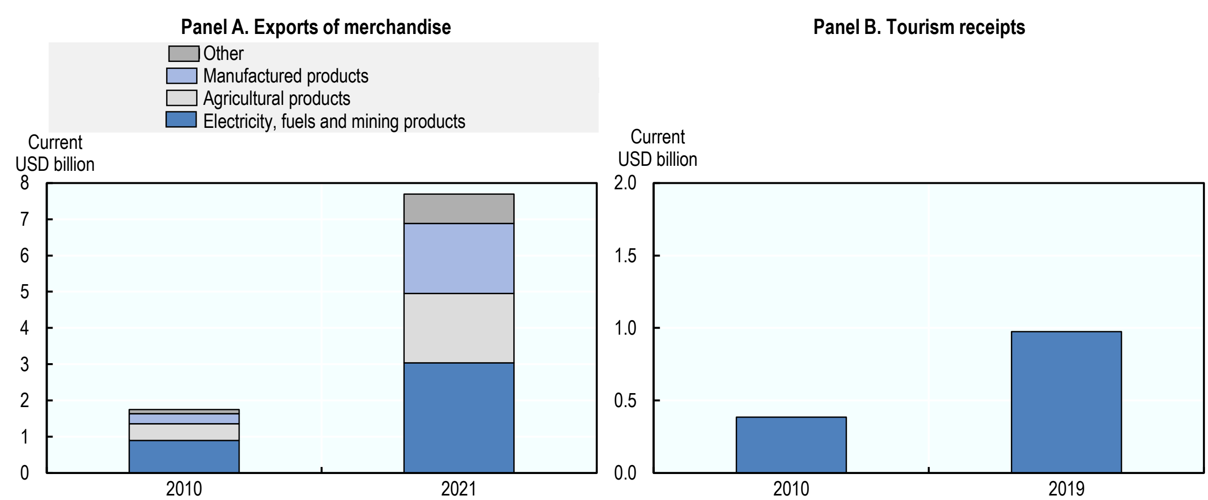
Prosperity: Moving from booming commodities to broad-based opportunities

Impressive economic growth promoted by investments, commodity exports and tourism

Lao PDR's economy has been one of the fastest growing in the world. With an average annual growth of 7.1% between 2000 and 2019, Lao PDR's economy has been the second-fastest-growing economy among the Association of Southeast Asian Nations (ASEAN) member States and the 13th fastest-growing economy globally (World Bank, 2024[1]).

Booming investment was an important driver of Lao PDR's economic success, spurring large-scale infrastructure projects and a push into the mining and energy sectors. Between 2006 and 2017, foreign direct investment (FDI) inflows grew almost tenfold, from USD 187.4 million (United States dollars) to USD 1.69 billion. Investment in Lao PDR's Special Economic Zones reached a cumulative USD 7.6 billion in 2021 (Dalavong, 2021[2]). The government's Turning Land into Capital (TLIC) (*nayobay han din pen theun*) policy facilitated large concession investment projects (World Bank, 2006[3]) in hydropower (64% of investment in Lao PDR between 2017 and 2021), mining (15% of investment) and agriculture (6% of investment). Between 1989 and 2018, the area under land concessions in Lao PDR increased from approximately 200 000 hectares (ha) to more than 1 000 000 ha. Forty-five percent of these concessions are agriculture concessions, 41% are mining concessions, 14% are tree plantation concessions and 1% are concessions for hydropower stations (CDE/University of Bern/MRLG, 2019[4]).

Figure 2.1. Exports: Commodities and tourism have seen strong growth



Source: (World Bank, 2024[1]), *World Development Indicators* (database), https://databank.worldbank.org/source/world-development-indicators (accessed on 15 November 2023).

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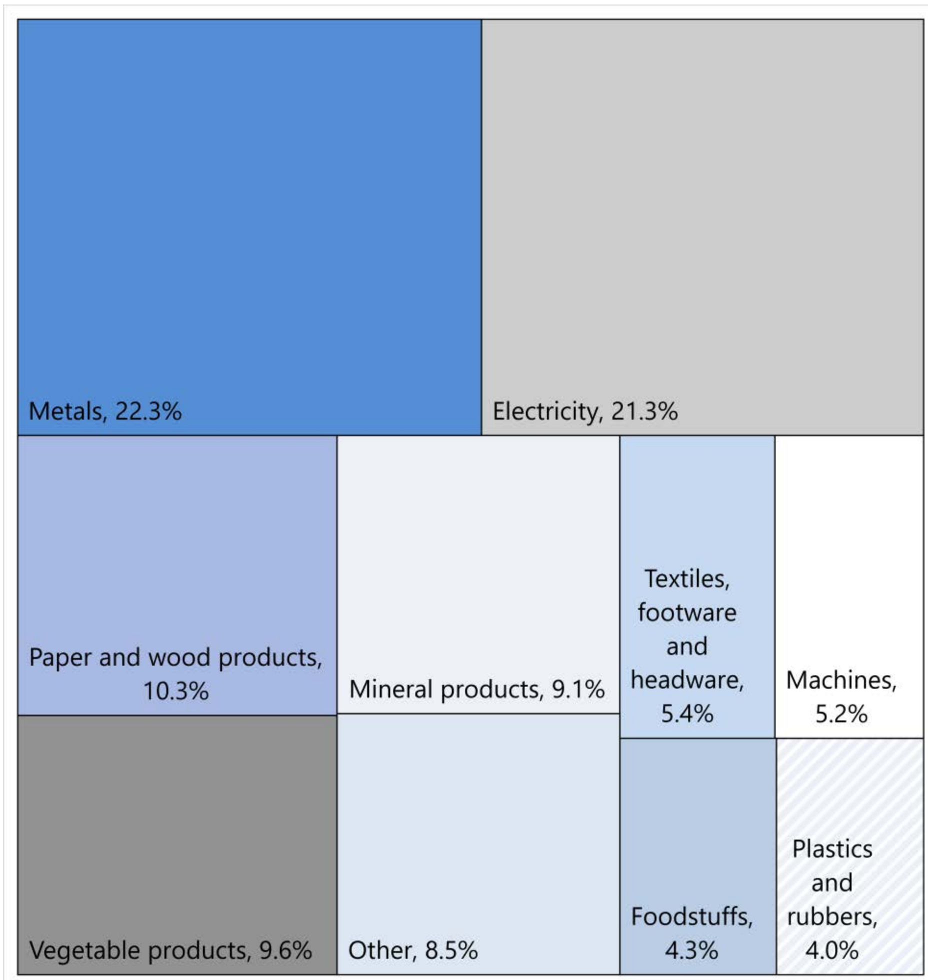
Exports grew rapidly, mirroring the investment push into energy and commodities as well as tourism expansion. Exports in goods grew more than fourfold between 2010 and 2021, reaching USD 7.7 billion in 2021 (up from USD 1.7 billion in 2010) (Figure 2.1, Panel A). Up until the COVID-19 pandemic, tourism had kept pace with the rapid growth of other exports, and accounted for a significant share of sectors and about 10% of gross domestic product (GDP) (Figure 2.1, Panel B; Box 2.1). Large hydropower projects made electricity the second most important export product (21.3% of trade). Exports of metals and ores like gold, iron and others boomed as well, followed by agriculture- and forestry-based products like cassava, rubber (of which Lao PDR is the seventh-largest global exporter, with exports worth USD 300 million in 2021), paper and pulp. Metals (accounting for 22.3% of exports) are Lao PDR's most important export goods, followed by paper and wood products (10.3%), vegetable products (9.6%), and minerals (9.1%). Mining products accounted for more than 30% of Lao PDR's exports and were also the second-largest recipient of FDI in Lao PDR (15% of FDI inflows) in 2021 (Figure 2.2) (Ngangnouvong, 2019[5]; IFC, 2021[6]).

Figure 2.2. Natural resources constitute the bulk of exports

Lao PDR's exports by category (percentage of trade), 2021



Source: (Simoes and Hidalgo, 2011[7]), "The Economic Complexity Observatory: An Analytical Tool for Understanding the Dynamics of Economic Development", Workshops at the Twenty-Fifth AAAI Conference on Artificial Intelligence. https://oec.world/en/profile/country/lao?tradeScaleSelector1=tradeScale0&depthSelector1=HS2Depth. Data from 2021 (accessed 15 January 2024).

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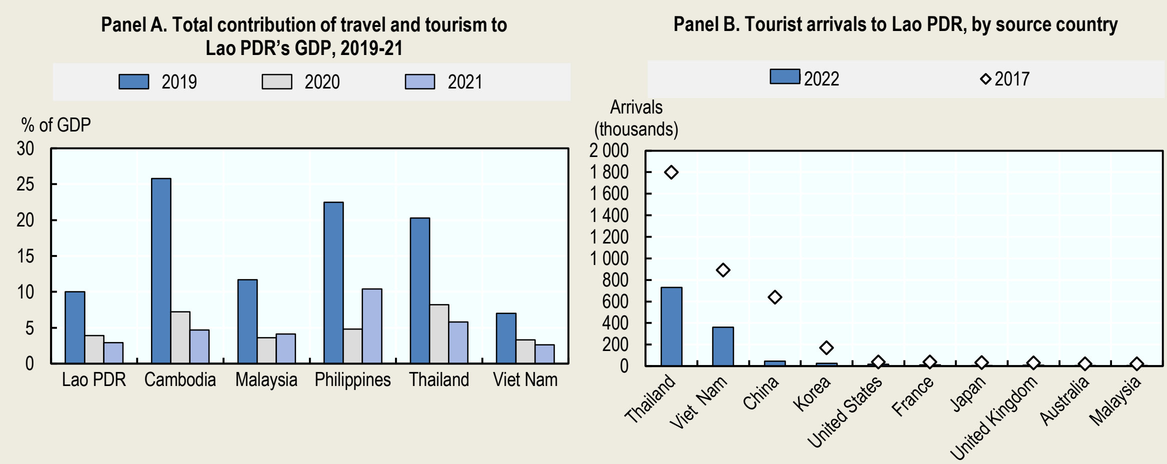
Box 2.1. Tourism in Lao PDR: An important sector with potential for revival after COVID-19

Prior to the COVID-19 pandemic in 2020, Lao PDR registered 4.79 million international tourist arrivals, primarily from neighbouring countries. Tourism receipts accounted for 13.9% of Lao PDR's exports, and the tourism sector accounted for 9.1% of GDP and created 300 000 jobs. The sector took a major hit when foreign tourism was restricted during the COVID-19 pandemic. As restrictions have been lifted, the sector has started showing signs of recovery, although travel and tourism have not yet reached pre-pandemic levels (Figure 2.3).

Figure 2.3. The tourism sector's contribution to Lao PDR's economy



Source: Panel A: (UN Tourism, 2024[8]) "Global and regional tourism performance" (database), https://www.unwto.org/tourism-data/global-and-regional-tourism-performance (accessed on 20 November 2023). Panel B: (UN Tourism, 2024[8]) "Global and regional tourism performance" (database), https://www.unwto.org/tourism-data/global-and-regional-tourism-performance (accessed on 10 December 2023).

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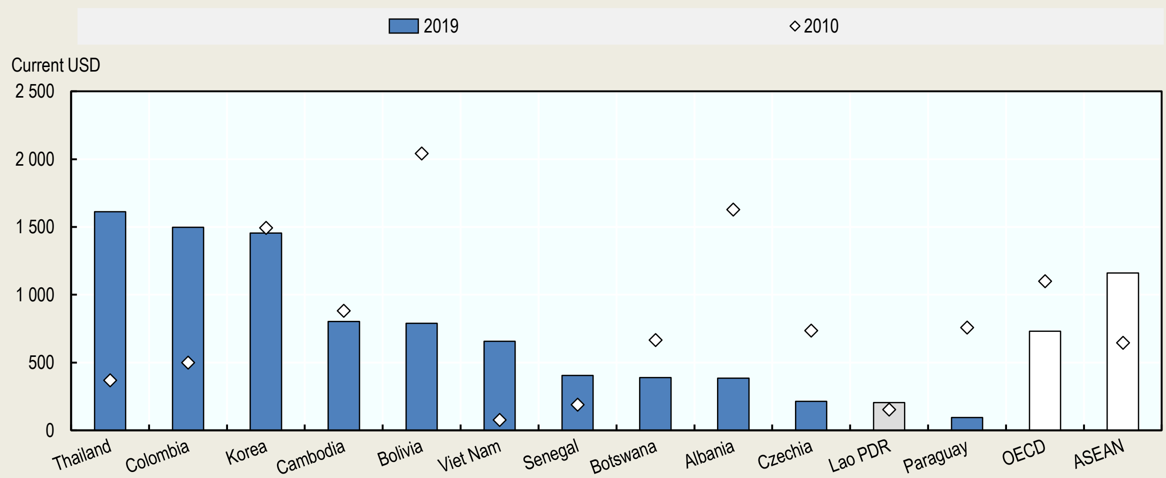
Attracting tourists who stay longer and spend more would increase resources. Prior to the COVID-19 pandemic, tourism receipts per arrival in Lao PDR amounted to USD 203 in 2019, less than one-fifth of the ASEAN average (USD 1 160) (Figure 2.4). Many tourists from neighbouring countries visit Lao PDR for a single day only, whereas tourists coming from farther away often combine a vacation in, for example, Thailand with a short stopover in Lao PDR. There are some options for Lao PDR to attract tourists to stay longer:

- facilitating access to Lao PDR's numerous tourist sites through improved connectivity and transportation infrastructure
- improving the tourism products offered in Lao PDR, including ecotourism and nature tourism, historical sites, ethnocultural tourism, adventure tourism, agriculture tourism, and wellness tourism.

Preserving tourism as a potential sector to grow. Going forward, it would be important to more systematically take into account the impact on tourism when deciding on the location of new investment projects such as mines, dams and power plants. In addition, the issue of air pollution from the traditional slash-and-burn agricultural practice, especially during the burning season, would need to be taken into consideration.

Figure 2.4. Tourism receipts per arrival in Lao PDR are relatively low

Tourism receipts per arrival, 2010 and 2019 (current USD)



Source: (World Bank, 2024[1]), *World Development Indicators* (database), https://databank.worldbank.org/source/world-development-indicators (accessed on 10 November 2023).

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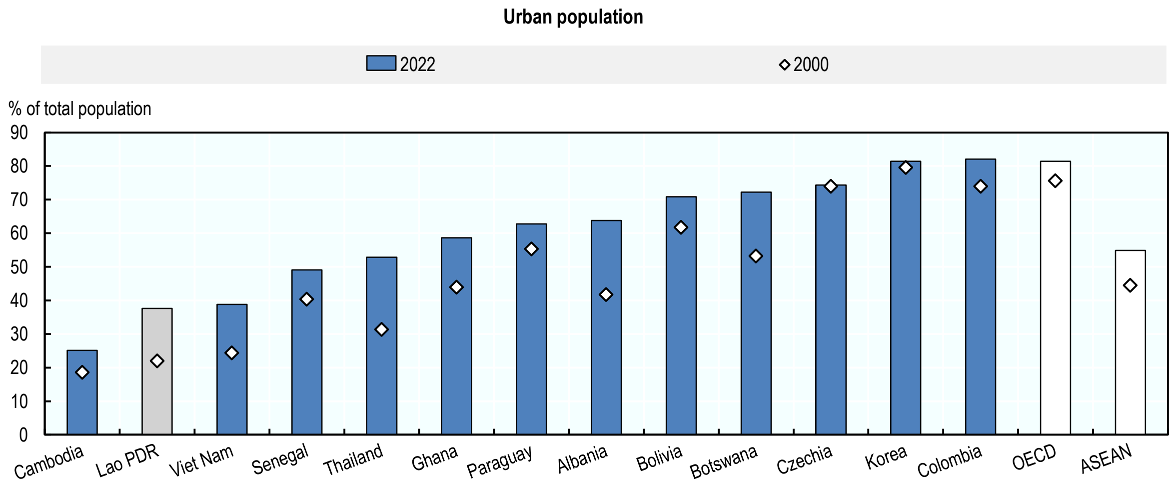
Lao PDR's strategic positioning within Southeast Asia and its integration with regional frameworks have been instrumental in its economic growth. In the mid-1990s, Lao PDR's regional integration intensified as it became a member of the Greater Mekong Subregion (GMS) and subsequently joined ASEAN. This participation in regional frameworks in fast-growing markets led to a significant increase in trade. Between 1990 and 1998, Lao PDR's trade grew from 36% to 84% of its GDP (World Bank, 2024[1]). By 2021, ASEAN member states accounted for a substantial portion of Lao PDR's trade, with 57% of imports and 53% of exports originating from these countries (World Bank, 2021[9]).

Along with its economic growth, Lao PDR has experienced rapid urbanisation that is expected to continue. Lao PDR has experienced one of the fastest rates of urbanisation growth in the Southeast Asia region and among its peers, reaching 37.6% urbanisation in 2022 (Figure 2.5). The share of urban population in Lao PDR is still low in comparison to its peers, however. Recent estimates indicate that the share of urban population in Lao PDR will reach 47.7% by 2025 (UN Habitat, 2023[10]).

Figure 2.5. Lao PDR has a growing urban population, but still has a lower urbanisation rate than its peers



Source: (World Bank, 2024[1]), *World Development Indicators* (database), https://databank.worldbank.org/source/world-development-indicators (accessed on 9 November 2023).

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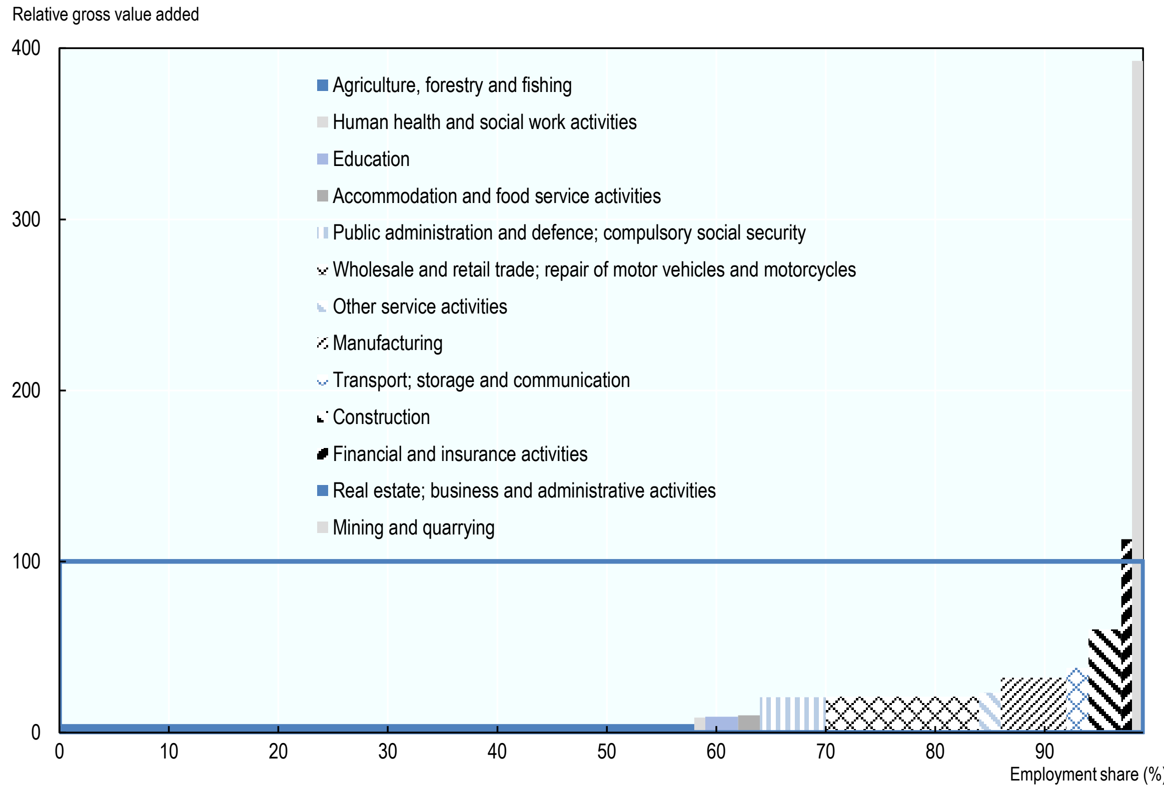
There is also stagnating structural transformation and an unbalanced distribution of opportunities

Stagnating structural transformation and an unbalanced distribution of opportunities are the flip side of the importance of commodities and the concentration of economic power. Past growth and investment in Lao PDR were highly concentrated in a few sectors and dominant state-owned enterprises (SOEs). More than 90% of workers remain in sectors dominated by informal employment, with more than 50% working in the agricultural sector, generating limited income, added value and tax revenue (Figure 2.6) (Box 2.2). Manufacturing – often the cornerstone sector for economic transformation – accounts for only 8.8% of Lao PDR's GDP (compared with 20.5% on average among ASEAN Member States, 27.0% in Thailand and 24.8% in Viet Nam), and the sector's contribution to Lao PDR's GDP has stagnated and even moderately decreased since the early 2000s. The manufacturing sector is dominated by textiles and clothing (which accounted for 15.7% of the manufacturing sector in 2017) and food processing (accounting for 33.4% of manufacturing in 2017) (IFC, 2021[6]; World Bank, 2024[1]).

Figure 2.6. Lower-productivity sectors, particularly agriculture, account for a large share of employment in Lao PDR

Relative gross value added and employment share by economic sector, 2021



Note: Y-axis: 100 = average national gross value added by sector. X-axis: percentage of total employment. Weighted average productivity (y-axis) is normalised to 100; a sector with a relative gross value added greater than 100 is more productive than the average. Labour productivity is measured as the annual value added (the value of output less the value of intermediate consumption) per employee.
Source (ILO, 2023[11]), "ILO modelled estimates", *ILOSTAT* (database), https://ilostat.ilo.org/data/; (United Nations, 2023[12]), *UNdata* (database), https://data.un.org/Default.aspx; (World Bank, 2024[1]), *World Development Indicators* (database), https://databank.worldbank.org/source/world-development-indicators (data accessed on 15 November 2023).

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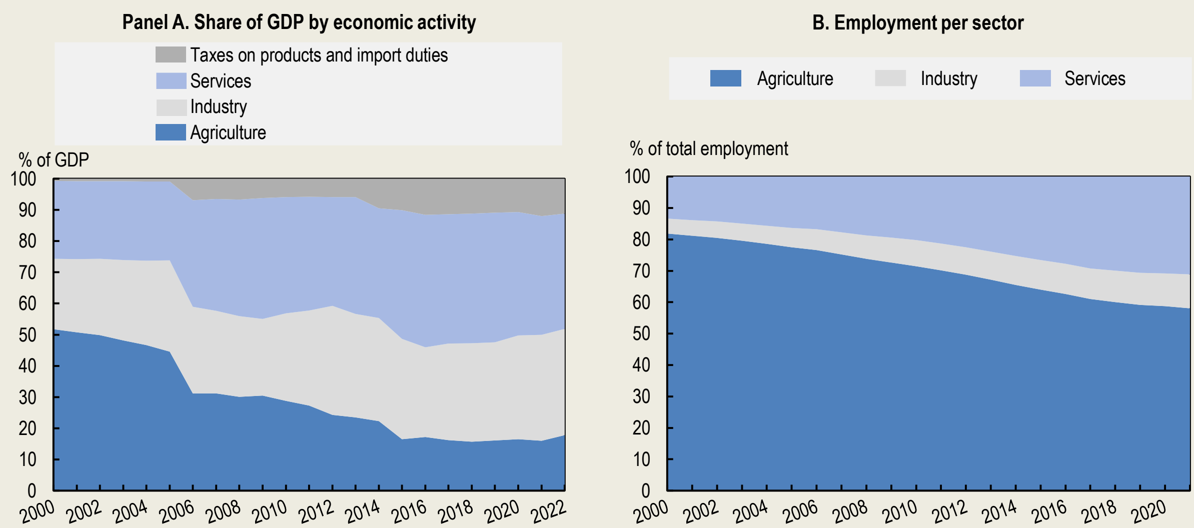
Box 2.2. Agriculture in Lao PDR: An important driver of economic growth

Lao PDR's agricultural sector constitutes an important part of the country's economy and involves a majority of the population. Agriculture is the main source of income and livelihood in rural Lao PDR. The contribution of the agricultural sector to Lao PDR's GDP has been significant, but has declined over the years, from 51.8% in 2000 to 17.8% in 2022 (Figure 2.7, Panel A). Over the same time period, the agricultural sector's share of employment has decreased from 80% to 58%, which compares with an ASEAN average of 39% (Figure 2.7) (World Bank, 2024[1]).

Figure 2.7. The agricultural sector employs a majority of the population of Lao PDR but constitutes a smaller part of the economy

Share of GDP by economic activity, and employment per sector



Note: Panel A: "Agriculture" consists of agricultural cropping, livestock and livestock products, forestry and logging, and fishing. "Industry" consists of mining and quarrying, manufacturing, electricity, water supply and sewage, waste management, and construction. "Services" consists of wholesale and retail trade; repair of motor vehicles; transportation and storage; accommodation and food; information and communication; financial and insurance activities; real estate activities; professional, scientific and technical activities; public administration and defence; education; human health and social work; and other services. Data for 2022 are based on estimates. GDP at constant market price. Panel B: Percentage of total employment is based on a modelled International Labour Organization (ILO) estimate.
Source: Panel A: (Lao Statistics Bureau, 2022[13]), *Statistical Yearbook*, https://laosis.lsb.gov.la/. Panel B: (World Bank, 2024[1]), *World Development Indicators* (database), https://databank.worldbank.org/source/world-development-indicators (accessed on 23 November 2023).

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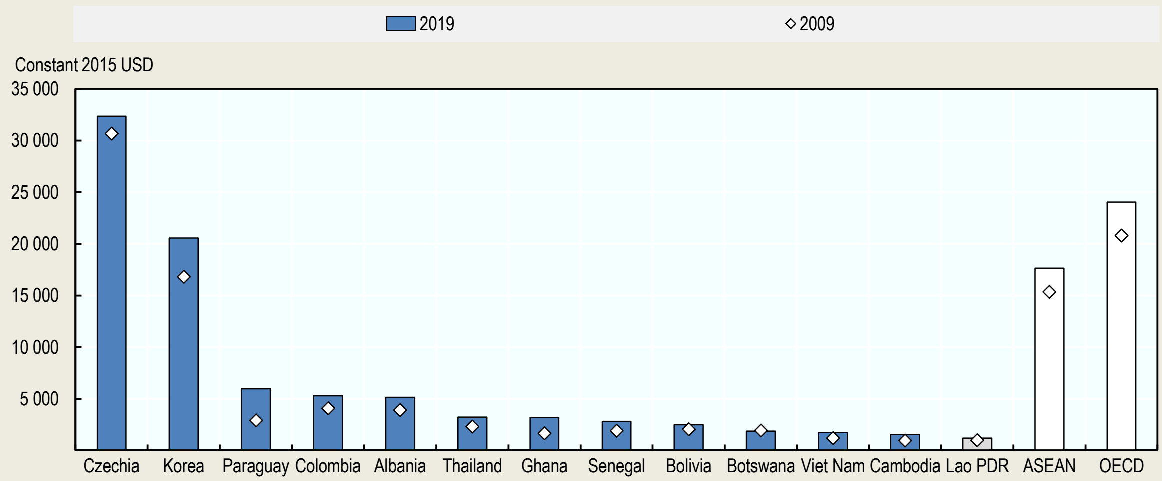
Reflecting the importance of subsistence and smallholder farming, agricultural productivity remains low in Lao PDR. While the country's agricultural outputs have increased as a result of commercial operations, overall agricultural productivity in Lao PDR remains low. Agricultural productivity (measured as value added per worker in agriculture, forestry and fishing) in Lao PDR is only 6.7% of the ASEAN average and increased at an annual rate of only 1.8% between 2009 and 2019 (Figure 2.8) (World Bank, 2024[1]).

Figure 2.8. Agricultural productivity remains low in Lao PDR



Source: (World Bank, 2024[1]), *World Development Indicators* (database), https://databank.worldbank.org/source/world-development-indicators (accessed on 29 January 2024).

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Opportunities for productivity and sustainability within the agricultural sector

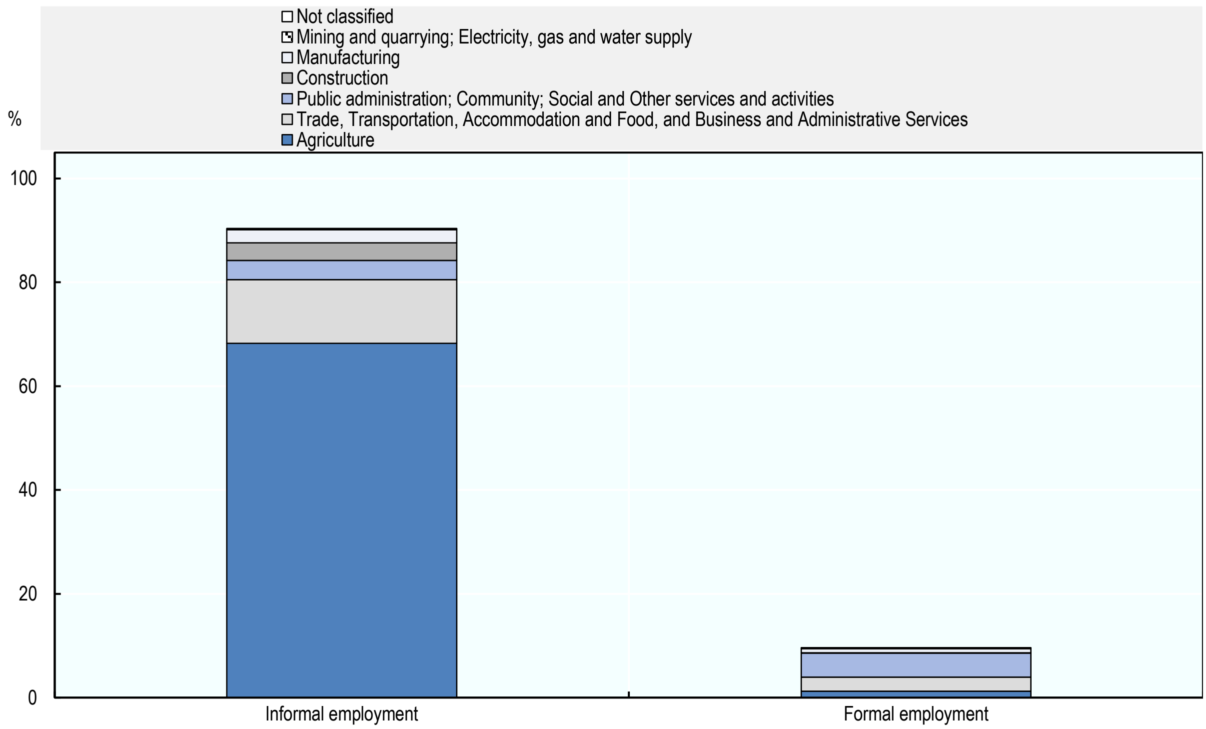
Lao PDR's geographic location offers an opportunity for regional connectivity in terms of importing and exporting agricultural products. Investment in the mechanisation and modernisation of agriculture, combined with traditional knowledge and the better organisation of smallholder farmers, could help to increase the sector's productivity. Additional opportunities include the following:

- Transitioning to more environmentally sustainable practices, such as organic farming, could increase farmers' income while improving the environment (OECD, 2024[14]).
- The expansion of longer-cycle crops (such as coffee, tea and sugar cane) and non-timber forest products (such as certain mushrooms) could reduce the damage to the environment caused by short-cycle crops like cassava and bananas.
- Harnessing the synergies between the agricultural and tourism sectors could lead to increased collaboration and increase value added. Tourism has many linkages with the agricultural sector, providing the potential to absorb seasonal excess labour in rural areas and encourage the production of higher-value-added agricultural goods and related products. For instance, tourism enterprises can purchase significant quantities of organic agricultural products (ADB, 2021[15]).

Similar to the uneven sector distribution as a share of GDP, the share of informal employment in Lao PDR stands out in comparison to other countries and illustrates the concentration of opportunity among a small share of the population. In the *Labour Force Survey 2022*, informal economy workers[1] accounted for 90.5% of the workforce (Figure 2.9). The share of informal economy workers was significantly higher in rural areas (at 91.2%) than in urban areas (at 69.4%) (ILO, 2023[11]). There were only modest gender differences, with 91.6% of women and 89.5% of men in informal employment (ILO, 2023[11]). Informal workers are more likely than employees and employers to experience low job and income security and are less covered by social protection and employment regulation. The formal sector, which comprises only 9.5% of employment, is dominated by public administration and community, social and other services (48.4% of formal employment) (Figure 2.9).

Figure 2.9. The informal economy employs a majority of the population in Lao PDR, mainly within the agricultural sector

Contribution of different sectors to the total amount of informal and formal employment in Lao PDR (2022)



Source: (ILO, 2023[11]), "ILO modelled estimates", *ILOSTAT* (database), https://ilostat.ilo.org/data/ (accessed on 29 January 2024).

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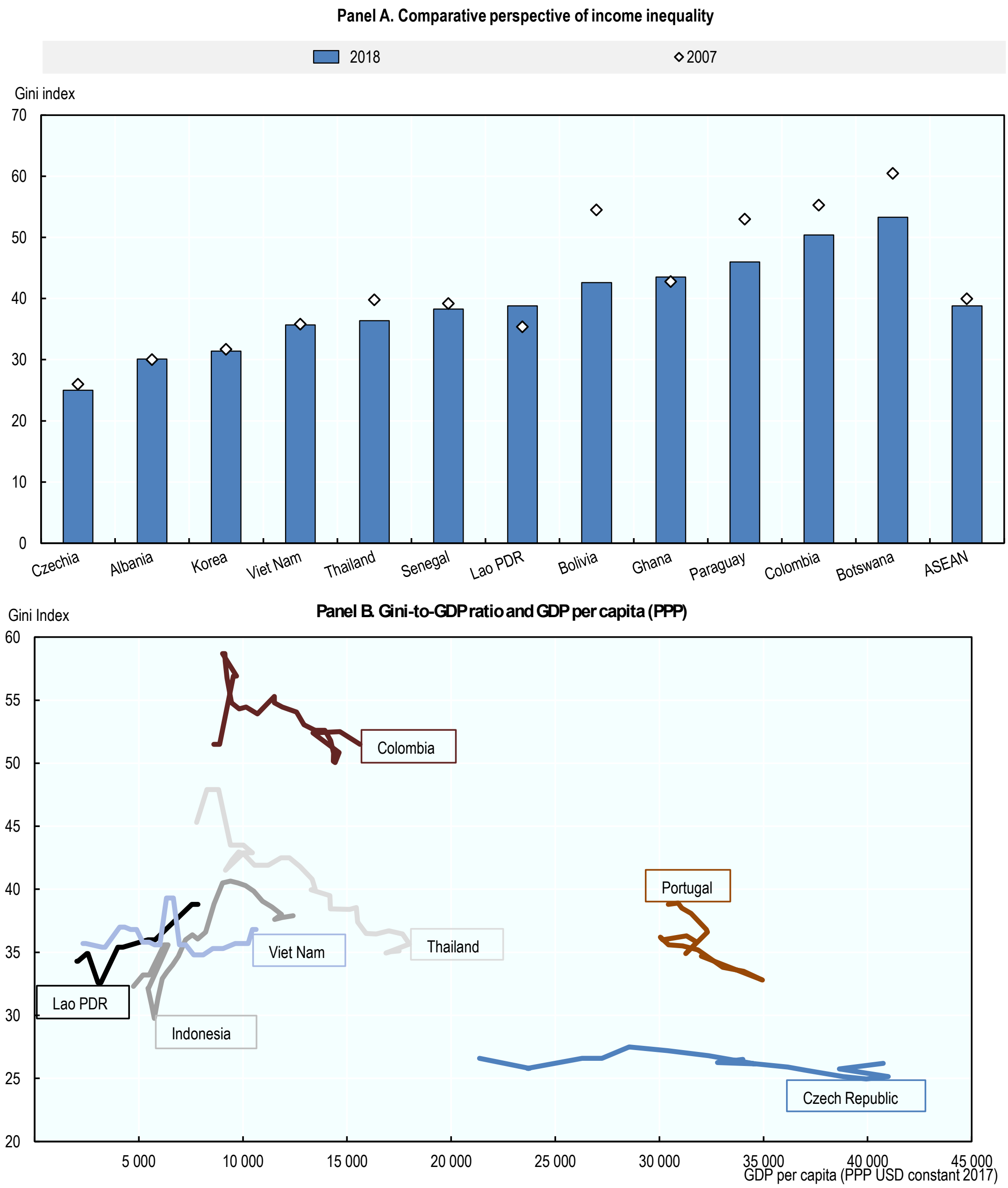
The unequal distribution of opportunities is reflected in increasing inequality. Lao PDR's remarkable economic growth has mainly been attributed to capital-intensive sectors, such as mining and energy, which have created limited employment opportunities. This has left household incomes growing significantly slower than the rest of the economy, especially at the lower end of the income distribution. Instead, growth has been more favourable at the top end of the income distribution, and inequality continues to rise. The Gini index for Lao PDR increased from 35.4 in 2007 to 38.8 in 2018 (Figure 2.10, Panel A). While Lao PDR follows the upward-sloping Gini-to-GDP per capita trajectory of its neighbours, much lower levels of inequality are possible (Figure 2.10, Panel B).

Figure 2.10. Income inequality is increasing in Lao PDR



Note: Panel A: Data for Albania are from 2008 instead of 2007; data for Botswana are from 2009 and 2015 instead of 2007 and 2018; data for Colombia are from 2009 instead of 2007; data for Ghana are from 2005 and 2016 instead of 2007 and 2018; data for Korea are from 2006 and 2016 instead of 2007 and 2018; data for Senegal are from 2005 instead of 2007; and data for Viet Nam are from 2006 instead of 2007. For the ASEAN average, data are missing for Brunei Darussalam, Cambodia and Singapore. Data for Malaysia and the Philippines are from 2006 instead of 2007. Panel B shows Gini-to-GDP ratio and GDP per capita paths between 2001 and 2021. The Gini-to-GDP ratio is calculated as the Gini coefficient divided by GDP (constant 2017 USD).

Source: Panel A: (World Bank, 2024[1]), *World Development Indicators* (database) https://databank.worldbank.org/source/world-development-indicators (accessed on 29 March 2024) Panel B: Authors' compilation based on World Bank (2024[1]).

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A thriving private sector that promotes employment and productivity across multiple sectors would be key to achieving more broad-based economic growth

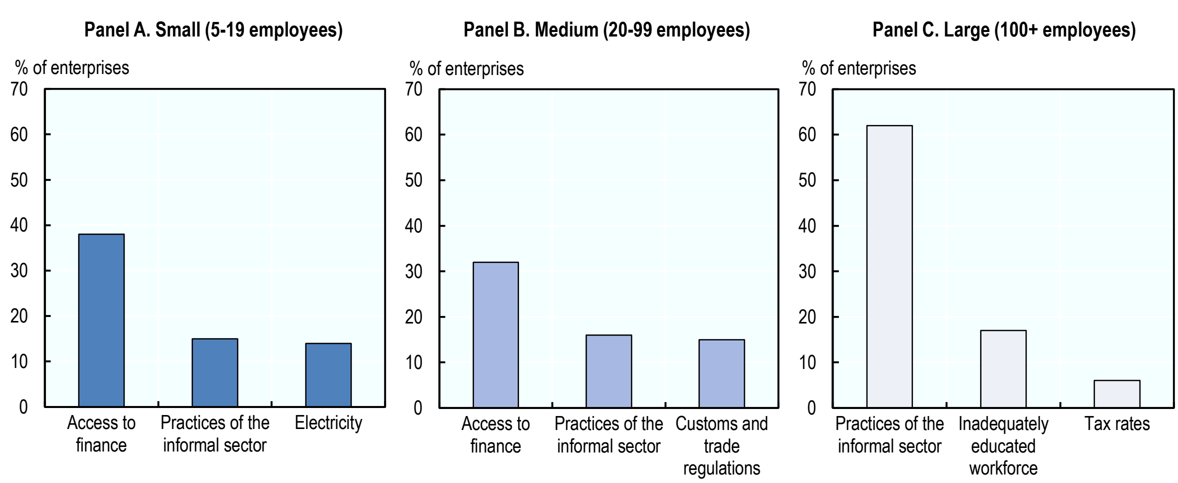
A level playing field and supportive conditions could help enterprises grow and become formal. The Lao PDR economy's current profile of high informality and limited productivity in most sectors (Figure 2.6) reflects a lack of opportunity for private enterprises to grow and create innovation and opportunity for Laotians. Informal enterprises exhibit significantly lower productivity compared with their formal counterparts, with only 13% of the sales per worker of a formal firm (World Bank, 2019[16]). Yet, many enterprises remain informal, often as a result of the multiple obstacles to formalisation. A level playing field that offers the same conditions and rules of engagement to all economic actors, no matter their background and size, is key to allowing for more formalisation.

Reflecting Lao PDR's level of development and its concentrated economic structure, the vast majority of firms are micro-businesses. These account for 94.2% of all enterprises in the country (126 168 micro-businesses). In addition, small enterprises (5-19 employees) account for 4.9% of all enterprises (6 600 small enterprises), medium-sized enterprises (20-99 employees) account for 0.7% (954 medium enterprises), and large enterprises (more than 100 employees) account for 0.2% (276 large enterprises), according to the latest Economic Census survey III (2019-20) (Lao Statistics Bureau, 2020[17]).

Access to finance is a key obstacle for small and medium-sized enterprises in the formal sector (Figure 2.11). Only 49.3% of small enterprises have a checking or savings account, and only 20.1% have a bank loan/line of credit (World Bank, 2019[16]). Consequently, internal company financing (89%) largely dominates sources of finance, followed by bank financing (6%) and equity (3%). A more open and competitive financial sector would be a key requirement in order to advance private sector development. Currently, most banks in Lao PDR are state-owned or are joint ventures with public shareholders. Chapter 3 provides recommendations for financing sustainable development.

Figure 2.11. Access to finance is a key constraint for small- and medium-sized enterprises in the formal sector

Top three business constraints in the private formal non-agricultural sector, by enterprise size



Source: (World Bank, 2019[16]), *Lao PDR 2018 Country Profile*, https://www.enterprisesurveys.org/content/dam/enterprisesurveys/documents/country-profiles/Lao-Pdr-2018.pdf (accessed on 10 February 2024).

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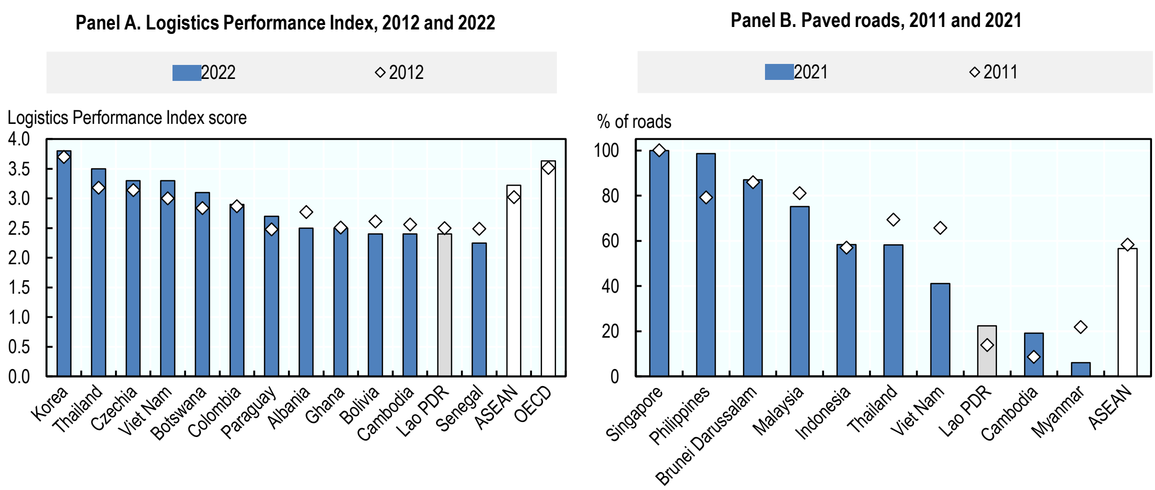
As firms grow larger in size, the availability of human capital becomes a binding constraint (Figure 2.11). Private investors in Lao PDR experience shortages in technical and vocational workers (such as mechanics; maintenance workers for heavy machinery; technicians and technical workers for dam maintenance; construction workers; and nurses), as well as a lack of engineers. Soft skills such as reliability, timeliness, work ethic and a willingness to work can be difficult to find for investors as well.

For the agricultural sector, export-based manufacturers and the tourism sector, high transportation costs remain a challenge. Significant progress on the construction of important highway and train routes has been made in recent years. Nevertheless, the road network in Lao PDR remains limited, and many areas of the country are difficult to access (Figure 2.12). Transportation costs along important trade corridors are between 1.4 and 2.2 times higher in Lao PDR than in Thailand (IDE-JETRO, 2017[18]).

Figure 2.12. Lao PDR performs worse than comparators in the Southeast Asia region and elsewhere in the world in terms of road transportation infrastructure and logistics



Note: Panel A: Senegal data are from 2018 instead of 2022. Panel B: Indonesia, Lao PDR and Myanmar data are from 2020 instead of 2021; Viet Nam data are from 2017 instead of 2021.
Source: Panel A: (World Bank, 2024[1]), *World Development Indicators* (database), https://databank.worldbank.org/source/world-development-indicators. Data accessed on 23 November 2023; Panel B: (ASEAN, 2023[19]), *ASEANstats*, https://www.aseanstats.org/ (accessed on 23 November 2023).

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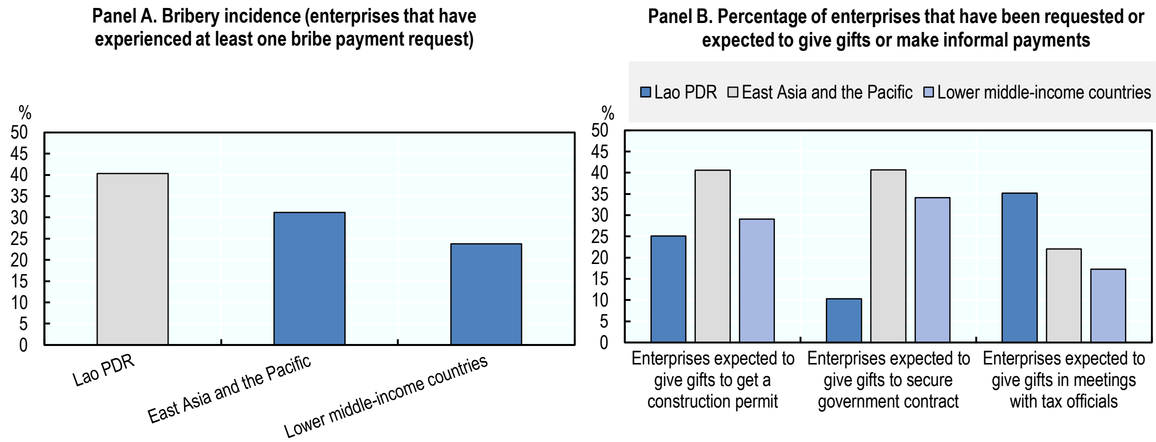
Furthermore, the prevalence of bribery in Lao PDR adds another layer of complexity to the business environment. Forty percent of enterprises in the private formal non-agricultural sector have reported encountering at least one instance of a bribe payment request across various transactions, encompassing tasks such as paying taxes, acquiring permits or licences, and securing utility connections. This figure exceeds the corresponding percentages in both the East Asia and the Pacific region (31%) and the average of lower middle-income countries (21%). Notably, bribery rates are the highest for engagements with tax officials (Figure 2.13). Chapter 5 provides a more detailed analysis of the constraints to private sector development and sustainable investment in Lao PDR, and provides recommendations to increase this investment.

Figure 2.13. There is a significant prevalence of bribery in the private formal non-agricultural sector in Lao PDR



Source: (World Bank, 2019[16]), *Lao PDR 2018 Country Profile*, https://www.enterprisesurveys.org/content/dam/enterprisesurveys/documents/country-profiles/Lao-Pdr-2018.pdf (accessed on 9 February 2024).

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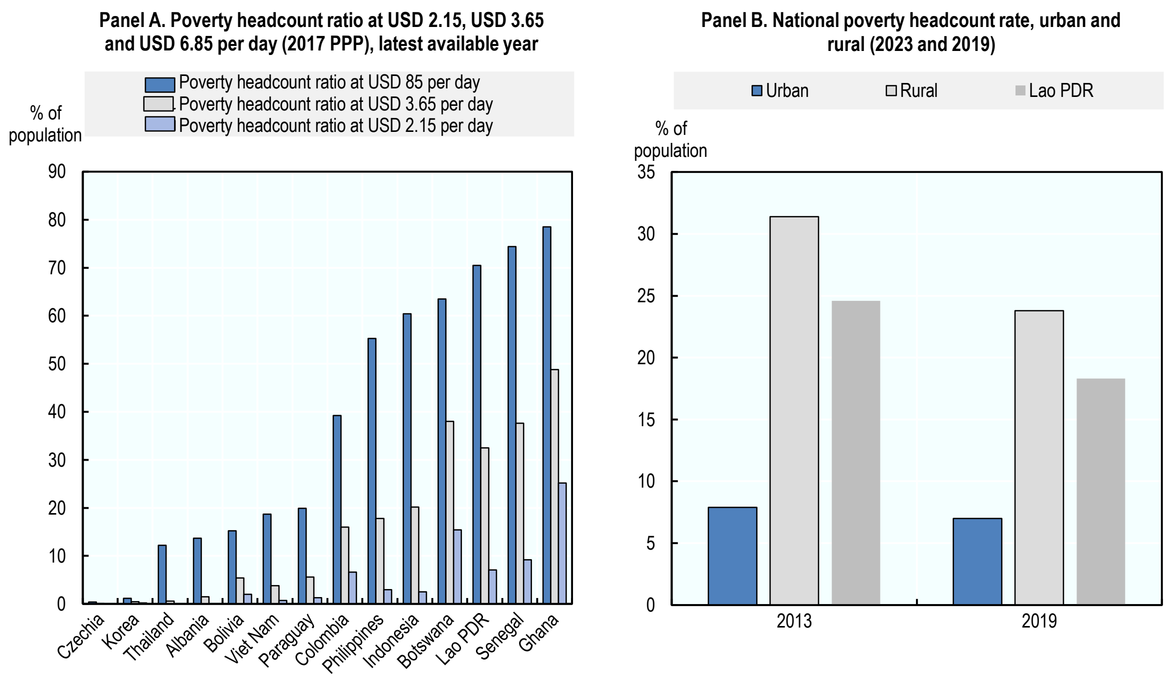
People: Making human capital development a priority

In order to ensure that no one is left behind in Lao PDR's continued development, inequality and poverty need to be addressed

Lao PDR has been able to translate its economic growth into important development gains in household income, poverty reduction, education and healthcare. Extreme poverty fell from 25.4% to 7.1% between 2002 and 2018, and poverty at the national poverty threshold fell from 46.0% to 18.3% between 1992-93 and 2018-19 (Lao Statistics Bureau, 2022[20]). Multi-dimensional poverty (which has been officially recognised by the government of Lao PDR and takes into account deprivation in healthcare, education, water and sanitation, housing, and access to information) has also declined, especially in rural areas, mirroring the decline in monetary poverty (Lao Statistics Bureau, 2020[21]; OPHI, 2023[22]). Lao PDR has made steady progress in expanding access to education and achieving nearly universal primary education, making primary school compulsory and free up to and including the fifth grade. Progress in health outcomes has been equally significant. Maternal mortality dropped from 284 deaths per 100 000 births in 2010 to 126 deaths per 100 000 births in 2020, and the mortality rate for children aged under 5 years improved from 61 deaths per 1 000 births in 2010 to 44 deaths per 1 000 births in 2020 (World Bank, 2024[1]).

Nevertheless, poverty remains a challenge, especially in rural areas. Despite progress in reducing poverty, poverty levels remain high, especially for the higher poverty measures (i.e. the share of the population living on less than USD 3.65 and USD 6.85 per day) (Figure 2.14, Panel A). In 2018, 32.5% of the population lived on incomes of less than USD 3.65 per day and 70.5% lived on incomes lower than USD 6.85 per day (World Bank, 2023[23]). Despite rapid poverty reduction in rural areas, a majority of those living in poverty live in rural areas, and significant gaps between the poverty rates in urban and rural areas remain. The rural poverty rate dropped by 7.6 percentage points between 2013 and 2019 (to 23.8%), while urban poverty has stagnated (Figure 2.14, Panel B). Some segments of society are experiencing new poverty prompted by landlessness and dispossession as a result of investment projects, concessions and other factors (Ingalls, 2018[24]). Provinces in both the north and south of Lao PDR have experienced a rapid reduction in poverty, but discrepancies persist across regions. Poverty reduction has stagnated in central Lao PDR, which has historically been the country's wealthiest region (Lao Statistics Bureau, 2020[21]).

Figure 2.14. The poverty rate in Lao PDR remains a challenge



Note: Panel A: Latest data available: Botswana (data from 2015); Korea and Ghana (data from 2016); Lao PDR and Senegal (data from 2018); Albania, Czechia and Viet Nam (data from 2020); and Paraguay (data from 2022).
Source: Panel A: (World Bank, 2024[1]), *World Development Indicators* (database), https://databank.worldbank.org/source/world-development-indicators. Panel B: (Lao Statistics Bureau, 2020[21]), *Poverty in Lao PDR, Key Findings from the Lao Expenditure and Consumption Survey, 2018-2019*, https://data.laos.opendevelopmentmekong.net/en/dataset/182169a3-6f97-4ade-81fb-755267a9c54e/resource/ffcc354f-a036-46f2-af9b-710ff47b5213/download/poverty-profile_eng-editing-23.7.2020-1.pdf (accessed on 23 November 2023).

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Vulnerable groups are at risk of being left behind. Despite the poverty reduction that has occurred in recent years, poverty remains high among minority ethnic groups. Out of the three largest ethnic minority groups in Lao PDR – the Mon-Khmer (which comprise 22% of the population), the Hmong-lu Mien (9% of the population) and the Chine-Tibet (3% of the population) – the Hmong-lu Mien has the highest poverty rate. This group constitutes 19% of those living in poverty despite making up only 9% of the population (Lao Statistics Bureau, 2020[21]; Lao Statistics Bureau, 2016[25]). The widening disparities among ethnic groups have multiple causes, including differences in household human and physical assets and economic opportunities, as well as high fertility rates and low school progression (Pimhidzai and Houng Vu, 2017[26]).

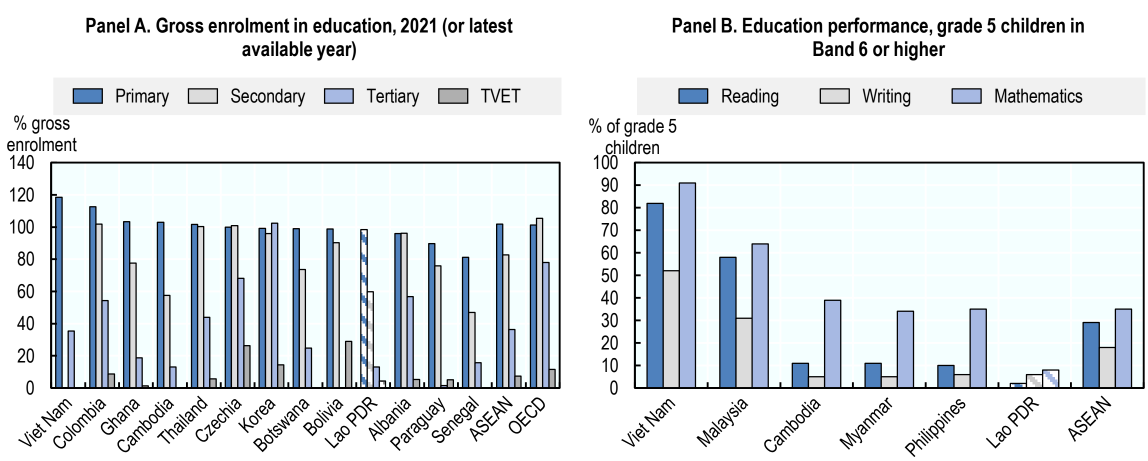
Human capital development presents a pressing development need for which funding capacity must be strengthened

A more balanced growth path would increasingly rely on human capital. The current trajectory of capital-intensive investments in natural resource extraction and energy generation only required relatively limited amounts of skilled labour. Accordingly, the employment effect of these sectors has been small. Other sectors, however, like manufacturing, agri-business, tourism and most services, will need larger numbers of qualified labourers. Beyond education and skills, human capital also requires adequate healthcare and a minimum level of social services.

Despite significant past success, the current outlook on education and skills is challenging. Lao PDR has made steady progress in expanding access to education and achieving nearly universal primary education in the last decade, making primary school compulsory and free up to and including the fifth grade. Despite this significant progress in expanding access to primary and secondary education, enrolment levels have started to decline and the dropout rate remains high, particularly for the rural population (Figure 2.15). Only 79% of the rural population in Lao PDR has completed primary education. The completion rate for the poorest quintile of the population also remains low, at 58% (Figure 2.15) (UNICEF, 2022[27]).

The quality of education is also of concern. Student performance on standardised tests in Lao PDR is among the lowest in the Southeast Asia region (Figure 2.15, Panel B). Students' learning outcomes are low, leaving children without essential knowledge and skills. Teachers' limited capacity, a weak pedagogical support system, challenges in multi-grade teaching, and the lack of teaching/learning materials are some of the key constraints resulting in the low quality of education in Lao PDR. As a result, job prospects for graduates are limited. These limited job prospects do not incentivise student enrolment at school. This is reflected in low enrolment rates above the primary level: enrolment in secondary and tertiary education and in technical and vocational education and training (TVET) in Lao PDR are lower than in comparators in the Southeast Asia region (World Bank, 2024[1]).

Figure 2.15. Despite progress in enrolment in education, Lao PDR lags behind its peers in terms of secondary education enrolment and in terms of the quality of education



Note: Panel A: Latest data available: Thailand (2022 instead of 2021); Bolivia, Colombia, Czechia, Ghana and OECD (2020 instead of 2021). Primary enrolment: Paraguay (2015 instead of 2021). Secondary enrolment: Paraguay (2012 instead of 2021). Tertiary enrolment: Paraguay (2013 instead of 2021). TVET indicates enrolment in vocational education among 15-24-year-olds. Panel B: The performance of grade 5 children is evaluated in six bands for reading, in eight bands for writing and in nine bands for mathematics.
Source: Panel A: (World Bank, 2024[1]), *World Development Indicators* (database), https://databank.worldbank.org/source/world-development-indicators. Panel B: (UNICEF/SEAMEO, 2020[28]), *SEA-PLM 2019 Main Regional Report, Children's learning in 6 Southeast Asian countries*, https://www.unicef.org/eap/media/7356/file/SEA-PLM%202019%20Main%20Regional%20Report.pdf (accessed on 20 November 2023).

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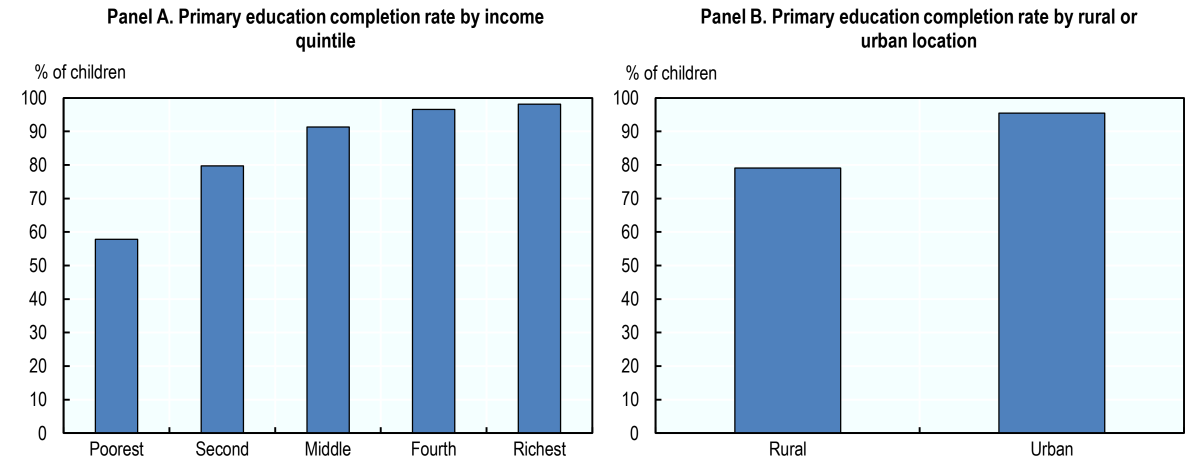
Figure 2.16. The education completion rate in Lao PDR is low among the poorest and rural populations



Percentage of the total number of children who are 3 to 5 years older than the intended age for the last grade of primary education (11 years old for Lao PDR).
Source: (UNICEF, 2023[29]), *MICS2017*, https://data.unicef.org/topic/education/overview/#data (accessed on 20 November 2023).

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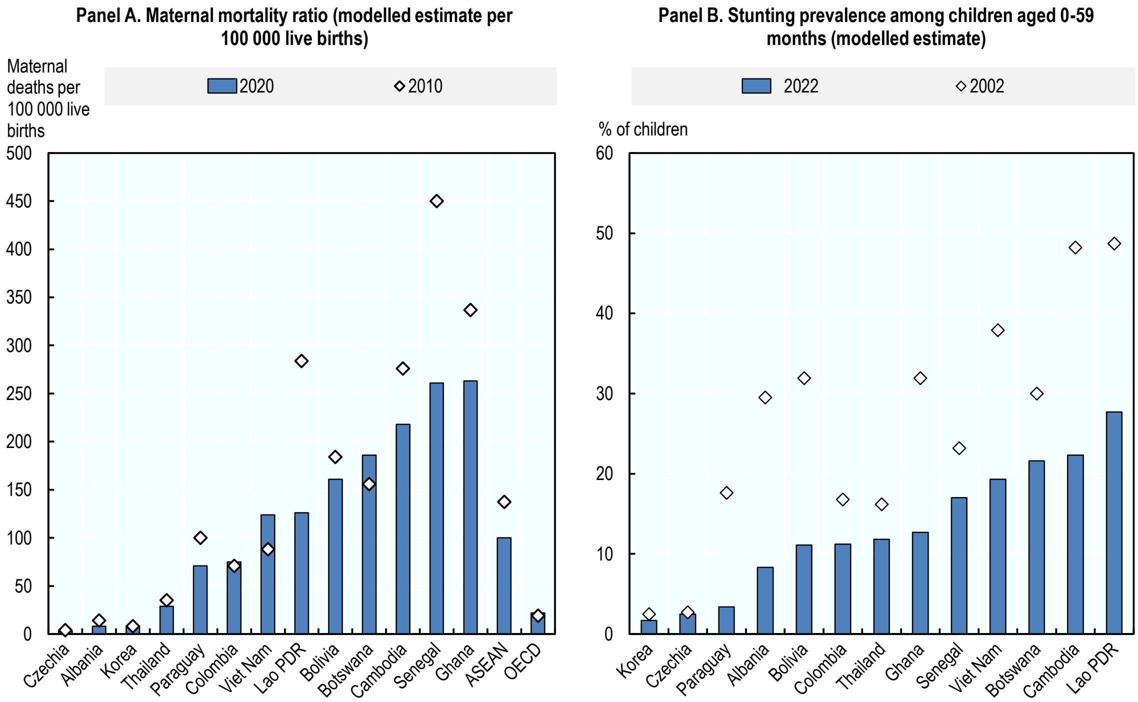
There has been remarkable progress in health outcomes, but maternal and child health remains a pressing issue. Further improving the quality of and access to healthcare remain priorities for sustainable development and for a human capital strategy. Maternal mortality in particular remains high in Lao PDR compared with the international average, notwithstanding significant progress the country has made (Figure 2.17, Panel A). Nutrition and food security remains a persistent problem, especially among low-income families in rural areas (Lao Statistics Bureau, 2020[30]). The prevalence of stunting due to chronic malnutrition among children aged under five years is high, at 27.7% in 2022 (UNICEF/WHO/World Bank, 2023[31]) (Figure 2.17, Panel B). Income and geographic inequalities in health service utilisation are further challenges reflecting the unequal access to health services (UNFPA, 2021[32]). While the government of Lao PDR has introduced a national free maternal and child health service policy, other barriers exist in terms of access to health services, especially for the poorer quintiles of the population. In addition to barriers to the physical accessibility of health services, ethnolinguistic barriers, cultural barriers and poor education are reported (World Bank, 2020[33]).

Figure 2.17. Lao PDR has made significant progress in health outcomes, but child and maternal health continues to be a pressing issue



Source: Panel A: (World Bank, 2024[1]), *World Development Indicators* (database), https://databank.worldbank.org/source/world-development-indicators; Panel B: (UNICEF/WHO/World Bank, 2023[31]), *Joint Child Malnutrition Estimates Database*, https://data.unicef.org/topic/nutrition/malnutrition/ (accessed on 15 November 2023).

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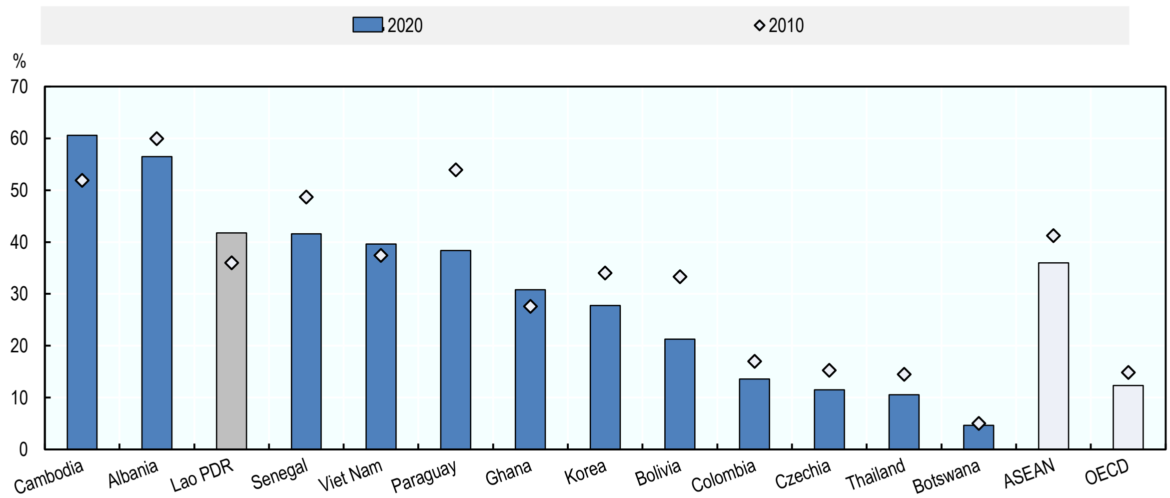
There has been significant health insurance expansion, but patients in Lao PDR spend more on healthcare in comparison with other countries. Lao PDR has a National Health Insurance (NHI) scheme that is funded by tax revenues and that provides social health protection to the population with a small co-payment at the point of care. Since its introduction in 2016, the NHI has drastically increased the number of people with health insurance coverage from 45% in 2016 to 94% in 2021, and has increased the use of public health services by 10-30% (WHO, 2022[34]). However, challenges remain in ensuring complete or proper availability of NHI benefits. Some people are required to pay additional or excessive fees, while a range of other operational challenges affect the delivery and sustainability of the scheme. As a result, Lao PDR is one of the countries where out-of-pocket (OOP) healthcare expenditure has risen between 2010 and 2020 (Figure 2.18). High OOP healthcare expenditure has larger impacts on more vulnerable populations, as data from the most recent Lao Expenditure and Consumption Survey, 2018-2019 show that the poorest quintile of the population is less likely to seek healthcare due to financial barriers than the richest quintile of the population: 14.4% of the poorest quintile reported not seeking healthcare for financial reasons compared with 6.8% of the richest quintile (WHO, 2023[35]). Regional disparities have also been noted: people living in Vientiane (the capital of Lao PDR) reported paying more than double the amount in OOP payments compared with those living in other regions, and they experienced higher overall healthcare expenditure compared with those living in other regions (WHO, 2023[35]).

Figure 2.18. Patients spend more on healthcare in Lao PDR despite the expansion of health insurance coverage

OOP healthcare expenditure (percentage of total healthcare expenditure)



Note: Data for Albania are from 2018 instead of 2020.
Source: (World Bank, 2024[1]), *World Development Indicators* (database), https://databank.worldbank.org/source/world-development-indicators (accessed on 15 November 2023).

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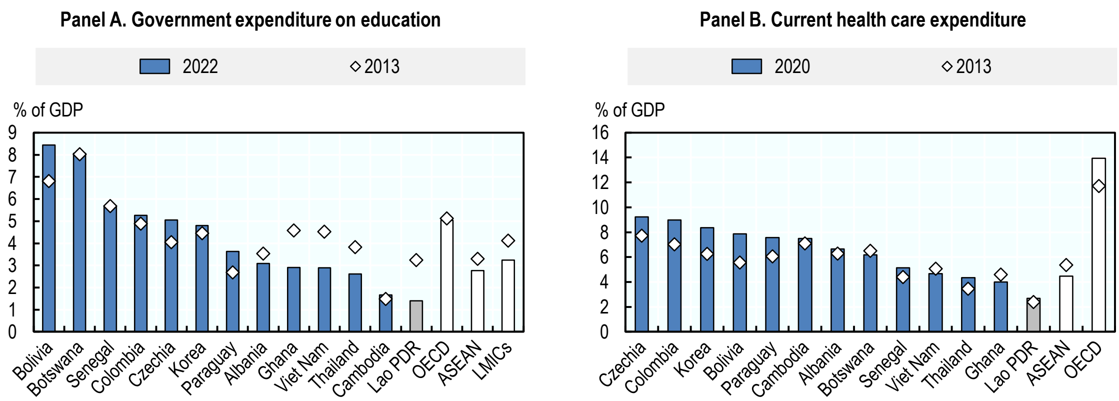
There is a lack of funding in the social sectors. Lao PDR's limited fiscal space has constrained the government's ability to expand spending on education, healthcare and social protection. Although health spending per capita has almost quadrupled since the year 2000, the country's total spending on education, healthcare and social assistance as a share of GDP is low compared with its regional and income peers and is below international benchmarks (Figure 2.19) (World Bank, 2024[1]). Article 60 of the Education Law (2015) states that 18% of the national budget should go to education, but the latest figures reveal that actual budgetary allocation to education has remained low and in fact decreased from 15.8% in 2015-16 to 13.1% in 2020-21 (Government of Lao PDR, 2015[36]; UNICEF, 2021[37]). The financing gap has led to the cancellation of key teacher in-service training programmes, limited essential funding to district bureaus and schools, and stalled national investment in the Water, Sanitation and Hygiene Education (WASH) in Schools programme (UNICEF, 2021[37]).

Figure 2.19. There is limited government expenditure on education and healthcare in Lao PDR



Note: Panel B: Data for Albania are from 2018 instead of 2020.
Source: (World Bank, 2024[1]), *World Development Indicators* (database), https://databank.worldbank.org/source/world-development-indicators (accessed on 23 November 2023).

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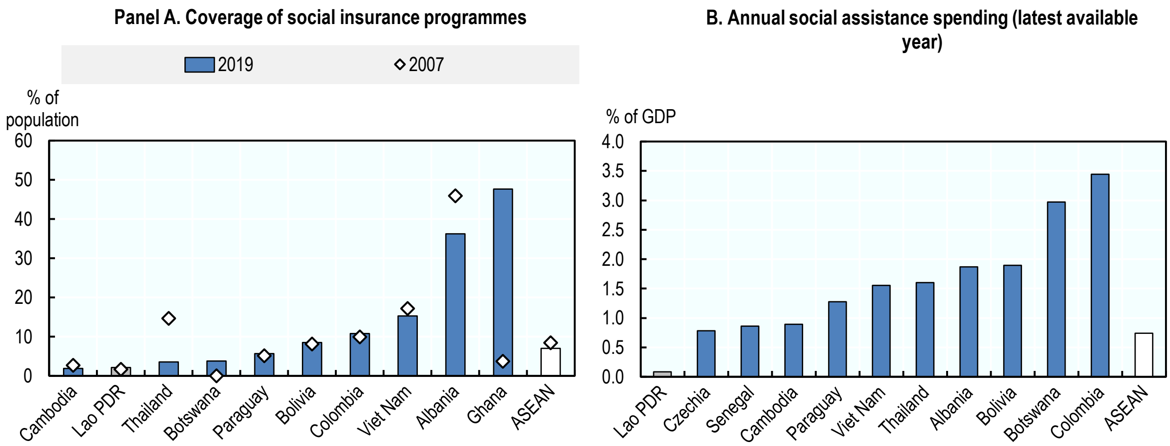
In addition, the social protection system has a low level of coverage. The total coverage of social protection is low (covering 2.1% of the population), as is spending, with 0.09% of GDP being spent on social assistance (Figure 2.20). This includes most public sector workers, slightly less than one-half of all workers in formal enterprises, and 24 000 self-employed workers (ILO, 2023[38]). Most of these workers are more likely than employees and employers to experience low job and income security, as well as less covered by social protection and employment regulation.

Figure 2.20. Coverage and spending on social protection are limited in Lao PDR compared with other countries around the world



Note: Panel A: No data were available for Czechia, Korea, Senegal and or OECD members member countries. Average for ASEAN Member States: data for the Philippines, Thailand and Viet Nam are from 2006 instead of 2007, and data for Cambodia and Malaysia are from 2008 instead of 2007. Data for Cambodia are from 2013 instead of 2019, data for the Philippines are from 2017 instead of 2019 and data for Lao PDR are from 2018 instead of 2019. No data were available for Brunei Darussalam. Panel B: Social assistance expenditure refers to spending on benefits and administrative costs. Annual social assistance expenditure is calculated by aggregating programme-level social assistance data for the most recent available year during the period 2015-21. Average for ASEAN Member States: data for Cambodia, Malaysia, Myanmar, the Philippines and Singapore are from 2015; data for Indonesia and Viet Nam are from 2016; data for Thailand are from 2018; and data for Lao PDR are from 2021. No data were available for Brunei Darussalam or OECD member countries. Data for Albania from 2018-2020, Bolivia 2015, Botswana 2018-2019, Colombia 2015-2020, Czechia 2016-17, Paraguay 2016-2017Senegal 2015.

Source: Panel A: (World Bank, 2024[1]), *World Development Indicators* (database), https://databank.worldbank.org/source/world-development-indicators. Panel B: (World Bank, 2023[39]), *World Bank ASPIRE* (database), https://www.worldbank.org/en/data/datatopics/aspire (accessed on 23 November 2023).

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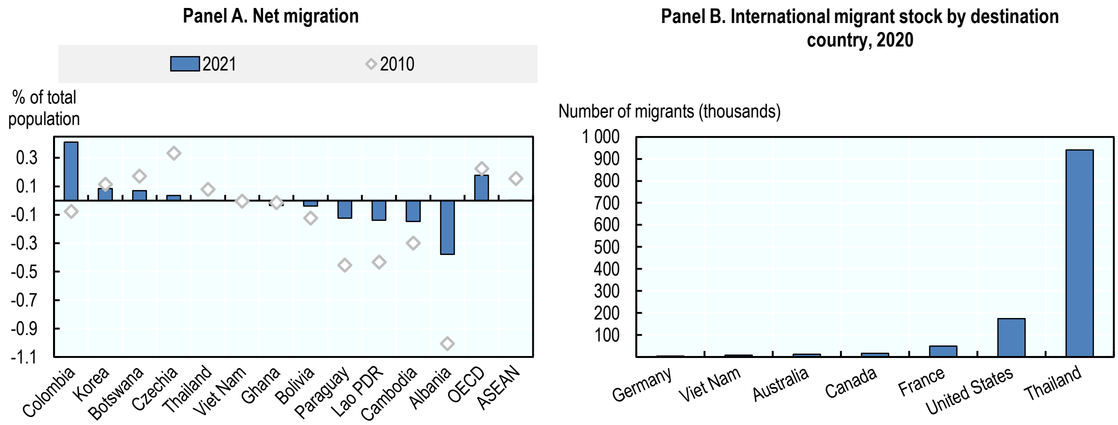
There are high rates of migration to neighbouring countries, but low levels of remittances

The migration rate from Lao PDR to neighbouring countries is high. Many skilled and unskilled workers in Lao PDR who are willing to work in a factory environment emigrate to neighbouring countries (primarily Thailand (Figure 2.21, Panel B)), where demand for low-skilled labour in sectors such as infrastructure, services, manufacturing and agriculture is high and minimum wages largely exceed those in Lao PDR. Although data for international migration are limited, estimates vary to a great extent, from 850 000 to 2.5 million (UNFPA, 2021[32]), and the net migration rate in relation to the population remains high in comparison with peer countries (Figure 2.21, Panel A). Laotian women are more likely to migrate abroad than men, with nearly 56% of Laotian migrants being women according to UN data (UNDESA, 2020[40]). Young women are more likely to leave rural provinces, moving out of agricultural communities into cities or to Thailand in search of employment (Ingalls, 2018[24]).

Figures on personal remittances may underestimate their true effect on household livelihoods. The share of remittances in relation to GDP in Lao PDR (1.26% of GDP in 2022) appears relatively modest when compared with those of other countries (Figure 2.22). This suggests that a significant portion of house'holds do not heavily rely on remittances as their primary source of income. Around 9% of households in Lao PDR receive remittances from abroad, and these remittances constitute 60% of their overall household income (IOM, 2022[41]). However, informal remittances may play a considerable role in household income, potentially accounting for up to 50% of total remittance transfers in the GMS. Consequently, national and official figures may underestimate the true impact of remittances on the macroeconomic level and on household livelihoods in Lao PDR (Asian Development Bank, 2013[42]).

Figure 2.21. Lao PDR has a high migration rate



Source: Panel A: Authors' calculations based on (World Bank, 2024[1]) *World Development Indicators* (database), https://databank.worldbank.org/source/world-development-indicators. Panel B: (UNDESA, 2020[40]), *International Migrant Stock* (database), https://www.un.org/development/desa/pd/content/international-migrant-stock.

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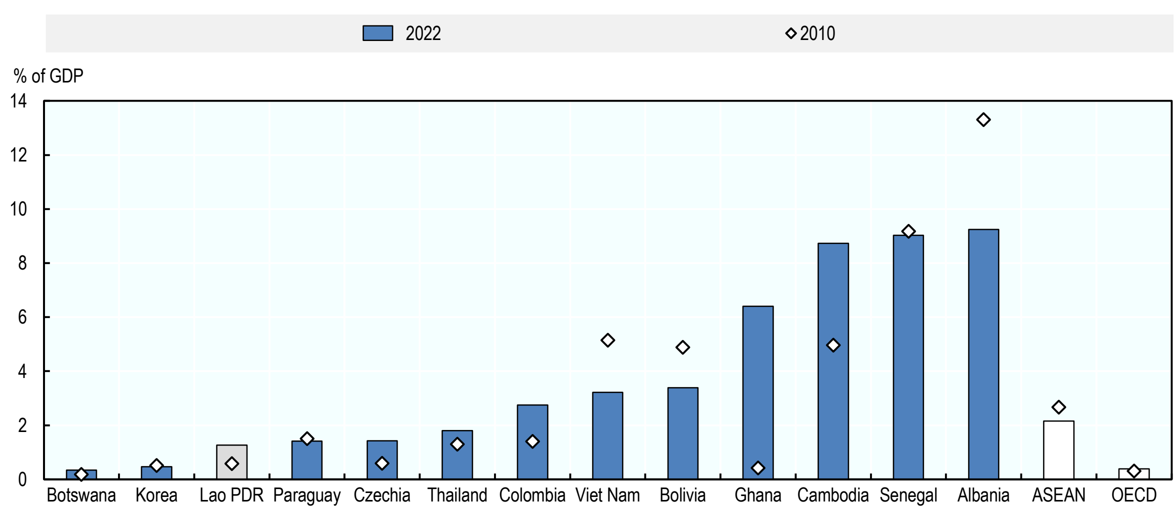
Figure 2.22. Personal remittances are low in Lao PDR

Personal remittances received (2010 and 2022)



Note: The ASEAN average was computed by OECD staff, but due to the absence of data for Brunei Darussalam and Singapore in 2010 and for Singapore in 2022, these countries were excluded from the average calculations.
Source: (World Bank, 2024[1]), *World Development Indicators* (database), https://databank.worldbank.org/source/world-development-indicators.

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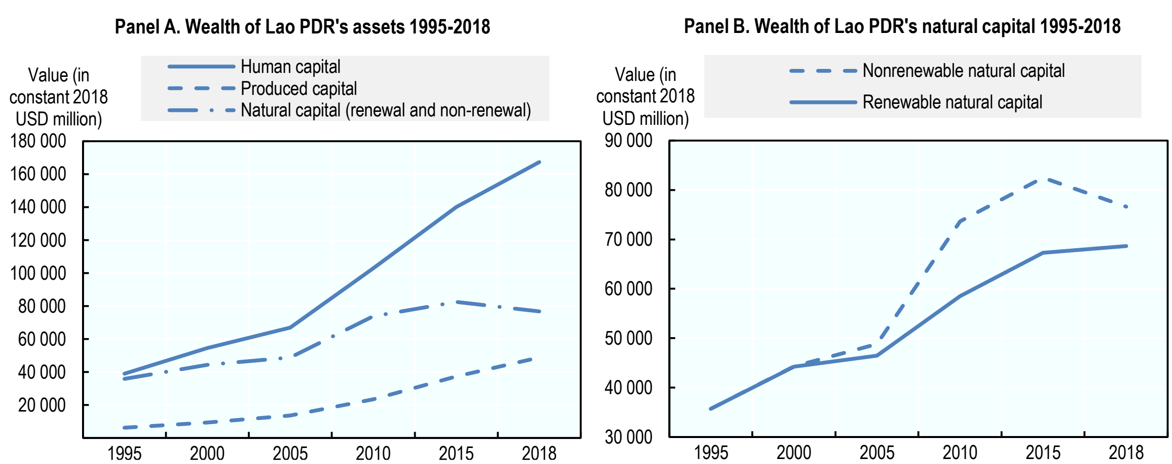
Planet: Preserving Lao PDR's abundant natural wealth and fighting air pollution

Lao PDR benefits from abundant natural endowments, but these have come under pressure

Lao PDR has an abundance of natural resources, namely water, mineral deposits and forests that cover the entire length of the country and serve important functions within the ecosystem. Lao PDR has one of the highest levels of forest cover in Southeast Asia. Its evergreen forests, karst landscape and mountainous forests have made Lao PDR one of the ten most important biodiversity ecoregions globally, with ongoing discoveries of new species (World Bank, 2020[43]). Forest resources are also crucial for economic development and individuals' livelihoods in Lao PDR. Forestry rents contributed 1.5% to the country's GDP in 2021 (World Bank, 2024[1]). Forests store carbon, help protect communities and infrastructure from the impacts of drought and flash floods, and contribute to the supply of clean water and food. In addition, forests provide invaluable non-timber forest products, such as food, materials used in construction and trade, and medicine, and are also a source of subsistence income in rural areas. Lao PDR's terrain is also rich in mineral resources. With more than 570 mineral deposits identified in the country, including deposits of gold, copper, zinc and lead, Lao PDR was ranked as one of the most resource-rich countries in Asia in 2008 (Houngaloune, 2019[44]). In addition, Lao PDR's water resources from surface and groundwater flows provide the country with irrigation, fisheries, plantations, livestock and hydropower potential.

Figure 2.23. Lao PDR's natural assets are declining



Note: "Natural capital" refers to renewable natural capital (including forest timber, forest ecosystem services, mangroves, fisheries, protected areas, and crop and pasture land) and non-renewable natural capital (including oil, gas, coal, metals and minerals).
Source: (World Bank, 2021[45]), *The Changing Wealth of Nations 2021: Managing Assets for the Future*, https://datacatalog.worldbank.org/dataset/wealth-accounting (accessed on 23 November 2023).

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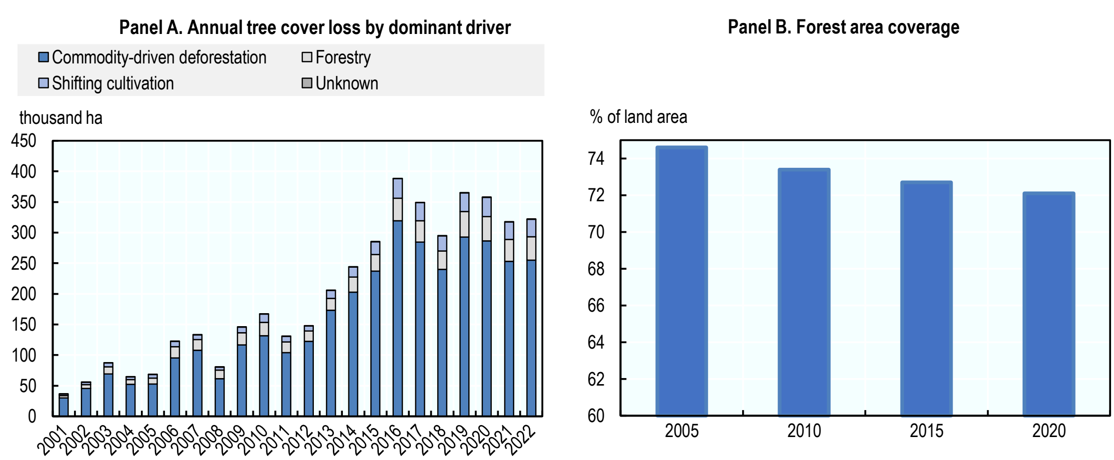
However, the current economic growth model has put the environment in Lao PDR under pressure. Lao PDR's rich natural resources – including minerals, hydropower and its diverse ecosystem – have contributed to the country's wealth and development in important sectors such as agriculture and tourism, providing jobs for more than 78% of its population (IFAD, 2018[46]). However, the current economic growth model has placed the environment under increasing pressure. While Lao PDR's wealth of human capital has increased over time, its wealth of natural capital has started to decline, mainly due to a decrease in the amount of non-renewable capital such as metals and minerals (Figure 2.23). Research suggests that in recent decades, forest loss and degradation have cost the country nearly 3% of its GDP per year, and that the health effects caused by pollution have an estimated annual cost equivalent to 15% of Lao PDR's GDP (World Bank, 2021[47]).

Lao PDR is home to important biodiversity, which needs protection. Of the 1 298 globally threatened species in the Indo-Burma Biodiversity Hotspot (consisting of Cambodia, Lao PDR, Myanmar, Thailand and Viet Nam, as well as some southern parts of the People's Republic of China [hereafter "China"]), 281 (22%) are found in Lao PDR (Critical Ecosystem Partnership Fund, 2020[48]). Forests, grasslands and other terrestrial habitats are being degraded, fragmented and lost as a result of the expansion of industrial agriculture and commercial timber extraction (World Bank, 2020[43]).These habitats are home to many rare and endangered species. In addition, the recent surge in investment (both domestic and foreign) in mining and hydropower activities is resulting in negative effects on biodiversity, as these activities are often being undertaken in protected areas. Biodiversity is further threatened by land conversion, urban development, climate change and pollution. In addition, commercial tree plantations can also be a threat to biodiversity as they risk reduce the diversity of plants and habitants of numerous species.

Deforestation, which is influenced by both legal and illegal economic activity, is a major challenge. Lao PDR has one of the highest levels of forest cover in Southeast Asia. An estimated 80% of the population are heavily reliant on forests for their well-being (UNEP GRID, 2023[49]). However, a combination of illegal logging, infrastructure development (such as hydropower, mining and roads) and the conversion of forests to agricultural land has caused forest loss. From 2001 to 2022, Lao PDR lost 4 370 000 ha of tree cover, which is equivalent to a 23% decrease (Global Forest Watch, 2023[50]) (Figure 2.24). Commercial agricultural expansion (commodity-driven deforestation) is the dominant driver of deforestation in Lao PDR (Figure 2.24, Panel A). Shifting agriculture (also called slash-and-burn agriculture) is another major driver of forest degradation in Lao PDR. This is a farming practice where farmers clear and burn forests in order to create ash-fertilised soil. Crops are then planted and harvested for one or two years in succession, after which the plot is abandoned and the practice is repeated in an adjacent patch of forest (Chen et al., 2023[51]).

Figure 2.24. The dominant drivers of deforestation in Lao PDR are linked to commercial agricultural expansion



Note: Panel A: The methods used to collect these data have changed over time, especially after 2015. "Commodity-driven deforestation" refers to large-scale deforestation linked primarily to commercial agricultural expansion. "Shifting agriculture" refers to the temporary loss of forest cover or permanent deforestation due to small- and medium-scale agriculture. "Forestry" refers to the temporary loss of forest cover from plantation and natural forest harvesting, with some deforestation of primary forests. The commodity-driven deforestation category represents permanent deforestation, while tree cover affected by the other categories often regrows. The dataset does not indicate the stability or condition of land cover after the tree cover loss occurs.

Source: Panel A: (Global Forest Watch, 2023[52]), *Tree Cover Loss by Dominant Driver*, www.globalforestwatch.org. Panel B: (FAO and UNEP, 2020[53]), *The State of the World's Forests 2020. Forests, biodiversity and people*, https://www.fao.org/state-of-forests/en/ (accessed on 23 November 2023).

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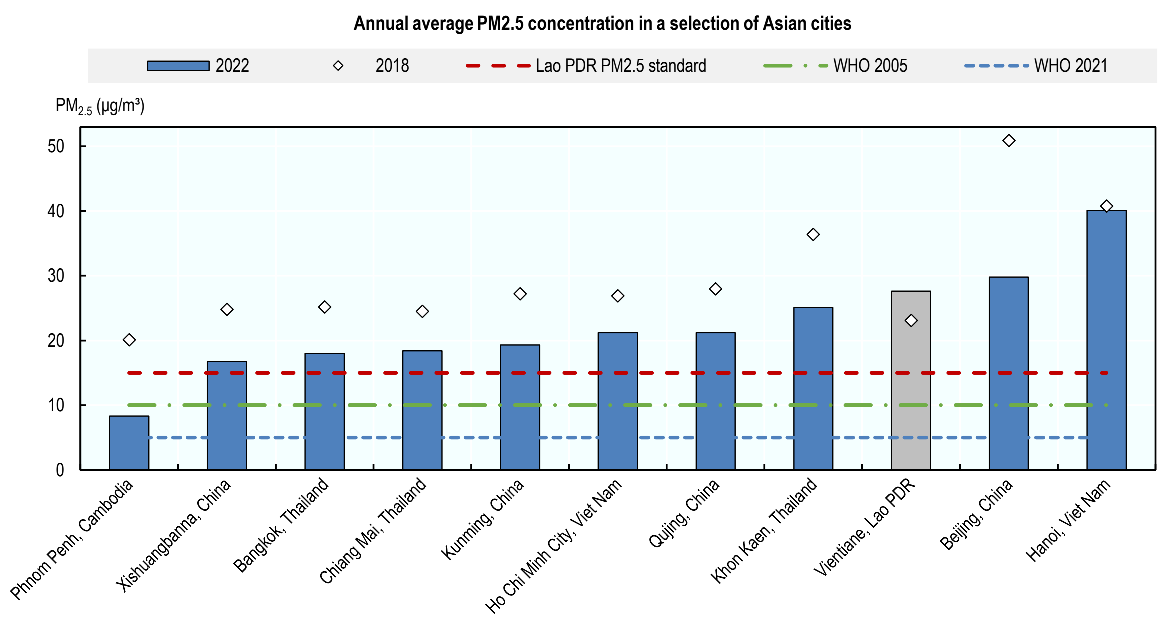
Air pollution is a significant challenge

Air pollution presents a serious threat to well-being. Lao PDR was ranked 149th out of 180 countries in the 2022 Yale Environmental Performance Index, and was among the worst-performing countries for air pollution (Wolf et al., 2022[54]). Particulate matter, and especially particulate matter with a diameter of 2.5 microns or smaller ($PM_{2.5}$), is the outdoor ambient air pollutant that is associated with the largest quantity of negative health effects globally. Chronic exposure to $PM_{2.5}$ considerably increases health risks, and the risk of respiratory and cardiovascular diseases in particular (OECD, 2024[55]). Although seasonal variations persist, monitored annual average $PM_{2.5}$ concentrations for Lao PDR for 2018 and 2022 significantly exceeded national and international air quality standards (Figure 2.25). A recent World Bank study estimated that environmental pollution contributed to 10 000 deaths in Lao PDR in 2017 (22% of all deaths in Lao PDR), and 27% of these deaths were from ambient air pollution. The cost of health effects from ambient air pollution in 2017 amounted to 3.5% of Lao PDR's GDP (World Bank, 2021[47]). Consequently, the burden of disease from ambient air pollution remains high (see Chapter 1 for further details).

Figure 2.25. Lao PDR has a high concentration of air pollution in comparison with other countries in Southeast Asia



Note: Data for Vientiane (Lao PDR) and Khon Kaen (Thailand) are from 2019 instead of 2018. The horizontal red line indicates the annual mean Lao PDR $PM_{2.5}$ air quality standard of 15 micrograms per cubic metre (µg/m³). The horizontal green line indicates the World Health Organization (WHO)'s 2005 $PM_{2.5}$ air quality guideline of 10 µg/m³. The horizontal blue line indicates the recently revised WHO 2021 $PM_{2.5}$ air quality guideline of 5 µg/m³.
Source: (IQAir, 2024[56]), *World's most polluted countries and regions*, https://www.iqair.com/us/world-most-polluted-countries (accessed on 9 November 2023).

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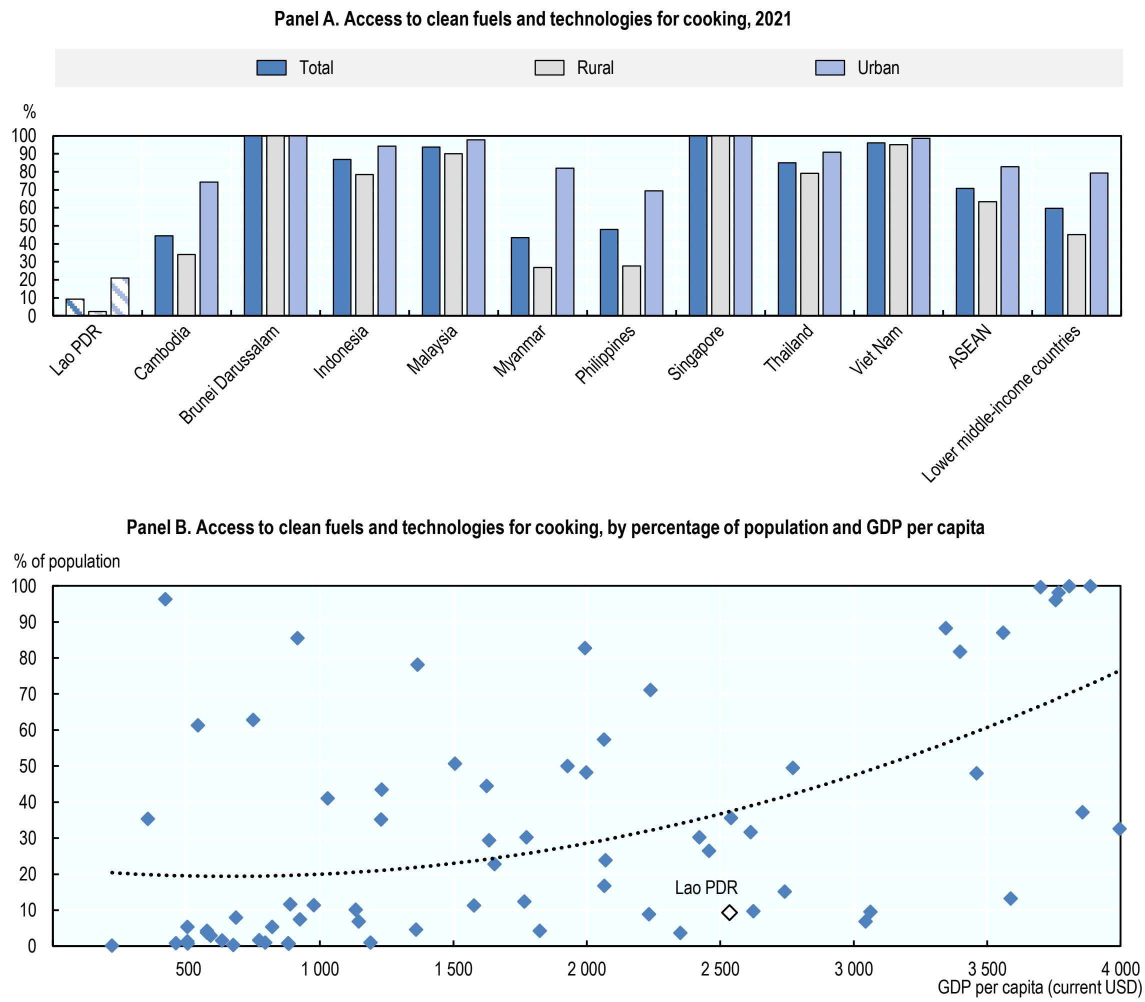
Burning wood and fuel oil plays a significant role in emitting atmospheric pollution. Lao PDR is affected by transboundary emissions from its neighbouring high-pollution countries of Cambodia, China, Myanmar, Thailand and Viet Nam, especially during the dry season (Ministry of Natural Resources and Environment, 2020[57]). The use of fire in order to clear land for agricultural purposes (so-called slash-and-burn practices) also plays a significant role in emitting atmospheric pollution. In addition, inadequate solid waste management practices, such as open dumping and the burning of waste, also contribute to air pollution (FAO, 2023[58]). Although Lao PDR's per capita waste generation rate is among the lowest in the Southeast Asia region, waste generation has doubled in Vientiane over the last decade and is expected to increase by another 46% by 2050 (World Bank, 2021[47]). The ban on burning garbage in Vientiane in December 2019 and the establishment of a hotline to report offences might reduce environmental damage if fully respected (The Laotian Times, 2019[59]).

Figure 2.26. Access to clean fuels and technologies for cooking across selected countries

Access to clean fuels and technologies for cooking (percentage of the population and per capita), 2021



Source: Panel A: (World Bank, 2024[1]), *World Development Indicators* (database), https://databank.worldbank.org/source/world-development-indicators. Panel B: Authors' compilation based on data from (World Bank, 2024[1]), *World Development Indicators* (database), https://databank.worldbank.org/source/world-development-indicators (accessed on 23 November 2023).

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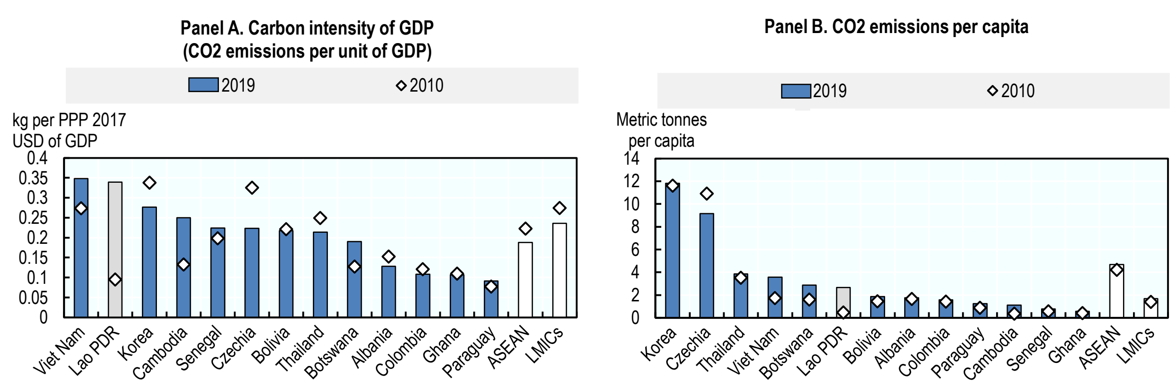
The use of solid fuels for cooking causes serious household air pollution. In 2021, only 9.3% of the total population in Lao PDR, and 2.4% of the rural population, used clean energies (for example, gaseous fuels, electricity, as well as an aggregation of any other clean fuels like alcohol) as their primary cooking energies. This compares with 60% in other lower middle-income countries, and 71% across ASEAN Member States (Figure 2.26, Panel A). While the use of clean energies increased by nearly 30 percentage points between 2000 and 2021 in the selected countries in Southeast Asia, the increase in Lao PDR over this time period was less than 8 percentage points. The selected countries' energy use in relation to income level indicates that 35-45% of the population in Lao PDR would be expected to use clean energies as their primary cooking energies in 2021 based on the country's per capita income level, rather than the actual level of 9.3% (Figure 2.26, Panel B).

Climate change: Lao PDR's contribution and vulnerability to climate change is increasing

Carbon dioxide (CO_2) emissions in Lao PDR are high in relation to the country's economic output. In relation to economic output, Lao PDR's 2019 CO_2 emissions (0.339 kilogrammes (kg) per 2017 purchasing power parity USD) were among the highest in the Southeast Asia region and were above the average for lower middle-income countries (0.236 kg per 2017 adjusted by Purchasing Power Parity USD) (Figure 2.27, Panel A). Notably, during the period from 2010 to 2019, Lao PDR demonstrated the most significant increase in carbon intensity compared with similar economies (Figure 2.27, Panel A). This surge can be primarily attributed to the commissioning of the 1 878 megawatt lignite-fired thermal plant in Hongsa in 2015, which produces electricity that is predominantly (95%) exported to Thailand. Furthermore, there are additional coal-fired plants in the pipeline – specifically in Xekong, Lamam, Houaphan and Boualapha – which could further elevate Lao PDR's carbon intensity (Asian Development Bank, 2019[60]). Similarly, per capita CO_2 emissions in Lao PDR (2.658 metric tonnes per capita) experienced the most substantial growth between 2010 and 2019 among a selection of comparable countries. Although Lao PDR's CO_2 emissions were aligned with those comparable countries in Southeast Asia in 2019, they remained 59% higher than the average for the lower middle-income country group (Figure 2.27, Panel B).

Figure 2.27. CO_2 emissions, both per unit of economic output and per capita, are high in Lao PDR given its level of economic development

CO_2 emissions per capita (tonnes) and per unit of GDP (kg per adjusted by Purchasing Power Parity USD 2015)



Source: (World Bank, 2024[1]), *World Development Indicators* (database), https://databank.worldbank.org/source/world-development-indicators (accessed on 10 February 2024).

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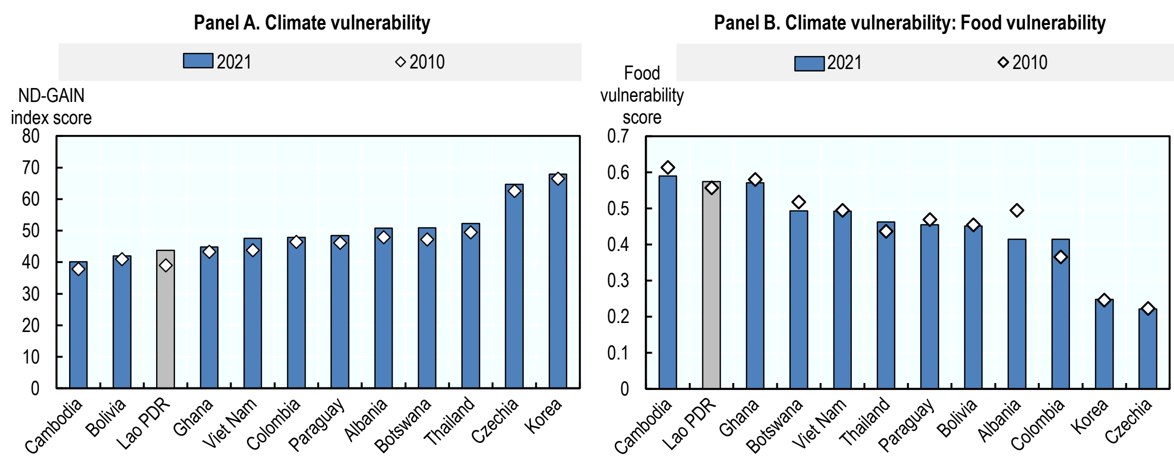
Lao PDR showcases ambitious climate mitigation objectives, as demonstrated by its nationally determined contributions (NDCs), with investment needs estimated at USD 4.8 billion (representing around USD 500 million annually until 2030). In practice, this is far more than the total amount of climate-related development finance currently being accessed by the country, including for both mitigation and adaptation measures (Government of Lao PDR, 2021[61]).

The importance of agriculture and hydropower for the economy make Lao PDR vulnerable to climate change. Lao PDR is vulnerable to natural disasters and extreme weather events, which have been increasing in frequency and intensity (Figure 2.28, Panel A). This vulnerability is further exaggerated by its lack of coping capacity (INFORM, 2022[62]). Almost all of Lao PDR's farming systems are vulnerable to flooding, drought and the late onset of the rainy season, with a high vulnerability to food security (Figure 2.28, Panel B). With the population's high level of dependency on traditional agricultural systems and a predominance of smallholder farms, the impacts of natural disasters can be devastating. Floods and droughts continue to be the most significant threats: some provinces experienced flooding every year between 2013 and 2019. Climate change is increasing the frequency and intensity of extreme rainfall events, resulting in more frequent and more severe flooding in vulnerable and rapidly growing cities along the Mekong River (UNEP GRID Geneva, 2024[63]).

Figure 2.28. Lao PDR is experiencing increased climate vulnerability



Note: Panel A: The Notre Dame Global Adaptation Initiative (ND-GAIN) Country Index summarises a country's vulnerability to climate change and other global challenges in combination with its readiness to improve its resilience. The more vulnerable a country is, the lower its score is, while the more ready a country is to improve its resilience, the higher its score. Panel B: A country's vulnerability to climate change is assessed through the food score in terms of food production, food demand, nutrition and rural population. Indicators consider the projected change of cereal yields, projected population growth, food import dependency, rural population, agriculture capacity and child malnutrition. The scale spans from 0 to 1, with a lower score corresponding to low vulnerability and a higher score corresponding to high vulnerability in the food sector. The most favourable score achieved throughout the world is 0.11, and the least favourable score is 0.79.
Source: (University of Notre Dame, 2023[64]), *Notre Dame Global Adaptation Initiative*, https://gain.nd.edu/our-work/country-index/download-data/ (accessed on 20 November 2023).

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Development priorities

To summarise, this diagnostic chapter identified four strategic pillars that can help Lao PDR build a more sustainable development path:

1. *Prosperity*: creating the conditions for opportunities to emerge in all sectors and for all citizens
2. *People*: making human capital development a priority
3. *Planet*: preserving Lao PDR's abundant natural wealth, fighting air pollution and mobilising green finance

The 9th NSEDP and other strategies reflect many of these priorities, especially the focus on human capital development.

The remainder of this report focuses on financing as the most binding constraint. Charting a new development path that builds on these three pillars, will require significant amounts of smart investment and reallocation of spending. However, Lao PDR faces a challenging financing landscape and has limited capacity for taxation and revenue generation. Working with all its partners towards a more sustainable structure of its public debt obligations, strengthening revenue generation, and fiscal and debt management, and focusing on investment that is sustainable, are clear priorities at the time of this report.

Notes

[1] This consists of two types of employment: those employed in the informal sector and those informally employed in the formal sector or in households.

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3 Opportunities and challenges in Lao PDR's sustainable development financing landscape

Lao People's Democratic Republic (Lao PDR) faces significant macroeconomic vulnerabilities that have been intensified by global events such as the COVID-19 pandemic and escalating food and energy prices. Consequently, the country grapples with pronounced fiscal and liquidity pressures and is currently in debt distress. Given these circumstances, Lao PDR's previous debt-driven infrastructure growth model is no longer viable. To effectively pursue its ambitious sustainable development agenda, the country must address its debt issues and the fragmented governance of its financing framework. Tackling these challenges is fundamental to build the type of sound environment required to harness additional and innovative resources in support of Lao PDR's development goals. This necessitates efforts to boost tax revenues, diversify investments and develop the domestic financial sector. Given Lao PDR's current financial constraints, sustained international support is essential to safeguard investments in key development areas, such as healthcare and education. In parallel, designing preventive strategies is crucial to ensuring long-term financial stability and avoiding future debt issues.

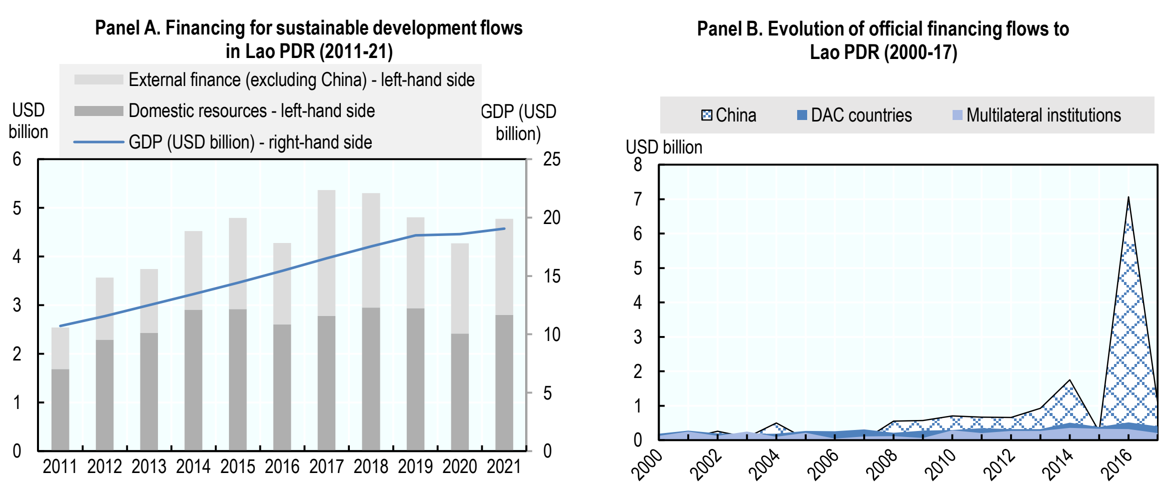
Lao PDR's sustainable development finance landscape has been instrumental in supporting the country's economic development

Lao PDR emerges from a successful decade of attracting external financing in order to advance its development objectives

The country's consistent economic growth over the past two decades was supported by a thriving financing landscape. Between 2005 and 2016, Lao PDR achieved a notable period of economic growth, consistently surpassing 7% annually. This sustained growth was accompanied by substantial and growing inflows of financing from external sources (Figure 3.1, Panel A), in particular official development finance (ODF) and foreign direct investment (FDI). For example, there was a significant increase in official development assistance (ODA) from bilateral and multilateral development partners, growing from USD 437 million (United States dollars) in 2011 to USD 773 million in 2016. Concurrently, FDI flows into the country also showed a robust increase over this period, growing from USD 301 million to USD 953 million.

The Lao PDR government's strong commitment to infrastructure development, as well as the People's Republic of China (hereafter "China")'s Belt and Road Initiative (BRI), have been two significant catalysts for this influx of financing. The surge in financing is in large part attributable to the Lao PDR government's strategy of investing in major infrastructure projects, especially in the energy and transportation sectors. This strategy was made possible by strong government borrowing from the country's main development partners, as well as a deliberate policy of FDI promotion. The increase in financing aligned with the availability of a large supply of external financing that coincided with the BRI's expansionary phase. From a yearly average of only USD 459.2 million between 2007 and 2010, China's total official financial commitments to Lao PDR reached an annual average of USD 1.8 billion between 2011 and 2017, with total financial commitments in 2016 alone reaching USD 7.1 billion (Figure 3.1, Panel B).

Figure 3.1. Lao PDR's economic growth went hand in hand with an increase in external financing



Note: In Panel A, values are in USD billion, 2021 constant prices. In Panel B, "DAC" stands for Development Assistance Committee".

Source: In Panel A, the authors' calculations are based on (OECD, 2023[1]), *Creditor Reporting System database*, https://stats.oecd.org/Index.aspx?DataSetCode=CRS1 for ODA and OOF flows; (World Bank, 2024[2]), *World Development Indicators*, https://data.worldbank.org/indicator/ and (UNWIDER, 2019[3]), *Government Revenue Database*, https://www.wider.unu.edu/project/government-revenue-dataset. In Panel B, the authors' calculations are based on commitments from (AidData, 2021[4]), *Global Chinese Development Finance Dataset*, https://www.aiddata.org/data/aiddatas-global-chinese-development-finance-dataset-version-2-0 and (OECD, 2023[1]) *Creditor Reporting System database*, https://stats.oecd.org/Index.aspx?DataSetCode=CRS1 (accessed on 15 October 2023).

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Energy and transportation emerged as the main economic sectors for external financing and investment. During the 2010s, the Lao PDR government's focus on energy and transport was rooted in its vision to transform the country. This transformation involved developing infrastructure that would enable the export and trade of energy, thereby generating revenue and establishing a balanced energy system for the country, as well as enhancing regional and international integration, particularly in Southeast Asia. Achieving these priorities required stepped up capital investments, which were only made possible through external financing by way of increased sovereign borrowing and foreign investment.

Following years of sustained growth, some of Lao PDR's main sources of financing pre-COVID-19 are starting to face bottlenecks

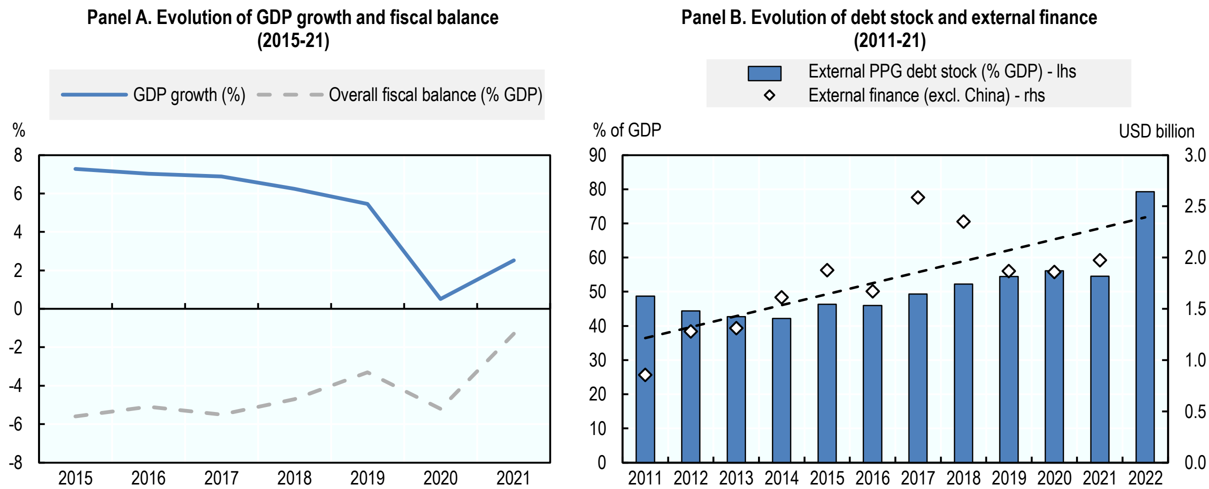
The dynamics of Lao PDR's sustainable development finance landscape explain the country's recent development achievements, but they are also a reminder of the challenges ahead. Growth in external financing flows to Lao PDR has greatly boosted the country's recent capacity to invest in its development priorities. This led to the rapid development of Lao PDR's electricity generation capacity thanks to the construction of new power plants, as well as improvements in connectivity through investments in railways, roads and ports. However, the country's success in attracting large volumes of financing from various sources also accentuated its vulnerabilities, particularly by rapidly increasing its debt burden while government revenue remained stagnant.

Warnings about mounting fiscal challenges surfaced in the 2010s, but Lao PDR's impressive strides in economic development allowed the country's financing model to endure. The International Monetary Fund (IMF) raised concerns early on about the escalating debt situation in Lao PDR and its long-term repercussions in the absence of drastic changes to fiscal practices, including borrowing and revenue mobilisation. The overall fiscal deficit was at a record low of -5.6% of gross domestic product (GDP) in 2015, before recovering in the years leading up to the COVID-19 pandemic (Figure 3.2, Panel A). However, the deficit was offset by high economic growth: between 2011 and 2017, Lao PDR was one of the fastest-growing economies worldwide, with GDP growth hovering around 7-8%. Spurred by strong and steady economic growth, important development outcomes were also materialising. As discussed in Chapter 2, this included progress in poverty reduction and access to basic infrastructure, as well as increases in income per capita.

Prior to the outbreak of the COVID-19 pandemic, Lao PDR's fiscal challenges were already triggering a decline in its main financing sources. After a peak in sustainable development finance during the mid-2010s, financing flows to the country appeared to taper off after 2017. The rapid increase in debt, which rose from 42% of GDP in 2014 to 52% in 2017, played a key role in this decline. Notably, financing from ODF providers experienced a slowdown due to both the culmination of the BRI's expansionary phase and Lao PDR nearing its borrowing capacity. While some financing sources (such as government revenue and FDI) held steady or even registered minor growth, this was not sufficient to offset the decline in ODF (Figure 3.2, Panel B).

In 2020, external shocks prompted a pronounced drop in sustainable development finance. The aftermath of the COVID-19 pandemic, coupled with increasingly restrictive global financing conditions in subsequent years, negatively affected financing flows to developing countries, including Lao PDR. Most of the country's financing flows registered a decline in 2020, except for ODA disbursements, which registered a modest increase. Nevertheless, the primary reason for the drop in financing for sustainable development in Lao PDR in 2020 was the decline in government revenue, which further strained the government's ability to meet its debt obligations, thereby also jeopardising the country's future financing options.

Figure 3.2. Until the COVID-19 pandemic, Lao PDR had been experiencing persistent fiscal deficits, which contributed to rapid debt build-up



Note: In Panel B, the trend line represents external finance (excluding China).
Source: For Panel A, the authors' calculations are based on (World Bank, 2024[2]), *World Development Indicators (database)*, https://data.worldbank.org/indicator/ and https://thedocs.worldbank.org/en/doc/b991970a7f5096ab093720e27d5f0b68-0500012021/related/data-lao.pdf. For Panel B, the authors' calculations are based on (OECD, 2023[1]), *Creditor Reporting System database*, https://stats.oecd.org/Index.aspx?DataSetCode=CRS1 and (World Bank, 2024[2]), *World Development Indicators (database)* https://data.worldbank.org/indicator/.

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Looking ahead, Lao PDR faces a challenging financing landscape. Stagnant government revenue, combined with increasingly restrictive global financing conditions, have made it more challenging for the country to fulfil its financing needs, putting its financial stability on a precarious footing. This is reflected in the slow recovery of financing flows to the country, which remain subdued. Exacerbating this are the elevated interest rates that the country faces as a result of increasingly restrictive global financing conditions and the downgrade of its sovereign credit rating in 2022. These factors have further curtailed Lao PDR's access to international capital markets, further limiting its financing options and ability to roll over its debt. The next section discusses the fiscal challenges facing Lao PDR following years of sustained financing growth and details their implications for the country's ability to finance its sustainable development in the future.

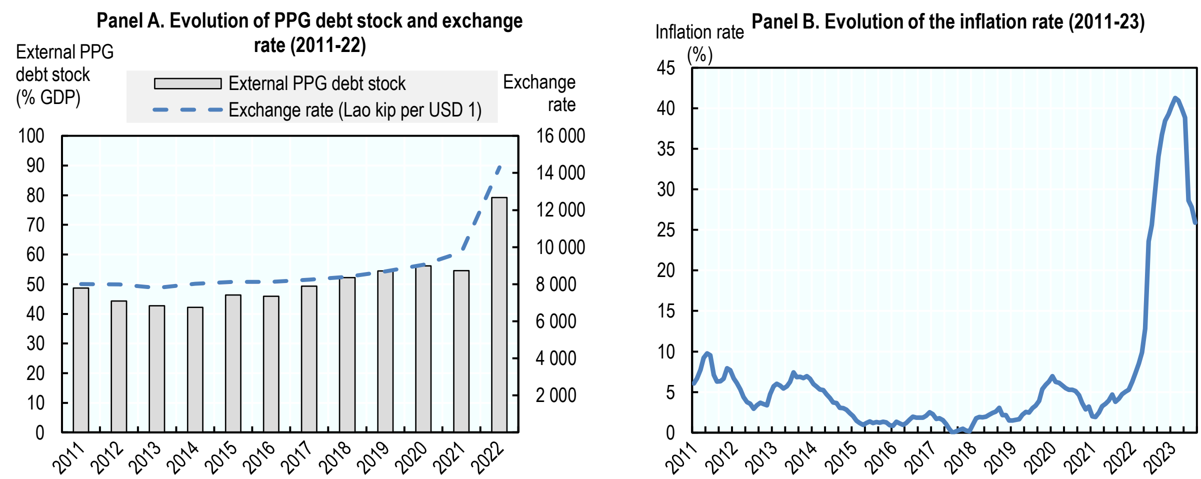
Lao PDR's debt distress is a symptom of long-term macroeconomic vulnerabilities

Lao PDR faces a challenging macro-fiscal situation

Lao PDR was already facing mounting macroeconomic vulnerabilities prior to the COVID-19 pandemic. Despite achieving significant development progress, with one of the fastest growth rates worldwide, Lao PDR was experiencing mounting macroeconomic vulnerabilities in the years leading up to the COVID-19 pandemic. Specifically, the country was facing a persistent fiscal deficit, with a current account balance of -7.9% of GDP in 2018 and -4.5% in 2019 due to low levels of government revenue and growing debt service from rapid debt accumulation. These vulnerabilities stemmed in part from the country's development and growth model, which centred on large infrastructure projects that were financed through public borrowing and tax incentive-based investment promotion. Moreover, economic growth was trending downward, from approximately 8% before 2013 to 6.9% in 2017 and 5.5% in 2019.

Recent crises, such as the COVID-19 pandemic and the global surge in food and energy prices, have intensified Lao PDR's economic fragilities. As a result of the pandemic, the country's economic growth plummeted to 0.5% in 2020 and only partially rebounded to 2.5% in 2021 and 2.7% in 2022. Pre-existing vulnerabilities and shallow buffers, including low levels of foreign exchange reserves, resulted in large macro-fiscal imbalances threatening Lao PDR's economic and financial stability. Although the country reduced its external borrowing, it faced growing difficulties in meeting its debt service obligations. As commonly seen in countries facing debt issues, the financial strain caused the local currency (the Lao kip) to depreciate by more than 50% against the United States dollar in 2022 (Figure 3.3, Panel A). This, in turn, contributed to a significant surge in the inflation rate (Figure 3.3, Panel B).

Figure 3.3. Macroeconomic imbalances materialised in 2022, notably because of a depreciation of the Lao kip and rapid inflation



Note: In Panel A, data for 2022 are preliminary. PPG stands for Publicly guaranteed debt.

Source: (Government of Lao PDR, 2022[5]), *Public and Publicly Guaranteed Debt Statistic Bulletin*, https://www.mof.gov.la/wp-content/uploads/2023/07/2022-Public-and-Publicly-Guaranteed-Debt-Bulletin-of-Lao-PDR-Final.pdf; (LAO Statistics Bureau, 2023[6]), *Laos Statistical Information Service*, https://laosis.lsb.gov.la; and World Bank (2024[2]), *World Development Indicators*, https://data.worldbank.org/indicator/.

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The country is now in debt distress. Lao PDR was already deemed to be at high risk of debt distress before the COVID-19 crisis due to its macro-fiscal vulnerabilities. The 2019 World Bank/IMF Debt Sustainability Analysis (DSA) of Lao PDR highlighted the country's inadequate financial buffers, rapid debt build-up and persistent primary deficit. It also pointed out specific vulnerabilities to shocks, especially risks associated with currency depreciation and contingent liabilities arising from state-owned enterprises (SOEs). Largely because of the Lao kip's depreciation, the public and publicly guaranteed (PPG) debt stock rose from 88% of GDP in 2021 to 112% of GDP in 2022. The latest DSA, carried out in May 2023, updated the country's status to "in debt distress" for both external and public debt under the Low-Income Countries Debt Sustainability Framework (LIC-DSF). It also deemed the country's debt unsustainable, highlighting the very high debt-to-GDP ratio and a significant rollover risk (IMF, 2023[7]).

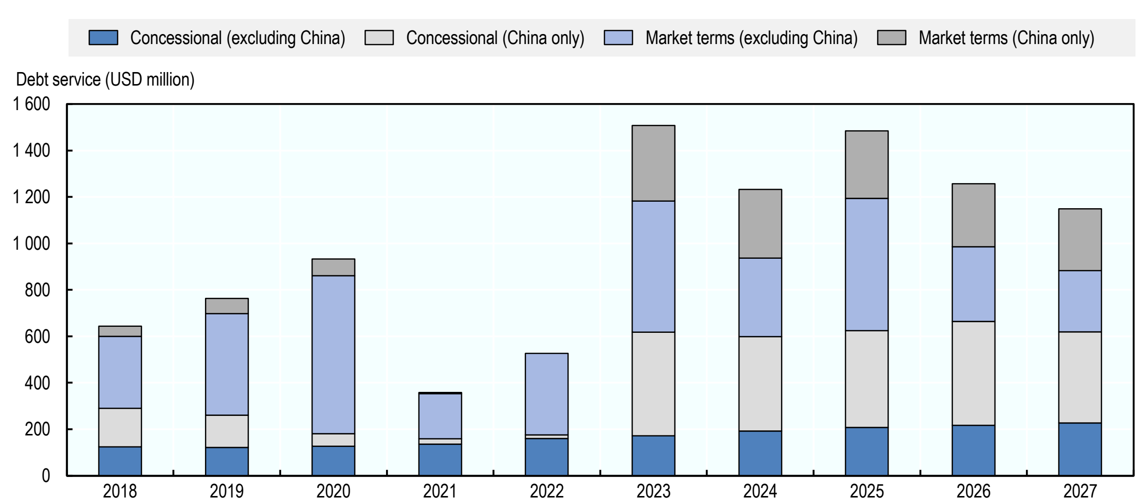
Lao PDR has only benefited marginally from international initiatives aimed at assisting debt distressed nations. The country benefited from the 2021 allocation of Special Drawing Rights (SDRs), which led to a modest allocation equivalent to USD 101.4 million, granted in proportion to Lao PDR's IMF quota (IMF, 2021[8]). On the other hand, Lao PDR did not participate in the Group of 20 (G20)-led Debt Service Suspension Initiative (DSSI) or the Common Framework for Debt Treatments beyond the DSSI, largely due to its debt profile. Since China (Lao PDR's primary lender) holds around one-half of its external debt, Lao PDR opted to engage in bilateral negotiations with China in order to secure a debt service suspension rather than pursuing consensus within broader initiatives such as the DSSI or the Common Framework, which would likely involve protracted negotiations with multiple creditors (IMF, 2023[9]).

The suspension of debt service negotiated with China prevented a default during the COVID-19 crisis, but this merely postponed the underlying debt issue. The bilateral negotiations resulted in the suspension of principal repayments to China worth USD 220 million in 2020, and the suspension of both principal and interest payments worth about USD 450 million in 2021 and USD 610 million in 2022 (Government of Lao PDR, 2022[5]). These suspensions deferred the problem rather than providing a lasting solution and, as a consequence, the country now faces a debt service to China totalling USD 769.8 million in 2023, with similarly high amounts (approximately USD 700 million annually) expected through at least 2027. In other words, Lao PDR's annual debt service to China has more than tripled compared with its average of USD 207 million per year in 2018-19, before the COVID-19 pandemic.

Lao PDR is grappling with significant financing needs and liquidity pressures that are expected to persist for years to come. Debt service was projected to surge by 186% in 2023 compared with 2022, reaching USD 1.51 billion and remaining at more than USD 1 billion through at least 2027 (Figure 3.4). The increase in debt service is largely attributable to the deferred debt payments to China and the 50% devaluation of the Lao kip against the United States dollar in 2022, which exacerbates repayment challenges by inflating the debt service cost (IMF, 2023[9]). In addition, the country's limited foreign currency reserves are expected to come under pressure due to the obligation to repay substantial external debt.

Figure 3.4. Lao PDR confronts a surge in debt service costs beginning in 2023

External PPG debt service (2018-27)



Source: (Government of Lao PDR, 2022[5]), *Public and Publicly Guaranteed Debt Statistic Bulletin*, https://www.mof.gov.la/wp-content/uploads/2023/07/2022-Public-and-Publicly-Guaranteed-Debt-Bulletin-of-Lao-PDR-Final.pdf, (accessed on 23 October 2023).

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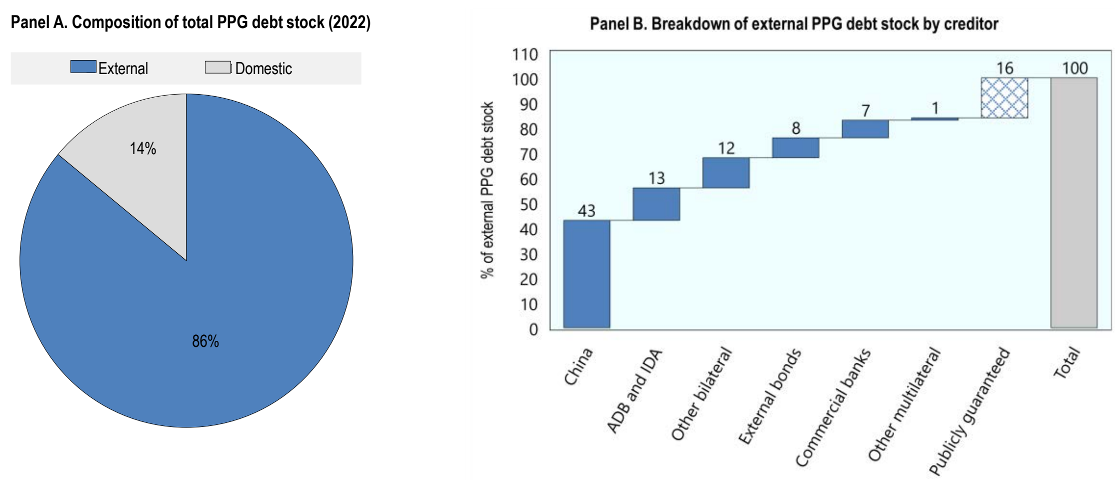
Lao PDR's fiscal situation has adversely affected its sovereign credit rating, restricting the country's ability to secure new financing. The deterioration in the country's fiscal position is expected to pose challenges for debt servicing in the coming years, given the limited options for Lao PDR to roll over and refinance its debt. Lao PDR already experienced a downgrade of its sovereign credit rating in 2022, with Fitch Ratings downgrading Lao PDR's long-term foreign currency issuer default rating (IDR) to "CCC-" from "CCC" in August of that year. Ratings in the "CCC+" to "CCC-" range indicate substantial credit risk and a real possibility of default. By October 2022, Moody's had followed suit by lowering Lao PDR's foreign currency sovereign debt rating to "Caa3" from "Caa2". As a result, Lao PDR has encountered increasing challenges in accessing market financing, jeopardising its ability to fulfil its debt commitments in the near future.

Lao PDR is largely indebted externally, with China as its primary creditor

Most of Lao PDR's public debt originates from external sources. The country's external debt stock amounted to USD 10.5 billion in 2022, representing 86% of its total external PPG debt stock (Figure 3.5, Panel A). Such a distribution can be attributed to Lao PDR's limited access to domestic finance, which stems from its underdeveloped financial sector. In fact, until 2018, the country's debt stock was entirely owed to external creditors.

China holds a significant portion of Lao PDR's total debt. Approximately 43% of the nation's total PPG debt stock is owed to China (Figure 3.5, Panel B). This surpasses the debt owed to all other bilateral and multilateral creditors combined, which amounts to a mere 26% of the total debt. While having such a concentration of debt with China enabled easier bilateral negotiations for debt service suspension, it also implies a heightened financial dependency on Lao PDR's main creditor.

Figure 3.5. Lao PDR's debt profile is biased towards external debt, which is largely owed to China



Source: (IMF, 2023[7]), *Lao PDR Debt Sustainability Analysis*, https://www.elibrary.imf.org/view/journals/002/2023/171/article-A003-en.xml (accessed on 20 October 2023) and OECD staff calculations.

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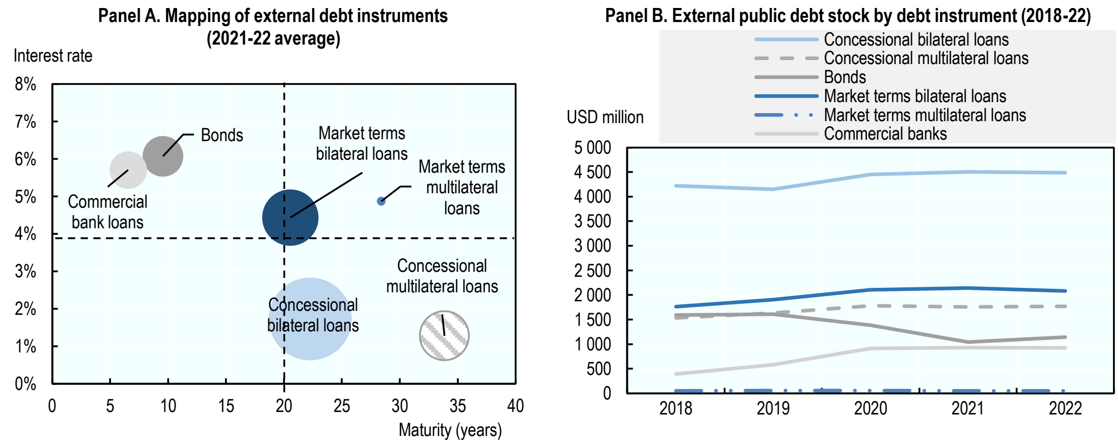
In the wake of the current debt crisis, Lao PDR faces constrained access to sustainable development financing. The country's access to international capital markets has greatly diminished, with the downgrading of its sovereign credit rating, making external bond issuance more challenging. This is visible in the decreasing volume of bonds in Lao PDR's external public debt stock that has been observed since the COVID-19 pandemic, which declined from around USD 1.6 billion in 2018-19 to USD 1.4 billion in 2020 and to USD 1 billion in 2021. Additionally, the debt situation has narrowed the options for Lao PDR to further borrow from its main development partners. While official loans from both multilateral and bilateral development partners increased until 2020, their volume has since plateaued. Recently, Lao PDR has primarily used bond issuances in the Thai and domestic markets, as well as loans from commercial banks, to repay non-concessional debt due in 2022. In fact, commercial bank loans, characterised by high interest rates and short maturity, were the fastest-growing debt instrument used by the country between 2018 and 2022 (Figure 3.6).

Figure 3.6. Lao PDR has compensated for constrained access to capital markets by increasing its use of official and commercial loans



Note: In Panel A, bubble size represents the size of the debt stock.
Source: (Government of Lao PDR, 2022[5]), *Public and Publicly Guaranteed Debt Statistic Bulletin*, https://www.mof.gov.la/wp-content/uploads/2023/07/2022-Public-and-Publicly-Guaranteed-Debt-Bulletin-of-Lao-PDR-Final.pdf (accessed on 20 October 2023).

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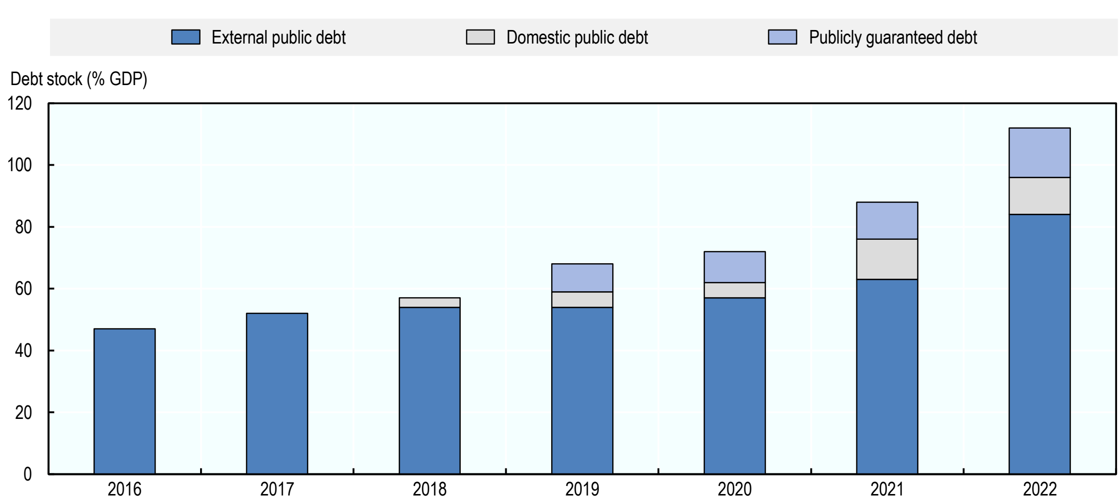
Due to challenges in external borrowing, Lao PDR has pivoted towards domestic borrowing. Practically non-existent before 2017, domestic borrowing gained traction from 2018 onwards. Between 2018 and 2022, the domestic public debt stock grew from 3% to 12% of Lao PDR's GDP (Figure 3.7). This increase in domestic borrowing was influenced in large part by the issuance of domestic bonds in order to settle public investment arrears and recapitalise the country's state-owned banks.

Figure 3.7. External debt continues to dominate, but the government of Lao PDR is increasingly turning to domestic borrowing

Total PPG debt stock (2016-22)



Note: Data for 2022 are preliminary.
Source: (Government of Lao PDR, 2022[5]), *Public and Publicly Guaranteed Debt Statistic Bulletin*, https://www.mof.gov.la/wp-content/uploads/2023/07/2022-Public-and-Publicly-Guaranteed-Debt-Bulletin-of-Lao-PDR-Final.pdf (accessed on 20 October 2023).

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Lao PDR's publicly guaranteed debt stock has also grown between 2019 and 2022. The publicly guaranteed debt stock has increased steadily from 9% of the country's GDP in 2019 to 10% of its GDP in 2020, 12% in 2021 and 16% in 2022. This upward trend suggests that the government is taking a more active role in backing debts, especially from SOEs. However, risks associated with continued growth of public guarantees should be taken into account, including greater exposure to fiscal risks that could in turn lead to further downgrades of the country's sovereign credit rating, as well as to increasing borrowing costs that could make access to capital markets unviable.

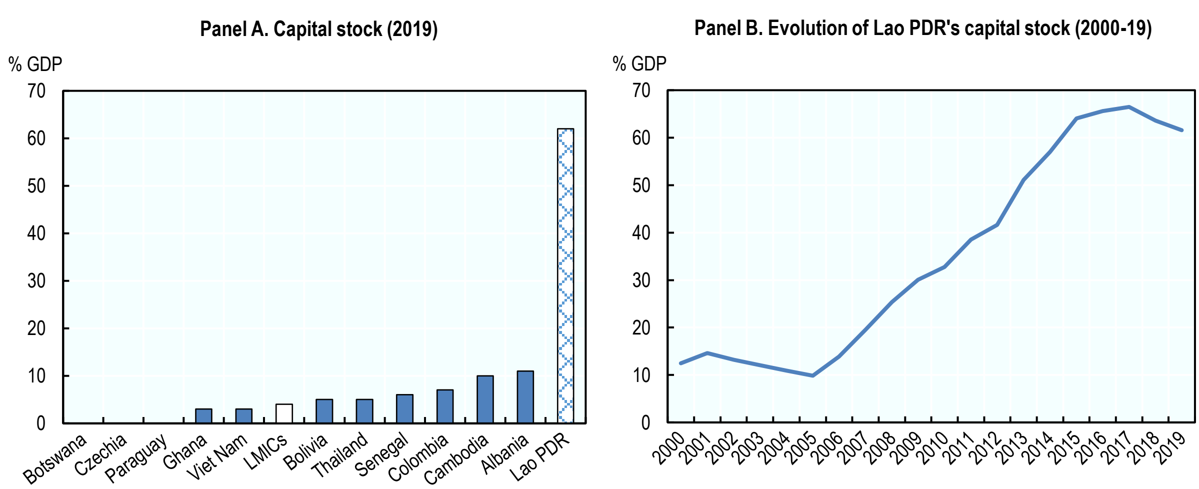
Lao PDR's pre-COVID-19 economic growth model has become unsustainable

Lao PDR has been among the fastest-growing economies in the world in the 2000s and 2010s, propelled by substantial public investments financed through borrowing and public-private partnerships (PPPs). The country's economy expanded at an average rate of 8% over the period from 2011 to 2017 (Figure 3.9). This growth primarily stemmed from public and private investment in infrastructure, notably in the hydropower, transportation and mining sectors. Capitalising on its hydroelectric power potential, Lao PDR has invested heavily in hydroelectric power plants and transmission lines and has aspirations of becoming "the battery of Southeast Asia", with the SOE Électricité du Laos incurring debt in order to take a share in numerous projects.

The government of Lao PDR borrowed extensively in order to develop the country's transportation infrastructure. A notable instance is the USD 5.9 billion construction project for a Lao PDR-China high-speed railway connecting Vientiane with Kunming, which is part of China's BRI. China shouldered 70% of this cost, while Lao PDR covered the remaining 30%, partly through loans. Another example is the Thanaleng Dry Port, which was designed to boost Lao PDR's cross-border trade with Thailand and China, and which was also partially financed through borrowing.

Many of Lao PDR's investments in the energy and transportation sectors have been made possible through the use of PPPs. Indeed, PPPs have promoted the rapid growth of the country's capital stock, making it an outlier in the world due to the outsized volume of its PPP capital stock in proportion to its GDP (Figure 3.8).

Figure 3.8. Lao PDR has become an outlier in terms of capital stock arising from public-private partnerships



Note: "LMICs" refers to "Lower middle-income countries".
Source: (IMF, 2021[10]), *Investment and Capital Stock Dataset* (database), https://data.imf.org/?sk=1ce8a55f-cfa7-4bc0-bce2-256ee65ac0e4 (accessed on 13 October 2023).

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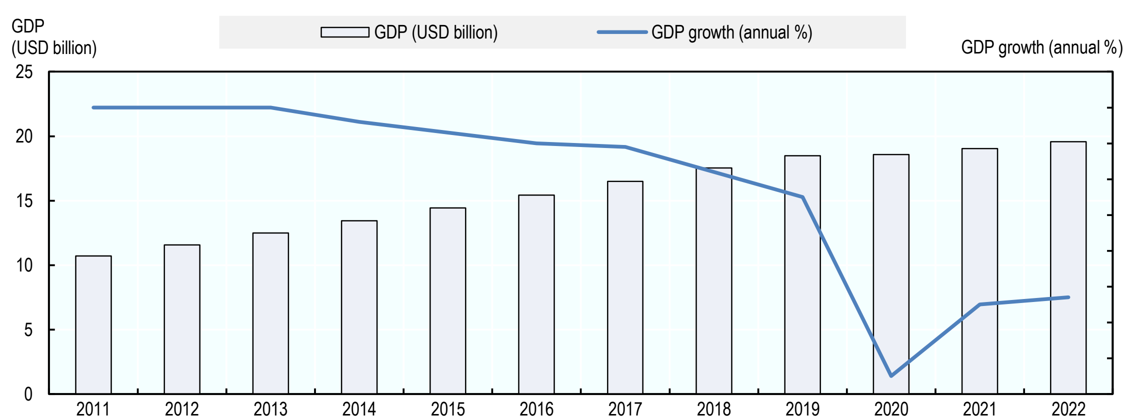
However, in light of Lao PDR's mounting fiscal challenges, this heavy reliance on PPPs is not sustainable in the long term in order to continue promoting investment and economic growth. In fact, PPP investments began to slow down after 2017, following a 12-year period of consistent rapid growth. While the government's extensive use of PPPs has been successful in attracting investment, it has also introduced fiscal challenges and risks that have contributed to the country's debt problems. These challenges include forgone revenue from tax exemptions, fiscal commitments and contingent liabilities. The fact that Lao PDR exhibits low PPP regulatory quality is an added concern considering the fiscal significance of PPPs in the country (World Bank, 2023[11]).

The protracted post-pandemic recovery has exacerbated Lao PDR's fiscal dilemma, making it more challenging for the country to overcome its debt problem. Following the COVID-19 pandemic and during a period of global inflation, Lao PDR's economic growth is only just starting to recover. The country's growth dropped from 5% in 2019 to 0.5% in 2020 (Figure 3.9). The delayed reopening of the country's borders in mid-2022, coupled with its economic reliance on neighbours like China (which also lifted border restrictions comparatively late, in 2023), resulted in modest economic growth in 2021 and 2022, with GDP growth rates reaching 2.5% in 2021 and 2.7% in 2022. Nonetheless, future projections indicate a swifter recovery from 2023 onwards, fuelled by increased regional growth and the reopening of borders. Specifically, these projections suggest a growth rate of 4% in both 2023 and 2024, although this remains below pre-pandemic levels (IMF, 2023[9]).

Figure 3.9. The economic downturn in Lao PDR makes debt reduction a challenging task

Evolution of GDP (in USD billion) and GDP growth (2011-22)



Note: GDP in USD billion (constant 2015 prices).
Source: World Bank (2024[2]), *World Development Indicators (database)*, https://data.worldbank.org/indicator/ (accessed on 15 October 2023).

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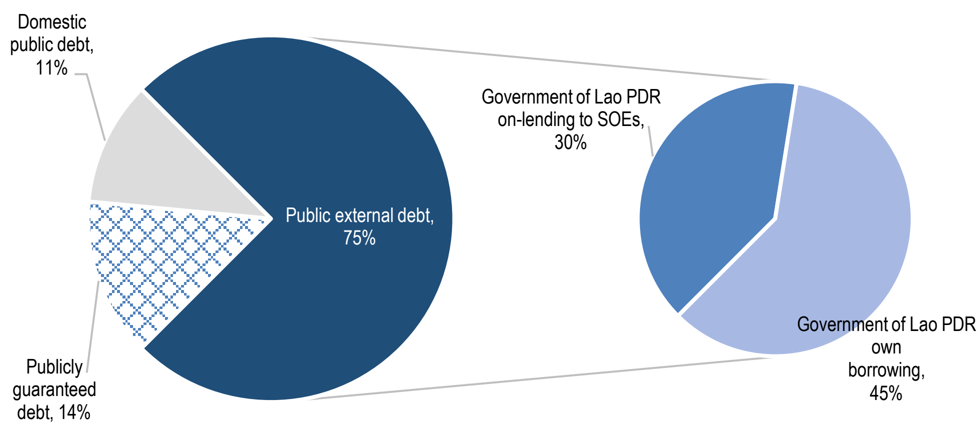
SOEs are ubiquitous in Lao PDR's economy, yet they also contribute to its debt challenges. Beyond the government of Lao PDR's external borrowing, which accounts for 45% of the country's PPG debt stock, the national debt stock comprises debt on-lent by the government to SOEs (30% of the total debt) and publicly guaranteed debt (14% of total), as illustrated in Figure 3.10. Consequently, although SOEs are instrumental in promoting economic growth, they are also partly accountable for the rapid debt build-up. Given Lao PDR's difficult financial context, its continued reliance on SOE-related borrowing in order to promote growth appears untenable. A shift towards identifying alternative, sustainable avenues for broad-based economic growth is therefore necessary. As elaborated in the section on a policy and governance framework for financing sustainable development, although addressing the fiscal risks and challenges posed by SOEs is critical, achieving sustained economic growth will also require tackling other SOE governance issues, such as their overpowering presence in the economy and their anti-competitive behaviour, which stifles the development of the private sector.

Figure 3.10. SOEs contribute significantly to Lao PDR's debt issues

Share of PPG debt stock (2022)



Source: (Government of Lao PDR, 2022[5]), *Public and Publicly Guaranteed Debt Statistic Bulletin*, https://www.mof.gov.la/wp-content/uploads/2023/07/2022-Public-and-Publicly-Guaranteed-Debt-Bulletin-of-Lao-PDR-Final.pdf.

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Local governments in Lao PDR also play a significant role in the country's fiscal landscape. Between 2015 and 2019, local governments generated 23% of domestic revenues, were responsible for 31% of public expenditures and accounted for about one-half of the country's fiscal deficit (World Bank Group, 2023[12]). This underscores the potential of local governments to not only influence the fiscal situation but also contribute to the nation's broader socio-economic objectives. In particular, local authorities can play a pivotal role in enhancing fiscal discipline and ensuring a strategic alignment of public expenditure with national development priorities. In addition, as discussed in Chapter 5 on sustainable investment, local and provincial authorities are also involved in the multilevel process to approve new investments.

Steering the country towards sustainable development requires curtailing its debt burden and **enhancing fiscal discipline and efficiency**. Conscious of this, and with support from the Asian Development Bank (ADB), the government of Lao PDR has recently initiated a high-level dialogue on good practices for enhancing its public debt management (Asian Development Bank, 2023[13]). Looking forward, the anticipated budget constraints suggest that achieving Lao PDR's former high growth rates will be challenging, as the financial difficulties that the country is facing could hinder the government's ability to invest in critical sectors, potentially slowing economic development.

In this context, efforts to diversify the economy and bolster sectors beyond infrastructure, such as the tourism and agricultural sectors, can pave the way for a more balanced, diversified and resilient economic landscape in the future. In order to be successful, such efforts will need to be accompanied by an effort to establish conducive conditions for attracting and mobilising sustainable financing sources. As detailed in the following sections, this includes a clear policy and governance framework for sustainable development financing and removing bottlenecks that hinder the country's access to sustainable development finance.

Policy and governance framework for financing sustainable development

Lao PDR has outlined its sustainable development objectives in a comprehensive and ambitious policy framework

With support from its development partners, Lao PDR has developed a wide-ranging and ambitious policy framework. The country's sustainable development agenda is anchored in two overarching documents: Lao PDR's *Vision 2030 and 10 Year Socio-Economic Development Strategy (2016-2025)*, published in 2016 (Government of Lao PDR, 2016[14]), and the *National Green Growth Strategy of the Lao PDR until 2030*, adopted in 2019 (Government of Lao PDR, 2019[15]). This vision is backed by subsequent strategic documents, in particular the *9th National Socio-Economic Development Plan* (NSEDP)*2021-2025)* (Government of Lao PDR, 2021[16]) (which received a mid-term review in 2023) and the associated Financing Strategy released in 2023 (Government of Lao PDR, 2023[17]). In addition, the country has also developed a Smooth Transition Strategy (STS) for its graduation from the United Nations (UN) list of least developed countries (LDCs) in 2026 (Government of Lao PDR, 2023[18]). This multipronged agenda appears particularly ambitious considering the difficult economic and financial context within Lao PDR.

While this ambition is commendable, it raises questions about Lao PDR's capacity to implement these multiple strategies concurrently, given the prevailing challenging economic and financial circumstances. The challenge is not only in the articulation of these policies but also in their effective implementation. The complexity of managing multiple interlinked strategies could stretch Lao PDR's administrative and financial capabilities to their limits. It will thus be critical to assess the implementation frameworks and the need to prioritise initiatives, as well as to properly sequence strategic actions in order to ensure that the country's limited delivery capacity does not lead to inefficient allocation of scarce resources.

The 9th NSEDP, which was approved in 2021, outlines Lao PDR's sustainable development aspirations through 2025. Following on from the previous NSEDP, which spanned 2016-20, the current plan emphasises three priorities: (i) preparing for LDC graduation; (ii) confronting development challenges, including financial constraints and emerging threats like COVID-19 and climate change; and (iii) enhancing the country's human capital and stimulating economic growth. The 9th NSEDP aims to serve as a blueprint for aligning the efforts of both internal and external development stakeholders. Accompanied by a thorough monitoring and evaluation framework, it was drafted through a consultative process involving government entities as well as key development partners. Considering Lao PDR's financial difficulties, the 9th NSEDP integrates considerations regarding debt and the country's immediate needs into its assessment of necessities and priorities.

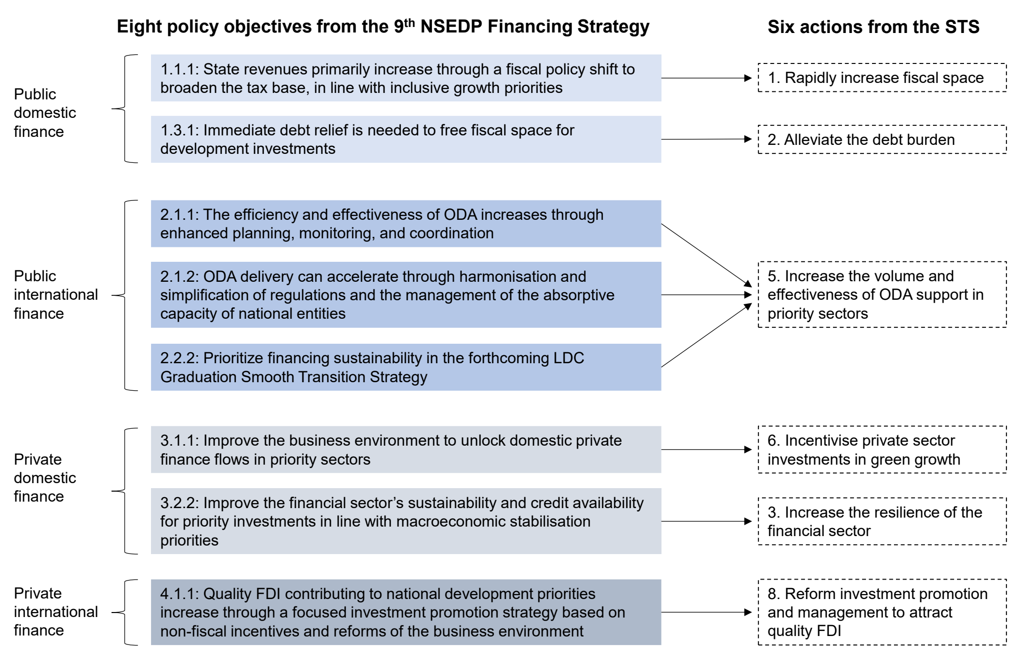
The 9th NSEDP acknowledges the direction set by Lao PDR's National Green Growth Strategy (NGGS) in ensuring sustainable socio-economic development. Shared objectives between the NGGS and the 9th NSEDP include stimulating economic growth, promoting the sustainable use of natural resources, minimising vulnerabilities to natural disasters and global economic dynamics, and curbing pollution and greenhouse gas (GHG) emissions.

The Financing Strategy for the 9th NSEDP has been developed to support the implementation of the country's sustainable development goals. Published in mid-2023, the 9th NSEDP Financing Strategy benefited from strong support from the UN. The Financing Strategy was developed as part of the country's Integrated National Financing Framework (INFF) process, which aims to integrate Lao PDR's sustainable development goals with its national budgeting and financial planning. Through its 54 actions and policies, the 9th NSEDP Financing Strategy encompasses a holistic view of financing (in line with the Addis Ababa Action Agenda (AAAA)) by looking at public, private, domestic and external financing sources. The development of the Financing Strategy represented a significant effort requiring consultation with multiple parts of the government and positioning Lao PDR as one of the first countries in the world to publish a financing strategy based on the INFF approach. However, the timing of its release (halfway through the time frame covered by the 9th NSEDP) leaves less than two years for implementation and may require strict prioritisation.

Lao PDR has also developed an STS in anticipation of its 2026 graduation from the UN list of LDCs. In 2021, the UN General Assembly recommended Lao PDR for graduation from the list of LDCs. Acknowledging the challenging global context, the UN General Assembly granted a five-year preparatory period leading up to Lao PDR's graduation in 2026. The STS, with its 22 actions spanning 4 pillars, appears ambitious given the country's financial constraints. Even with the five-year buffer, there are some concerns regarding Lao PDR's capacity to achieve its graduation with momentum in a context requiring stringent fiscal discipline.

Lao PDR's efforts to establish a coherent and comprehensive policy framework for sustainable development constitute a positive development. The different sustainable development policy documents not only complement one another but also recognise specific areas of interconnectedness and overlap. The 9th NSEDP Financing Strategy and the STS in particular have overlapping policy objectives and actions. Specifically, 8 policy objectives from the Financing Strategy (out of a total of 54) match with 6 STS actions (out of a total of 22) (Figure 3.11). This reflects the understanding that synergies may exist across the various parts of Lao PDR's development agenda. However, significant co-ordination efforts will be required in order to prevent redundancies or governance challenges from arising during the implementation phase, as discussed in the next section.

Figure 3.11. Eight of the 9th NSEDP Financing Strategy's policy objectives match with six of the STS's actions



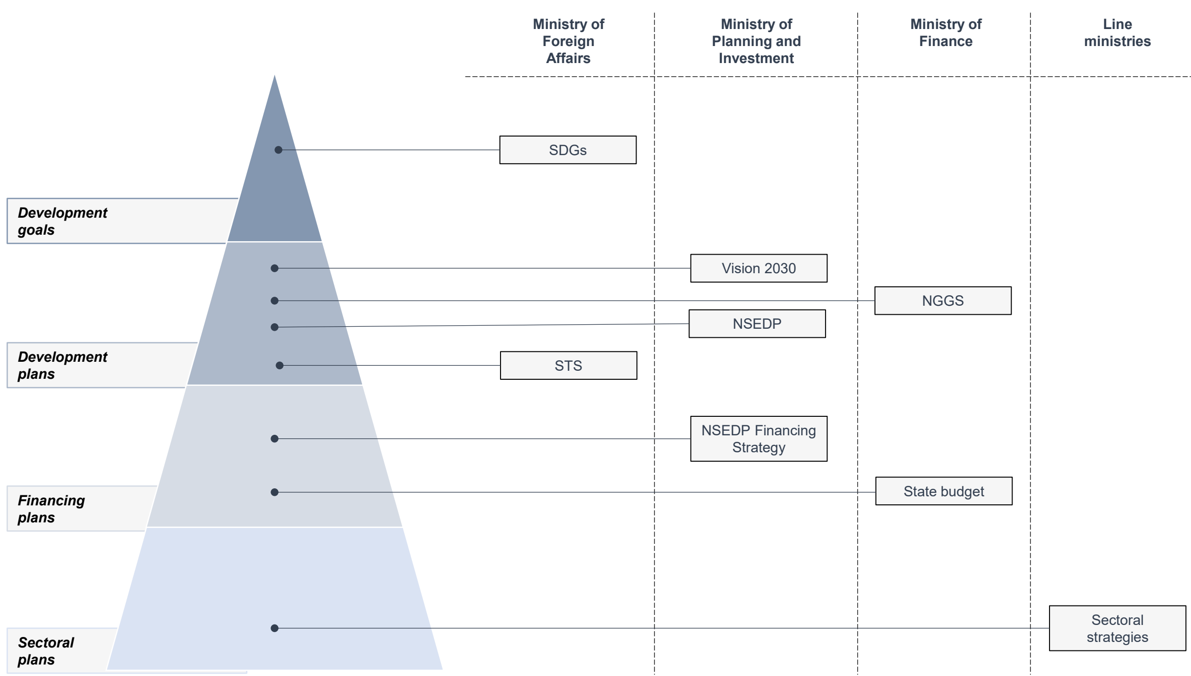
Source: Authors' design, based on (Government of Lao PDR, 2023[17]), *9th National Socio-Economic Development Plan Financing Strategy (2023-2025)*.

The governance structure underpinning Lao PDR's sustainable development agenda appears fragmented

Although Lao PDR's policy framework for sustainable development is robust and well-conceived, its practical implementation might face hurdles due to the fragmented governance structure. Beyond the strategic direction and vision provided by the policy framework, it is crucial to ensure collaboration among all sustainable development agenda stakeholders. Currently, the governance structures for the policy framework remain fragmented, with various parts of government spearheading the different segments of the sustainable development agenda and operating on diverse implementation time frames.

Responsibilities related to the country's sustainable development agenda are dispersed across multiple institutions. For instance, whereas the Ministry of Foreign Affairs oversees the Sustainable Development Goals (SDGs) and the STS for LDC graduation, the Ministry of Planning and Investment is responsible for the medium- (NSEDP) and long-term (Vision 2030) development plans and for the INFF process, including the development and monitoring of the 9th NSEDP Financing Strategy (Figure 3.12). Co-chairing arrangements – such as the National Steering Committee for Green Growth chaired by the Deputy Prime Minister and the Minister of Finance, with the Deputy Minister of Planning and Investment as Vice-Chair – have enabled some degree of intergovernmental consultation and co-ordination. Maintaining such collaborative efforts during the implementation of the sustainable development agenda will be critical in order to prevent intergovernmental political rivalry affecting the agenda's success.

Figure 3.12. Different parts of the government of Lao PDR lead the various aspects of the sustainable development agenda



Source: Authors' design.

Adding to the fragmentation, Lao PDR's primary creditor, China, has so far shown limited involvement in the country's strategic development co-ordination mechanisms. China has taken a back seat in Lao PDR's governance regarding sustainable development finance (for instance, contributing minimally to the INFF process that started in 2017 with the country's Development Finance Assessment (United Nations, 2017[19])). As a result, the governance framework developed since the inception of the INFF process in December 2021 only reflects a portion of Lao PDR's financing landscape, raising legitimate concerns about a lack of transparency, accountability and co-ordination, especially due to the significance of China's financial support of the country and its important fiscal implications. The fact that China has recently started attending the annual donor co-ordination meetings organised by the government of Lao PDR (with support from the UN Resident Coordinator) represents a welcome development but should only be considered a first step towards China's more active participation in Lao PDR's co-ordination mechanisms.

The fragmented governance framework translates into a lack of co-ordination and policy coherence at the national level

The fragmented governance framework is apparent across many different sectors and financing sources, leading to inefficiencies. A fragmented governance framework prevents a holistic and unified understanding of the multi-dimensional impacts and trade-offs of government strategies and policies related to sustainable development. In Lao PDR, for example, this has made it difficult to comprehensively evaluate the trade-offs of prioritising economic growth sectors, such as mining or hydropower, when such decisions might negatively affect environmental or social goals (see the section on recent evolutions and the state of play of Lao PDR's financing for a sustainable development landscape). Another issue is the highly prevalent trend of using tax incentives as the primary tool for promoting private investment, which can be effective in drawing private sector interest but often results in a significant reduction in government revenue. Balancing the positive and negative implications of such policy decisions requires the establishment of mechanisms for direct engagement and co-ordination among all relevant institutions: for example, between the Ministry of Finance, the Ministry of Planning and Investment, relevant sector ministries, and provincial governments.

Overlapping responsibilities among government entities and a lack of proper co-ordination mechanisms further complicate governance in key areas of sustainable development finance. For example, this is the case for investment-related policies and processes where multiple institutions and levels of government are involved in policy making and in project review and approval. Approval procedures for foreign investments thus necessitate the involvement of several ministries and levels of government, from the national government to provincial authorities. Without adequate co-ordination mechanisms, such complexity can breed opacity and result in inefficiencies, negative externalities and delays in project implementation. Chapter 5 further discusses the need for clear inter-institutional co-ordination mechanisms in order to ensure a whole-of-government approach to investment, as well as the alignment of investment, environmental, development and sectoral strategies.

Some development partners have also expressed concerns over the multiple government counterparts and convoluted governance within Lao PDR's sustainable development agenda. The blurry delineation of roles and responsibilities among government institutions is perceived as complicating development partners' engagement with the government of Lao PDR. The interlinked nature of the various strategies relevant for sustainable development financing, which are managed by different tiers or parts of the government, creates confusion regarding who to approach for specific subjects. The maze of responsibilities also results in extended government approval times for some decisions concerning development co-operation. This includes green-lighting new development projects or granting operating permissions to new international non-governmental organisations (NGOs), which many development partners rely on for project implementation.

Recent budget constraints and increased competition for scarce resources risk further weakening co-ordination. A unified and co-ordinated approach to sustainable development governance is essential in order to ensure that development stakeholders' efforts to harness financing lead to tangible development impacts. This is especially true for new and innovative financing sources (which often lack a pre-existing policy and governance framework), with clear roles and responsibilities being defined across government and other development stakeholders. The Lao PDR government's ongoing efforts to monetise the country's natural resources is a case in point. In the absence of a clear policy framework, which would clearly delineate the roles and responsibilities of government institutions and other development partners in designing, deploying and using the proceeds of novel financing instruments, various government entities are independently exploring the potential of innovative financing instruments such as sovereign carbon credits. Government entities are also reaching out to different development partners for help with determining viable methods for the issuance of sovereign carbon credits and the allocation of their proceeds. Such disjointed efforts may result in inefficiencies down the line, preventing the Lao PDR government from fully benefiting from these new financing opportunities. The section on innovative financing sources discusses the specific case of sovereign carbon credits, and describes different government entities' multiple endeavours to develop them and access their resources with the support of different development partners. Box 3.1 describes the key role of development partners in supporting greater co-ordination and preventing fragmentation in the field of sustainable development finance.

Box 3.1. Development partners are essential for cultivating sound governance and effective co-ordination in support of Lao PDR's sustainable development agenda

Development partners play a pivotal role in Lao PDR's sustainable development financing landscape. In the past, Lao PDR has relied heavily on external public finance in order to support its development agenda. Current fiscal challenges limit Lao PDR's ability to sustain its recent rate and volume of borrowing from both official and non-official sources. In this context, development co-operation, especially in the form of concessional and technical support, remains an essential source of affordable financing and knowledge. As Lao PDR strives towards its multipronged agenda of graduating from the UN list of LDCs, as well as overcoming its debt burden, investing in human capital and encouraging inclusive growth, it is vital to ensure the effective use and co-ordination of development partners' support in order to make the most of this scarce but stable resource.

The impact of development co-operation can be severely compromised by poor co-ordination. There is a well-established and widespread consensus, supported by evidence, regarding the impact of development partners as either drivers of, or constraints to, effective development co-operation (OECD, 2005[20]). This is demonstrated in Lao PDR, where some government departments struggle with the transaction costs associated with monitoring multiple and often uncoordinated development projects (Government of Lao PDR, 2021[21]). Beyond transaction costs, lack of co-ordination among development partners can also result in duplicated efforts or financing gaps.

Without an established governance and co-ordination framework, new financing sources are particularly susceptible to fragmentation and inefficiencies. If left unaddressed, such governance challenges could prevent new financing sources from fully delivering on their promise to bolster Lao PDR's sustainable development. Due to the lack of clearly delineated roles and responsibilities, various sectors of government can be tempted to vie for control over the implementation of, and the use of proceeds from, these innovative financing sources. This risk is heightened by current fiscal constraints, which incentivise ministries to compete for access to new financing in order to protect their budgets. As discussed in the section of this chapter on innovative financing sources, the issuance of carbon credits exemplifies this challenge. Several ministries (each backed by different development partners) are engaging in carbon credit initiatives, creating confusion over their potential in terms of revenue generation and the possible use of their proceeds. This disjointed approach could also result in inefficiencies and double counting, threatening the credibility of Lao PDR's future sovereign carbon credit issuances.

It is incumbent upon all of Lao PDR's development partners to uphold universal principles of development effectiveness in their engagements. The Lao PDR government and its development partners have a shared responsibility to ensure the effective use of international support to promote the country's development priorities, including by incentivising co-ordination in order to encourage greater transparency and mutual accountability, inclusive partnerships, and a focus on results and country ownership. The *Vientiane Declaration on Partnership for Effective Development Cooperation (2016-2025)* is a commendable effort at localising the effectiveness approach (Government of Lao PDR, 2015[22]). This declaration would, however, benefit from a renewed commitment to monitor the progress made by all relevant stakeholders, including development partners.

Lao PDR's development partners must avoid contributing to fragmentation. This involves ensuring that their contributions are complementary and do not lead to the duplication of effort or to fragmented approaches within the government that could undermine country ownership. Concurrently, the government of Lao PDR should ensure that all relevant development partners (including China and Lao PDR's South-South partners) actively participate in the country's aid co-ordination mechanisms. Revitalising the sector and subsector working groups under Lao PDR's national Round Table Process could further support this endeavour.

Examples of aid co-ordination mechanisms from other Asian countries can provide insights or models for enhancing governance and effectiveness in managing international support

The Philippines

Sulong Pilipinas: Hakbang Tungo sa Kaunlaran (Onward Philippines: Leap Towards Progress), formerly known as the Philippine Development Forum, serves as the Philippines' primary platform for facilitating policy dialogue among stakeholders regarding the country's development agenda. This annual event gathers various stakeholders from across the nation, including representatives from the government, development partners, businesses, civil society, academia and youth organisations. In addition, regional forums, such as the Mindanao Development Forum, have been launched as nationwide initiatives to stimulate dialogue with regional line agencies, donors, local government units and local businesses, with the goal of revitalising job creation and hastening poverty reduction. This model could inspire Lao PDR to enhance its Round Table Process by incorporating more diverse stakeholder perspectives, including from local actors, in order to ensure that development initiatives promote inclusive economic growth.

Cambodia

In order to support the implementation of its *Development Cooperation and Partnership Strategy 2024-2028*, the Royal Government of Cambodia has developed flexible partnership mechanisms at the national, sectoral and subnational levels. These mechanisms include national multi-stakeholder consultations, bilateral consultations with development partners, government and NGO consultation meetings, and subnational partnership dialogues. Furthermore, the implementation of Joint Monitoring Indicators (JMIs) provides a standardised framework for tracking progress on key development goals, promoting accountability and aligning stakeholders' efforts in order to enhance the effectiveness of development co-operation.

Bangladesh

In Bangladesh, the Aid Effectiveness Unit within the Economic Relations Division of the Ministry of Finance provides policy advisory, networking and donor co-ordination functions, facilitating high-level donor co-ordination and development dialogues through initiatives like the Local Consultative Group (LCG) and the Bangladesh Development Forum (BDF). It also works on the formulation of a national policy for effective development co-operation and the establishment of an Aid Information Management

System (AIMS) in order to increase aid transparency and accountability. In parallel, the Development Partners Group (DPG) brings together key stakeholders to co-ordinate on development priorities, while sector working groups focus on specific sectors such as healthcare and education.

By considering these examples from peer countries, Lao PDR can identify practical measures to strengthen its own aid co-ordination frameworks. Each example provides a road map for how Lao PDR might adapt its existing mechanisms or introduce new strategies in order to ensure that development efforts are well-co-ordinated, aligned with national and local priorities, and capable of delivering tangible results towards sustainable development. Adopting a similar approach to regional forums could help Lao PDR address localised development challenges more effectively by cultivating dialogue with regional stakeholders and tailoring development efforts to the specific needs of different regions within the country.

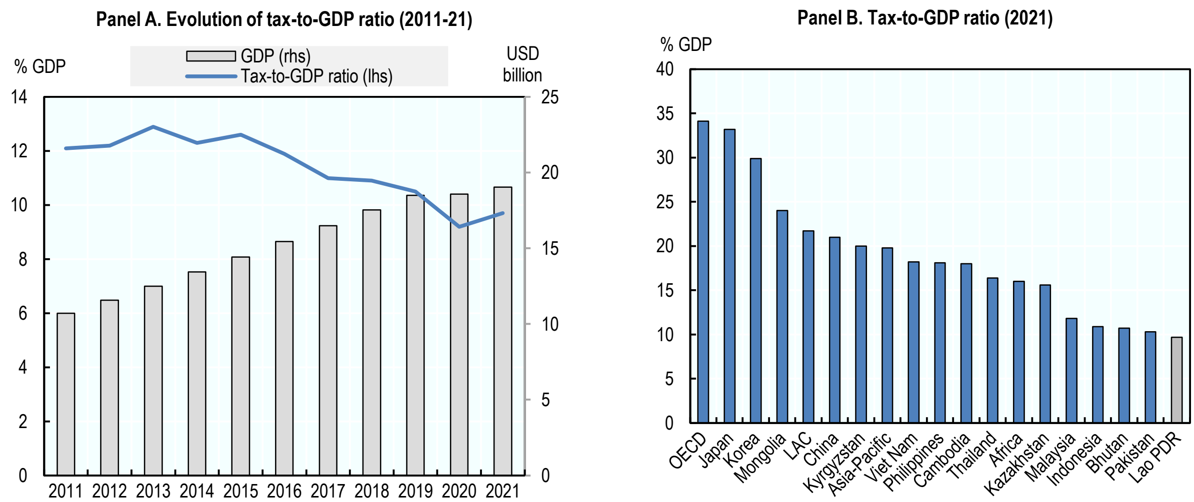
Recent evolutions and the state of play of Lao PDR's financing for a sustainable development landscape

Lao PDR's sustainable development landscape has expanded significantly, but still exhibits notable imbalances. As in other developing countries, government revenue in Lao PDR accounts for a sizeable share of the country's financing for sustainable development, although it remains low relative to the levels observed in peer countries. FDI represents another significant financing source for the country's sustainable development goals and has often been used as part of PPPs in the energy and, more recently, transportation sectors. However, the potential of domestic private finance has been stymied by the limitations of the local financial sector. Remittances, despite their critical role in individual livelihoods, remain a minor source of financing. In the challenging financial context currently confronting Lao PDR, the government has started turning its attention towards innovative sources of financing, such as carbon finance. The following section delves deeper into these financing dynamics, shedding light on their implications and potential.

Lao PDR presents vast scope for improving the mobilisation and use of government revenue

The strong and sustained economic growth experienced by Lao PDR has not translated into an increasing tax-to-GDP ratio. While most countries enhance their revenue mobilisation capacity as their economies mature, Lao PDR's tax revenue shows little responsiveness to the country's economic growth – a concept known as tax buoyancy that is further explored in Chapter 4 (Figure 3.13, Panel A). As a result, the country stands out for its low capacity to raise taxes, having the lowest tax-to-GDP ratio out of all Association of Southeast Asian Nations (ASEAN) Member States. Lao PDR's tax-to-GDP ratio in 2021 was less than 10%, in contrast to Thailand's 16%, Viet Nam's 17% and the OECD average of almost 35% (Figure 3.13, Panel B). As explained in Chapter 4, Lao PDR's challenges in mobilising tax revenue are primarily linked to its low tax rates and narrow tax base, resulting in part from the aggressive use of tax incentives in order to attract private investment. The government's tax revenue is further undermined by issues related to tax compliance.

Figure 3.13. The tax-to-GDP ratio in Lao PDR has decreased between 2011 and 2021 in a context of sustained economic growth



Note: USD million in 2015 constant prices.
Source: (OECD, 2023[23]), *OECD.Stat – Revenue Statistics: OECD Countries* (database), https://stats.oecd.org/Index.aspx?DataSetCode=REV. (accessed on 15 October 2023).

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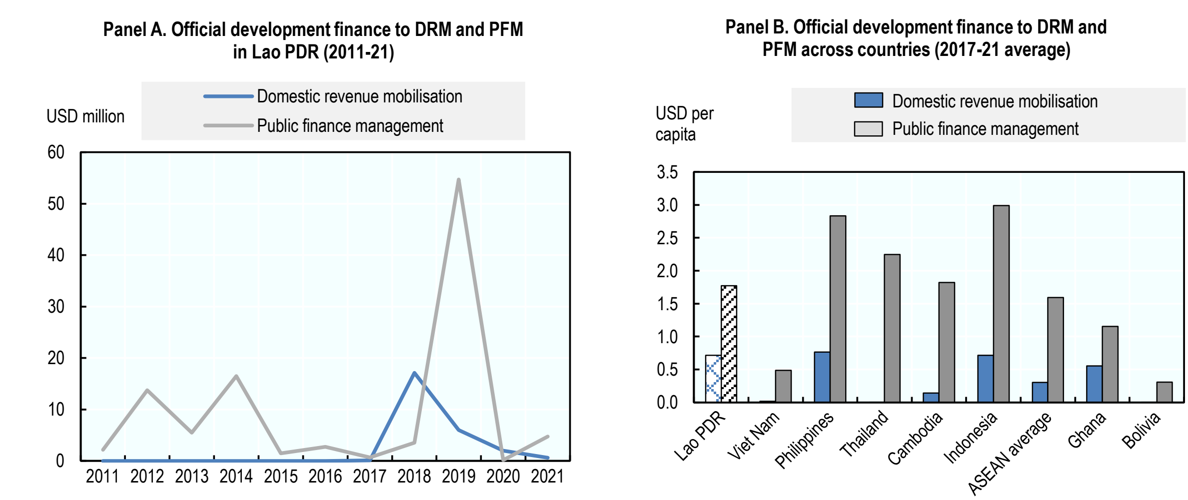
The low capacity to raise sufficient levels of tax revenues affects the Lao PDR government's capacity to finance key development sectors. Domestic resources, in particular tax revenue, are essential in order to finance progress in key development areas. This includes social sectors, which receive comparatively low financing from government sources in Lao PDR compared to what is observed in other countries that are at similar development levels. In 2020, Lao PDR's total spending on education amounted to 2.3% of its GDP, compared with 3% on average in low-income countries (LICs) and 3.9% in lower middle-income countries (LMICs). A similar trend can be observed for healthcare expenditure, which amounted to 2.7% of Lao PDR's GDP compared with 5.1% in LICs and 3.9% in LMICs in 2020. As further discussed in the section on recent evolutions and the state of play of Lao PDR's financing for a sustainable development landscape, the country is currently unable to provide adequate social funding, which results in the majority of the population lacking basic social protection coverage and access to basic healthcare, and in Lao PDR exhibiting relatively poor educational outcomes.

In tandem with low government revenue, public expenditure efficiency is suboptimal, hindering the utilisation of already scarce resources. The *Public Expenditure and Financial Accountability (PEFA) Assessment 2018* revealed that Lao PDR has considerable room for improvement across most indicators of public financial management (PFM) (World Bank, 2019[24]). Key issues include low budget reliability, lack of transparency in fiscal information, and insufficient information about budget allocations, particularly concerning provincial budgets. While the foundational elements of a robust PFM system exist, they require enhancement and full implementation. Existing PFM legislation is not fully implemented, often contradicting other legislation or having become outdated since it was initially passed. The budgeting process currently lacks a strong medium-term perspective and connection to policy objectives. Although efforts are under way to transition towards a Treasury Single Account (TSA) and enhance cash management, past attempts to do this have not been successful, leading to challenges such as payment delays and reliance on costly short-term borrowing. Notably, however, strides are being made to upgrade the Ministry of Finance's core systems and processes, with the anticipated nationwide rollout of a new financial management information system in 2024.

Recent efforts to restore fiscal balance have relied on public expenditure cuts rather than additional revenue generation. The government of Lao PDR is making a conscious effort to improve the management of its public budget and mitigate its public debt by reducing the long-standing fiscal deficit. However, the sustainability of these fiscal reforms throughout the 9th NSEDP hinges on transitioning from a model of fiscal consolidation based on expenditure reduction to one that emphasises enhancing the mobilisation of domestic revenue and the efficiency of public spending. Furthermore, there is scope to improve the budget's credibility and better align budget allocations with NSEDP priorities.

International support for domestic resource mobilisation (DRM) and PFM in Lao PDR is slightly above the average among ASEAN Member States but is promoted by a few large projects. Between 2017 and 2021, Lao PDR received on average USD 0.72 per capita of ODF for DRM and USD 1.77 per capita for PFM. In comparison, the average among ASEAN Member States stood at USD 0.30 per capita for DRM and USD 1.59 per capita for PFM. Two other LMICs that received comparatively little international support between 2017 and 2021 were Ghana (which received only USD 0.56 per capita for DRM and USD 1.16 per capita for PFM) and Bolivia (which received only USD 0.01 per capita for DRM and USD 0.31 per capita for PFM) (Figure 3.14, Panel B). All official development finance for DRM that is provided to Lao PDR is provided in the form of ODA. In the case of DRM, a single ODA loan from Korea, disbursed in 2018-19 in order to establish a tax revenue information system, accounted for 77% of the ODA that Lao PDR received for DRM between 2017 and 2021. The situation is similar for PFM, where an ODA loan from the ADB that was disbursed in 2019 as part of a programme to strengthen Lao PDR's PFM also represented 77% of total ODA that the country received for PFM between 2017 and 2021 (Figure 3.14, Panel A).

Figure 3.14. Official development finance for domestic revenue mobilisation and public finance management in Lao PDR is slightly above the ASEAN average



Note: In Panel B, the average for ASEAN Member States excludes Brunei Darussalam and Singapore because these countries did not receive ODF for DRM or PFM.
Source: (OECD, 2023[1]), *OECD Creditor Reporting System database*, https://stats.oecd.org/Index.aspx?DataSetCode=crs1 (accessed on 15 October 2023).

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Given the fiscal challenges currently affecting Lao PDR, there may be significant benefits to increasing development partner support in order to enhance budget planning, improve the mobilisation of domestic resources and ensure the efficiency of public spending. It is crucial for Lao PDR to adapt its tax policies, broaden its tax base and enhance tax compliance in order to effectively mobilise domestic revenue. At the same time, streamlining public expenditures, eliminating inefficiencies and aligning budgetary processes with clear policy objectives are essential to improving the delivery of key public services, as well as enhancing the credibility and durability of the fiscal adjustment undertaken by the government. Collaborative efforts involving international donors and key government stakeholders should be intensified in order to build robust financial systems and practices that can sustain Lao PDR's development aspirations in the long term.

Private investment in Lao PDR is dominated by resource-seeking FDI in the mining and energy sectors

Lao PDR has implemented a proactive policy in order to attract FDI. In order to strengthen Lao PDR's position as an attractive destination for investment, the government has pursued a proactive policy aimed at encouraging FDI, notably by making extensive use of tax incentives. This strategy, also evident in the establishment of Special Economic Zones, is reminiscent of models championed by neighbouring countries, notably China and several ASEAN Member States.

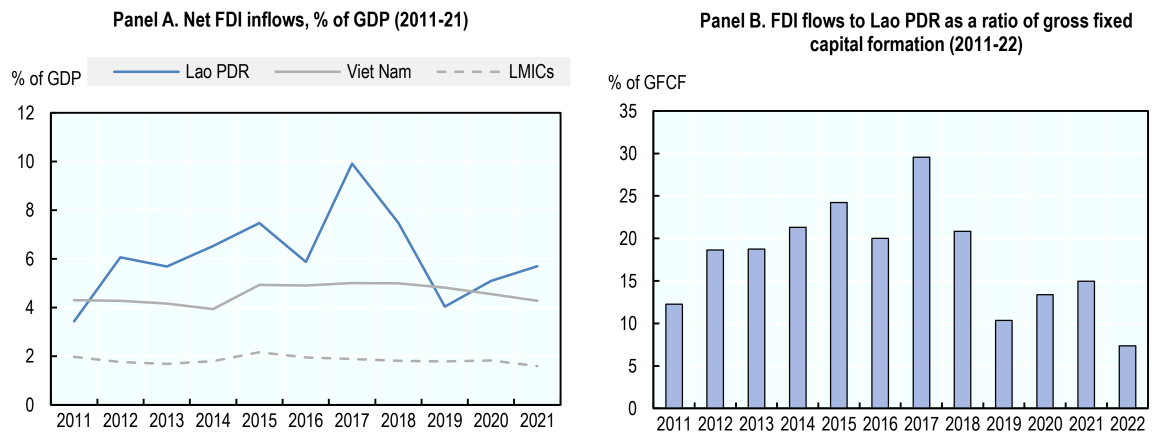
The government of Lao PDR has gradually introduced measures to support investors and facilitate the conduct of business in the country. Laws and regulations related to investment are routinely publicised, and an official website offers access to pertinent information. Newly introduced laws and regulations aim to streamline administrative processes (such as the acquisition of licences) while also enhancing investor support. Nevertheless, in a 2022 ASEAN survey, Lao PDR scored poorly on the perceived quality of investment facilitation services, with fewer than 20% of respondents rating services as satisfactory or exceeding expectations (ASEAN, 2022[25]). In contrast, Cambodia scored 60% and Viet Nam nearly 80%, suggesting that Lao PDR could benefit from an exchange of experiences with its regional counterparts. Moreover, Lao PDR was the ASEAN Member State with the highest proportion of investors who saw room for investment facilitation improvement, a view shared by nearly 90% of survey respondents.

A notable share of FDI in Lao PDR has been facilitated through PPPs. Historically, Lao PDR has leveraged PPPs as a tool to attract FDI, especially in sectors like energy, with a focus on hydropower projects. More recently, their use has been expanded to include investments in the transportation sector, as demonstrated by the USD 5.9 billion railway project connecting Lao PDR with China, which is part of the Lao PDR government's strategy to evolve from a "landlocked" to a "land-linked" country. While there are undeniable advantages to employing PPPs in certain situations, the fact that the country's growing use of PPPs has coincided with its growing fiscal challenges prompts concerns regarding the sustainability of this investment model. Specifically, it raises questions about whether the decision to adopt the PPP model primarily stems from a desire to bypass the government's narrowing fiscal space. These partnerships also carry inherent – and sometimes hidden – risks and costs, including potentially forgone revenue from tax incentives and contingent liabilities. As detailed in Chapter 5 on stimulating sustainable investment, building country capacity on PPPs would be key to mitigating these risks and preventing such investments from aggravating the country's debt issues.

During the 2010s, FDI inflows into Lao PDR have presented a pattern of rapid expansion that reached its apex in 2017 before experiencing a significant contraction. Between 2011 and 2017, Lao PDR attracted a growing volume of FDI, although it experienced a high level of volatility compared with peer countries (Figure 3.15, Panel A). The volume of FDI in Lao PDR rose by 75% from USD 5.7 billion in 2016 to USD 10 billion in 2019 before experiencing a drop. This distinctive trend can be partly attributed to the extensive use of PPPs, which, while encouraging investment, also placed considerable strain on the government's fiscal position. It is reasonable to conclude that the progressive materialisation of Lao PDR's fiscal challenges contributed to the ebb in FDI inflows after 2017.

Foreign investment plays a pivotal role in Lao PDR's capital formation. Data analysis reveals a relatively steady rise in FDI flows as a percentage of gross fixed capital formation (GFCF) between 2011 and 2017 (Figure 3.15, Panel B). Lao PDR also presents a high ratio of FDI inflows as a percentage of GFCF (19% on average between 2011 and 2021) compared with other developing countries in Asia (for which the average stood at 5% over the same period). This suggests that a significant portion of the country's capital investments – infrastructure, machinery, buildings and other forms of fixed assets – is financed by foreign capital rather than domestic sources. It also underscores the need for policy makers to consider adopting strategies that diversify capital formation sources, thereby mitigating risks associated with an over-reliance on FDI in the future.

Figure 3.15. FDI inflows to Lao PDR have been substantial but volatile over the past decade



Note: GFCF refers to gross fixed capital formation. "LMICs" refers to "Lower middle-income countries".
Source: Panel A: Based on (World Bank, 2024[2]), *World Development Indicators (database)*, https://data.worldbank.org/indicator/. Panel B: Authors' calculations based on (UNCTAD, 2023[26]), *DFI database*, https://unctadstat.unctad.org/datacentre/dataviewer/US.FdiFlowsStock.

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Delving into the composition of Lao PDR's FDI reveals a concentration in sectors such as mining and energy. Indeed, mining and hydropower together accounted for 79% of the country's FDI between 2017 and 2021. Recent years have seen continued investment in energy and increasing investment in transport, which has been promoted by large infrastructure projects, notably with China. For instance, the USD 5.9 billion railway project linking Lao PDR with China opened in December 2021. Numerous hydropower projects have also commenced or continued construction. One such example is the USD 2.4 billion Phou Ngoy hydropower project, which involves a consortium of Korean companies and is scheduled to be completed around 2029.

The focus on resource-seeking FDI raises concerns regarding its impact on Lao PDR's long-term sustainable development. While sectors such as energy and mining bring in considerable investments, these projects also come with significant social and environmental impacts. Furthermore, research suggests that some of these investments might not significantly contribute to value addition or job creation (Columbia Center on Sustainable Investment, 2016[27]). This underscores the need for Lao PDR to diversify its FDI, ensuring that investments are in line with the country's long-term and sustainable development goals. Interviews from the fact-finding mission for this report revealed that the government of Lao PDR is already looking at sectors like tourism and manufacturing to try to diversify the country's FDI. Nevertheless, FDI in these sectors remains in its infancy and will require some of the country's remaining challenges related to the business environment to be addressed. For example, an enabling environment for private sector development plays a more pivotal role in attracting foreign investors in manufacturing than in mining. Chapter 5 on stimulating sustainable investment explores the enabling environment for private investment in Lao PDR in greater detail and presents specific policy options to make the country's market more attractive to FDI.

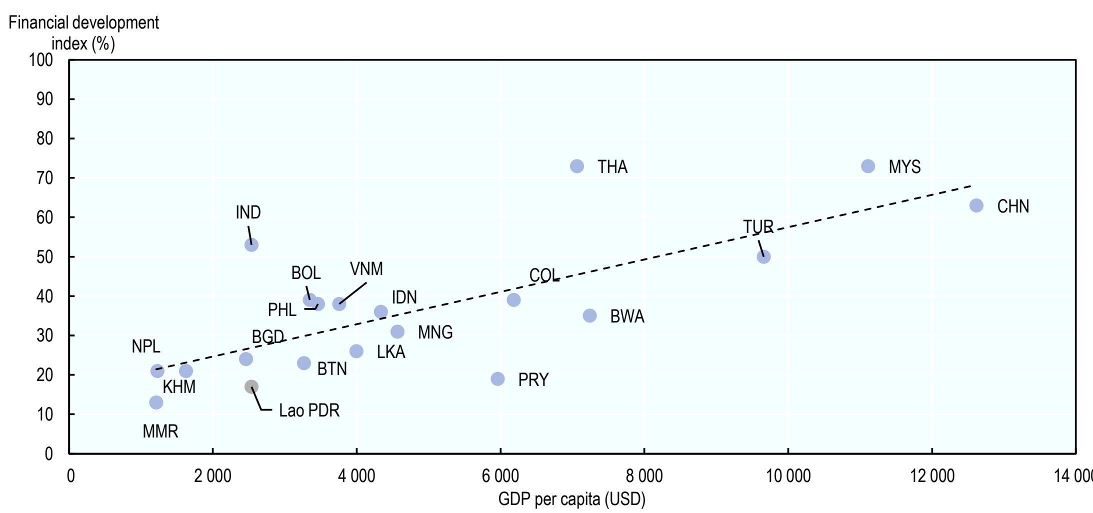
The domestic financial sector has limited depth and can only make a marginal contribution to financing Lao PDR's sustainable development

A robust and well-developed domestic financial sector is vital to providing financing for sustainable development. A thriving financial sector fuels economic growth, supports business ventures, helps attract private investment and facilitates capital allocation for diverse development projects, including by facilitating sovereign borrowing in the local currency.

Lao PDR's financial and banking landscape is relatively shallow, lagging behind countries with similar economic structures and development trajectories. The financial development index for Lao PDR is one of the lowest in Asia, registering a score of less than 20% (IMF, 2023[28]). For context, neighbouring Cambodia scores marginally better, hovering around 20%. Bolivia and Viet Nam, which are also categorised as LMICs, exhibit a far more advanced local financial sector, with their scores nearing the 40% mark (Figure 3.16).

Figure 3.16. Lao PDR exhibits low financial development

Financial development index and GDP per capita (2021)



Note: USD million in 2022 constant prices.
Source: (IMF, 2023[28]), *Financial Development Index*, https://data.imf.org/?sk=f8032e80-b36c-43b1-ac26-493c5b1cd33b&sid=1480712464593.(accessed on 20 October 2023).

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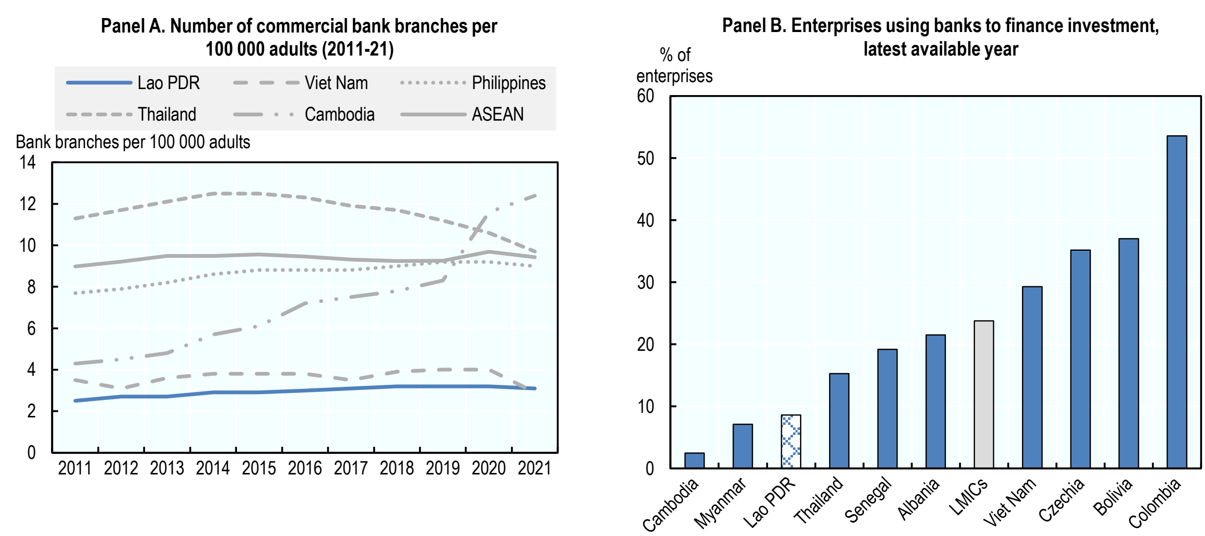
Lao PDR's domestic financial sector is dominated by large, government-owned banks. The country's financial ecosystem consists of 38 commercial banks divided into 6 categories: 1 state-owned bank, 5 joint venture state banks, 7 private banks, 8 subsidiary banks, 16 foreign commercial bank branches and 1 specialised bank (Bank of Lao PDR, 2023[29]). In addition, five enterprises offer life insurance and three engage in securities trading. Other financial institutions encompass providers of money and value transfer services, foreign exchange bureaus, and microfinance institutions.

Despite a gradual improvement in capital and asset quality of the major banks, Lao PDR's domestic financial sector still exhibits vulnerabilities. The issue of non-performing loans remains a primary concern, although gauging its scale is challenging due to limited data availability (IMF, 2023[9]). Alarmingly, many banks fail to meet the capital adequacy ratios mandated by the Basel Committee on Banking Supervision, with a significant number also grappling with insufficient cash reserves. In response, the government of Lao PDR has recapitalised two of its banks in 2021 and 2022. Recognising these shortcomings, the IMF has recently emphasised the need for Lao PDR to enhance banking regulations, bolster oversight and establish robust capital reserves (IMF, 2023[9]).

The limited depth of the financial sector inevitably curtails access to domestic credit for both the public and private sector. As a result of the underdeveloped local financial market, both the government and enterprises in Lao PDR, especially small and medium-sized enterprises, struggle to access long-term credit domestically. In the case of the government, this results in a significant reliance on external borrowing. For local enterprises, this often translates into reduced capacity to invest in their own development. For instance, despite some visible improvement since 2011, with 3.1 commercial bank branches per 100 000 adults in 2021 (up from 2.5 commercial bank branches per 100 000 adults in 2011), Lao PDR still lags behind the ASEAN average of 9.2 commercial bank branches per 100 000 adults (Figure 3.17, Panel A). In addition, the proportion of enterprises using banks to finance investment is notably lower in Lao PDR than in other countries. Fewer than 9% of enterprises in Lao PDR rely on bank financing for their investments. This percentage is higher than in neighbouring countries like Cambodia (3%) and Myanmar (7%), but significantly lower than the average for LMICs (23%) or other regional peers like Viet Nam (29%) (Figure 3.17, Panel B). Considering the modest size of Lao PDR's financial sector, there is also a risk that increased sovereign domestic borrowing – stemming from limited access to international capital markets – might inadvertently crowd out credit availability for the local private sector.

Figure 3.17. Lao PDR needs to increase its capacity to finance businesses



Note: In Panel A, the ASEAN average excludes 2020 and 2021 data for Myanmar, which were not available. Panel B is based on the latest available data for Senegal (2014); Viet Nam (2015); Cambodia, Myanmar and Thailand (2016); Bolivia and Colombia (2017); Lao PDR (2018); and Albania and Czechia (2019). "LMICs" refers to "Lower middle-income countries".
Source: (World Bank, 2024[2]), *World Development Indicators*, https://data.worldbank.org/indicator (accessed on 20 October 2023).

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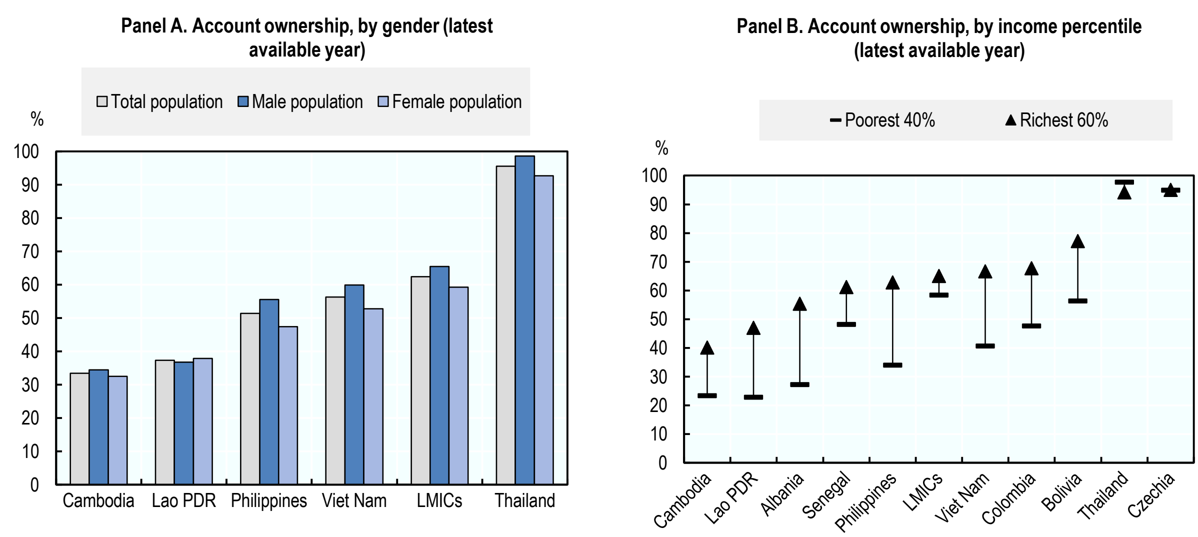
Another significant challenge facing Lao PDR is the limited access its population has to basic banking and financial services. A large segment of the country's population remains unbanked and effectively excluded from the formal financial system. Such restricted access stifles the improvement of individual livelihoods and hampers the mobilisation of domestic savings for investments. The absence of a developed banking sector, particularly in remote areas, further exacerbates this divide, causing many to depend on informal lending sources such as family and friends. From 2011 to 2021, the proportion of Lao PDR's population with an account at a financial institution or with a mobile money service provider increased from 27% to 37%. Although this is a commendable increase, it pales in comparison to regional peers like Viet Nam (56%) and Thailand (96%), or the average for other LMICs (62%). However, it is slightly above Cambodia's 33% (Figure 3.18, Panel A).

Lao PDR stands out positively in terms of gender equality in financial inclusion, although there is room for improvement concerning access to finance for its poorest citizens. Unlike its peer countries, Lao PDR exhibits a slightly higher percentage of account ownership among women than men. Specifically, 34% of women aged 15 years and over have an account at a financial institution or with a mobile money service provider, compared with 33% of men (Figure 3.18, Panel A). In contrast, many other countries show a more pronounced gender gap that generally favours men, with the average account ownership for LMICs being 59% for women and 65% for men. On the other hand, Lao PDR could better address the financial inclusion of its most economically disadvantaged groups (Figure 3.18, Panel B). While nearly one-half (47%) of the wealthiest 60% of the population holds an account at a financial institution, only 23% of the poorest 40% of the population owns an account. This gap, which is considerably more pronounced than the average among LMICs, can be partly explained by the fact that the poorest segments of society in Lao PDR live in rural and often remote areas. This underscores the importance of expanding access to banking and financial services. Digitalisation offers promising solutions in this area, as discussed in this section and further elaborated on in the section concerning remittances.

Figure 3.18. Financial inclusion in Lao PDR is low compared with peer countries



Note: Panel B is based on the latest available data for Senegal (2014); Viet Nam (2015); Cambodia and Thailand (2016); Bolivia and Colombia (2017); Lao PDR (2018); and Albania and Czechia (2019). "LMICs" refers to "Lower middle-income countries".
Source: (World Bank, 2024[2]), *World Development Indicators*, https://data.worldbank.org/indicator (accessed on 15 October 2023).

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Village banks have emerged as a local solution to fill the financial void in the rural areas of Lao PDR. In Lao PDR, where two-thirds of the population live in rural areas, village banks emerged in the late 1990s as a solution to partly bridge the financial access gap at the grassroots level. Present in approximately 4 000 villages thanks to support from development partners and promotion by the government, village banks operate as community-based savings groups, providing loans and savings options to villagers. Lao

PDR's experience shows that these banks can play an important role in facilitating small-scale investments, addressing immediate financial needs and promoting local entrepreneurship. As such, the funds they provide offer an avenue for integrating unbanked rural populations into a financial ecosystem that recognises and respects local customs and traditions.

However, community-based village banks present their own set of challenges and risks. As semi-formal entities, they operate outside the purview of the national financial regulatory framework, eluding the supervision of the Bank of the Lao PDR. Their management, operation and activities are essentially governed by internal by-laws (UNCDF, 2021[30]). In addition, most village banks are not able to intermediate savings beyond the village level, leaving their loan portfolios vulnerable to specific localised risks. The absence of professional management exacerbates these concerns.

The development of financial technology provides a possible way forward to bolster financial inclusion and strengthen rural finance. In 2019, GIZ supported the development of a microfinance platform to help Lao PDR's multitude of village banks maintain and keep track of their transaction records, and hence mitigate risk and fraud. Since then, this platform (named Lan Xang Banker) has been successfully rolled out across hundreds of village banks in the country. Among other things, the platform aims to help facilitate the intermediation of savings beyond the village level, potentially solving a critical issue in the traditional model of village banks.

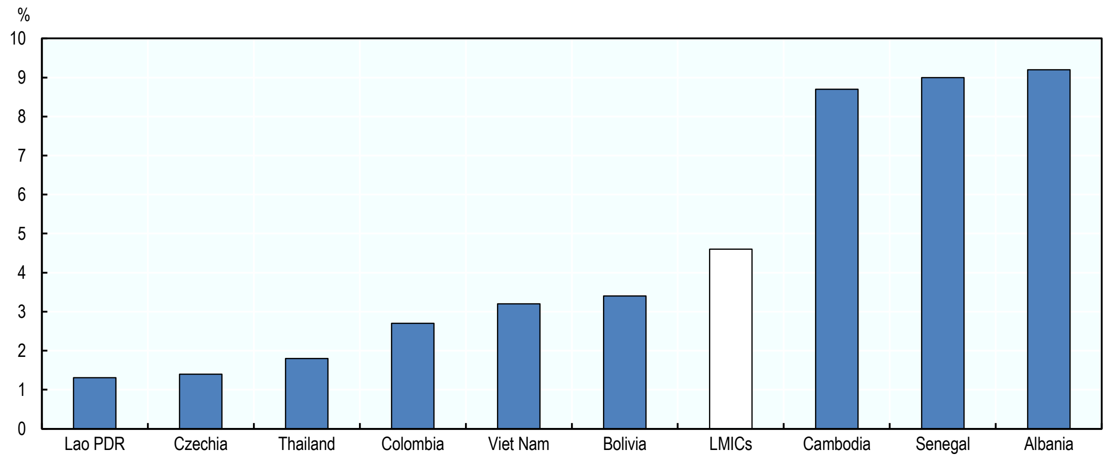
Mobile banking and mobile payments technology are another significant opportunity to advance financial inclusion in Lao PDR. By integrating digital platforms and mobile banking and payment solutions, local financial institutions can enhance their reach, offer diverse financial products, and instil greater transparency and efficiency in their operations. Mobile banking platforms allow users to conduct basic financial transactions – from checking their account balances to transferring funds – without the need to go to an automated teller machine (ATM) or bank branch. Meanwhile, mobile payments enable peer-to-peer transfers, bill payments and commercial transactions, thus integrating a larger segment of the population into the formal financial ecosystem. The data generated from these digital transactions can ultimately assist financial institutions in crafting tailored financial products and services to meet the unique needs of previously excluded individuals, including those living in remote areas.

Remittance flows to Lao PDR are low but showed an upward trend until the COVID-19 pandemic

For Lao PDR, remittance inflows have traditionally been on the lower side compared with some of its neighbours. Remittances play a crucial and growing role in the economies of many developing countries, offering a lifeline to families and sometimes surpassing foreign aid in volume. In Lao PDR, remittances are relatively low, at 1.3% of GDP, as compared with 4.6% of GDP in LMICs on average (Figure 3.19). In Southeast Asia, Thailand's remittances (1.8%) are closest to those of Lao PDR, but Lao PDR trails far behind other regional neighbours like Viet Nam (3.2%) and Cambodia (8.7%), which have longer experience of economic migration. It should, however, be noted that remittance statistics might not capture the full extent of transfers from migrants, as many use informal channels.

Figure 3.19. Remittances are surprisingly low in Lao PDR compared with peer countries

Personal remittances received (% of GDP), 2020-22 average



Source: (World Bank, 2024[2]), *World Development Indicators*, https://data.worldbank.org/indicator (accessed on 15 October 2023).

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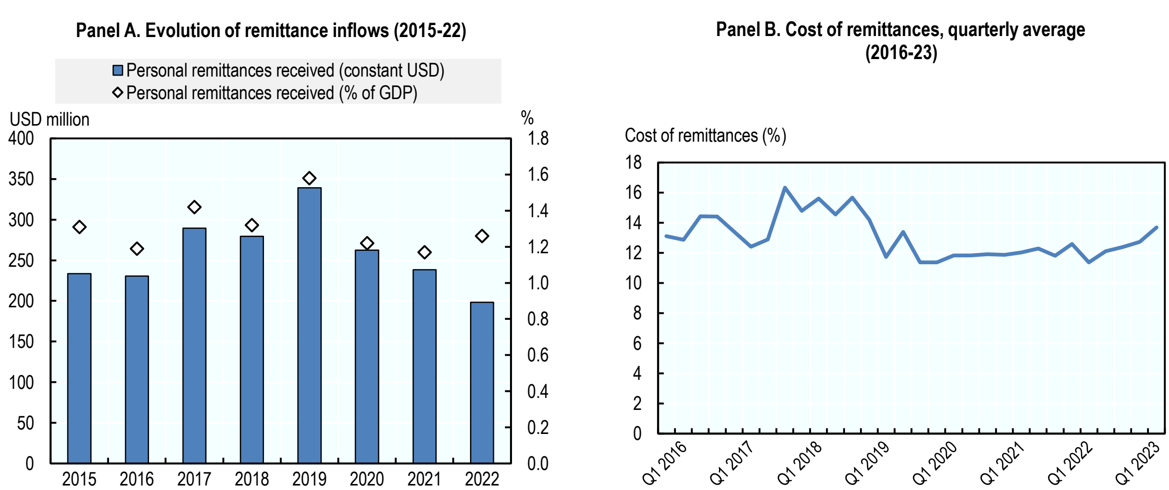
During the years leading up to the COVID-19 pandemic, there was a noticeable upswing in remittance inflows to Lao PDR, hinting at a changing dynamic in the country's financial landscape. Several factors contributed to this upward trend. A growing number of Laotians sought employment opportunities abroad, particularly in neighbouring countries like Thailand and Viet Nam. These migrant workers sent money back to their families, contributing to the increasing volume of remittances (Figure 3.20, Panel A). Additionally, improvements in banking infrastructure and the proliferation of mobile money services observed from the end of 2018 onwards made cross-border transactions more accessible. On the other hand, progress on the affordability of remittance fees has been inconsistent. The cost of sending remittances to Lao PDR rose from 13% in 2015 to 16% in 2017, before decreasing in 2018 and 2019, and stabilising thereafter (Figure 3.20, Panel B).

Figure 3.20. The COVID-19 pandemic halted the rise of remittance inflows to Lao PDR



Source: Panel A: (World Bank, 2024[2]), *World Development Indicators (database)*, https://data.worldbank.org/indicator. Panel B: (World Bank, 2023[31]), *Remittance Prices Worldwide*, https://remittanceprices.worldbank.org.

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The onset of the COVID-19 pandemic disrupted the trend of increasing remittances to Lao PDR. Due to lockdowns, travel bans and job losses, Laotian citizens working abroad faced hardships during the COVID-19 pandemic, with many returning home. Consequently, remittances fell from 1.6% of GDP in 2019 to approximately 1.2% in 2020 (Figure 3.20, Panel A). The decline in remittances during the pandemic underscored the vulnerability of relying heavily on such inflows for economic resilience. While Lao PDR is not overly dependent on this financing source, the reduction in remittances primarily affected household incomes, leading to potential setbacks in areas like education, healthcare and general well-being.

Looking forward, remittances to Lao PDR present a substantial opportunity for growth, particularly as global economies rebound post-pandemic. As the economies of Southeast Asia recover post-pandemic and barriers to international employment recede, a rebound in remittance inflows to Lao PDR is plausible. In order to maximise the potential development impact of remittances, the government of Lao PDR, in collaboration with development partners, could focus on facilitating cross-border financial transactions and promoting financial literacy. Encouraging the formalisation of these inflows can cultivate a more transparent and efficient financial system. Moreover, there is a compelling case for introducing policies and financial products that nudge remittance recipients towards savings and investments, facilitating capital accumulation. By transforming remittances from mere consumption support to a catalyst for sustainable growth, Lao PDR could harness a valuable resource for its socio-economic advancement in the coming years.

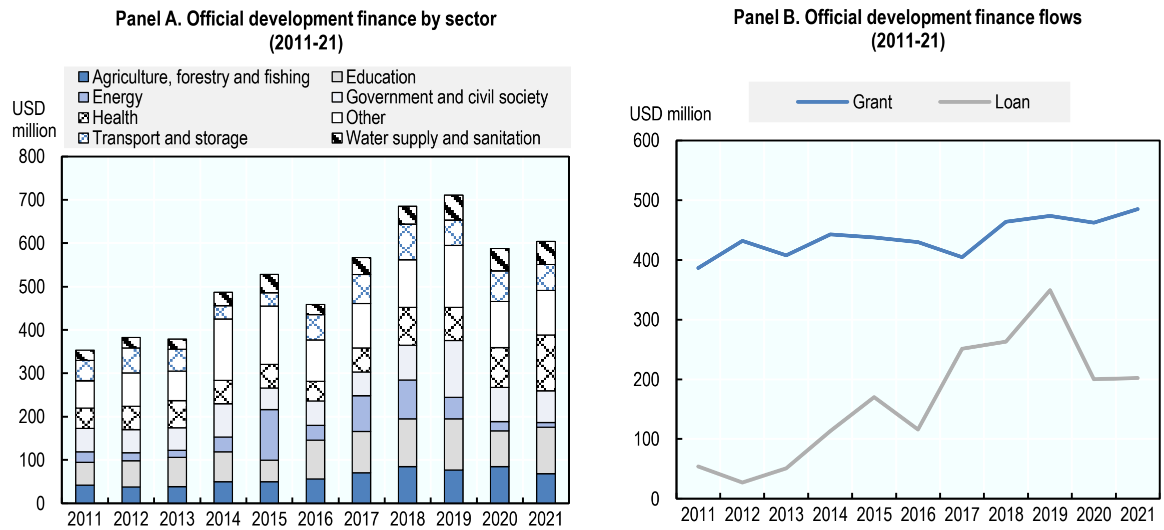
Nonetheless, increased migration among Lao PDR's youth will come with challenges. Given the relatively slow economic recovery, Lao kip devaluation and high level of inflation experienced by the country, a significant portion of the Lao PDR workforce, especially youth, could be tempted to seek employment opportunities in neighbouring countries. While this movement might lead to an increase in remittance inflows to Lao PDR, it could also strip the country of a crucial engine of economic growth: its young workforce and human capital. Such a shift could ultimately pose challenges to achieving sustainable long-term growth. Policies should thus be crafted to ensure that migration leads to upskilling for these workers and offers incentives or prospects for their return to Lao PDR, enabling local industries to benefit from the demographic dividend (Asian Development Bank, 2023[32]).

Development co-operation is expected to continue playing an important role for years to come in key development sectors in Lao PDR

ODF has taken on an increasingly important role in Lao PDR during the 2010s. This type of financing, encompassing both grants and loans from bilateral and multilateral development partners, supported Lao PDR's strategy of capital-intensive investment in energy and transportation infrastructure. Notably, loans from China played a significant part in these infrastructural ventures. Furthermore, ODF has been instrumental in the social sectors, an area where government allocations have been constrained due to limited fiscal capacity. ODF flows (excluding those from China) surged by 67% between 2011 and 2019, rising from USD 369.4 million to an impressive USD 746.6 million (Figure 3.21, Panel A).

Loans, previously Lao PDR's fastest-growing source of ODF, experienced a sharp decline after 2019 as a result of the country's fiscal challenges. After a notable increase from USD 27.2 million in 2012 to USD 349.7 million in 2019, the amount of ODF loans dropped to USD 200.3 million in 2020 (Figure 3.21, Panel B). These changing dynamics underscore the significance of a country's fiscal situation in terms of influencing development finance patterns.

Figure 3.21. After experiencing sustained growth between 2011 and 2019, ODF flows in Lao PDR started to decline in 2020 as a result of reduced access to official loans



Source: (OECD, 2023[1]), *OECD Creditor Reporting System database*, https://stats.oecd.org/Index.aspx?DataSetCode=CRS1 (accessed on 10 October 2023).

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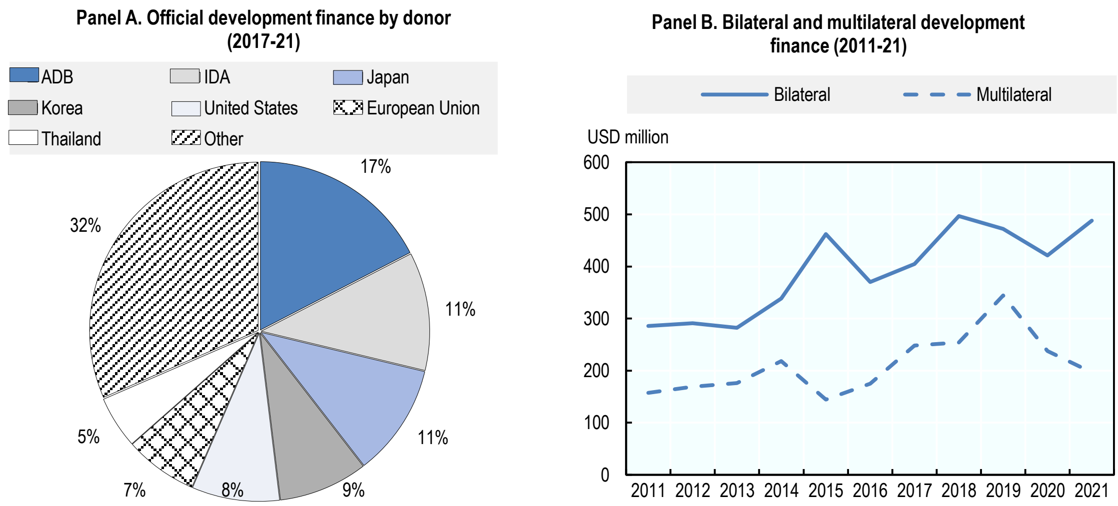
Financing from China and the multilateral development banks, which dominated official finance to Lao PDR during the 2010s, are on the decline. China, the ADB and the International Development Association (IDA) were the largest sources of ODF flows to Lao PDR between 2017 and 2021. Excluding China, the ADB accounted for 17% of ODF flows, followed by the IDA (11%) and Japan (11%) (Figure 3.22, Panel A). A salient characteristic shared among these major financiers is their inclination to extend loans. Lao PDR's debt issues make it challenging for these partners to maintain their previous levels of lending to the country. This trend is evident in the decrease of multilateral development finance to Lao PDR after 2019, as shown in Figure 3.22, Panel B. In the current era of escalating global debt, this raises the question of how development partners can continue supporting countries grappling with significant fiscal challenges, especially those in or at high risk of debt distress.

Figure 3.22. Bilateral development partners are playing a growing role in Lao PDR's financing for a sustainable development landscape



Source: (OECD, 2023[1]), *OECD Creditor Reporting System database*, https://stats.oecd.org/Index.aspx?DataSetCode=crs1 (accessed on 10 October 2023).

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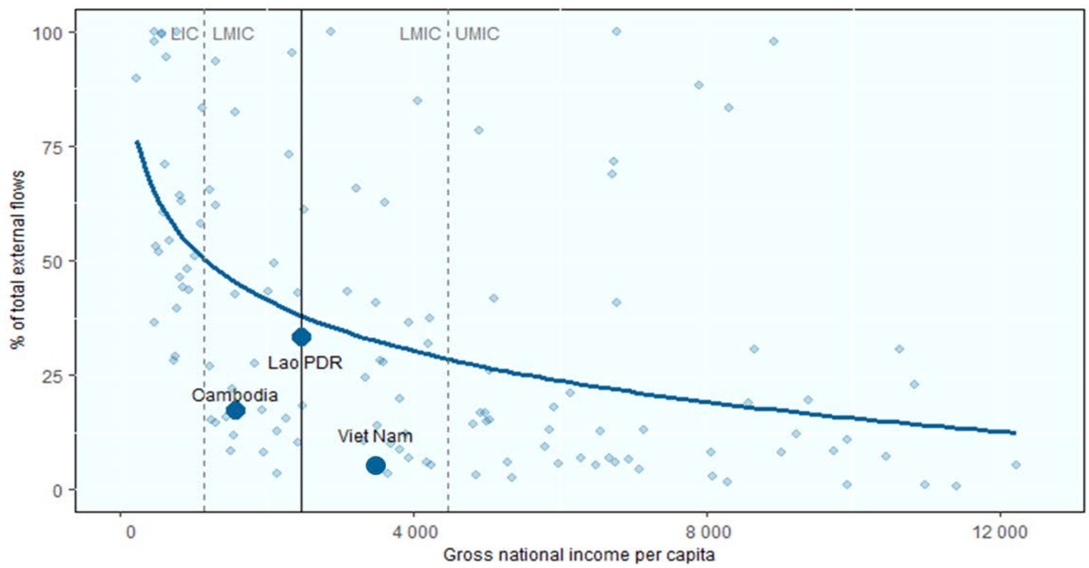
Maximising the impact of development co-operation hinges on ensuring its fitness for purpose, quality and effectiveness. The experience of Lao PDR demonstrates the importance of developing countries carefully analysing and selecting their financing sources and instruments, including the appropriate mix of concessional and market-term finance required in order to achieve their objectives. ODA, which represents the concessional facet of ODF, accounts for a smaller share of the external financing mix in Lao PDR relative to peer countries (Figure 3.23). Specifically, ODA accounts for just over 25% of Lao PDR's external financing, in stark contrast to the nearly 40% typical for the average developing country at a comparable development stage. This comparatively lower share of ODA in Lao PDR can be attributed to the prominence of China's lending – which does not fall under ODA and is in large part non-concessional – and the significant influence of FDI. Beyond the level of concessionality, other factors are also crucial to maximising the impact of development co-operation. For example, the importance of transparency and co-ordination cannot be overstated. Key development partners' active engagement and participation in the country's aid co-ordination mechanisms and strategic dialogues is paramount to curbing some challenges in aid management and governance, such as the risk of fragmentation and duplication discussed in Box 3.1.

Figure 3.23. Concessional finance, such as ODA, accounts for a relatively small share of Lao PDR's external financing mix compared with countries at a similar development stage

Average ODA as a share of total external financing flows, 2017-21



Note: "LIC" refers to "Low-income countries", "LMIC" refers to "Lower middle-income countries" and "UMIC" refers to "Upper middle-income countries". The blue line represents the trend line for all ODA recipient developing countries.
Source: Authors' calculations based on (OECD, 2023[1]) , *Creditor Reporting System database*, https://stats.oecd.org/Index.aspx?DataSetCode=CRS1; and (World Bank, 2024[2]), *World Development Indicators* (database), https://databank.worldbank.org/source/world-development-indicators (accessed on 20 October 2023).

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Innovative financing sources are in their infancy in Lao PDR but have the potential to reconcile its twin agenda of resource mobilisation and natural capital preservation

The government of Lao PDR, like the governments of many developing countries, is exploring innovative financing mechanisms as potential tools to boost its revenue and enhance its access to financing. These mechanisms, which include carbon credits as well as green, social, sustainable and sustainability-linked (GSSS) bonds, have the potential to help countries monetise their natural assets while promoting environmentally conscious behaviours domestically. However, the fiscal situation of a country dictates what timing is feasible and requires differentiating and prioritising among the different options considered.

Carbon credits offer an attractive and credible option to generate additional revenue by monetising Lao PDR's natural capital. Carbon credits have become a topic of increasing interest in recent years, especially as part of discussions around the Conference of the Parties (COP) on climate change. Enterprises have historically been the main purchasers of carbon credits: in Lao PDR, for example, the Lao–Swedish enterprise Burapha Agro-Forestry Co., Ltd., a plantation and wood products manufacturing company successfully issued carbon credits tied to its agroforestry activities for the first time in 2022 for a value of approximately USD 1 million. While this example confirms the potential for carbon credits to be a source of additional revenue, it is essential to note that carbon credits have faced global criticism about their actual environmental benefit.

Recent international discussions open opportunities for Lao PDR to issue sovereign carbon credits. International discussions have recently explored new mechanisms for sovereign nations to purchase and sell carbon rights, including those tied to forest conservation projects. Specifically, the involvement of governments and the creation of internationally transferred mitigation outcomes (ITMOs) under Article 6.2 of the Paris Agreement offers a new opportunity for governments to participate in more credible international carbon credit markets. Countries can use these new types of credits in order to meet their nationally determined contributions (NDCs) under the Paris Agreement (Box 3.2). This opens significant opportunities for countries like Lao PDR to explore converting their carbon sinks into natural capital that yields a return on investment against a commitment to preserve it. This is particularly suitable for Lao PDR since the country has included the goal of increasing its forest cover to 70% of its land area in its NDC, at an estimated cost of USD 1.7 billion (Government of Lao PDR, 2021[33]).

Box 3.2. The early experiences of pioneer countries with sovereign carbon credits present valuable learning opportunities for Lao PDR

The concept of sovereign carbon credits, although still in its early stages, has been gaining traction globally. Sovereign carbon credits quantify a nation's efforts to reduce GHG emissions as tradable units. This system not only incentivises sustainable practices but also opens new avenues for economic growth and environmental conservation. Lao PDR stands to gain valuable insights and learn lessons from early adopters such as Ghana, Costa Rica and Colombia, which, despite their differing geographical and economic contexts, offer instructive examples of how sovereign carbon credits can be effectively implemented.

Ghana's approach is noteworthy for its focus on establishing a comprehensive institutional framework. In 2022, Ghana became the first country to adopt a comprehensive institutional and regulatory framework for issuing ITMOs under Article 6 of the Paris Agreement. During the COP 27 climate conference that same year, Ghana, Switzerland and Vanuatu announced the first voluntary co-operation to trade ITMOs. This arrangement allows Switzerland to purchase ITMOs in return for its support of climate change mitigation projects. The initiative in Ghana will support thousands of rice farmers to reduce methane emissions by converting to more sustainable forms of agriculture. These farmers, who account for approximately 80% of Ghana's rice production, stand to increase their income through revenues generated from ITMO sales. This model promotes environmental stewardship while simultaneously bolstering the local economy, offering Lao PDR a valuable example of the potential of sovereign carbon finance to align economic incentives with environmental conservation.

Costa Rica, currently the only nation to have successfully reversed deforestation, capitalises on its environmental achievements to engage in carbon credit issuance. The country's success in forest and biodiversity preservation builds upon a track record of strong government policies over several decades. During the 1970s and 1980s, Costa Rica experienced one of the world's fastest deforestation rates, which was caused by the clearance of forest areas for cattle ranching and road construction. Since the 1980s, Costa Rica has implemented strong government policies that tackled deforestation and allowed its forest cover to grow back to 60% from a low point of 40% in the 1980s. In 1997, the government introduced the Payments for Environmental Services (PES) programme, through which landowners receive payments for adopting sustainable forestry practices such as forest protection and reforestation. PES payments compensate landowners for the loss of revenue that they could have earned from agriculture by converting tropical forest to field or other land uses. Originally funded by a fuel tax and water usage fees, the PES revenue base could be expanded to include a significant share from carbon credits. Costa Rica's experience demonstrates the possibility of Lao PDR reversing deforestation and adopting sustainable forest management practices, and demonstrates how carbon credits could be leveraged in support of this goal.

Colombia is another pioneer country exploring the potential presented by carbon credits. Since 2023, Colombia has participated in the Supporting Preparedness for Article 6 Cooperation (SPAR6C) programme, funded by the German Ministry for Economic Affairs and Climate Action and led by the Global Green Growth Institute (GGGI). The SPAR6C initiative focuses on developing robust frameworks for international carbon markets and helping develop mitigation activities eligible for market participation. Colombia's example illustrates how Lao PDR could leverage its rich biodiversity and forest resources for mitigation, positioning itself as an active participant in global carbon markets and securing a new stream of financing in order to incentivise green investments and practices.

The experiences of early carbon credit adopters like Ghana, Costa Rica and Colombia offer key insights and practices that can be beneficial to other countries, including Lao PDR. These three nations have employed unique approaches in their efforts to develop market-based mechanisms for mitigating GHG emissions, and their examples illuminate different paths towards leveraging carbon credits in order to integrate environmental sustainability and economic progress. By understanding the variety of approaches and paths towards harnessing sovereign carbon credits, Lao PDR can effectively navigate its own carbon finance journey and progress towards achieving its climate goals while encouraging sustainable development. The experience of Ghana, which was shared and discussed during a meeting of the OECD Mutual Learning Group, shows that integrating carbon finance as part of a sustainable finance package requires a multifaceted approach:

- **Alignment with local policies and regulations:** Adhering to Lao PDR's policy and regulatory framework is essential for the success of carbon finance initiatives. The fiscal regime, along with environmental regulation and the financial framework, play interconnected roles in unlocking carbon finance.
- **Establishment of credible institutional structures:** Building robust institutional structures is crucial for the effective implementation and monitoring of carbon finance projects. This includes setting up entities responsible for oversight, verification and enforcement in order to maintain credibility and transparency in the carbon market.
- **Mobilisation of actors:** Achieving success in carbon finance requires collaboration across all sectors of society, including the public and private sectors. This entails engaging stakeholders in order to cultivate awareness of, participation in and a commitment to sustainable practices.
- **Youth involvement:** Engaging youth in carbon finance initiatives is critical for long-term sustainability.

Source: Authors' elaboration based on the OECD Mutual Learning Group meeting held on 29 February 2024.

In order to fully capitalise on the carbon finance opportunity, Lao PDR must satisfy specific conditions. These include improving governance and co-ordination among key stakeholders, keeping a detailed record of land use across the country, and producing accurate, harmonised and regularly updated environmental statistics (a topic expanded upon in Chapter 6). Fulfilling these preconditions will ensure that carbon credits and forest preservation efforts are effective, sustainable and adequately monitored. Lao PDR could also benefit from creating bilateral agreements with countries willing to offer technical support for both the monitoring of forest preservation activities and the purchase of carbon credits. This approach would mirror the model used by the agroforestry enterprise Burapha Agro-Forestry Co., Ltd., which collaborates with a private entity for technical support on carbon credit issuance and, in return, pledges to sell the credits to that private entity.

An uncoordinated approach to carbon credits could endanger the credibility and success of the entire initiative. Carbon credits, by their nature, demand a high degree of trust among stakeholders, usually upheld by stringent assurance processes. Among other things, they require a multistep process of measurement, reporting and verification (MRV) in order to certify that an activity has actually prevented or removed GHG emissions. Also, as shown in Chapter 6, co-ordination is crucial in making data available for measuring, reporting and verifying carbon credits. While the concept of sovereign carbon credits is relatively new, past experiences highlight the necessity of a solid governance framework. Conversely, a fragmented approach risks introducing complexity, which could severely undermine trust in Lao PDR's sovereign carbon credits. In order to avoid this, strategic co-ordination is paramount, both within the government and among development partners.

Currently, key responsibilities are scattered across various parts of the Lao PDR government, which are working alongside different development partners in order to operationalise carbon credits. For instance, the Ministry of Agriculture and Forestry is responsible for the National REDD+Strategy (reducing emissions from deforestation and forest degradation in developing countries) , which includes clear emissions reduction and removal targets (Ministry of Agriculture and Forestry, 2021[34]). Since 2020, the Ministry of Agriculture and Forestry has been collaborating with the World Bank under the Forest Carbon Partnership Facility to issue carbon credits. As part of this Emission Reductions Payment Agreement (ERPA), the World Bank committed to making payments to Lao PDR for verified reductions of up to 8.4 million tonnes of carbon dioxide emissions in northern Lao PDR, valued at approximately USD 42 million (World Bank, 2021[35]). Since 2023, the Ministry of Natural Resources and Environment (MONRE), backed by the GGGI and Australia, is seeking to establish a co-ordinated policy structure and MRV system. Other institutions, such as the Ministry of Public Works and Transport, have responsibility for the emissions of specific sectors or activities. Looking forward, harmonisation is required across these multiple and overlapping initiatives in order to ensure the coherence and complementarity of efforts at the national level and avoid institutional or sectoral compartmentalisation.

The issuance of GSSS bonds, often touted as a promising financing avenue for developing countries, is not a viable option for Lao PDR in the short to medium term. These instruments, despite emerging as innovative financing tools globally, require a stable economic environment, reliable access to capital markets and a certain level of borrowing capacity. For developing countries like Lao PDR, diving into such complex financial instruments amid fiscal challenges might exacerbate their economic vulnerabilities. Moreover, the issuing, management and servicing of these bonds often involve significant costs and require robust legal and regulatory frameworks. Until Lao PDR can achieve a more fortified fiscal position and establish the necessary infrastructures, the risks associated with GSSS bonds are likely to outweigh their potential benefits.

While the immediate feasibility of GSSS bonds may be in question for Lao PDR, it is important to recognise that the foundation for such instruments can be cultivated progressively. The establishment of a conducive environment for these bonds is intrinsically linked to the restoration of macroeconomic stability, the development of the domestic financial sector and the availability of harmonised data and statistical systems in order to ensure that different ministries and government departments responsible for the projects financed with the bonds can report on the use of the proceeds, the impact of projects, or the achievement of sustainability targets. As Lao PDR works towards strengthening its economic base and building a more diversified financial sector, it can simultaneously lay the groundwork for GSSS bonds (OECD, 2022[36]). This would involve regulatory enhancements, statistics capacity building, and cultivating partnerships with international financial institutions and relevant development partner initiatives, such as the European Union's Sustainable Finance Hub. Over time, as macroeconomic conditions stabilise and the local financial sector matures, Lao PDR will be better positioned to harness the benefits of these sustainable financial instruments. Furthermore, in the long term, a robust GSSS framework could act as a catalyst, channelling the necessary funds and investments into sectors relevant to developing sustainable tourism, forestry and renewable energy, thereby promoting a green and sustainable economic growth trajectory for the country.

Mounting challenges in financing key development sectors put Lao PDR's development objectives at risk

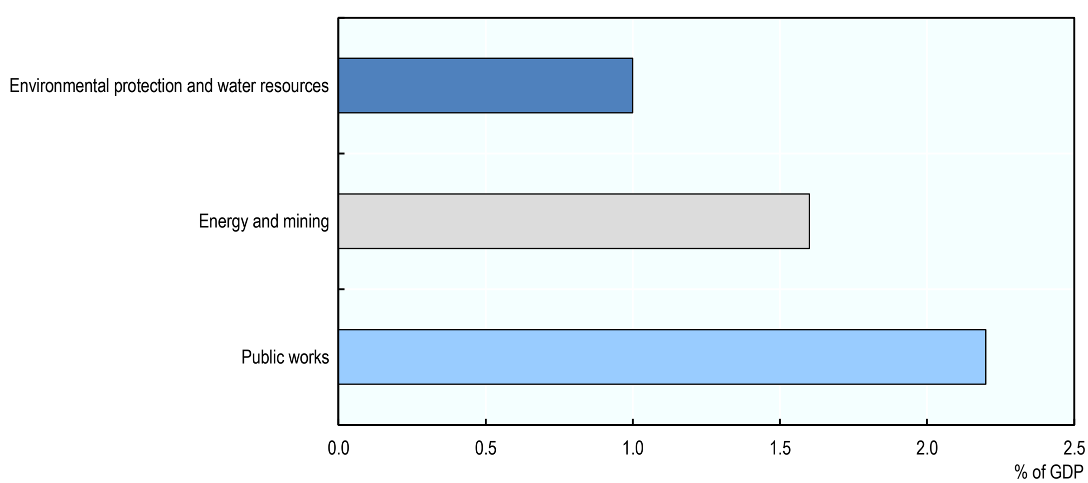
The debt situation threatens the financing of essential development sectors

The 9th NSEDP and its Financing Strategy point to healthcare, education and the environment as priority sectors. This strategic focus, reflecting the government's commitment to sustainable development and inclusive growth, is designed to address the interlinked challenges of reducing poverty, improving the quality of life for Lao PDR's citizens and safeguarding natural resources. Under the NSEDP, the government aims to enhance access to quality healthcare and education services and reduce disparities in access to such services, especially for girls, women and ethnic minorities. Meanwhile, the NSEDP sets environmental goals that emphasise the protection of biodiversity, the promotion of sustainable agricultural practices and the management of the effects of climate change. By allocating resources and mobilising international support for these objectives, the government could ensure a transformative impact on Lao PDR's socio-economic landscape, laying the groundwork for long-term resilience and prosperity.

The 9th NSEDP Financing Strategy acknowledges the current gap between these priorities and actual allocations of public resources. Despite the NSEDP's clear emphasis on social sectors and environmental protection, some of the sectors with negative social and environmental externalities (such as energy, mining and public works) together made up more than 20% of all public expenditure in 2020. Public expenditure on energy and mining, for example, accounted for 1.6% of GDP (Figure 3.24). In contrast, public expenditure dedicated to environmental protection and water resources represented only 1% of total expenditure as a share of GDP (Government of Lao PDR, 2021[16]). The government's revenue is also highly dependent on activities that are potentially harmful for the environment and for social outcomes. For example, between 5% and 10% of the government's total revenue comes from royalties related to the exploitation of Lao PDR's natural resources.

Figure 3.24. There is a significant misalignment between the Lao PDR government's priorities for sustainable development and actual allocations of public resources

Public expenditure in key environmentally relevant sectors as a percentage of GDP (2020)



Source: (Government of Lao PDR, 2023[17]), *9th National Socio-Economic Development Plan Financing Strategy (2023-2025)* (accessed on 10 October 2023).

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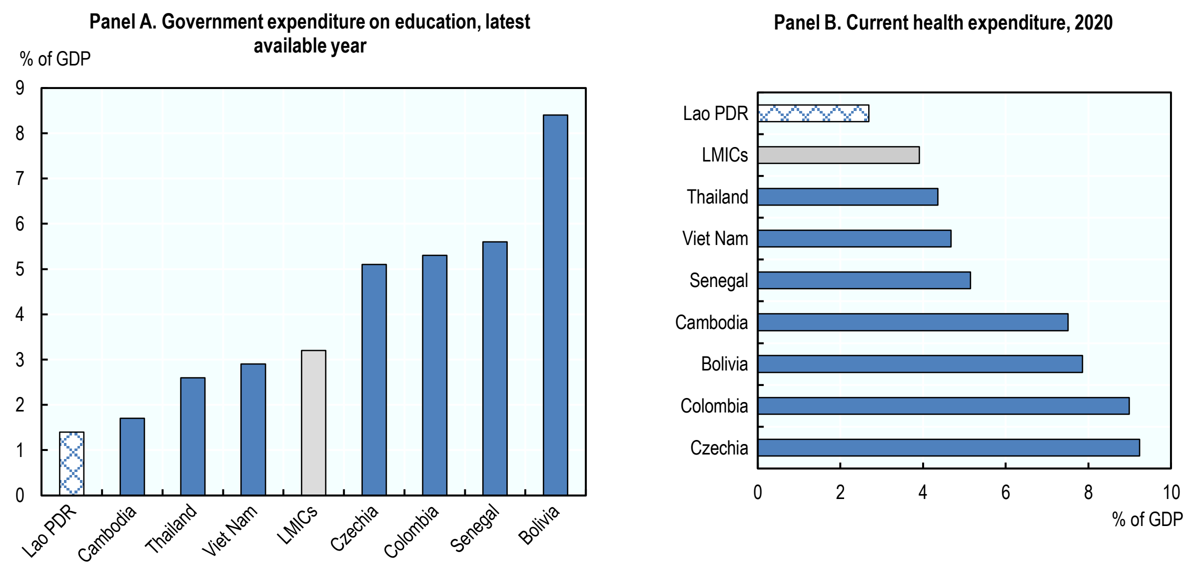
Compared with other countries, Lao PDR has historically demonstrated very low spending in social sectors. These include healthcare and education, where its government spending is among the lowest in the world. Government expenditure on education in Lao PDR stands at around 1.4% of GDP, compared with 3.2% of GDP for the average LMIC (Figure 3.25, Panel A). Even Cambodia, which has a lower income per capita, exhibits a slightly higher volume of education spending relative to its GDP. This also holds true for healthcare expenditure, which represents a mere 2.7% of GDP in Lao PDR (Figure 3.25, Panel B). In contrast, the average healthcare expenditure for LMICs is nearly 4% of GDP, and all of Lao PDR's neighbouring countries demonstrate a higher ratio of healthcare expenditure to GDP, including 4.4% for Thailand, 4.7% for Viet Nam and 7.5% for Cambodia. Lao PDR's low spending in social sectors is likely due to the low levels of government revenue that also characterise the country, as discussed in Chapter 4 on generating sustainable fiscal revenue.

Figure 3.25. Government expenditure in social sectors in Lao PDR ranks among the lowest in the world



Note: Panel A is based on the latest available data for Thailand (2016); Bolivia and Colombia (2020); Cambodia and Czechia (2021); and Lao PDR, LMICs, Senegal and Viet Nam (2022). "LMICs" refers to "Lower middle-income countries".
Source: World Bank (2024[2]), *World Development Indicators*, https://data.worldbank.org/indicator (accessed on 12 October 2023).

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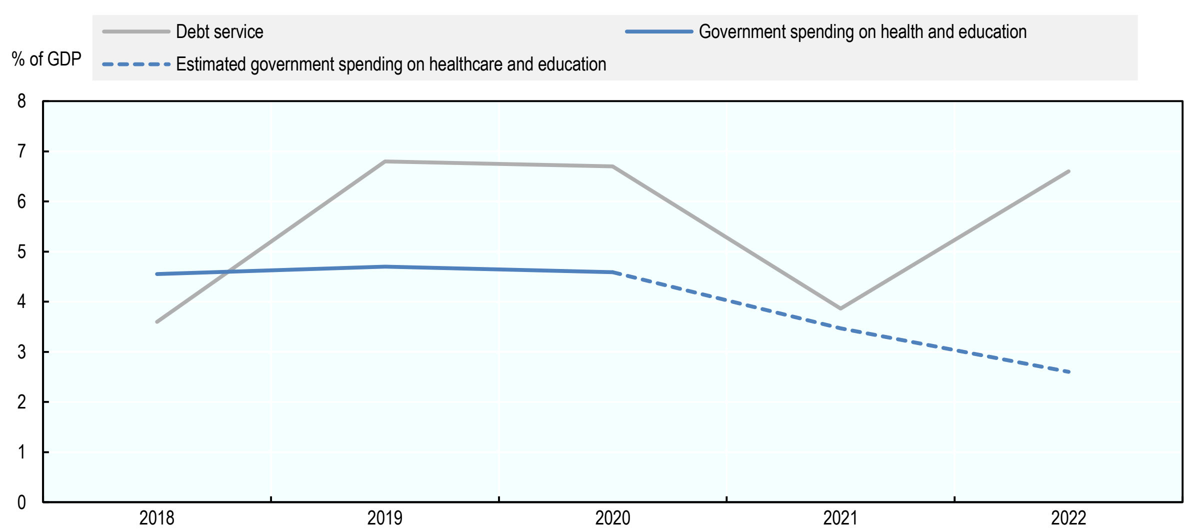
The healthcare sector financing landscape in Lao PDR reveals a high degree of reliance on sources other than government expenditure. Compared with other LMICs, a significant portion of Lao PDR's healthcare sector financing comes from ODA and out-of-pocket contributions from the country's citizens. In contrast, government expenditure in the healthcare sector is lower than that in countries at a similar income level. This financing trend has detrimental implications for the country's most vulnerable populations, as the poorest citizens are disproportionately burdened by out-of-pocket expenses, especially during times of high inflation. For example, a recent survey showed that more than one-half of Laotian families affected by high inflation had to decrease their education and healthcare spending. Spending reductions were more prevalent among low-income families, with 65.6% reducing healthcare spending and 68.2% reducing education spending, compared with only 54.6% of more affluent households reducing healthcare spending and 50.7% reducing education spending (World Bank, 2023[37]). Without an increase in government expenditure, the current financing situation in social sectors is thus likely to exacerbate poverty and inequality.

Debt service already surpasses, and could increasingly crowd out, government spending in both the healthcare and education sectors. While Lao PDR's social sector spending remains worryingly below the global average, the country's debt service burden continues to escalate, taking precedence over investment in vital areas, such as healthcare or education. In fact, despite the debt service deferrals that the government negotiated with Lao PDR's main bilateral creditor between 2020 and 2022, the ratio of debt service to GDP exceeds that of the government's expenditure in healthcare and education (Figure 3.26). An alarming statistic illustrates this challenge: in 2022, while the combined expenditure on healthcare and education was estimated to represent 2.6% of the country's GDP, debt service represented nearly 7% of its GDP.

The recent need for fiscal consolidation in order to address debt distress has resulted in spending cuts in healthcare and education. Lao PDR displays a worrying trend where essential development sectors, notably healthcare and education, have faced expenditure reductions (Figure 3.26). This fiscal consolidation, prompted by growing concerns over the debt situation, has primarily been achieved through these spending cuts. In stark terms, the commitment to address debt risks is curtailing essential spending on healthcare and education, which is vital for human development. This is particularly concerning given the sharp increase in inflation in 2022, which remained elevated in 2023.

Figure 3.26. The gap between Lao PDR's debt service and government spending on social sectors is expected to widen

Debt service and total government spending on healthcare and education in Lao PDR as a percentage of GDP (2018-22)



Note: Debt service data for 2022 are preliminary. Data on government spending on healthcare and education in 2022 are an estimate from the World Bank Lao PDR Economic Monitor.
Source: (Government of Lao PDR, 2022[5]), *Public and Publicly Guaranteed Debt Statistic Bulletin*, https://www.mof.gov.la/wp-content/uploads/2023/07/2022-Public-and-Publicly-Guaranteed-Debt-Bulletin-of-Lao-PDR-Final.pdf; World Bank (2024[2]), *World Development Indicators (database)*, https://data.worldbank.org/indicator/; and World Bank (2023[38]), *Lao PDR Economic Monitor*, https://thedocs.worldbank.org/en/doc/4d007846d90603cba830b0b2859cf9be-0070062023/original/LaoEconomicMonitorMay2023.pdf (accessed on 13 October 2023).

StatLink https://stat.link/ixy0mw

Unless specific measures to increase government revenue are adopted, it is probable that a widening financial chasm will emerge, with rising debt service costs overshadowing government spending on social sectors. Prioritising debt payments in order to avoid default could detract from government investments in social sectors. The steep increase in debt service that has been projected from 2023 onwards is likely to further widen the gap between debt service and social spending. In this context, the already insufficient social spending is unlikely to increase in the coming years without the government securing new financing sources. Therefore, it is critical for the government to take steps to increase its revenue, which could include the adoption and implementation of “sin taxes” (e.g. on tobacco), an option examined in detail in Chapter 4. Another option could be to explore mechanisms to sustainably manage future revenues from hydropower, forestry and mining, learning from peer experiences, such as the Bhutan Economic Stabilization Fund or similar sovereign wealth funds (SWFs). Recent research suggests that stabilising SWFs help reduce fiscal policy volatility (Al-Sadiq and Gutiérrez, 2023[39]).

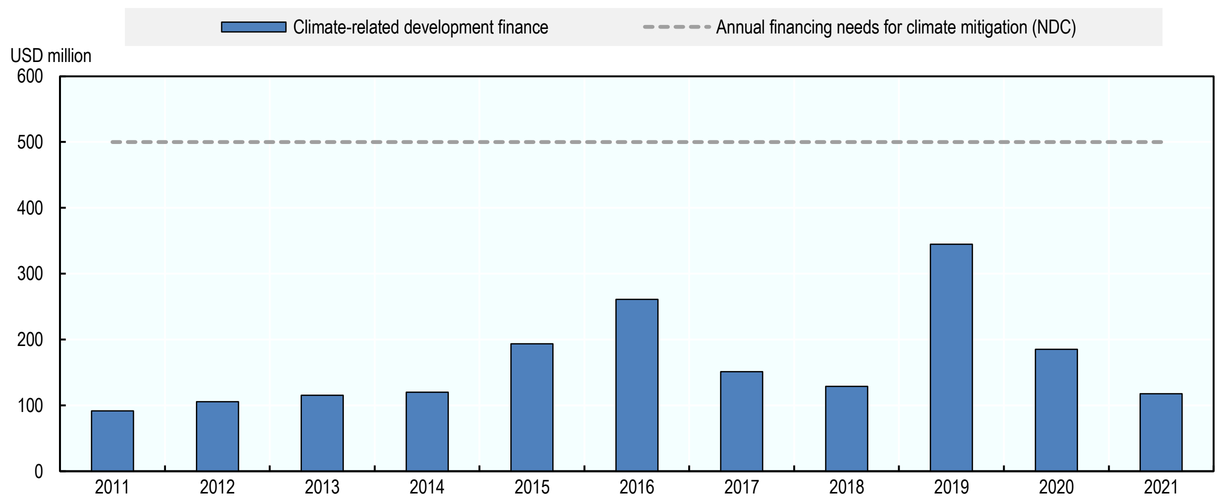
Underfunding of essential development sectors jeopardises Lao PDR’s sustainable development trajectory

Lao PDR’s consistent shortfalls in investment in social sectors raises critical concerns about its sustainable future. If this pattern persists, it could pose significant challenges to the country’s long-term development goals. Social sectors, including healthcare and education, are foundational to the prosperity and progress of any country. A sustained underinvestment in these areas not only affects immediate well-being but can also hinder human capital formation, which is crucial for Lao PDR’s overall growth trajectory and competitiveness on the global stage. This is acknowledged by the 9th NSEDP Financing Strategy, which considers healthcare and education as priority sectors for financing due to the importance of human capital in helping to realise Lao PDR’s objectives of achieving irreversible LDC graduation and attaining the SDGs, all in a post-COVID-19 context.

Similarly, insufficient financial support for environmental protection and climate action poses a threat to the implementation of the NGGS. The Lao PDR government’s shift to environmentally protective policies is a step in the right direction. Recent research suggests that in recent decades, forest loss and degradation has cost Lao PDR nearly 3% of its GDP per year, and that the health effects caused by pollution have an estimated cost equivalent to 15% of the country’s GDP (World Bank, 2023[40]). This is compared with biodiversity protection costs amounting to 0.3% of global GDP per year, which, if applied to Lao PDR, would have represented investments totalling USD 60 million per year in 2020 (Government of Lao PDR, 2023[17]). In addition, Lao PDR showcases ambitious climate mitigation objectives, as shown by its NDC, with investment needs estimated at USD 4.8 billion (representing around USD 500 million annually until 2030). In practice, this is far more than the total amount of climate-related development finance currently being accessed by the country, including for both mitigation and adaptation measures (Figure 3.27).

Figure 3.27. Despite an increasing trend, Lao PDR still has room for improvement in terms of access to climate finance

Lao PDR's climate-related development finance and financing requirements (2011-21)



Note: The annual financing requirements for climate mitigation correspond to the estimated requirements mentioned in Lao PDR's NDC towards achievement of its 2030 conditional targets.
Source: OECD (2023[41]), *Climate-Related Development Finance*, https://www.oecd.org/dac/financing-sustainable-development/development-finance-topics/climate-change.htm (accessed on 13 October 2023).

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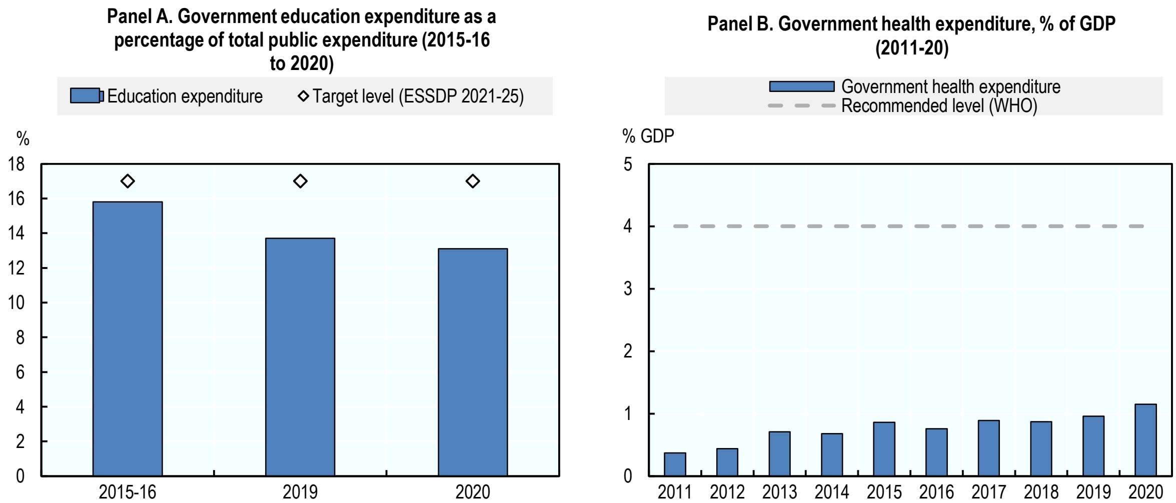
The current trajectory of government investment in education and healthcare is not in alignment with achieving Lao PDR's set or suggested targets in these areas. Despite growing recognition of the critical importance of education and healthcare for sustainable development, the allocation of funds remains inadequate when measured against domestic policy goals and international benchmarks. Government spending on education has been on a downward trend since 2015, from representing nearly 16% of total public expenditure in 2015-16 to barely 13% in 2020 (Figure 3.28, Panel A). In the case of healthcare financing, government expenditure has increased from 0.4% of GDP in 2011 to 1.2% in 2020, but that is still far from the 4% of GDP recommended by the World Health Organization (WHO) (Figure 3.28, Panel B) (ADB, 2023[42]).

Figure 3.28. Government expenditure on education and healthcare in Lao PDR is far below target or recommended levels



Note: In Panel A, the target level for government expenditure on education is the level mentioned in the *Education and Sports Sector Development Plan 2021-2025 (ESSDP)*. Panel B shows the WHO-recommended level for government expenditure on healthcare, as mentioned in (ADB, 2023[42]).
Source: (Government of Lao PDR, 2023[17]), *9th National Socio-Economic Development Plan Financing Strategy (2023-2025)*; World Bank (2024[2]), *World Development Indicators (database)*, https://data.worldbank.org/indicator.

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Without significant adjustments to the financing trends for its priority sectors, Lao PDR risks falling short of its developmental aspirations in these vital areas. This underinvestment could stifle the country's human capital and sustainable development, two cornerstones of economic growth and poverty alleviation. In order to reverse this trend, it will be essential for the government to prioritise environmental and social sectors within the national budget in an effort to close the gap between current expenditure levels and the strategic investments required to develop a healthy, educated and productive society.

Bolstering the government's revenue is key to addressing the shortfall in social sector financing. A robust revenue system provides a steady stream of resources that can be channelled into crucial public services and infrastructure. It also reduces the dependency on external finance and ensures that domestic priorities can be met in a consistent manner. This is particularly true for investments in social sectors and in climate adaptation, both of which tend to be financed in large part through public finance because their returns, which require a long-term horizon, are typically less appealing to private investors.

Box 3.3. Key recommendations

Given its challenging economic and financial situation, Lao PDR requires a carefully phased approach aimed at addressing both its immediate and future financing challenges and opportunities. Addressing the escalating debt is a prerequisite for the country to return to a path towards sustainable development. In the short term, priority should be given to reducing the debt burden. This will involve seeking debt relief or restructuring where possible in order to alleviate the immediate financial pressures, as well as securing ways to ensure a sustained fiscal consolidation. Looking towards the medium term, it is important for Lao PDR to cultivate new economic drivers that can diversify its economy beyond traditional sectors, such as resource extraction and agriculture, which often carry negative environmental and social consequences. Striving to better harness current and new financing sources is also essential in order to facilitate adequate investment in key development sectors. Long-term stability hinges on institutional reforms that prioritise sustainable debt levels, including the implementation of prudent financial management that steers the economy towards increased resilience.

In the short term, Lao PDR should deleverage in order to reduce the debt burden and re-establish macroeconomic stability.

- **Address the country's fiscal challenges in order to break the vicious cycle of escalating debt, currency depreciation and high inflation:**
  - Seek debt relief from the country's primary lender (i.e. China) in order to free up fiscal space and alleviate short-term payment pressures.
  - Co-ordinate and communicate transparently with development partners in order to avoid moral hazard concerns, ensuring that any new concessional financing results in additional investment in development rather than merely serving to free up government resources to repay other creditors.
  - Gradually shift the emphasis of fiscal consolidation efforts from expenditure reduction to increased revenue generation and spending efficiency in order to ensure the sustainability and credibility of the fiscal adjustment (building on the recommendations detailed in Chapter 4 on on generating sustainable fiscal revenue).
- **Mitigate mounting fiscal risks arising from contingent liabilities associated with PPPs and SOEs:**
  - Audit existing SOEs and PPPs in order to evaluate their fiscal risk profiles and identify urgent threats to macroeconomic stability.
  - Define and enforce strict criteria for government guarantees in order to minimise fiscal exposure, ensuring that such guarantees are only issued when absolutely necessary.
  - Identify and enact quick-win reforms (such as cost-cutting and operational efficiency improvements) in those SOEs that present the riskiest profiles in order to stabilise SOE finances.
  - Communicate clearly with development partners and the public about the short-term fiscal risks identified in SOEs and PPPs, and about the measures being taken to address them.

In the medium term, Lao PDR should establish a sound framework in order to secure financing for the country's development goals.

- **Address the current fragmentation and lack of co-ordination in the country's sustainable development financing landscape:**
  - Establish a shared and well-co-ordinated governance of the sustainable development financing agenda among the multiple government stakeholders involved, including the co-chairing of key committees.
  - Ensure adequate resourcing of, and institutional engagement in, the sector and subsector working groups of Lao PDR's Round Table Process.
  - Secure the active participation of, and garner contributions from, all relevant development partners in strategic development and aid co-ordination mechanisms.
  - Develop a clear and coherent governance framework for sovereign carbon finance in order to promote a co-ordinated approach across the government, avoiding inefficiencies and reputational risks that could jeopardise this new financing source.

- **Take steps to safeguard the impact and effectiveness of development co-operation:**
  - Reinvigorate the multi-stakeholder dialogue around the Vientiane Declaration on Partnership for Effective Development Cooperation (2016-2025), as well as efforts to monitor the implementation of the Country Action Plan for the Implementation of the Vientiane Declaration on Partnership for Effective Development Cooperation (2016-2025).
  - With a view to maximising international support for sustainable development, use existing aid co-ordination platforms in order to consult partners on key governance and institutional issues constraining development co-operation flows to Lao PDR.
- **Enhance spending efficiency and build greater capacity for revenue collection:**
  - Explore opportunities with key development partners for enhanced support on public financial management and domestic resource mobilisation, appropriate to Lao PDR's fiscal context and challenges.
  - Develop and implement a comprehensive action plan to increase government revenue, with clear and credible revenue targets (building on the recommendations detailed in Chapter 4 on on generating sustainable fiscal revenue).
  - Review the current investment promotion framework in order to assess its costs and benefits, factoring in the effect of tax incentives on government revenue (building on the recommendations detailed in Chapter 5 on stimulating sustainable investment).
- **Create and strengthen a centralised public debt management function with authority over public debt issuance:**
  - The legal framework should clarify which body has the authority to borrow and to issue new debt, to invest, and to undertake transactions on the government's behalf.
  - Credit risk assessment and validation should be centralised for all public debt issuance, including by SOEs.

In the long term, Lao PDR should lay the foundations more broad-based growth and take preventive measures in order to avoid debt issues in the future.

- **Strengthen the business environment in order to encourage greater private sector development, reducing the strong reliance on public investment**:
  - Carry out an in-depth review of the role, governance and performance of the country's SOEs, which can help inform an action plan to tackle the negative implications of their dominant position in the development of Lao PDR's private sector.
  - Strengthen the local banking sector in order to reduce financial sector vulnerabilities and fiscal liabilities while promoting enhanced credit provision to the private sector.
  - Identify new drivers for foreign private investment, and seek development partner support in order to design an integrated and cross-cutting investment promotion strategy that considers the impacts on various sectors of the economy and aligns with Lao PDR's sustainable development objectives (building on the recommendations detailed in Chapter 5 on stimulating sustainable investment).
  - Engage with South-South partners and regional platforms in order to exchange knowledge and experiences with regard to maximising the development impact of remittances, including through policies supporting increased human capital and productive investments.
  - Explore additional support from development partners on key areas in order to increase the channelling of remittances to savings through the formal or semi-formal (e.g. village banks) financial system, with a focus on expanding access to digital services and improving financial education.

- **Promote sustainable borrowing policies and practices, and design formal mechanisms for contingency planning:**
    - Continue the policy dialogue on debt management initiated with the main international financial institutions and identify key functions of government that require additional technical support.
    - Seek technical support and capacity building from development partners in key areas of sustainable development finance, specifically in order to better harness finance opportunities and to design sound frameworks allowing Lao PDR to tap into innovative or nascent financing instruments in the future, including carbon and biodiversity finance. Explore possible financial or technical support from the INFF Facility initiative in order to cover part, or all, of the costs of the technical assistance.
    - With support from development partners and regional platforms, explore and assess the benefits for Lao PDR of mechanisms to stabilise and sustainably manage future revenues from commodity exports such as hydropower and mining. Use regional platforms to discuss good practices and peer experiences, such as the Bhutan Economic Stabilization Fund or other types of SWFs.
- **Develop a knowledge base and robust country systems in order to harness innovative financing sources:**
    - Strengthen the country's statistical systems and data collection processes – especially with regard to environmental protection, climate adaptation and mitigation – in order to support Lao PDR's efforts to harness innovative financing, such as carbon credits. As detailed in Chapter 6, access to carbon markets is likely to require technical support and capacity building from development partners in order to help Lao PDR produce harmonised and regularly updated data and statistics on its GHG emissions and the carbon absorption capacity of its forests.
    - Keep abreast of developments and the experiences of regional peers with regard to GSSS bonds as possible instruments to consider in the future, once Lao PDR is back to sustainable debt levels. In parallel, efforts to strengthen the local financial sector and the country's PFM and statistical systems will provide solid foundations to make sustainable finance instruments a viable option in the future.

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4 Generating sustainable fiscal revenue

Lao People's Democratic Republic (Lao PDR) faces the significant challenge of raising its tax-to-gross domestic product (GDP) ratio, which remains too low despite substantial growth in per capita incomes. As a result, and without reform, Lao PDR will miss its 2025 tax revenue target. While tax policy cannot be examined in isolation from the country's challenging macroeconomic setting, Lao PDR needs to change its approach to designing, administering and evaluating the tax system. This requires reconsidering many tax design features, such as overly generous investment tax incentives. There is also a lack of tax policy coherence across the enacted policies, and overall tax compliance remains low. In the future, the tax system should play a larger role in promoting formalisation. High-quality tax policy analysis will also be necessary in order to enact tax reforms and raise sufficient tax revenues while also promoting sustainable economic development.

Lao PDR's tax-to-GDP ratio remains stuck at a level that is too low to support development despite significant economic growth

Tax revenues are low and not "buoyant"

The tax system in Lao PDR mobilises too little revenue to support economic development; in fact, the country's tax-to-GDP ratio has been declining, despite significant economic growth. Tax revenues were equal to 9.7% of GDP in 2021, lower than in 2010 (11.5%) and 2015 (12.6%). In fact, the tax-to-GDP ratio declined every year between 2015 and 2020, which suggests that the downward trend is not purely due to the COVID-19 pandemic (OECD, 2023[1]).[1] The decline in the tax-to-GDP ratio reflects a lack of tax revenue "buoyancy". While Lao PDR recorded rapid economic growth over the past decade, with real per capita income growing by around 62% between 2010 and 2020, this economic growth did not result in an increase in the tax-to-GDP ratio. Tax revenue buoyancy refers to a state in which tax revenues grow faster than GDP on average, generating more resources and a higher tax-to-GDP ratio as a country develops (see Box 4.1).[2]

A low revenue buoyancy is the result of how the tax design, tax enforcement and tax policy in a country interact with the behaviour of taxpayers when the economy grows (or declines). For example, a well-enforced progressive tax system typically contributes to revenue buoyancy because taxpayers pay a higher marginal tax rate when incomes grow and a lower marginal rate when incomes decline. This chapter identifies a large number of features in the Lao PDR tax system that contribute both to low tax revenues and to the lack of tax buoyancy. Low revenue buoyancy can also be caused by revenue-reducing tax reforms that are positively correlated with economic growth. If a country tends to lower taxes discretionally in times of economic growth, as has been the case in Lao PDR, the buoyancy of tax revenue declines.

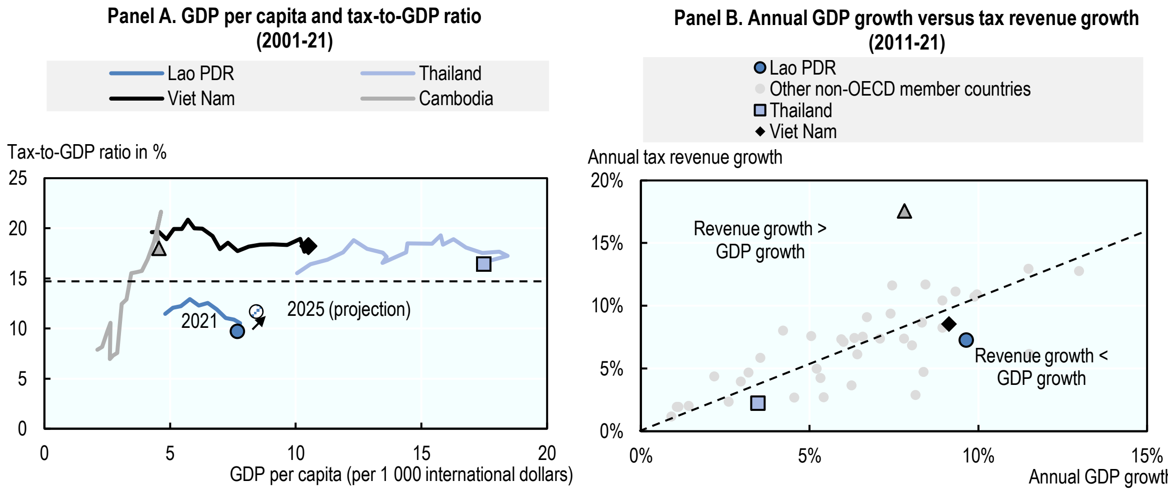
Revenue buoyancy has been sluggish in other countries in the Southeast Asian region as well, with the exception of Cambodia (Figure 4.1, Panel A). However, countries like Thailand and Viet Nam already mobilise a much higher tax-to-GDP ratio and enjoy a higher GDP per capita than Lao PDR. This leaves their governments with significantly more resources, although domestic resource mobilisation and re-establishing tax buoyancy are among those countries' policy goals as well. Lao PDR stands out because it simultaneously exhibits a very low tax-to-GDP ratio and a low tax buoyancy (Figure 4.1, Panel B). Only three countries in the OECD Global Revenue Statistics Database recorded a lower tax-to-GDP ratio in 2020: the Democratic Republic of the Congo, Equatorial Guinea and Nigeria.

Without reform, Lao PDR will miss its 2025 tax revenue target

Lao PDR requires buoyant tax revenues if the country wants to meet its own 2025 revenue target. According to its *9th Five-Year National Socio-Economic Development Plan (2021-2025)* (NSEDP) (Government of Lao PDR, 2021[2]), Lao PDR aims to increase its tax-to-GDP ratio from 11.05% in 2020[3] to 14.0% by 2025 (i.e. by 2.95 percentage points). Buoyant tax revenues can indicate that it may be sufficient for a developing country to maintain its current tax policy path because future GDP growth will result in a growing tax-to-GDP ratio. This is not the case in Lao PDR. On its current path, with a declining tax-to-GDP ratio despite economic growth, Lao PDR will fail to meet the revenue targets set in its NSEDP.

Projections by the World Bank suggest that Lao PDR may see a slight increase in its tax-to-GDP ratio until 2025 (World Bank, 2023[3]). The tax-to-GDP ratio also rebounded slightly in 2021 from its absolute low in 2020 (from 9.17% to 9.7%) (OECD, 2023[1]). However, without additional measures, the country will fall short of the goals stated in its NSEDP. In addition, the increase in its tax-to-GDP ratio predicted by the World Bank would result in a slow return to Lao PDR's previous revenue ratio levels (which reached a peak of 12.9% in 2015) but would fall significantly short of the government's tax revenue target, let alone sustainably raise the revenue ratio to levels observed in neighbouring countries.

Figure 4.1. Evolution of tax revenue and GDP in Lao PDR and peer countries until 2021



Note: Tax-to-GDP ratio and GDP per capita (purchasing power parity) paths until 2021. The lines in Panel A represent values prior to 2021. The dots refer to the value for each country in 2021. The dashed line in Panel A represents the revenue target that the Lao PDR government specified in the NSEDP (14%). Light grey dots in Panel B represent other non-OECD member countries with available revenue data in the OECD Global Revenue Statistics Database as of August 2023. Annual growth rates in Panel B correspond to the compound annual growth rate of nominal values between 2011 and 2021.

Source: Tax-to-GDP ratio and GDP per capita paths until 2021. The lines represent values prior to 2021. The dots refer to the value for each country in 2021. The dashed line represents the revenue target that the Lao PDR government specified in the NSEDP (14%).

Source: (OECD, 2022[4]), *Revenue Statistics 2022: The Impact of COVID-19 on OECD Tax Revenues*; (OECD, 2023[1]), *Revenue Statistics in Asia and the Pacific 2023: Strengthening Property Taxation in Asia;* GDP data from (IMF, 2023[5]), *World Economic Outlook Database* (accessed on 5 September 2023); (World Bank, 2023[3]), *Lao PDR Economic Monitor*; (Government of Lao PDR, 2021[2]), *9th Five-Year National Socio-Economic Development Plan 2021-2025.*

StatLink https://stat.link/m0budg

Peer countries raise more tax revenue in proportion to GDP

The Lao PDR government's tax revenue target of 14% of GDP for 2025 (i.e. an increase by about three percentage points between 2020 and 2025) appears moderate compared with the revenue-raising capacity of peer countries. In 2021, the average tax-to-GDP ratio for the Asia-Pacific region (out of the 27 countries in the region that report to OECD Revenue Statistics) stood at 19.8%. With a tax-to-GDP ratio of 9.7% in 2021, Lao PDR's tax-to-GDP ratio was more than ten percentage points below that average and was the lowest in the region. When Viet Nam had income per capita levels comparable to those of Lao PDR in 2022, its revenue ratio was significantly greater than Lao PDR's. Cambodia, despite lower income levels, already mobilises a larger share of GDP in tax revenue than Lao PDR.

Box 4.1. Tax revenue buoyancy as a tool to evaluate the tax system's response to growing incomes

Alongside tax revenue elasticity, tax revenue buoyancy is one of the key measures that captures the sensitivity of government revenue to economic activity. For instance, an overall tax revenue buoyancy of 1.2 suggests that when GDP grows by 1%, total tax revenues would be expected to grow by 1.2%. Buoyancy thus captures the total response of tax revenues to changes in GDP, including the impact of tax policy changes. In contrast, revenue elasticities control for tax policy reforms in order to isolate the impact of economic growth on tax revenue (i.e. in the absence of policy changes). If the tax revenue buoyancy is greater than 1, tax revenues in a country are "buoyant", which implies that tax revenues tend to grow faster than GDP.

Buoyant tax revenues indicate that it could be sufficient for a developing country to maintain its current tax policy path because future GDP growth will likely result in a growing tax-to-GDP ratio. A tax revenue buoyancy between 0 and 1 suggests that tax revenues tend to increase when a country's GDP grows, but revenues grow at a slower pace than GDP. Note that this results in a declining tax-to-GDP ratio, which is a particular problem in developing country contexts where tax-to-GDP ratios are already low. A negative tax buoyancy implies that tax revenues in absolute terms decline if a country grows its GDP.

The short- and long-term tax revenue buoyancy can be estimated empirically based on historical revenue and growth data (Cornevin, Corrales and Angel, 2023[6]; Belinga et al., 2014[7]). In addition to assessing the responsiveness of overall tax revenue, the analysis can also be conducted separately by tax type. For example, corporate income taxes are known to have a higher short-term tax buoyancy than other taxes, as profits are volatile and linked to the economic cycle. Tax buoyancy estimates can also be used to compare the actual responsiveness of tax revenues in one year with the expected change in tax revenues according to the historical tax revenue buoyancy (OECD, 2022[8]). A recent study finds a small difference between the tax revenue buoyancy and tax revenue elasticity for the average country, suggesting that tax revenue buoyancy estimates are mostly not driven by discretionary tax policy changes (Cornevin, Corrales and Angel, 2023[6]).

Another recent study estimated that the long-term tax revenue buoyancy in Lao PDR is 1.2 (Hill, Jinjarak and Park, 2022[9]). This is despite the fact that the tax-to-GDP ratio in Lao PDR was lower in 2022 than it was in 2010 (the earliest year for which tax revenue data are available in the OECD Global Revenue Statistics Database). Empirical tax revenue buoyancy estimates for developing countries can be misleading if they are based on historical tax data that date too far back in time. Using the relationship between economic growth and tax revenue as far back as the 1980s in order to estimate a tax buoyancy coefficient in a developing country with rapid economic growth in recent years results in estimates that need to be interpreted with care. A high tax buoyancy coefficient could also emerge if tax revenues and GDP fluctuate strongly from year to year – for example, due to changes in commodity prices (if the country is highly commodity dependent), due to a very low GDP and tax revenue (which magnify year-to-year percentage changes) or due to inaccuracies in measurement.

The lack of tax revenue buoyancy analysed in this chapter refers to the fact that the tax-to-GDP ratio in Lao PDR has not increased (and has actually declined recently) despite the country's rapid economic growth.

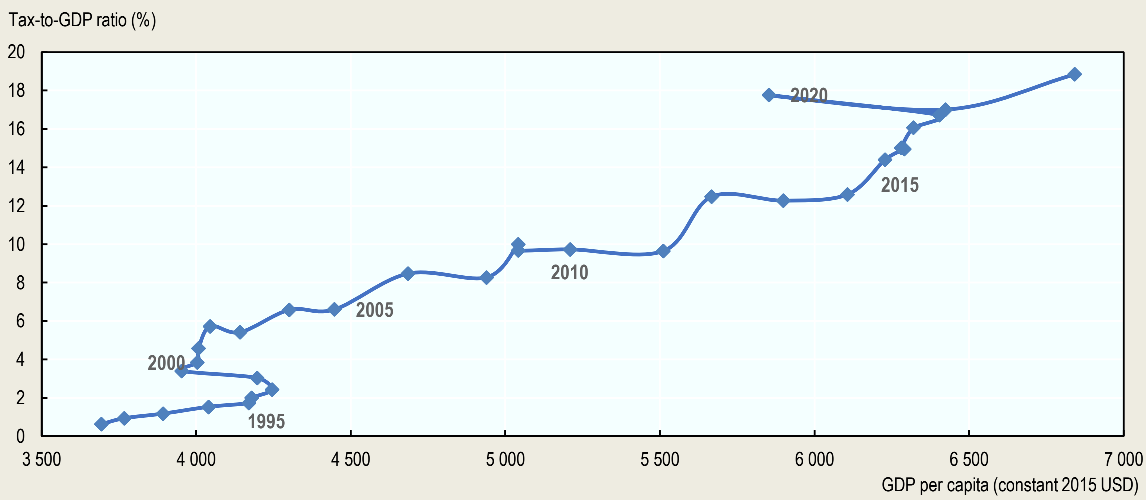
Not only would increasing the buoyancy of the tax system in Lao PDR help the country achieve its 2025 revenue target but it would also establish a positive link between economic growth and government finances for the future. Countries with a higher income generally find it easier to increase tax revenue as a percentage of GDP, and a buoyant tax system generates extra tax resources exactly when income growth is rapid. It has also been suggested that once tax revenues as a share of GDP surpass a certain minimum tipping point – a sign of higher state capacity – a country can expect faster economic growth for several years (Gaspar, Jaramillo and Wingender, 2016[10]). The effect could be even stronger if the additional revenue is invested in initiatives that promote growth in the long term.

However, history also indicates that even with positive revenue buoyancy, raising the tax-to-GDP ratio by five percentage points over a decade is a challenging task but there are examples (Gaspar et al., 2019[11]) (Box 4.2). This is particularly true in Lao PDR, which needs to address a large number of other development challenges in addition to raising more tax revenue. Assuming a 4% real annual income growth rate, an absolute tax revenue increase of more than 50% would be necessary in order to increase the tax-to-GDP ratio from 11.05% to 14% within five years. It is important to ensure that raising more tax revenue does not unduly compromise progress towards other development goals.

Box 4.2. Colombia has increased its tax-to-GDP ratio through a number of tax reforms

Starting from a low tax-to-GDP ratio, Colombia has made considerable efforts to broaden its tax bases, raise tax rates and stimulate voluntary compliance. Between 2000 and 2022, Colombia's tax-to-GDP ratio increased from 3.8% to 18.8% (Figure 4.2). In 2012, Colombia implemented a tax reform that reduced the tax burden on labour. The reform aimed to strengthen the formal economy by reducing SSCs in order to finance social expenditure from general tax revenues, including the National Alternative Minimum Tax (IMAN) and Alternative Simplified Mínimum Tax (IMAS). The tax reform reduced the number of VAT rates from 15 to 3 and introduced electronic invoicing. Simultaneously, the capital gains tax was lowered significantly, from 33% to 10%.

Figure 4.2. With economic development, Colombia managed to increase its capacity to collect taxes



Source: (World Bank, 2024[12]), *World Development Indicators*, https://databank.worldbank.org/ (accessed on 5 March 2024).

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In 2016, following recommendations from a group of experts, Colombia reformed its tax system in order to increase tax revenue. The revenues generated from the 2016 tax reform helped protect social spending while achieving the country's structural deficit target. This reform involved raising the VAT rate from 16% to 19%, comprehensively streamlining the tax code, alleviating the high corporate tax burden and implementing measures to enhance formalisation and tax administration. The reform mandated electronic invoicing for real-time transaction monitoring and introduced general anti-avoidance rules.

Colombia undertook tax reforms in 2019, 2021 and 2022 with the aim of enhancing the progressivity of its tax system while also focusing on increasing tax transparency and information. Beneficial ownership rules were introduced, and the tax administration was strengthened in terms of both information technology and human resources. Improved tax audits, supported by information sources like ultimate beneficial data and electronic invoicing, aimed at building taxpayer confidence. Since 2022, the tax administration sends personalised emails to individuals who file personal income tax returns to explain how their taxes will be used.

Source: Authors' elaboration based on OECD Mutual Learning Group meeting on 29 February 2024 and (IMF, 2023[13]), Article IV Consultation Report.

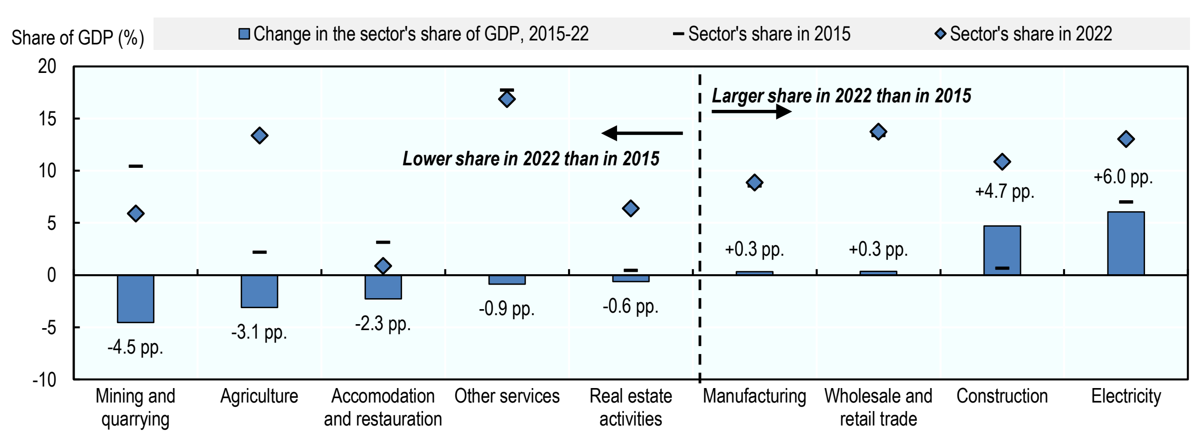
The link between economic growth and tax revenue generation is too weak in Lao PDR

The low tax revenues and low tax revenue buoyancy in Lao PDR can be traced back to how the tax system interacts with economic growth. Economic sectors that have experienced above-average growth over the last years, such as the construction or electricity generation sectors, are particularly prone to not raising adequate revenue (Figure 4.3). This is linked to the approach that Lao PDR has decided to follow in order to try to grow its economy and attract investment. Rather than working towards a consistent and reliable standard tax system, which would provide potential investors with a stable environment for investing and doing business, the country tends to further expand its web of tax incentives, special rules and untransparent agreements with individual investors.

For example, large-scale hydropower projects regularly benefit from project-specific agreements that exempt the enterprises carrying out the projects from corporate income taxes or withholding taxes for many years, among other tax concessions. In some instances, the payment of these taxes is replaced by a lump-sum amount that the developer can transfer to the government. Such arrangements not only reduce tax collection, but also dissociate the revenues generated in a given year from the economic activity in that same year. Signing multi-year concession agreements with project developers has significantly reduced the government's leeway in future years: Tax policy changes that Lao PDR decides to enact now will only affect major enterprises in growth sectors after a considerable delay.[4]

Widespread informality in the sectors driving economic growth contributes to low revenues as well. The construction sector, a sector with one of the highest levels of informality in Lao PDR (94% informal employment), has increased its share of GDP by almost five percentage points between 2015 and 2022 (Figure 4.3). However, additional employment in the construction sector will generate little additional revenue for the government if new workers are predominantly hired in the informal economy. Other economic activities benefit from permanently reduced corporate income tax (CIT) rates. Sectors with reduced CIT rates are frequently those whose growth the government of Lao PDR wants to stimulate, such as businesses operating in the area of green technologies. In practice, these types of incentives imply that growth in these sectors will not translate into significant revenues for the government.

Figure 4.3. Change in GDP by sector between 2015 and 2022 in Lao PDR



Note: Electricity includes water supply and waste management. "'PP" refers to "percentage points".
Source: (Lao Statistics Bureau, 2023[14]), *Laos Statistical Information Service (LAOSIS)*, https://laosis.lsb.gov.la/main.do (accessed on 23 September 2023).

StatLink https://stat.link/0d9ktf

Tax design challenges can be identified across all tax types and across types of economic activity. Table 4.1 provides a stylised overview of features characterising the Lao PDR tax system, which can explain why economic growth does not translate into adequate tax revenue growth. This chapter discusses these and other tax design challenges in more detail and provides concrete tax policy recommendations. However, tax reform in Lao PDR has to go beyond specific tax design changes, and major improvements to the country's approach to designing, administering and evaluating the tax system are needed as well. Ultimately, Lao PDR needs to identify a set of reforms that gradually increase revenue buoyancy (and raise revenue), while also turning the tax system into a positive force that helps address other developing challenges, such as high inequality, inadequate social protection, high informality or the lack of investment.

Table 4.1. Stylised overview of why economic growth does not result in adequate revenue growth in Lao PDR

Even if there is growth in Lao PDR in…	…it may not translate into much higher tax revenue because…	…which is a result of…
Domestic enterprises' profits	Effective CIT rates are low	Reduced CIT rates being offered in growth sectors (such as green technologies)
Multinational enterprises' profits	Profits can be easily stripped out of the country	The lack of a consistent international taxation framework
The profits of enterprises in Special Economic Zones (SEZs)	Profits are tax-exempt for many years	The availability of generous profit-based tax incentives in SEZs
Profits generated in the resource sector	Effective CIT rates are low or zero	Generous case-by-case tax incentives being granted to enterprises or consortia carrying out natural resource projects
Salaries	Average personal income tax (PIT)/SSC rates increase little with income	Only moderately progressive PIT and a low maximum SSC threshold
Capital incomes	Withholding tax rates are low	Low capital income taxes and a territorial PIT system
Self-employed business income	The self-employed are taxed more favourably than salaried workers, and their turnover is potentially under-reported	Special regimes (e.g. the freelancer regime) and suboptimally designed presumptive tax regimes
Real estate values	The land tax is not linked to real estate values	The lack of a mechanism to update land values, and no inclusion of the value of buildings and land improvements in the tax base
Consumption expenditure	The VAT efficiency and the standard VAT rate are low	The high share of informal businesses and a recent reduction in the standard VAT rate
Consumption of harmful products	Effective health taxes are low, despite increases in statutory rates	Non-compliance and no consistent health tax policy (e.g. the long-term stability contract with Lao PDR's leading tobacco producer)
Imports	A significant share of imports are undeclared	Complex procedures and a different set of taxes (including a "deemed profits" tax)
Exports	Exporting businesses pay little CIT (and PIT/SSCs)	Exporting businesses' tendency to be located in SEZs

Note: More details about these tax system design features and reform options are provided in the next section.

The tax policy in Lao PDR cannot be assessed in isolation from the country's challenging macroeconomic setting and weak social protection system

Current tax revenues are insufficient to finance spending needs

Current levels of tax revenue are insufficient to finance the substantial spending needs that Lao PDR faces, even ignoring the additional revenue needed in order to service the high public debt. One key area requiring significant additional resources is social protection, but more tax revenue is also needed in order to provide quality education or further invest in the country's infrastructure, which has been overly reliant on debt financing in recent years. Tax revenue mobilisation should be the preferred strategy for generating additional resources because debt financing has reached a limit in Lao PDR, and excessively cutting expenditure would harm the country's growth trajectory. Only domestic government resources will provide the reliable stream of sizeable revenues that would be independent from other countries' priorities and that are necessary in order to sustain and further expand public expenditure over the medium and long term. The goal of increasing tax revenue is therefore well-founded, and, in the medium term, tax revenues will likely have to exceed the 2025 target of 14% of GDP.

Financing needs are particularly significant if Lao PDR wants to achieve universal social protection by 2030 because the latest data suggest that the country currently only allocates 1.6% of its GDP to social protection (ILO, 2021[15]). On average, Lao PDR was therefore only able to spend less than LAK 40 000 (Lao kip) per person per month on social protection in 2022 (around EUR 2.0-2.5 (euros) based on 2022 exchange rates). The Lao PDR National Social Protection Strategy includes the target to provide all Laotian people with access to basic social protection by 2030, including health insurance, social security and social welfare (Government of Lao PDR, 2020[16]). This 2030 target is consistent with the Sustainable Development Goals, but achieving it will require significantly more financial resources, especially if the benefits are adequate.[5] The revenue generated from SSCs was equal to around 0.7-0.8% of GDP in 2019 and 2020 (IMF, 2022[17]). This implies that general government revenues and donor funds had to contribute significantly to social protection expenditure, even at the low levels of such protection observed today.[6]

The tax system in Lao PDR has not managed to keep inequality in check

Economic inequality is on the rise in Lao PDR, and the tax system has so far been unsuccessful in stopping this trend. Evidence from private household expenditure data shows an increase in the Gini coefficient for Lao PDR from 0.31 in 1992 to 0.36 in 2012, indicating growing inequality in consumption expenditure (Warr, Rasphone and Menon, 2018[18]). More recent estimates point towards a continuation of this trend. Based on the latest edition of the Lao Expenditure and Consumption Survey (LECS), the country's Gini coefficient regarding consumption expenditure reached 0.388 in 2018. At the same time, peer countries in the Southeast Asian region experienced a decline in economic inequality. As measured by the Gini coefficient, inequality in Lao PDR was higher than in Viet Nam (0.357), Thailand (0.364) and Indonesia (0.384) in 2018. New data also suggest a shift in the dominant type of economic inequality in Lao PDR: Inequalities inside provinces and geographical regions – rather than larger gaps between regions – have been the drivers of the latest increases in inequality (World Bank, 2020[19]).

As economic inequality grows and turns into a predominantly within-region phenomenon, the role of the tax and transfer system as a tool for mitigating inequality increases. Broad-scale redistribution from richer to poorer regions cannot address inequalities that exist between individuals within the same city or region. Individual taxes and transfers, on the other hand, have the potential to redistribute income in a targeted way from the rich to the poor regardless of location – but the current tax system in Lao PDR is not well placed to take up that role. In the average OECD member country, the tax and transfer system reduces the level of inequality as measured by the Gini coefficient by 0.1 points (OECD, 2023[20]). Such a large reduction in inequality requires a combination of progressive taxes and targeted benefits. Data on the difference in inequality before and after accounting for tax and transfers are not available in Lao PDR. However, Lao PDR mobilises less than 25% of its tax revenue from personal and corporate income taxes, while consumption taxes make up the majority of tax revenue. The low tax-to-GDP ratio also implies that the fiscal space for redistributive transfers is very limited. In addition, high levels of informality make it difficult for the state to tax those with higher incomes and reach those in need of income support. Other characteristics of the tax system (such as its limited progressivity) imply that high-income earners likely pay little tax. In such a setting, it is not surprising that the current tax and transfer system has not been able to stop the increase in inequality.

Reducing inequality is a target of the NSEDP, but would require significant changes in tax policy and process. Reduction of "inequality in income distribution and consumption" is a stated policy goal in the NSEDP (Government of Lao PDR, 2021[2]). Reducing inequality requires reversing the current trend over the next years, which cannot be expected to happen without tax policy changes. The impact of potential tax reforms on inequality would need to be systematically assessed when Lao PDR decides on future tax policy changes. At a minimum, additional tax revenue mobilisation and enforcement efforts should not come at the expense of the bottom of the income and wealth distribution. However, in a conversation with the United Nations (UN) Special Rapporteur on extreme poverty and human rights, officials from the Ministry of Finance (MOF) in Lao PDR stated that, as of 2019, inequality did not play any role in the tax policy and budgeting process (United Nations, 2019[21]).

Most workers and firms operate in the informal economy

Only 10-20% of employment in Lao PDR occurs in the formal economy, and more than 70% of businesses in Lao PDR are not registered (ILO, 2023[22]). Informality is most prevalent in the sectors with the largest workforces, among which are agriculture (in which 98% of workers are informal), construction (94%), and retail and trade (92%). The services (66%) and manufacturing (77%) sectors record the lowest levels of informality. Apart from Cambodia, where informality is similarly high, Lao PDR's neighbouring countries have managed to bring a larger share of their workforces into the formal labour market. In addition, in Lao PDR, working in the formal sector is not the same as being able to access the national social protection system. Fewer than two out of five formal sector workers (37%) contribute to social security, despite the fact that they (and their employers) are mandated by law to do so (ILO, 2023[22]).

The high level of informality limits the revenue-raising potential of taxes and reduces the reach of the social protection system in Lao PDR. Mobilising a significantly larger share of tax revenue from personal income taxes and SSCs will not be possible if almost 90% of workers remain out of the reach of the tax system. The same applies to business taxes and indirect taxes if most enterprises are not registered. Informality also complicates standard tax policy reasoning because a large number of workers and businesses in Lao PDR effectively operate under a "shadow tax" system in which some rules of the ordinary tax system apply, but not others. For example, informal enterprises do not levy VAT on their sales, but they do pay the tax on some of their inputs without being able to recover it. And as long as enterprises face competition from informal businesses in the same sector, the regular tax system creates incentives for enterprises to remain partially informal, to not register all their workers or to under-report turnover, for example under a presumptive tax regime (World Bank, 2018[23]).

The tax system in Lao PDR is not conducive to business and worker formalisation. Instead, the design of the current tax system contributes to a polarised economy that generates too little revenue for the government. Informal economy workers and enterprises face high uncertainty and no protection, but a low tax burden. Formal workers and enterprises should, in theory, generate tax revenue as per the standard rules of the tax system, but many have developed tools to navigate the system in a way that ensures that their tax burden remains low as well. Large formal enterprises know how to utilise the web of tax incentives, SEZs and discretionary agreements with the tax administration system in order to keep their effective tax burden low. The CIT gap in Lao PDR has been estimated at 90% (World Bank, 2023[3]).[7]

The current system particularly disadvantages informal enterprises (and their workers) that would like to transition to the formal economy but lack connections, knowledge of the complex rules and the capacity to optimally use tax incentives. There is also evidence that registered enterprises that attempt to pay all taxes according to the rules encounter more scrutiny and are more likely to face charges for minor tax non-compliance than enterprises that are completely informal and not visible to the tax administration system (World Bank, 2017[24]). The result has been described as an "impossible choice" that enterprises in Lao PDR are confronted with: (i) remaining at least partially informal despite the high uncertainty; or (ii) trying to follow the complex set of rules and pay all taxes in full, risking losing out to competitors that remain in the informal economy or that reduce their tax burden through other means (World Bank, 2017[24]).

Mobilising additional tax revenue in Lao PDR thus needs to happen in parallel with efforts to further encourage the formalisation of the economy. Well-designed presumptive tax regimes can be a tool to stimulate formalisation while also gradually increasing tax revenues (Mas-Montserrat et al., 2023[25]). Although Lao PDR has made progress in redesigning its presumptive tax regimes, there is scope for further improvement. Any other tax policy change under consideration in Lao PDR needs to be assessed with regard to its impact on informality as well. It is also crucial that the social protection system is functional and is seen as providing adequate benefits of sufficient quality to encourage workers and their employers to register. The aftermath of the COVID-19 pandemic could be a good time to capitalise on the experiences of workers and businesses during the health crisis. Certain transfers during the COVID-19 pandemic were only available to registered workers and enterprises, which may have increased the salience of the benefits delivered by the social protection system that were accessible only to formal workers and enterprises (UNESCAP, 2021[26]).

Lao PDR's economy is in a vulnerable state, making tax policy changes both necessary and difficult to implement

Lao PDR faces a multitude of acute macroeconomic challenges that create additional challenges for tax policy. The Lao kip depreciated by around 50% against the United States dollar and more than 40% against the Thai baht between December 2021 and December 2022 (IMF, 2023[27]). Inflation averaged 23% in 2022, and year-on-year inflation stood at 28.6% in June 2023, according to official Lao PDR government statistics (Lao Statistics Bureau, 2023[14]). The debt-to-GDP ratio (including publicly guaranteed debt) stood at 112% at the end of 2022 (Lao PDR Ministry of Finance, 2023[28]), which is very high in international comparison given the low amount of tax revenues that the country raises. There is a lack of transparency on the total amount of debt and its creditors, and the country faces hurdles to borrow on the international capital market. The following macroeconomic challenges will further complicate tax policy in the coming years:

- Addressing these acute debt-servicing challenges will bind tax revenue and require additional revenue if large spending cuts are to be avoided. A credible debt-servicing and repayment plan needs to be developed that will increase transparency and reduce government debt to a sustainable level.
- Lao PDR's large debt-servicing obligations could potentially make it more difficult for the country to pass revenue-raising tax reforms because taxpayers may be less willing to pay taxes if the revenue is used to service debt, which would otherwise be deferred.[8] Ensuring that economic growth translates into higher tax revenues – not only in total amounts but also as a percentage of GDP – is a crucial element of a strategy that puts government debt on a sustainable downward trajectory.
- Inflation has eroded the net income of a large share of the population, and there has likely been an uptick in poverty (World Bank, 2023[3]), which reduces the ability of lower- and middle-income taxpayers to pay for additional tax increases.
- High inflation may prompt Lao PDR to consider indexing tax brackets and other key parameters for inflation, although less than full indexing for inflation would result in a gradual increase in tax revenues.
- Due to its exceptionally low tax-to-GDP ratio, Lao PDR also requires a strategy to navigate the trend in the Southeast Asian region of reducing tax rates such as the VAT or CIT. Continuing to move along with these tax reductions would create considerable additional challenges for Lao PDR.

These acute macroeconomic challenges come in addition to already existing structural economic vulnerabilities with implications for tax policy. For example, human capital development has been weak in Lao PDR, and a large number of workers (both low and high skilled) have left to work in neighbouring countries (ILO, 2023[29]). Lao PDR must balance its need to increase revenue in order to invest in human capital development with ensuring that the tax burden on labour does not become so great that it encourages more skilled workers to leave the country. Lao PDR is surrounded by richer neighbours that offer higher-paid jobs and better social protection. Thailand's minimum wage, for example, is three times higher than the minimum wage in Lao PDR (ILO, 2023[29]).[9] It is estimated that almost 1.3 million Laotians have left the country (which has a population of 7.5 million) to live abroad. As of 2020, more than 70% of these migrants were living in Thailand (UN/DESA, 2020[30]). While remittances constitute an important source of income (around 1-2% of GDP), Lao PDR will not be able to grow its economy sustainably without a skilled domestic workforce and without ensuring that skilled workers find good-quality jobs that pay well. Lao PDR's young population has the potential to do this – around 50% of the population in Lao PDR is aged under 25 years – but investment in training and skills development for this population is essential (UN/DESA, 2022[31]).

Environmental degradation comes at a large economic and societal cost, and the tax system has a stronger role to play in safeguarding the environment and ensuring that economic growth is sustainable.[10] Estimates suggest that forest loss alone caused annual damage to Lao PDR's economy equal to 3% of its GDP (World Bank, 2021[32]). Often, these activities take place either illegally or within the informal sector, implying that both wider society and the government miss out on potential economic benefits. Industrial mining has also frequently failed to create employment opportunities for local communities. Large foreign investors have tended to bring their own workforces and expertise, while the local population remained reliant on agriculture and small-scale mining.[11] Air pollution, lead exposure and water contamination have started to severely affect local communities and their economic prospects. A reduction in the levels of rainfall caused by climate change may threaten the revenue generated by hydropower dams (Spalding-Fecher, Joyce and Winkler, 2017[33]). In order to combat this, the government of Lao PDR introduced the *National Green Growth Strategy of the Lao PDR until 2030* in 2018, aspiring to shift the country's economic growth model away from environmentally detrimental activities. The tax system needs to play a central role in this shift by: (i) ensuring that society benefits in the form of tax revenue when natural resources are exploited; (ii) mitigating environmental damage; and (iii) steering the economy towards a more sustainable growth model.

Further economic growth will be necessary in order to finance Lao PDR's spending requirements

Neither reprioritising expenditure nor mobilising a higher share of GDP through tax revenues will ultimately be sufficient to meet the spending needs that Lao PDR faces. In 2022, even a tax-to-GDP ratio of 50% would have resulted in tax resources of only around LAK 1.2 million per person per month (around EUR 60 based on 2022 exchange rates).[12] This figure still seems insufficient to finance pensions, high-quality healthcare, education and infrastructure, as well as to meet the cost of all other government transfers and operations. Despite rapid economic growth over the last decades, it is clear that there is a need for Lao PDR and its tax system to stimulate further economic growth in order to be able to meet the country's spending needs.

In addition to raising more revenue, the tax system must actively contribute to promoting economic development while also helping to reorient the economy towards a new economic growth model that is less dependent on natural resources. Lao PDR wants to expand its economy through growth in the transportation, tourism, electricity generation, higher-value agricultural and manufacturing sectors, along with deepening its integration into the ASEAN community (Government of Lao PDR, 2021[2]). Currently, Lao PDR attempts to attract investment primarily through very generous tax incentives in order to compensate for a suboptimally designed and enforced standard tax treatment. Although the country's economy has been growing rapidly, this chapter identifies ways in which the tax system could play a more active and efficient role in strengthening sustainable investment in particular.

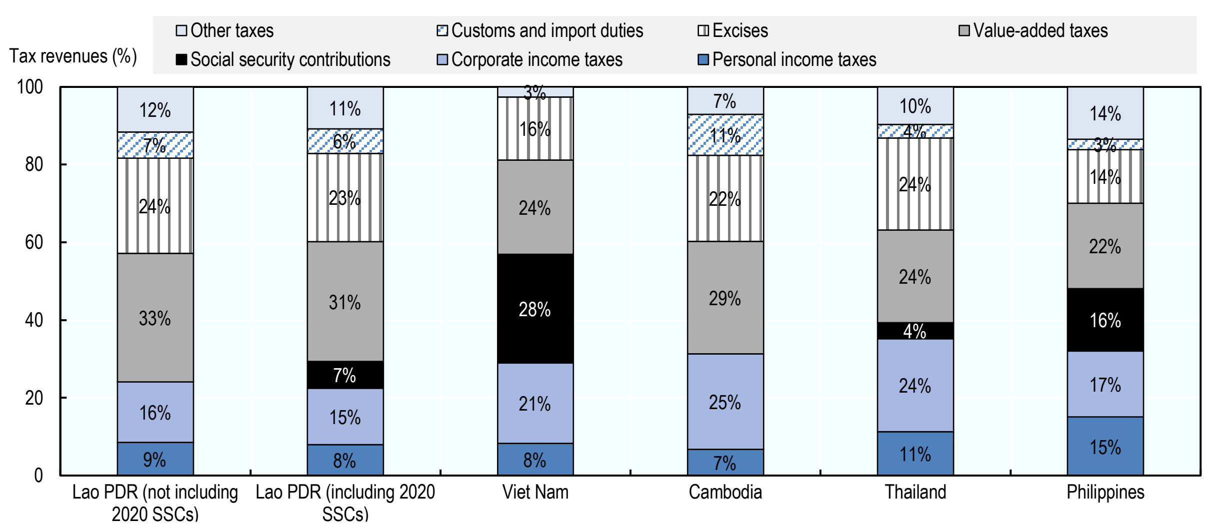
Lao PDR relies heavily on indirect taxes

VAT and excise duties play an outsized role in the tax mix, while revenue raised through personal and corporate income taxes is particularly low

Lao PDR currently relies heavily on revenues from taxes on goods and services, **with scope for improvement**. Notable revenue sources are the VAT (33% of tax revenue), excise duties (24% of tax revenue) and import duties (7% of tax revenue). In every year between 2011 and 2021, taxes on goods and services made up 70-80% of total tax revenue in Lao PDR, with a peak of 78.1% in 2020. It is not unusual for indirect taxes to play a significant role in developing countries, but the combined contribution of personal and corporate income taxes is particularly low in Lao PDR. Revenues from SSCs, which are directly paid to the social security fund, are systematically excluded from tax revenue statistics in Lao PDR. However, even if these revenues were included in the tax mix, the combined share of personal income taxes, SSCs and corporate income taxes would increase only slightly (Figure 4.4). There is scope to improve the functioning of the VAT in Lao PDR, notwithstanding its large contribution to tax revenues. The VAT should be aligned with the *International VAT/GST Guidelines* (OECD, 2017[34]).

The government also collects significant non-tax revenues, notably through grants and property income. Property income predominantly includes income streams linked to the resource sector, such as government royalties (Figure 4.5). However, property income as a share of GDP is rather low, at around 1-2%. Lao PDR does plan to reduce its resource dependence, which will ultimately also reduce resource-related government revenues. Lao PDR should make good use of resource-related revenues and ensure fiscal gains from resource rents, but the resources required to satisfy its spending needs will ultimately have to be delivered by the regular tax system. Revenue sourced from grants may eventually decline when Lao PDR graduates from the UN's list of least developed countries (LDCs) and as its per capita income continues to grow.

Figure 4.4. Tax revenue mix in Lao PDR and peer countries in 2021



Note: Lao PDR includes 2020 SSC revenue as recorded in IMF (2022[17]) *Technical Assistance Report on Government Finance Statistics Mission*.
Source: (OECD, 2023[1]), *Revenue Statistics in Asia and the Pacific 2023: Strengthening Property Taxation in Asia*, https://www.oecd.org/tax/tax-policy/revenue-statistics-in-asia-and-the-pacific-5902c320-en.htm; (OECD, 2024[35]), *Global Revenue Statistics Database*, https://www.oecd.org/tax/tax-policy/global-revenue-statistics-database.htm (accessed on 23 September 2023).

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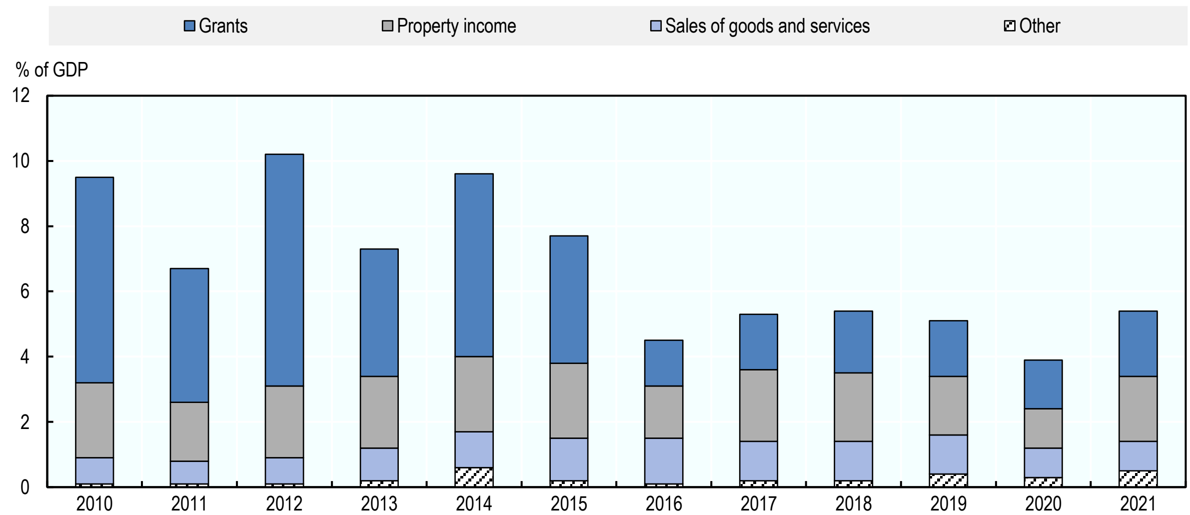
Figure 4.5. Non-tax revenue in Lao PDR between 2010 and 2021



Note: "Property income" includes royalties, natural resource taxes, and interest and dividend income of the government. "Sales of goods and services" includes sales by market establishments, administrative fees, incidental sales by non-market establishments, and imputed sales of goods and services.
Source: (OECD, 2024[35]), *Global Revenue Statistics Database*, https://www.oecd.org/tax/tax-policy/global-revenue-statistics-database.htm (accessed on 5 September 2023).

StatLink https://stat.link/nqr4vj

A large number of tax design features contribute to low tax revenues and to the lack of tax buoyancy and progressivity

Tax incentives in SEZs are overly generous and not optimally designed

The growing presence of SEZs in Lao PDR means that the government collects little tax revenue from large formal enterprises whose activities would be the easiest to monitor and tax. Tax benefits granted in SEZs in Lao PDR are extremely generous, their design does not conform to best practice and they excessively undermine revenue mobilisation. While there is a strong rationale to have SEZs in Lao PDR, in particular because of the broader governance challenges in the country's main economy, the government should avoid the use of overly generous tax incentives in SEZs. For example, the duration of the CIT exemption in SEZs in Lao PDR (6-17 years) is longer than the average in other emerging and developing economies (Figure 4.6).

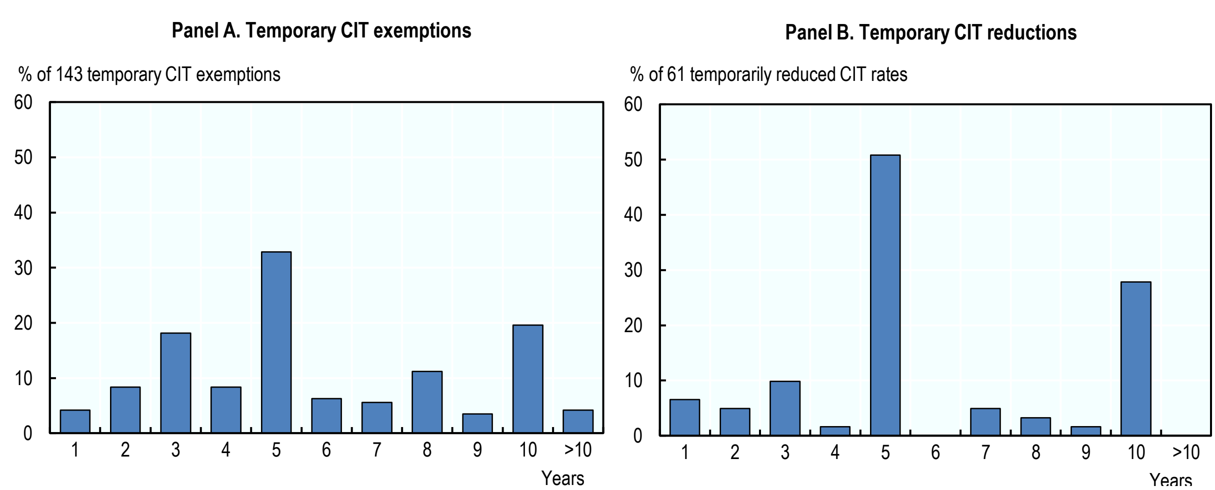
Lao PDR has designated a total of 21 SEZs in 7 provinces over the last 20 years, and these provide investors with multiple tax reductions. The types of economic activities that can be performed in SEZs, and which therefore benefit from preferential tax treatment, are very broad and not limited to manufacturing or industrial work. Indeed, there are SEZs that target investment in office buildings, residential complexes, hospitals, schools, golf courses, hotels, shopping centres and logistics centres. A prime example is the That Luang Lake SEZ, an upscale urban development project located in the heart of Vientiane, Lao PDR's capital city, in which all buildings and operations fall under the SEZ designation. Outside Vientiane, SEZs are typically located near the border with neighbouring countries such as Cambodia, the People's Republic of China (hereafter "China"), Myanmar or Thailand.[13]

Although the exact incentives provided can vary by SEZ and type of business, tax incentives available to investors in SEZs can include:

- exemption from CIT for 6-17 years and, for example, a 65% reduction in CIT payments for the 5 years following that exemption period[14]
- a VAT rate of 0% on the import of materials for developing the SEZ and a VAT rate of 0% on other imports into the SEZ, which could include construction materials, machinery, raw materials or minerals (from abroad or from businesses registered in the domestic economy)[15]
- exemption from land and property sales tax
- a minimum 50% reduction in VAT paid on electricity and water supply
- a cap on the marginal PIT rate at 5%.

Tax incentives must be well designed and combine investment attraction with minimal tax revenue loss, safeguarding public financial resources. Tax incentives often play a role in attracting foreign investment, they are usually not the primary determinant for businesses deciding whether to invest in a developing country (Blomstrom and Kokko, 2003[36]). Other factors – such as the stability of the political and economic environment, the quality of the infrastructure, access to local and regional markets, the availability of skilled labour, and regulatory clarity – often weigh more heavily in the decision-making process. These elements contribute to the overall investment climate and are vital in ensuring that an enterprise can operate efficiently and profitably. Although tax incentives can lower the cost of doing business, they do not necessarily offset weaknesses in these other areas. To the contrary, by reducing tax revenues, incentives can undermine the ability to invest in improving them. Tax incentives therefore need to be targeted and properly designed in order to be effective at attracting investment while minimising tax revenue losses.

Figure 4.6. Duration of CIT reductions according to the OECD Investment Tax Incentives Database



Note: The OECD Investment Tax Incentives Database collects information about investment tax incentives in 52 emerging and developing economies (including Lao PDR). See (Celani, Dressler and Wermelinger, 2022[37]) for definitions. Based on information on 52 economies and 467 CIT incentive entries.

Source: Figure 1, Panel F in (OECD, 2022[38]), *OECD Investment Tax Incentives Database – 2022 Update: Tax incentives for sustainable development (brochure)* (accessed on 5 September 2023).

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Lao PDR needs to rethink its tax incentive strategy in SEZs, shifting its focus away from profit-based incentives and towards expenditure-based ones. This would better target incentives while minimising revenue loss. Profit-based tax incentives, such as an exemption from CIT, provide tax benefits as a function of business profits. These types of incentives are heavily used in developing countries, in particular in SEZs (Celani, Dressler and Wermelinger, 2022[37]). Expenditure-based tax incentives, on the other hand, are tied to the amount of investment that businesses make in Lao PDR. They can come in various forms, including investment tax allowances, investment tax credits, or methods of quicker cost recovery, such as accelerated depreciation or immediate expensing.

Expenditure-based tax incentives offer several advantages compared with profit-based incentives, as follows:

- Profit-based incentives contribute to a low revenue buoyancy. This is because even highly profitable enterprises that contribute to economic growth do not generate any (or only generate very little) tax revenue. Expenditure-based incentives ensure that tax revenues increase when profits grow. Under expenditure-based incentives, profitable enterprises also start paying tax earlier than those that are not profitable.
- Expenditure-based incentives limit tax revenue loss because the government can set a maximum for an investment credit or allowance. Strategies such as accelerated depreciation or immediate expensing merely delay tax collection to the future, maintaining the actual tax payment. They only provide enterprises with the net present value difference that comes from making a deferred tax payment. In contrast, profit-based incentives lack such a built-in limit to potential tax revenue loss because the size of the tax reduction depends entirely on the profitability of the enterprises benefiting from the incentive.
- Profit-based incentives disproportionately favour enterprises that generate tax-free returns with minimal real activity in Lao PDR. Enterprises making large long-term investments in tangible assets, which may initially yield lower returns, benefit comparatively less from such incentives. Expenditure-based incentives avoid this imbalance by providing tax relief as a function of actual investment in Lao PDR's economy.
- Expenditure-based incentives provide a continuous incentive for already existing enterprises to invest further, unlike the current system where investment incentives disappear for these enterprises once the tax exemption period ends. This property of profit-based incentives can also prompt enterprises to create new entities or threaten to move to another SEZ at the end of the exemption period in order to continue profiting from the tax exemption. Expenditure-based incentives do not tie tax benefits strictly to the number of years a business has existed.
- Profit-based incentives can induce businesses with activity both within and outside the SEZ to artificially shift profits into the SEZ subsidiary, where profits are untaxed and reporting requirements are more limited (OECD, 2015[39]).
- Profit-based incentives reduce the effective tax rate of businesses, which may trigger a "top-up tax" levied in another jurisdiction under the Global Anti-Base Erosion (GloBE) rules (OECD, 2021[40]). If the effective tax rate of a multinational business within the scope of the GloBE rules is below 15%, a foreign jurisdiction may decide to collect a top-up tax in order to bring the business's effective tax rate to 15%. In such a scenario, Lao PDR forgoes tax revenue, and the profit-based tax incentive is less effective because the tax-exempt business pays tax elsewhere. Certain types of expenditure-based incentives, including immediate expensing or accelerated depreciation, do not affect the effective tax rate calculated under the GloBE rules, so these incentives avoid the risk of a top-up tax being levied in other jurisdictions (OECD, 2022[41]).

There exists a strong rationale for Lao PDR to levy a top-up tax on certain businesses in SEZs, bringing their effective tax rate up to the new global minimum tax rate of 15%. Large multinational enterprises (MNEs) with revenue exceeding EUR 750 million and with a subsidiary in a Lao PDR SEZ could soon face tax obligations in their headquarter country or other countries in which they conduct business if their effective tax rate in Lao PDR is below 15%. This is a result of the GloBE rules agreed by a large number of countries in 2021.[16] It is important for Lao PDR to assess how many and what type of

MNEs with revenues exceeding the threshold operate in the country’s SEZs. This would help in formulating a strategy to reform Lao PDR’s SEZs, as well as its wider tax incentive regime in the context of the newly established global minimum tax rate. The implications of the GloBE rules should also be taken into account when Lao PDR considers extending the tax exemption status of some SEZs. If the officially recorded payroll and tangible assets of these businesses are significantl, there could be a potential to maintain an effective tax rate below 15%, according to substance-based carve-outs provided for in the GloBE rules.

In the future, tax benefits granted within SEZs could be even more contingent on the employment or training of local workers. This would strengthen the positive spillovers between SEZs and the domestic economy. Currently, foreign workers make up over 50% of the employees in SEZs (IOM, 2019[42]). About 50% of the workforce in SEZs are foreign workers, most of whom work in the construction sector. Laotian workers predominantly work in the manufacturing and services sectors within the SEZs. If a significant portion of activity within SEZs involves foreign enterprises that utilise foreign workers and foreign equipment for export production, all while being tax-exempt and benefiting from subsidised electricity, this arrangement might not be the most advantageous for Laotian taxpayers. The strategic placement of many SEZs right on the border with neighbouring countries suggests that a large share of input materials into SEZs might be imported. If this scenario holds true, it highlights the need to target the tax benefits more effectively in order to ensure that the domestic (and local) economy profits sufficiently from SEZ activities. Lao PDR has introduced rules that mandate investors to staff at least 30% of their workforce with Laotian workers, but it remains unclear whether these rules are enforced (OECD, 2017[43]). More targeted tax benefits could also ensure that enterprises do not use SEZs as a strategy to undermine the tax base in the broader Southeast Asian region. This risk emerges if enterprises are able to relocate their domestic production and workforce just a few kilometres away into a SEZ right across the border in a neighbouring country and thereby avoid paying any significant amount of tax for multiple years.

The tax revenue loss from SEZs can multiply if countries do not properly design and monitor rules on how SEZ businesses interact with the national economy. Trade between SEZs and the national economy appears limited in Lao PDR right now, but additional challenges could emerge if Lao PDR becomes successful in attracting businesses that operate from within SEZs in order to service the domestic market. For example, until recently, the supply of goods from a SEZ-located enterprise to the national economy was not subject to VAT in Lao PDR, which could prompt businesses to route goods through SEZs before making them available to domestic consumers (as businesses can issue a 0% VAT invoice and recover input VAT when they sell goods and services to SEZ businesses). While this particular loophole has been addressed, Lao PDR needs to properly monitor the flow of goods in order to ensure that VAT is levied on these goods in practice. In 2022, the Lao PDR government decided to introduce check-points in order to supervise the entry and exit of goods between SEZs and the rest of the country (JETRO, 2023[44]).

One potential strategy to reduce abuse if SEZ businesses start servicing the domestic economy could be to reconsider the VAT rate of 0% applied to sales to SEZs and to imports into the SEZs, because some of the goods purchased by SEZ businesses may find their way back into the domestic economy. In theory, there is no need to zero-rate products sold to SEZs because the input VAT could have been recovered by SEZ businesses in any case when these businesses export (or resell) the final good. One reason why the 0% VAT rate may be in place is in order to reduce the administrative burden for businesses in SEZs. When considering a reform, it would therefore be crucial to ensure that SEZ businesses are refunded the input VAT quickly upon presentation of the export or sales certificate. If leakages from the suspension of import tariffs are believed to be large (imports could be purchased by a SEZ business but then brought to the domestic market), the exemption from tariffs could be replaced by a drawback mechanism under which SEZ businesses can claim a refund for import tariffs only when they present an export certificate (Zee, Stotsky and Ley, 2002[45]).

In order to avoid additional and ineffective tax revenue loss, future investment incentives in SEZs should only be granted according to predetermined, uniform and clearly declared criteria. The authority to grant tax benefits should lie exclusively within the MOF. The benefits should be codified in the standard income tax law rather than in separate investment promotion laws. As suggested in the latest OECD Investment Policy Review of Lao PDR, negotiations on a case-by-case basis involving multiple government bodies can increase the bargaining power of investors and lead to rent-seeking behaviour (OECD, 2017[43]). The enforcement of existing rules and regulations within SEZs needs to be strengthened as well, and the government has recently announced steps to do so (JETRO, 2023[44]). As enterprises in SEZs are highly observable, it is unclear why a large share of workers in some SEZs are not registered with the social security administration (Gerin, 2022[46]). Tax benefits should be contingent on compliance with other legal obligations, and it needs to be made clear to potential investors that these obligations are enforced.

A thorough cost-benefit evaluation of the SEZ regime's impact on investment since its introduction in 2003 is required as well. This investigation should centre around determining whether the tax incentives achieved "additionality", i.e. whether they led to investments that would not have occurred without the incentives. The expiration of the CIT exemption for the first round of investment projects made in SEZs in 2003 (in case these exemptions are not extended) could provide a useful case study to examine how investors behave once the tax benefits fade out and whether the incentive has attracted long-term investment. It could also be a good time to assess the profitability that enterprises in SEZs have reached multiple years after their initial investment. Finally, the assessment should establish whether SEZs have contributed to the artificial growth of certain sectors that are not conducive to the long-term development of Lao PDR but have grown merely as a result of large tax incentives and speculative investor behaviour (such as, potentially, certain projects in the real estate sector). In addition to monitoring the profits that SEZ businesses earn and the taxes they pay, attention should also be given to the profits earned and taxes paid by the SEZ developers (i.e. the businesses that oversee the operations within the SEZs). Even if enterprises are not liable for CIT in SEZs, it is good practice for the tax administration to monitor the economic activity of those businesses.

It is worth mentioning that enterprises in neighbouring countries also enjoy generous profit-based tax incentives from SEZs. A study published in 2015 estimated that there were more than 1 000 SEZs in ASEAN Member States in 2015, and the number of SEZs has continued to grow since then (UNIDO, 2015[47]). In order to protect tax revenues from being undermined by an overuse of tax incentives, excessive competition and the artificial shifting of profits between each country's SEZs, further regional collaboration on the design of SEZs would be beneficial.

Lao PDR also grants additional investment incentives with slightly different rules for investment projects in less developed areas of the country. For example, businesses that invest in poor remote areas can be eligible for a ten-year exemption from CIT (upon meeting certain other criteria). These incentives generally suffer from the same disadvantages as those available in SEZs. One advantage over SEZs is that the eligibility rules for these incentives are explicitly stated in the 2016 Law on Investment Promotion. They also require a minimum number of Laotian workers to be employed by the investor.

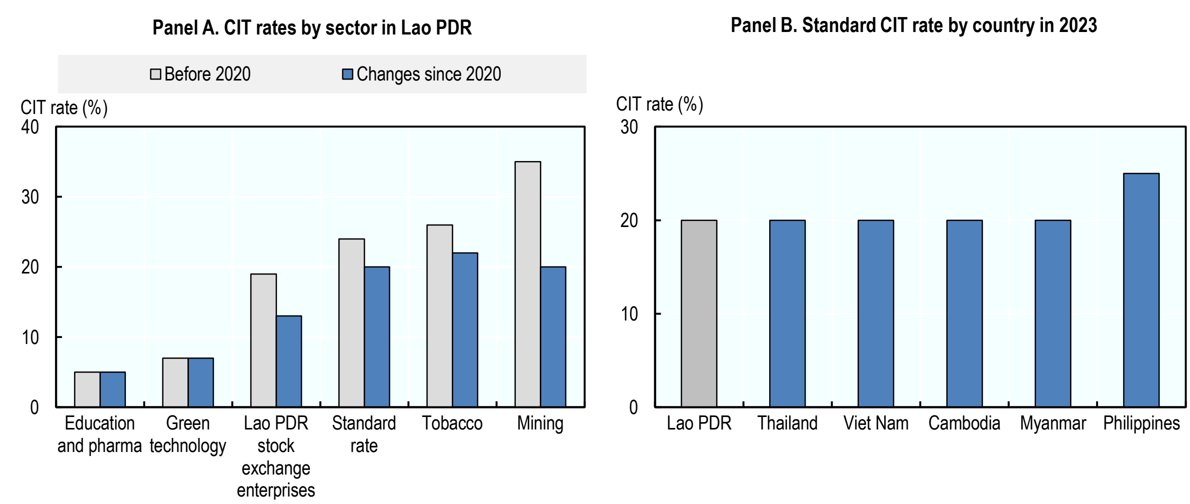
The CIT gap is large

Lao PDR exhibits a large gap between potential and actual CIT revenue, which weakens the link between growth in profits and tax revenue. A recent World Bank estimate puts the CIT gap at nearly 90%, which suggests that Lao PDR loses significant tax revenue from non-compliance and from granting generous tax reductions, such as the exemptions granted for businesses operating in SEZs or reduced rates for specific sectors of the economy (World Bank, 2023[3]). The CIT gap is calculated as the difference between potential and actual CIT revenue. A large CIT gap contributes not only to a low level of tax revenues, but also to low tax buoyancy. If non-compliance is high and if many businesses are exempt from paying CIT (i.e. the CIT gap is large), growing corporate profits do not translate into additional tax revenue for the government. The reverse is true in countries with a smaller CIT gap, where the CIT is often considered the most buoyant tax type because business profits fluctuate strongly over the economic cycle.

Lao PDR has a CIT system based on differentiated rates by economic sector, which comes with similar disadvantages as the profit-based tax incentives in SEZs. For example, businesses operating in the area of green technologies only pay a CIT rate of 7% instead of the 20% standard rate. Several other sectors also have reduced CIT rates (Figure 4.7), If Lao PDR's growth strategy aims at growing the economy primarily in the sectors that enjoy reduced CIT rates (e.g. green technologies), and if Lao PDR is successful in implementing this strategy, the country's CIT revenue will structurally decline in line with economic growth. This is because a larger share of businesses will be taxed under the reduced CIT rate. In addition to the overly generous tax incentives (such as those mentioned in the previous section), the standard CIT system therefore also contributes to the large CIT gap and low tax buoyancy in Lao PDR.

Lao PDR could consider transitioning towards expenditure-based tax incentives and gradually move away from providing reduced CIT rates with little targeting. The tax system should incentivise the transition to new technologies, which could be achieved through more generous tax deduction rules instead of profit-based tax incentives or the use of sector-specific reduced CIT rates. Once businesses in the new technology sector have reached profitability, these profits should be taxed at the standard CIT rate.

Figure 4.7. Tax rates on corporate income by activity in Lao PDR since 2020, and standard CIT rates in peer countries in 2023



Note: The reduced rate for businesses registered on the Lao stock exchange is valid for four years following registration.
Source: Tax rates in Lao PDR by industry from IBFD. Corporate tax rates from (PWC, 2023[48]) and VDB Loi (2023[49]).

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Scope exists to increase revenue mobilisation from the mining and hydropower sectors

Opportunities exist to boost revenue generation from the natural resource sector in Lao PDR. Estimates indicate stable non-tax government revenues of approximately 1.2% of GDP from natural resource royalties (75% from mining and 25% from hydropower) and 0.6% of GDP from dividends. However, Lao PDR loses out on tax revenue by repeatedly entering into generous investment agreements with natural resource developers, particularly for major ventures like hydropower projects. These agreements (which are usually undisclosed and negotiated on a case-by-case basis) grant substantial tax reductions, including full CIT exemptions for a specified number of years after the first profitable year. These types of incentives are particularly unsuited for natural resource projects that only run for a limited number of years (like mining projects). In the near term, Lao PDR should (at a minimum) ensure transparency by publicly disclosing the terms granted to investors. Incentives offered by the Ministry of

Energy and Mines in the past have also included provisions that exempt the investor from paying a withholding tax on repatriated profits (Netherlands Enterprise Agency, 2017[50]).

The increased CIT for the natural resource sector could be maintained, but it is an ineffective tool for capturing natural resource rents as long as generous tax exemptions continue to be granted on a project-by-project basis. The CIT surcharge can also only be effective if the tax administration is able to monitor how businesses in the natural resource sector declare costs and avoid profits being stripped out of the country. Instead, Lao PDR should prioritise and increase the role of royalties, as they are easier to enforce and collect and are less susceptible to profit manipulation.

The profits of foreign firms are taxed under a deemed profits tax

With the "deemed profits tax", Lao PDR follows a peculiar approach to taxing the profits of foreign businesses that do not have any registered entities in the country.[17] When a Laotian business purchases goods and services from a foreign supplier, the Laotian business needs to withhold a tax on the "deemed profits" of the foreign supplier.[18] The tax is calculated by multiplying: (i) the amount of the purchase; (ii) a deemed profit margin specified by the tax administration for each sector; and (iii) the CIT rate. For example, the deemed profit rate in the manufacturing sector is 7%, so any purchase of manufactured goods from foreign suppliers is subject to an additional effective tax rate of 1.4% (7% profit rate × 20% CIT rate).

This deemed profits tax is incompatible with international model tax conventions and would likely have to be reformed were Lao PDR to strive for tax agreements with other countries. In international model tax treaties (such as the UN or OECD model tax conventions), a country's taxing rights are limited to businesses that have a permanent establishment within the country. That is, only income from businesses that have a permanent establishment in Lao PDR would be taxable in Lao PDR under model tax treaties, and the mere fact of selling goods or services to an enterprise resident in Lao PDR does not trigger a permanent establishment. Other countries may not be willing to sign a tax agreement with Lao PDR as long as the domestic tax system includes a tax that is incompatible with model tax treaty rules.

Lao PDR has already entered into a small number of tax agreements based on model tax treaty templates (with countries such as Singapore and Thailand) despite the treaty rules being incompatible with its deemed profits tax. As per the rules of the tax treaties, suppliers located in either of these two treaty countries should be exempt from the deemed profits tax as long as they do not maintain a permanent establishment in Lao PDR (e.g. in the case of a Thai company selling machinery to a Laotian business).[19] If Lao PDR plans to expand its tax treaty network over time, a larger and larger share of foreign suppliers would be exempt from the deemed profits tax, so it would no longer raise meaningful revenue.

The deemed profits tax is also ineffective at taxing the profits of foreign suppliers because, in practice, the deemed profits tax will often simply amount to an additional tax on imports to be paid by Laotian businesses.[20] There are many inputs that Laotian businesses can only purchase from foreign suppliers, and purchases from Lao PDR likely constitute only a small fraction of total sales for large multinational businesses. In such a setting, the incidence of the deemed profits tax can be expected to largely fall on the Laotian businesses that purchase goods and services from abroad.

The deemed profits tax complicates the administrative procedures that Laotian businesses have to follow when purchasing inputs from abroad. Aside from the deemed profits tax and the import VAT, businesses often also have to pay an import tariff and an excise tax. Even if the combined tax burden created by these three or four distinct levies is not excessively high, such a system is complex for the government to administer and for the taxpayer to comply with. Businesses also have to consider the different tax implications for each of these taxes: A business can recover the VAT paid on its imports from abroad and it can deduct the excise taxes and import tariffs from its CIT, but the deemed profits tax is not deductible. Lao PDR could consider integrating the deemed profits tax into the VAT or into the import tariff system in order to reduce the number of different taxes importing businesses have to pay.

Without any transfer pricing rules, it is also difficult for the tax administration system to monitor if the prices charged and reported for the purposes of the deemed profits tax rate are correct. Taxing transactions with foreign enterprises based on a deemed profits tax that applies to the foreign enterprise's domestic turnover creates incentives to manipulate the amount of economic activity and turnover reported in Lao PDR. Businesses could have an incentive to under-report the value of purchases made from foreign suppliers. If a multinational business regularly records transactions with its own subsidiaries outside Lao PDR, the business could have an incentive to reduce the price it charges to itself for the goods and services purchased by its Lao PDR subsidiaries.

The lack of a consistent international taxation framework results in revenue leakages

Lao PDR currently lacks a strong international tax framework, which is necessary in order to limit the taxable economic activity that enterprises and individuals can artificially shift abroad:

- Individuals are not taxed on their foreign-sourced capital income because Lao PDR follows a purely territorial principle in its PIT system.
- Lao PDR does not participate in international tax information sharing under the Automatic Exchange of Information (AEOI) or Exchange of Information on Request (EOIR) standards. As a result, the country lacks information on the foreign income and assets held by its residents.
- There are no codified transfer pricing, controlled foreign company (CFC) or thin capitalisation rules. In addition, the country is not part of the OECD/G20 Inclusive Framework on base erosion and profit shifting (BEPS). This, in combination with the low withholding tax rates on payments to non-resident enterprises, can enable businesses to shift taxable profits outside the country.
- Lao PDR only has a limited number of tax treaties, and the existing treaties foresee low withholding rates.

Under Lao PDR's present system, individuals are taxed only on income earned within its borders. For example, capital income earned by residents from assets managed in foreign accounts (like those in countries with low capital income taxes, such as Singapore) remains untaxed in Lao PDR. A territorial approach to personal income taxation can prevent double taxation of foreign-earned income, especially as Lao PDR has few double taxation treaties. However, this is an uncommon approach, and it allows high net wealth individuals to avoid Lao PDR taxes by keeping their savings in low-tax jurisdictions.

Lao PDR could consider transitioning to a worldwide tax regime for personal income in order to tax the foreign-sourced income of individuals who are Lao PDR tax residents. Lao PDR would need to define clear rules that stipulate when an individual is considered a tax resident (for example, if residing in the country for more than 183 days per year) in order to ensure that foreign workers pay tax on their salaries and do not claim tax residency status in neighbouring countries. Currently, Lao PDR employs a worldwide approach for corporate income but a territorial system for personal income. In practice, reversing this system, taxing personal income on a worldwide basis, and partially transitioning to a territorial system for corporate income could better serve Lao PDR.

Participating in the international exchange of taxpayer information, **could help Lao PDR raise additional tax revenue.** If the country decides to switch to a worldwide tax system for personal income, participating in the information exchange between tax administrations (currently Lao PDR does not participate) could help raise additional tax revenue from undeclared income and assets held abroad by Lao PDR tax residents. Under the EOIR standard, a country's tax authorities can make specific requests to the tax authorities of other countries for information that will allow them to progress their tax investigations. The AEOI standard organises the automatised annual transmission of detailed information about financial accounts held by non-residents to the resident country. Neighbouring countries such as

Viet Nam have started the implementation process, and others (such as China and Thailand) are already sharing taxpayer information. Important regional financial centres, like Hong Kong, China and Singapore, have been sharing information under this mechanism for several years as well.

Through the automatic exchange of information between tax administrations, Lao PDR could gain access to information about financial accounts held by Lao PDR residents in foreign jurisdictions. Collecting tax on these capital income streams would generate additional revenue and strengthen the fairness of the tax system. Among the eight Asian nations that have tracked their increase in tax revenue generated from using the AEOI standard, the average revenue gain since participating in this information sharing was equal to approximately EUR 1.3 billion over the 2020-22 period (OECD, 2023[51]). These statistics highlight the potential fiscal significance of participating in this information exchange system. While setting up the technical capabilities required in order to participate in the EOIR and AEOI involves upfront investment on the part of the tax administration, technical assistance would be available from international organisations.

Without transfer pricing rules, the tax administration system lacks the tools to verify that goods and services are sold at the correct "arm's length" price between domestic and foreign enterprises – and taxed correctly under the CIT or deemed profits tax. Businesses may have an incentive to understate the price of intra-group purchases from abroad in order to pay a lower deemed profits tax. However, purchases from SEZ subsidiaries are prone to being overstated in value because these purchases enable businesses to shift more activity into the tax-exempt zone. As a first step, Lao PDR should assess the number of multinational businesses not located in SEZs and the number of Laotian businesses with subsidiaries both within and outside SEZs. These would be the two types of businesses for which the tax revenue loss from transfer mispricing could be the largest.

Despite capacity constraints, the tax administration should develop a set of transfer pricing guidelines for businesses to follow. The tax administration has stated that it does not have the capacity at this point to introduce and enforce full-scale transfer pricing rules (JETRO, 2022[52]). Nevertheless, it should develop guidelines to overcome current shortcomings. Lao PDR does provide some guidance stating that transactions should be recorded at "market value" or "fair value", but how this price should be determined in the absence of a market transaction (i.e. if the transaction takes place within a group) is unclear. This creates uncertainty for businesses because, at the same time, tax inspectors have the discretion to determine whether or not a particular transaction was recorded at the appropriate price and retroactively adjust its value. As a result, some international businesses prepare transfer pricing compliant documentation even though it is not required. At the same time, the tax administration encounters difficulties in determining the taxable profits of subsidiaries of foreign MNEs that operate in SEZs.

Gaining access to country-by-country (CbC) reports could help Lao PDR carry out transfer pricing assessments on transactions between linked enterprises, and also analyse the tax revenue risk from other tax planning strategies potentially employed by MNEs. Today, as a non-member of the OECD/G20 Inclusive Framework on BEPS, Lao PDR does not have access to CbC reports prepared under the BEPS Action 13 standard. CbC reports include aggregate data on the global allocation of income, profit, taxes paid and economic activity among tax jurisdictions in which an MNE operates. More than 100 jurisdictions have laws in place introducing a CbC reporting obligation for MNEs. In addition, more than 3 000 relationships were in place for the exchange of CbC reports between jurisdictions in 2022 (OECD, 2022[53]). This means that every MNE with consolidated group revenue of at least MULTINATIONEUR 750 million is already required to file a CbC report – very likely including most MNEs that are active in Lao PDR. For example, China and Thailand (the headquarter countries of several major investors in Lao PDR) require MNEs to compile a CbC report.

The revenue loss from undeclared imports into Lao PDR is substantial

There is a need to enhance customs procedures and border checks in Lao PDR in order to reduce the high levels of fraudulent behaviour. Evidence suggests that Lao PDR may lose up to 1% of its GDP in revenue from import tariffs, excise taxes and import VAT through undeclared imports flowing into the country without being reported to the customs administration (AMRO, 2022[54]). These estimates have been calculated by comparing the value of exports recorded by Lao PDR's trading partners with the imports recorded by Lao PDR, and then applying the relevant statutory tariffs, excise taxes and import VAT (Table 4.2).

Table 4.2. Undeclared imports into Lao PDR from major trading partners in 2019

Lao PDR trading partner	Discrepancy between import and export statistics	Major products
China	15%	Office/data machines, vehicles, furniture
Thailand	28%	Perfumes/cosmetics, miscellaneous food, telecommunications
Viet Nam	41%	Petroleum and related products, beverages, miscellaneous food products

Source: (AMRO, 2022[54]), *Annual Consultation Report on Lao PDR*, based on WITS.

Import procedures should also be simplified and made more efficient so that Laotian businesses do not face excessive administration costs, which can contribute to lower tax compliance. One factor contributing to the complexity of import formalities is that businesses often have to pay several different taxes and levies (including the import tariff, import VAT, an excise tax and the deemed profits tax) on foreign supplies. Some of these taxes, such as the deemed profits tax and the large number of excise taxes, are uncommon in an international context and come with many disadvantages; they should likely be reformed (see the specific section on these taxes). Imports into Lao PDR have become significantly more expensive for Laotian businesses in recent years for reasons that are unrelated to the tax system, but rather due to the depreciation in the value of the Lao kip. In this context, the tax system should not add any additional unnecessary burden that further increases the effective cost of imports. Initiatives like the Lao National Single Window, a one-stop portal to submit all trade-related documents, should be continued and reinforced.

The PIT is only moderately progressive, and inflation has pushed taxpayers into higher tax brackets

A progressive tax system can contribute to tax revenue buoyancy because taxpayers get pushed into higher tax brackets and pay a higher average tax rate as their incomes grow. Lao PDR has a progressive PIT, but its top marginal rate of 25% is relatively low compared with those of peer countries. In addition, tax brackets in Lao PDR are wide, especially at the top. This implies that only very large incomes (relative to the exempt income tax bracket) pay higher marginal tax rates. For example, the top marginal PIT rate applies only to incomes that exceed 50 times the minimum wage, while a taxpayer with income equal to the maximum contribution ceiling for social security still falls within the lowest income tax bracket. Top marginal rates in other countries in the Southeast Asian region stand at 35% (the Philippines, Thailand and Viet Nam), 30% (Malaysia), 25% (Myanmar) and 20% (Cambodia). The fact that workers in some SEZs pay a maximum marginal PIT rate of 5% also undermines the progressivity and revenue buoyancy of the PIT.

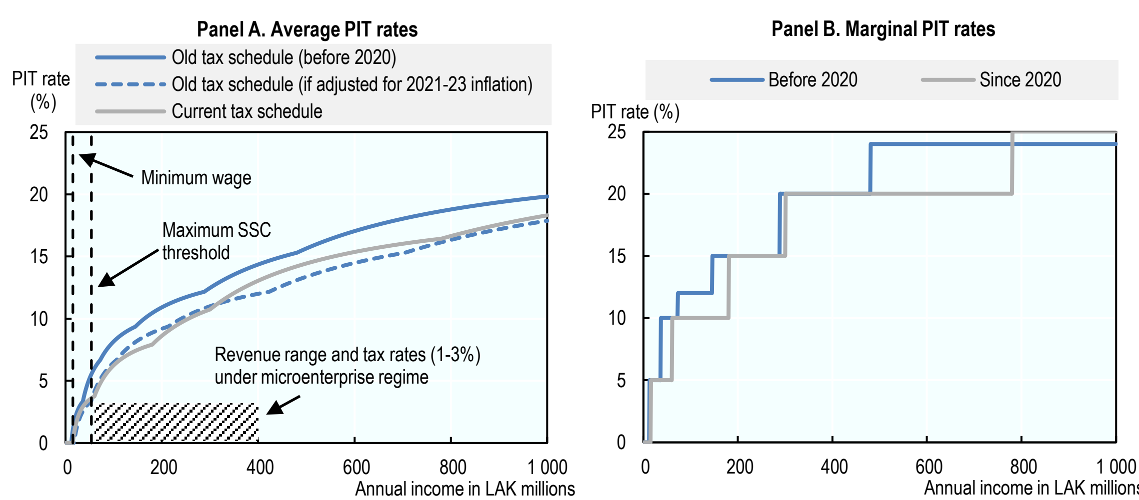
Higher-paying jobs (and not the tax system) are the key reason why Laotians move abroad (ILO, 2023[29]). However, Lao PDR needs to ensure that the PIT burden does not outgrow the productivity of its labour force, which could soon become a concern for lower-skilled and medium-skilled employment. High inflation has effectively neutralised the tax-lowering effect of the PIT tax reform that Lao PDR implemented in the beginning of 2020, which lowered the tax burden by increasing the income thresholds of tax brackets.[21] However, overall prices increased by 34% between 2020 and 2022, and by 31% in 2023. When the tax schedule prior to 2020 is adjusted for inflation until the end of 2022, the pre-2020 tax burden closely resembles the post-2020 tax burden (see Figure 4.8). This suggests that the tax reduction has been almost completely offset by inflation over the last three years.

While the 2020 tax reform has shielded taxpayers from inflation-induced "bracket creep" over the last three years, the actual tax reduction has now been neutralised. Under the new tax schedule, taxpayers paid a similar amount of tax in 2022 as they would have paid under the old tax schedule if it was adjusted for inflation. An adjustment of income tax brackets would be warranted if Lao PDR wants to avoid "bracket creep" in the future and restore the tax-lowering effect of the 2020 tax reform. With inflation around 25% during the first trimester of 2024 (Bank of the Lao PDR, 2024[55]) Lao PDR might consider an upward adjustment of the PIT thresholds. In the future, tax brackets could be indexed to inflation.

Such an adjustment would not have to be uniform across all tax brackets, and higher brackets could be adjusted more slowly than lower brackets, increasing the progressivity of the PIT. A differentiated adjustment could also be used in order to narrow the markedly wide tax brackets in real terms, particularly at the top of the income tax schedule (e.g. the top marginal tax rate only applies to incomes that exceed 50 times the minimum wage). An increase in the PIT exemption threshold will also be necessary if Lao PDR wants to avoid the fact that minimum income earners will have to pay PIT in the future. After its latest increase, the minimum wage coincides with the threshold of the first income tax bracket, so minimum wage earners would have to start paying PIT once the next increase in the minimum wage is implemented.

The Lao PDR PIT schedule and SSC system create a large increase in the marginal tax burden on labour around the minimum wage when workers start paying PIT (5%) and SSCs (a 6% employer contribution and a 5.5% employee contribution). On the other hand, workers earning incomes in the second PIT bracket already surpass the maximum contribution threshold for social security. In addition to a more progressive PIT schedule with more brackets, a progressive SSC schedule could be envisaged under which the government subsidises the contributions of low-income workers in order to encourage registration.

Figure 4.8. Average and marginal personal income tax rates in Lao PDR



Note: The dotted line in Panel A represents the pre-2020 PIT schedule with bracket thresholds adjusted for inflation during the 2021-23 period (46.8%, according to IMF World Economic Outlook data). The minimum wage was equal to LAK 1.3 million per year in 2023. The maximum social security contribution threshold is equal to LAK 54 million per year.
Source: (IBFD, 2023[56]), *Tax Research Platform (Database)*, https://research.ibfd.org/#/; (VDB Loi, 2023[49]).

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SSC maximum contribution thresholds kick in at relatively low incomes

Low maximum SSC contribution thresholds reduce the buoyancy of a tax system because taxpayers whose earnings have reached the threshold do not pay any additional contributions when their income grows. The maximum combined employer and employee contribution to social security is low, at LAK 517 500 per month (around EUR 25). The income necessary to reach the maximum contribution threshold in Lao PDR is equivalent to around five times the minimum wage and still falls into the first PIT bracket, which has a marginal rate of 5%. In Colombia, the maximum contribution threshold is set at 25 times the minimum wage, and in Viet Nam it is equal to 20 times the (much higher) minimum wage. It is unlikely that Lao PDR can generate enough resources to finance adequate social protection from such a narrow SSC base. The maximum contribution threshold should also grow in line with inflation.

Self-employed individuals can register voluntarily for social security and pay a total rate of 9% on an income amount they select themselves. The voluntary insurance of self-employed individuals comes with the risk that high-income earners will avoid the social security system. An alternative approach could be to make registration mandatory for the self-employed. If a minimum SSC threshold were to be introduced, the Lao PDR government could subsidise the contributions of self-employed individuals whose actual income is below the minimum wage.

Suboptimally designed taxes can promote tax arbitrage

Tax revenue loss can also occur if the tax system incentivises taxpayers to conduct their work as a self-employed individual instead of as a salaried worker. The special income tax regimes for microenterprises and freelancers that are available in Lao PDR create a strong incentive for high-income workers to turn their labour income into business income. Ideally, the tax system should be neutral so that individuals choose their employment form according to the nature of the activity they perform and not due to tax considerations.

This is a particular problem for the freelancer regime that was introduced in 2020, which offers an uncapped flat 5% gross income tax rate for consultancy income and a 2% rate on construction and repair services income. These rates are considerably lower than the average PIT rates for higher incomes. The microenterprise regime is capped at LAK 400 million and offers a presumptive tax rate on turnover of 1% (agriculture), 2% (trade) or 3% (services). These turnover taxes could be attractive as an alternative to employment income in sectors that are less cost-intensive, such as the services sector. In comparison, a salaried worker with an annual income of LAK 400 million would pay an average PIT rate of 13%. Lao PDR could consider capping the freelancer regime in order to avoid revenue loss from tax arbitrage. It would also be advisable to deny former employees access to the presumptive tax regime if they continue working for their previous employer as a self-employed business.

Capital income is taxed at low rates

The tax rates applied to capital income are generally low, especially when compared with OECD member countries (Table 4.3). However, capital taxes are more in line with what can be observed in other countries in the Southeast Asian region. It would be important for Lao PDR to analyse who earns capital income in the country in order to make an assessment as to whether the capital income tax rates could be increased. It would also be key to analyse who benefits from exemptions from withholding taxes (such as those granted to some investment projects in the hydropower sector). The tax treatment applied to the sale of shares and to the sale of immovable property should be based on the realised capital gain rather than the transaction value.

Table 4.3. Tax rates applied to specific types of income in Lao PDR

	Type of income	Tax rate in Lao PDR	Tax rate in other countries
Capital income	Dividend income	10%	OECD member countries: 20% Viet Nam: 0% Thailand: 10% Singapore: 0%
	Interest income	10%	OECD member countries: 16% Viet Nam: 5% Thailand: 15% Singapore: 15%
	Royalty income	5%	OECD member countries: 19% Viet Nam: 10% Thailand: 15% Singapore: 10%
	Income from the sale of shares	2% transaction tax	
	Income from the sale of immovable property	2% transaction tax	
	Income from leases (land, buildings, machinery, etc.)	10%	
Other types of income	Income from brokerage fees	10%	
	Lottery prizes	5%	
	Pensions received by civil servants	0%	

Note: Some OECD member countries have in place a full or partial dividend imputation system, but rates in Lao PDR are low in comparison even if the total effective tax rate on distributions is considered (taking into account the CIT and integration).
Source: (OECD, 2023[57]), *Corporate Tax Statistics (database)*, https://www.oecd.org/tax/beps/corporate-tax-statistics-database.htm; (IBFD, 2023[56]), *Tax Research Platform (database)* https://research.ibfd.org/ (accessed on 23 November 2023).

The land tax does not reflect increases in market prices

Recurrent taxes on immovable property are generally viewed as a reliable and progressive revenue source, causing limited harm to investment and economic growth (Brys et al., 2016[58]). However, the tax revenue collected from the land tax[22] in Lao PDR is low and has not been increasing as a share of GDP in recent years, despite a boom in real estate prices. The reason is that Lao PDR has not adjusted the land tax in line with higher land values, and that enforcement of this tax remains low (particularly outside the capital city of Vientiane). If market prices increase and the amount of tax to be paid per unit of land remains the same, the effective tax burden on land declines over time, contributing to low tax revenues and a low tax revenue buoyancy.

Revenue from land and property taxes in Lao PDR is extremely low. The land tax for a 1 000 square metre residential area in the most urbanised zone of Vientiane would be equal to LAK 80 000 per year (around EUR 4 based on 2023 exchange rates).[23] The total revenue raised from recurrent taxes on immovable property in Lao PDR only accounts for around 1% of tax revenue or 0.1% of GDP. Low taxes on land may have also contributed to real estate speculation. Foreign investors are reported to purchase land usage rights in Lao PDR in order to build apartments for speculative purposes, but do not make them available to the Laotian housing market because the cost of holding empty property is very low.

Lao PDR could increase the land tax in order to generate additional revenue and better reflect the increases in land values over the last years. The country should also devise a mechanism to link the land tax to the evolution of land prices in order to ensure that tax revenues will grow in line with future price increases.[24] In order to discourage real estate speculation, the country could also consider charging a higher land tax for holding empty residential property that is not owner-occupied and is being withheld from the rental market in urban areas. Lao PDR already charges a higher land tax on undeveloped land, and these higher taxes could be applied to empty residential property as well.

Lao PDR's land tax is calculated as a function of the land area and location. For example, land in the capital city of Vientiane is taxed more heavily than land in rural areas, and land used for industrial purposes and commerce is subject to a higher tax than residential land. The design of the land tax is atypical in that it does not use an approximation of the value of the land as the tax base (i.e. the value to which a tax rate is applied), but instead directly specifies the amount of tax to be paid per square metre or per hectare of land. Buildings and land improvements do not enter the calculation of the final tax liability. A recent OECD analysis of property taxation in the Asia-Pacific region suggests that, apart from the land use tax in China, Lao PDR is the only country relying on such a purely "area-based" approach (OECD, 2023[1]).

Moving from a purely land-based tax to a recurrent tax on immovable property (i.e. also accounting for the value of buildings and land improvements) would increase the fairness of the land tax. This requires a new approach to determining the value of land and buildings because the current tax design only stipulates the final amount of tax to be paid per square metre. What would be advisable in any case would be to split the tax amount levied per square metre into a tax base (the value of the property) and a tax rate that is applied to the tax base. This would allow Lao PDR to separate discussions about changes to the tax rate from discussions about adjusting property values.

One realistic approach to determining the value of immovable property for tax purposes, at least in the short term, could be to maintain the area-based approach but introduce adjustment factors that attempt to incorporate the value of buildings and land improvement (such as the construction date or the type of building). The base amount could be adjusted regularly in line with the evolution of prices observed in local housing markets. Accurately valuing property for tax purposes is not straightforward, especially in a developing country where a comprehensive and reliable cadastre is unavailable (particularly in rural areas). In 2021, only around 40% of land parcels in Lao PDR had been registered and titled (World Bank, 2021[59]). Frequently re-estimating actual property values on a granular level based on actual market transactions would either require significant resources or it would not be possible at all if transactions are not sufficiently observable by the government. Nevertheless, a system of immovable property taxes levied according to market prices should remain the objective in the medium term, following good practices in some other ASEAN Member States.

Lao PDR also loses tax revenue because it exempts firms (such as large real estate developers) in SEZs from paying the land tax. For example, the That Luang Lake SEZ in Vientiane offers investors 99-year leases paired with a combination of tax incentives, among which is a complete exemption from the land tax for investments above USD 100 000 (United States dollars). The tax benefit also carries over to individual foreign residents purchasing units in already developed apartment complexes located in SEZs. Real estate in SEZs often corresponds to luxury apartments in the most sought-after areas of Vientiane, and the real estate is mostly developed by large domestic or foreign developers and investors. As a case in point, one SEZ benefiting from a land tax exemption has been advertised by the government of Lao PDR as hosting "one of the best golf facilities in the country" (SEZO, 2024[60]).

By exempting property in SEZs from the land tax, Lao PDR exempts property that is located in areas where the land tax could most easily be enforced and would likely generate the most revenue. In OECD member countries, taxes on immovable property finance local services that the property owners receive. Owners of immovable property profit from government services irrespective of whether the property is located within or outside a SEZ and, as a result, there are strong arguments to ask SEZ businesses to pay the land tax (businesses in SEZs arguably benefit from even more government services than those located outside of SEZs, as they have access to a one-stop service office, for example). Scaling back the land tax exemption in SEZs would also contribute to the progressivity of the tax system, as it currently exempts large businesses and owners of luxury real estate from paying this tax.

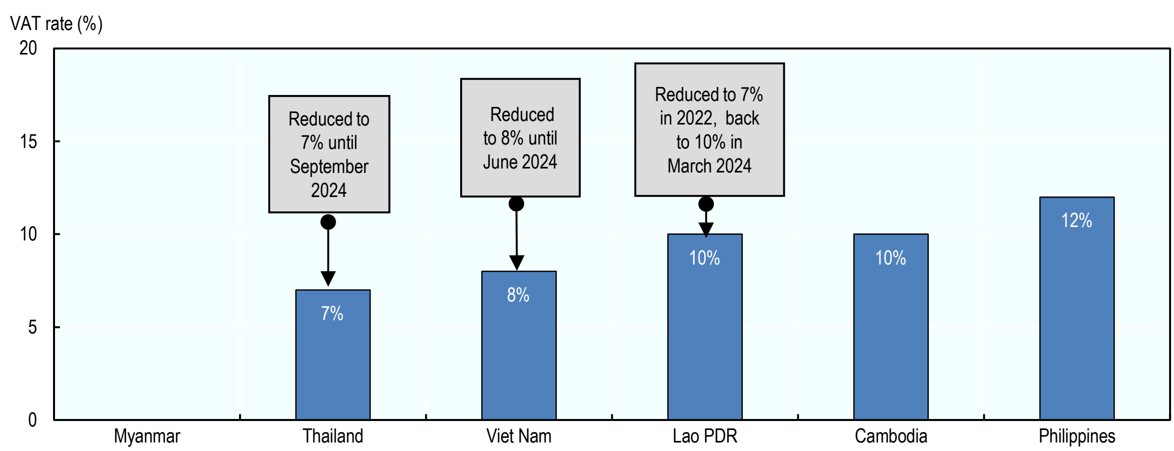
Enforcement of the land tax also needs to be strengthened across the country. Despite the significant penalties for tax non-compliance, such as the risk of losing land usage rights after three years of non-payment, the overall tax compliance rate in Lao PDR remains low. An official land tax register and better-defined land property rights would also be necessary in order to improve the administration of the land tax.

Recent reforms have resulted in reduced tax rates

The recent trend of reducing tax rates in Lao PDR also contributes to the country's low tax revenue buoyancy. Starting in 2020, the country has implemented a series of tax reforms that resulted in lower rates for both the CIT and the VAT. Specifically, the standard CIT rate has been reduced from 24% to 20%, and certain CIT rates applicable to specific sectors (such as mining) have been lowered as well. Moreover, the standard VAT rate was cut by three percentage points (from 10% to 7%) in 2022. It has recently been brought back up to 10% in March 2024 (Figure 4.9).

Lao PDR's ability to implement tax reductions is severely limited given its very low tax revenues and high public debt. In order to restore tax revenue buoyancy, it would be advisable for Lao PDR to abstain from further tax cuts and instead prioritise improving the design and enforcement of the tax system in order to increase its buoyancy. A challenge lies in the fact that some of the tax reductions were part of a regional trend, with similar tax reductions also happening in neighbouring countries (Figure 4.9). A co-ordinated policy initiative within ASEAN Member States could be one strategy to prevent further undermining the VAT and CIT as tax revenue sources. It would also be key for Lao PDR to evaluate whether the tax reforms have achieved their intended policy goals. For example, the reduction in VAT rates was carried out in order to promote formalisation; however, the extent to which this objective has been realised is yet to be determined.

Figure 4.9. Standard VAT rate in Lao PDR and peer countries in 2023 and 2024



Note: No VAT exists in Myanmar, but there is an indirect commercial tax with a standard rate of 5%.
Source: Data from (PWC, 2023[48]).

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There is a larger role for the tax system in promoting formalisation and sustainable growth

Presumptive tax regimes could be redesigned

Presumptive or simplified tax regimes can be an important tool that is used to gradually increase the formalisation of previously informal businesses and their workers while at the same time raising some tax revenue (Mas-Montserrat et al., 2023[25]). Presumptive tax regimes aim to encourage tax compliance by reducing tax compliance costs and levying lower tax rates compared with the standard tax system (Loeprick, 2009[61]). If it is well-designed, a presumptive tax regime can contribute to positive tax revenue buoyancy because the growth in economic activity will move businesses from the presumptive tax system to the standard tax system (rather than businesses remaining informal and not paying any tax at all).

However, tax regimes of this nature need to be well-adapted to each individual country's context in order to avoid unintended consequences. Badly designed presumptive tax regimes not only fail to encourage formalisation but can also result in excessive tax revenue loss (if the eligibility criteria are too broad), prevent businesses from growing (if the transition between the presumptive and the standard tax regime is not well-designed) or encourage self-employment (if salaried workers can easily transform their employment income into business income taxed under the presumptive regime).

Like many other countries, Lao PDR has introduced a set of presumptive tax regimes for microenterprises and small businesses. For example, a flat turnover tax of 1-3% is available for microenterprises with turnover of less than LAK 400 million. Larger businesses with turnover of up to LAK 6 000 million and up to 99 employees can benefit from a temporarily reduced CIT rate of 3-5% (Table 4.4).

These presumptive tax regimes do provide considerable tax benefits relative to the standard tax treatment, but the design of the regime in Lao PDR could be improved in order to increase its effectiveness and limit tax revenue loss through the following measures:

- *Transitioning towards a presumptive tax base:* The lower CIT rates available to small and medium-sized businesses do not reduce the tax compliance costs for these businesses, which should be a key feature of a successful presumptive tax regime. However, the reduced CIT rate may incentivise businesses to grow into the regular tax regime. The specific tax design could be evaluated using microenterprises' tax return data.
- *Evaluating the alignment of the VAT registration threshold and the design of the presumptive tax regime:* Businesses that have a turnover of more than LAK 400 million have to register for VAT in order to qualify for the presumptive tax regime. There is scope for re-evaluating the design of the VAT registration threshold and the extent to which it is aligned with the design (and possible reform) of the presumptive tax regime.
- *Lifting the three-year eligibility limit:* Limiting the eligibility for the presumptive tax regime to three years could deter informal businesses from entering the regime if they expect their business to grow more slowly. Instead, eligibility to enter the presumptive regime could be granted until a business has surpassed the turnover threshold (regardless of how many years it takes). Fixed time periods can also prompt a business to re-establish itself as a new legal entity in order to continue benefiting from the regime. In order to avoid the misreporting of turnover by businesses that want to remain in the presumptive tax regime indefinitely despite growth in their economic activity, a comprehensive audit could be conducted at a predetermined frequency (e.g. every three years).
- *Removing the additional eligibility rule based on asset ownership:* The threshold for the maximum value of assets a business is allowed to own in order to qualify for the presumptive tax regime could be removed. Businesses may fail to qualify for the presumptive regime from the very beginning of their operations if meaningful capital investment is required for the type of activity they perform. For example, under the current rules, a microenterprise with 1-5 employees can no longer benefit from the presumptive regime if it owns assets worth more than LAK 200 million (around EUR 9 500). These additional criteria also increase tax compliance costs for businesses, and they are difficult for the tax administration to verify.
- *Including SSCs in the scheme:* The presumptive tax regime could include SSCs for self-employed workers and small businesses by levying a low presumptive amount. This would ensure that

enterprises (and their workers) are not only brought into the tax system through the presumptive regime but also register with the social security administration.

- *Evaluating and, possibly, introducing sector-specific turnover rates under the presumptive tax regime:* The tax rates applied to turnover could be stratified by sector and gradually increase in such a way that the tax liabilities under the presumptive and standard tax regimes converge close to the eligibility threshold (for enterprises with average profitability).
- *Offering a one-stop tax office:* In order to further reduce tax compliance costs, businesses taxed under a presumptive regime could be made eligible to use a centralised one-stop shop for all administrative requests on tax issues, similar to the system available to businesses located in SEZs.
- *Limiting abuse:* Lao PDR should be rigorous in monitoring which types of businesses use the presumptive tax regime and whether they are businesses that belong to the target group. Special rules should be put in place in order to prevent salaried workers from transitioning to the microenterprise regime. Lao PDR should also monitor potential under-reporting of turnover under the presumptive tax regime – for example, by cross-validating the declared turnover with information collected for VAT administration purposes.

Table 4.4. Presumptive tax regimes available to micro, small and medium-sized businesses

Type of business	Eligibility criteria	Tax treatment
Microenterprises (not VAT-registered)[1]	1-5 employees Assets owned: <LAK 200 million[25] Turnover: <LAK 400 million	1% turnover tax (manufacturing sector) 2% turnover tax (trade sector) 3% turnover tax (services sector) Tax exemption (turnover <LAK 50 million)
Microenterprises (voluntarily VAT-registered)	1-5 employees Assets owned: <LAK 200 million Turnover: <LAK 400 million	0.1% CIT
Small businesses	6-50 employees Assets owned: <LAK 1.5 billion Turnover: <LAK 3 billion	3% CIT for three years
Medium-sized businesses	51-99 employees Assets owned: <LAK 6 billion Turnover: <LAK 6 billion	5% CIT for three years

Note: The standard CIT rate is 20%. Businesses that have a turnover of more than LAK 400 million must register for VAT in order to qualify for the presumptive tax regime. LAK 100 million is equivalent to around EUR 4 700 at 2023 exchange rates. The VAT registration threshold is LAK 400 million.
Source: VDB Loi (2023[49]) ; (IBFD, 2023[56]), *Tax Research Platform (Database)*, https://research.ibfd.org (accessed on 23 September 2023).

The tax system could play a more effective role in promoting formalisation

The relationship between the tax system and formalisation is complex. More nuanced perspectives have prevailed in recent years, highlighting that the tax burden is not the only determinant of whether a business or worker becomes formalised. However, a well-designed tax system can facilitate registration and formalisation, and the tax system in Lao PDR could perform more effectively in that regard. Currently, only about 300 000 workers are registered for social security in Lao PDR.

The following measures could increase the formalisation incentives provided by the Lao PDR tax system:

- Where fees exist to register workers for social security, these should be abolished.
- The tax system should be forward-looking in order to help ensure that enterprises do not have to pay SSCs retroactively if they register workers.

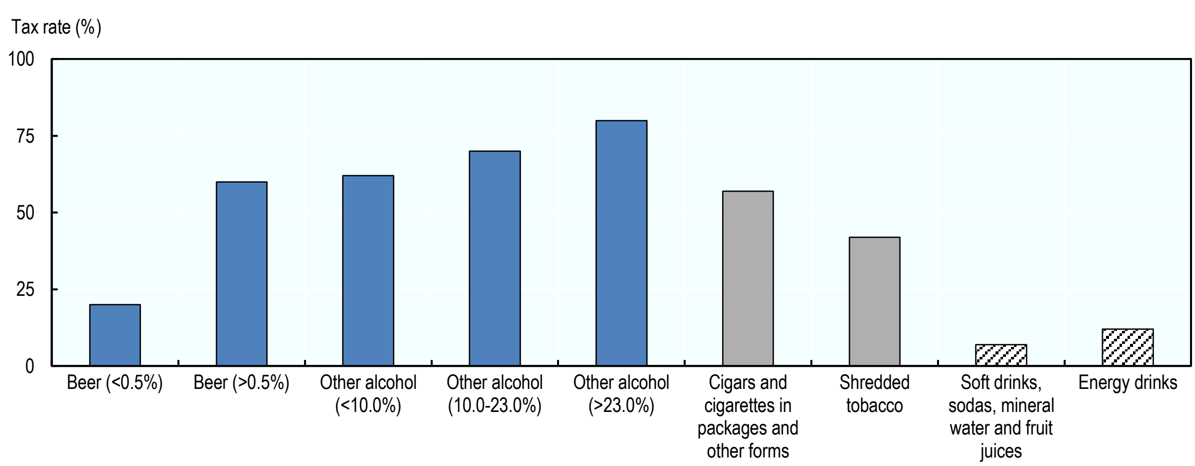
- Enterprises should only be allowed to deduct the labour cost of workers as a business expense if the workers are registered with the social security administration.
- Tax benefits (such as the tax exemptions in SEZs) should be conditional on complying with other legal obligations, including registering workers for social security.
- The government of Lao PDR could advertise that future “insurance-type” government benefits (such as support for businesses and workers during the COVID-19 pandemic) are conditional on registration as a formal worker or business and having contributed to social security.
- Lao PDR could consider introducing a progressive SSC schedule with reduced rates for lower-income workers that are matched by government contributions.
- Registered workers should be able to view the SSCs they have made and their accumulated pension rights online or by using a mobile application. Under such a system, workers would receive information about the benefits associated with their contributions and not be left with the impression that their contributions are “lost”.

Health and environmental taxes are underused

Health taxes have been increased, but non-compliance is high

There is a significant gap between how health taxes in Lao PDR function on paper and in practice. Health taxes are generally not low in Lao PDR, and many rates have been increased in the last decade (Figure 4.10). The country levies substantial excise taxes on alcohol, tobacco and sugar-sweetened beverages (SSBs), but the policy goal of raising revenue and reducing consumption of these harmful products is often not achieved (for example, as of 2015, 32% of people aged 15 years or over in Lao PDR were using tobacco products, one of the highest rates in the Southeast Asia region (Xangsayarath et al., 2019[62]). The reason is a mix of non-compliance with the excise taxes and the fact that Lao PDR has pursued contradictory policies, such as the long-term stability contract, which guarantees low excise tax rates to the country’s leading tobacco producer.

Figure 4.10. Ad-valorem health tax rates in Lao PDR, 2023



Note: The ad-valorem rate on cigars and cigarettes has been reduced from 60% to 57%.
Source: VDB Loi (2023[49]).

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The stability contract with Lao PDR's largest tobacco producer constrains tobacco tax policy

The Lao PDR government has entered into a 25-year investment agreement with what has become the leading tobacco producer in the country (holding more than 75% market share), which limits the government's capacity to increase excise taxes until 2026 (Tan and Dorotheo, 2021[63]).[26] In the meantime, Lao PDR has increased excise taxes on tobacco products to 57% of the wholesale price, but the contract with the partly government-owned tobacco producer guarantees that products covered by the agreement are only taxed at 15% or 30% of the production cost. There is also an additional excise tax of LAK 500-600 (EUR 0.02-0.03) per pack of cigarettes, but a recent report indicates that tobacco companies are not complying with this tax (UNDP, 2022[64]). According to the same report, tobacco producers are also refusing to pay the 2% CIT surcharge and an additional per-pack levy, which they are required to pay into the country's Tobacco Control Fund. At the same time, local tobacco producers are shielded from international competition through an import tariff of USD 0.40 per pack.

A coherent tobacco tax strategy needs to be implemented from 2026 onwards

Addressing Lao PDR's high rate of tobacco use will require a tobacco tax strategy from 2026 onwards. Increased and better-designed health taxes on tobacco products could help to gradually reduce tobacco use in Lao PDR, and the extra revenue generated could be used to fund public health initiatives or other government expenditure. Adhering to the World Health Organization (WHO) recommendation to tax tobacco products at a rate of at least 75% of their retail price by 2023 would mean a fourfold increase in cigarette prices in Lao PDR if the entire cost of the tax increase were shifted to consumers (UNDP, 2022[64]). In order to increase the effective taxation of tobacco products, it would be a key priority for Lao PDR to make the largest tobacco producers comply with the existing tax rules and ensure that the special tax treatment of one company ends in 2026. Estimates suggest that Lao PDR has lost almost USD 150 million in tax revenue over the last years as a result of the investment contract (Tan and Dorotheo, 2021[63]). In addition to the forgone tobacco tax revenue, the high number of smokers generates significant costs for the healthcare system, creates wider social and economic problems, and reduces well-being. Tobacco tax reform is urgent and should be treated as a priority.

Lao PDR could consider replacing the current ad-valorem excise taxes with specific excise taxes per pack of cigarettes. The lack of compliance with excise taxes is proof that the current mixed model has not been successful. The government also lacks information about the pricing strategy and true production costs of the country's largest tobacco producer (despite the government's involvement in the business), which means that it has difficulty enforcing the ad-valorem tax. Specific excise taxes are easier to enforce and, if adjusted for inflation, guarantee a minimum level of tax per package of cigarettes. Increases in health taxes do not necessarily need to be regressive (i.e. harm poorer households more than richer households). Box 4.3 expands on these and other common arguments which often prevent effective tobacco tax policies from being adopted.

There is also a wider inconsistency in Lao PDR's tobacco control policy that needs to be addressed. The country combines stringent measures like a complete ban on e-cigarettes with the provision of generous investment contracts to the tobacco industry. This is likely due to the government's involvement in the tobacco industry. In the *Global Tobacco Industry Interference Index 2021*, Lao PDR found itself ranked 62nd out of 80 assessed countries (Assunta, 2021[65]). Also in 2021, Lao PDR joined 30 other countries in imposing a complete ban on e-cigarettes and other new nicotine products.

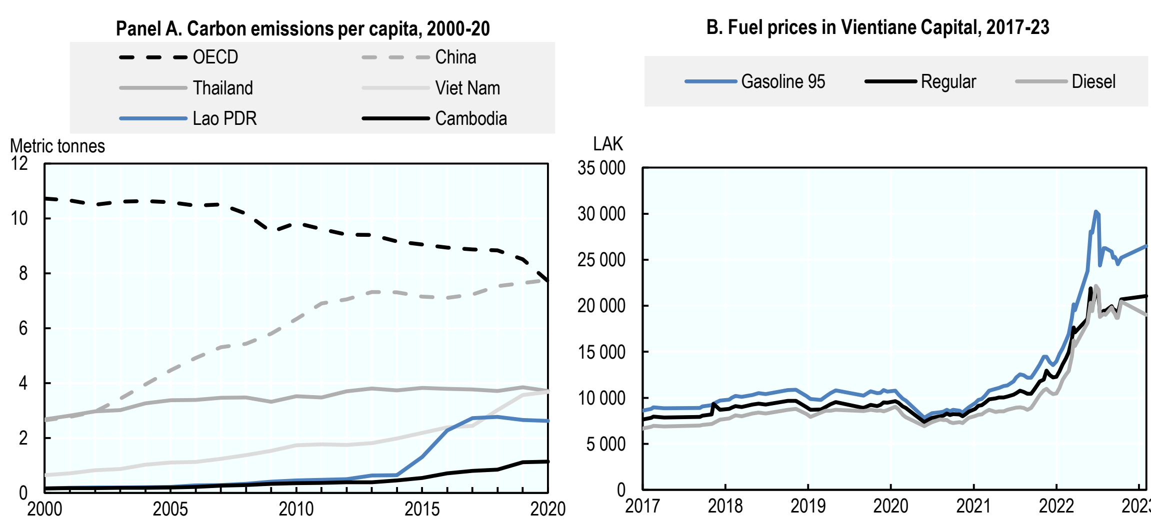
Any increases in health taxes in Lao PDR should go hand-in-hand with stronger enforcement in order to limit smuggling and tax evasion. Evidence shows that the pass-through of tobacco tax hikes on the retail price of tobacco products is lower in border regions, as illegal imports can replace domestic products when prices increase (Harding, Leibtag and Lovenheim, 2012[66]). As a landlocked country surrounded by five neighbouring countries, this issue is particularly relevant for Lao PDR. Better enforcement may require a co-ordinated, ASEAN-wide approach to tobacco policy. Such an initiative could help to prevent illegal trade and ensure that efforts to raise health taxes are not undermined by smuggled products imported from neighbouring countries. Lao PDR could also assess whether tobacco producers pay adequate taxes on their profits. Low competition and very favourable tax treatment should produce large profits for tobacco producers. If the tax administration concludes that these producers are paying only a small amount of tax relative to their profits, it could indicate that profits are being artificially shifted out of the country.

There is also potential to improve the system used for alcohol taxation. The current alcohol tax structure is **ad-valorem based**, with differentiated rates both by product category and alcohol content. Transitioning to a specific tax solely based on alcohol content could make the system easier to manage and remove incentives for the under-reporting of sales prices. It would also ensure that high-alcohol, ultra-low-cost spirits are subject to a sufficient amount of tax.[27] The tax rate could be higher per unit of alcohol for products with a higher alcohol content. Beverages could be categorised into three broad groups, with cut-offs at 5% and 20% alcohol content, as recommended by the Asia-Pacific Tax Forum (APTF)-ASEAN Excise Tax Study Group (APTF ASEAN Excise Tax Study Group, 2013[67]). In order to ensure its long-term effectiveness, the specific tax applied would have to be regularly adjusted for inflation.

Explicit carbon taxes are difficult to implement in the context of high energy prices

Currently, scope for introducing carbon taxation with the aim of raising fuel prices appears to be limited. Fuel prices have more than doubled since 2020, which corresponds to a stronger pricing signal than any explicit carbon tax would have realistically achieved (Figure 4.11). Lao PDR currently does not levy an explicit carbon tax.[28] Emissions are implicitly taxed through the fuel excise tax, with differentiated rates for gasoline (31-40%), diesel (21%) and jet fuel (8%). In May 2022, the government of Lao PDR temporarily reduced the excise tax on oil products for three months.

Figure 4.11. Carbon emissions per capita and fuel prices over time in Lao PDR



Note: Carbon dioxide emissions are those stemming from the burning of fossil fuels and the manufacture of cement. They include carbon dioxide produced during consumption of solid, liquid, and gas fuels and gas flaring.
Source: (World Bank, 2024[12]), *World Development Indicators* (database) (Lao State Fuel Company, 2023[68]), *Oil prices*, https://laostatefuel.com/en (accessed on 23 September 2023).

StatLink https://stat.link/mxjuit

Lao PDR has committed itself to reducing emissions by 60% until 2030 relative to a business-as-usual scenario (Government of Lao PDR, 2021[69]). The country plans to achieve this goal through reforestation, the expansion of hydropower capacity and a 10% reduction in energy consumption (relative to the business-as-usual scenario). Emissions per capita had been increasing in Lao PDR, but they have plateaued since 2017. Emissions also remain low compared with OECD member countries and with neighbouring countries like China, Thailand and Viet Nam (Figure 4.11).

Box 4.3. Additional arguments to consider when discussing tobacco taxation in Lao PDR

Tackling tobacco use through more effective policy measures should be a priority for Lao PDR. As of 2015, 32% of people aged 15 years or over were using tobacco products, one of the highest rates in the Southeast Asian region (Xangsayarath et al., 2019[62]). Tobacco use is a leading risk factor for non-communicable diseases (NCDs) such as heart disease, stroke and lung cancer. The WHO describes the global prevalence of tobacco use as an "epidemic" due to its extensive health impacts (WHO, 2021[70]). A recent report suggests that tobacco use may account for up to 15% of all deaths in Lao PDR (UNDP, 2022[64]). Alongside the negative health effects of tobacco use, the treatment of tobacco-related illnesses places additional stress on the healthcare system and uses resources that could be devoted to other health and development issues. Furthermore, extensive tobacco consumption leads to additional indirect economic costs that are linked to reduced productivity due to illnesses or premature deaths caused by tobacco use (Goodchild, Nargis and Tursan d'Espaignet, 2017[71]). Increasing the rate at which tobacco products are taxed in Lao PDR would be an essential step for improving both public health and economic development.

The argument is frequently made that higher health taxes are regressive (DeCicca, Kenkel and Lovenheim, 2022[72]), but the elasticity of low-income earners is higher, so they would be the first to stop smoking and no longer pay the tax. If a substantial portion of these individuals came to prefer not smoking once they have been induced to quit, the welfare-enhancing impact of the tax could be considerable and progressive. In this scenario, the tax no longer prevents a behaviour that people would desire in the absence of the tax, but instead has aided them in achieving a healthier lifestyle. Health taxes differ in this regard from environmental excise taxes. For health taxes, it can be argued that some low-income taxpayers (who are more likely than those with higher incomes to respond to higher prices) may eventually prefer the lifestyle changes they have had to make in response to the tax due to the direct personal health benefits they experience. This argument, which rests on the addictive and health-damaging effects of tobacco consumption, is less straightforward to make on the individual level for environmental taxes, where taxpayers may be forced to abandon a consumption behaviour that has delivered limited personal harm but meaningful welfare gains.

Not raising tobacco taxes also does not automatically keep prices low for lower-income consumers in developing countries. The tobacco industry is often not competitive, and due to the addictive nature of tobacco, users display a lower elasticity in demand than they do for other products. This means that even in the absence of higher taxes, the industry can gradually increase prices without losing a significant number of customers. Yet, this approach results in the additional revenue going to the tobacco industry rather than the government. At the same time, the industry is unlikely to raise prices to a level that would discourage consumption. Instead, price increases by the tobacco industry would aim to extract each consumer's maximum willingness to pay. This might be achieved by, for example, offering a broad range of brands at varying price points in order to keep consumers of different income levels smoking despite higher prices. This mechanism could be at work in Lao PDR. The country's tobacco industry has lobbied for a "minimum price" on tobacco products while strongly objecting to meaningful tax increases. And while the tax burden in Lao PDR is significantly lower than in other ASEAN Member States, the price per pack of cigarettes is above average if measured as a share of GDP per capita.

Lao PDR could monetise its natural resources through carbon certificates

One innovative opportunity for Lao PDR to raise additional revenue while limiting environmentally harmful behaviour could be to monetise its forests through carbon credits. This has become a topic of increasing interest in recent years, especially as part of discussions around the Conference of the Parties (COP) on climate change. The discussions have recently explored new mechanisms for sovereign nations to purchase and sell carbon rights. Historically, enterprises have been the main purchasers of carbon credits, including those tied to forest conservation projects.[29] These credits, however, have been criticised due to insufficient monitoring, leading to questions about their actual environmental benefit. The involvement of governments and the creation of internationally transferred mitigation outcomes (ITMOs) under Article 6.2 of the Paris Agreement offers a new opportunity to participate in more credible international carbon credit markets. Countries can use these new types of credits to meet their nationally determined contributions (NDCs) under the Paris Agreement. There are significant opportunities for countries like Lao PDR to explore converting their carbon sinks into natural capital that yields a return on investment while preserving these natural resources. This is particularly the case for Lao PDR, which has included the goal of increasing its forest cover to 70% of its land area in its NDC at an estimated cost of USD 1.7 billion (Government of Lao PDR, 2021[69]).

In practice, other governments would be able to buy carbon credits that would ensure that forests in Lao PDR are not destroyed. The revenue generated could be reinvested into the local economy by employing local people, providing municipalities with an incentive to maintain their forests. Thus, a strong link can be established between carbon credits and financing below the central government level. To seize this opportunity, however, several preconditions need to be met. These include improving governance, keeping a detailed record of land use across the country and establishing a geographic information system (GIS)-based cadastre. Fulfilling these preconditions will ensure that carbon credits and forest preservation efforts are effective, sustainable and properly monitored. Lao PDR could also benefit from creating bilateral agreements with countries that are willing to both offer technical support for monitoring forest preservation activities and to purchase carbon credits.

There would also be opportunities to link existing taxes with a new such initiative. If forests are converted into agricultural land, a recurrent land tax could be levied on the non-forest use of the land. This tax could be equivalent to the return that Lao PDR would have earned through carbon credits if the land had been maintained as a forest, establishing a new role for recurrent taxes on immovable property.

Lao PDR needs to radically change its approach to designing, administering and evaluating the tax system

There is a lack of coherence across enacted tax policies

There is too little dialogue and co-ordination on tax matters among ministries and government institutions in Lao PDR. This has contributed to a lack of coherence within the tax system in areas such as investment incentives, health taxes or SSCs. More dialogue across government bodies would lead to an improved understanding of the functioning of the tax system as a system. The role of the MOF as the central institution in formulating tax policy needs to be strengthened. It does not correspond to best practice that ministries other than the MOF have the power to introduce tax incentives or other tax provisions with direct effects on tax revenues without the involvement or agreement of the MOF. For example, the excessive use of tax incentives by the Ministry of Planning and Investment induces the MOF to levy taxes that are suboptimal.

Coherence would also increase if Lao PDR were to unify all tax provisions pertaining to one type of tax into a single tax law (e.g. the income tax law) instead of allowing for the coexistence of

multiple pieces of legislation that change the original tax law for certain taxpayers. For example, tax incentives should be granted through provisions in the standard income tax law rather than through separate investment promotion laws. The power to introduce tax incentives should lie solely with the MOF, which would also be closely involved in any change in the social security rates.

The government of Lao PDR must limit the use of tax incentives as policy tools. While it is recognised that Lao PDR's economy faces many challenges and that finding solutions might be difficult, government officials seem to "automatically" turn to the possibility of introducing yet another tax incentive in order to achieve an identified policy objective. This approach does not necessarily result in good policy, as the tax system is not necessarily the best tool to tackle economic problems that have their source outside of the tax system.

Tax transparency and certainty need to improve

Tax transparency and certainty about the precise tax rules applied and enforced at any given point are often absent in Lao PDR, which makes it difficult for taxpayers to comply with the tax rules because they face the risk that the rules will be applied selectively by tax administration officials. Depending on the business sector, the tax administration interprets certain tax rules in ways that are not aligned with the tax code. As a result, some businesses prefer to remain in the informal economy or to not invest in Lao PDR at all.

Lao PDR lacks a single place (e.g. a dedicated website) to access all tax laws and regulations that are in effect on a given date in both Lao and English. If translations are available, they are unofficial and do not always include the latest changes made to the laws and regulations. Lao PDR should make these documents readily available and, ideally, produce a set of interpretive guidelines that make it easier for the taxpayer (and tax officials) to determine with certainty how the tax law applies in any given situation.

The lack of transparency will lead to tax disputes between taxpayers and the tax administration, but Lao PDR also lacks a transparent process to resolve these disagreements. Businesses cannot go to court to resolve tax disputes, as there are no tax courts in Lao PDR. Instead, the taxpayer needs to bring their dispute to political institutions (whether that is an individual at the provincial level, the Minister of Finance, the Prime Minister or, if the case cannot be resolved by any of these, to the highest political institution in the country). In the future, a dispute resolution mechanism should be established that is distanced as much as possible from political institutions.

The recent tax administration reforms are a step in the right direction, but many challenges remain

Lao PDR has made progress in terms of digitalising the administration of the tax system in the last years. For example, the country has introduced a Tax Revenue Information System (TaxRIS), which issues taxpayer identification numbers to firms and enables them to file and pay taxes online. According to the MOF, more than 75% of (formal) businesses were using TaxRIS in 2022. In August 2023, the MOF announced that businesses will no longer be allowed to settle their tax liabilities in cash but will need to use TaxRIS and the banking system instead. Businesses are also asked to use TaxRIS to declare VAT. A recent amendment to the tax law states that businesses will only be allowed to deduct input VAT from the VAT they collect on their sales if the purchases were facilitated by the banking system (in other words, there is no deduction for inputs paid in cash) and if receipts are provided. Digital tax payments have also been introduced in other areas; for example, to pay the road tax or the land tax. Individual filing for PIT will become compulsory once the national Tax identification number has been fully implemented; currently, only the employer has to declare taxes for its salaried workers.

These initiatives should be strengthened and accelerated because efficient and effective tax administration and enforcement continue to be major challenges in Lao PDR. Close monitoring is required so that unintended consequences can be limited as much as possible. For example, foreign investors have reported that they are denied the deduction of input VAT if they purchase goods and services from a Lao PDR supplier that fails to produce a valid VAT invoice (European Chamber of Commerce and Industry in Lao PDR, 2020[73]). Although this mechanism is, in theory, appropriate in order to encourage purchases from formal businesses, it should not prevent foreign investors from participating in the domestic economy. One potential transitory solution could be to offer foreign investors the option to withhold and transmit the VAT when they make a purchase from a Laotian business (which will receive an invoice stating that VAT has been paid on its behalf).[30]

There are a number of additional tax administration challenges linked to the VAT that need to be addressed urgently. If the tax administration aims to increase the share of formal businesses that withhold and pay VAT according to the law, it has to ensure that it can properly administer the VAT system. Reducing the general VAT rate with the goal of bringing more businesses into the VAT system (as Lao PDR has done recently) will likely not be effective as long as businesses that attempt to comply with the rules are put at an additional disadvantage. For example, businesses report that VAT refunds are not properly processed by the tax administration and that enforcement is not uniform across the country (e.g. TaxRIS has only been introduced in large cities).While a gradual introduction of new systems can be reasonable, the national roll-out should follow without much delay in order to avoid creating unintended distortions between workers and enterprises located in different parts of the country due to differences in the enforcement of taxes.

The large degree of discretion exercised by individual tax officials contributes to unpredictable and unfair decisions. There are reports that, tax bills are frequently settled on an ad hoc and negotiated basis. In 2018, more than one-third of enterprises felt like they were expected to give gifts when meeting with tax officials, according to the World Bank Enterprise Survey of 2018. Lao PDR could consider establishing an independent tax administration agency with its own financial, organisational and human resources. Additional measures will likely be necessary in order to reduce the over-dependency on individual discretion. Further training and skill development for tax officials would be part of such a strategy.

Ensuring a more efficient and transparent tax administration would, over time, likely also contribute to higher tax morale (i.e. the intrinsic motivation to pay taxes) and initiate a virtuous cycle of higher revenues and higher tax morale. Although tax audits, fines and third-party reporting play a major part in ensuring compliance with tax rules, tax administration resources remain limited, especially in developing countries like Lao PDR. This implies that tax systems generally have to rely to some extent on the voluntary compliance of taxpayers (OECD, 2019[74]; OECD, 2022[75]) (Box 4.4). Improving tax morale can play a key role in achieving additional revenue mobilisation. Work by the OECD also shows that higher tax morale can typically be linked to taxpayers believing that tax revenue is spent more effectively.

Box 4.4. Improved tax morale through building trust and value management in the Swedish Tax Agency

Tax morale – or the intrinsic willingness to pay tax – is a vital part of all tax systems, as they rely on the voluntary compliance of taxpayers. This holds particular significance for developing countries like Lao PDR, where revenue generation remains low, the scope and quality of public services are under-developed, and the resources of the tax administration are limited. Improving tax morale offers governments the potential to increase revenues spontaneously while they target their enforcement efforts to activities and taxpayers that are less inclined to voluntarily comply with the tax system through reduced enforcement efforts, thereby optimising the use of limited enforcement resources. Improving tax morale requires that tax rules are clear and transparent for both taxpayers and tax officials, who need to be trained so they can facilitate a culture of tax compliance.

However, where levels of trust are low, building trust will take time and requires sustained efforts. Developing a coherent strategy through collaboration between the tax administration, enterprises and other relevant stakeholders can build support for tax reform that leads to a positive cycle of revenues, public service provision and tax morale. It will strengthen tax certainty and transparency, which are crucial for implementing a tax environment that is growth friendly.

Strengthening tax compliance is thus not only about improving tax enforcement and “enforced compliance” but also about pursuing “quasi-voluntary compliance” through building trust and facilitating payments – all of which are underpinned by a credible, fair and equitable system of enforcement.

For example, adopting a service-oriented approach rather than solely increasing enforcement measures has proven successful for the Swedish tax authorities to increase citizens’ trust in the government, tax morale and, thus, tax compliance. Through value management and determined work to improve individuals’ attitudes towards the tax system, the Swedish Tax Agency was able to transform from a feared tax collector into an accepted service agency that is trusted by the public. In addition, enhanced transparency and the introduction of more simplified procedures for paying taxes have also been successful in enhancing tax morale and compliance. By applying an approach that encourages openness, transparency and dialogue, the Swedish Tax Agency managed to change its emphasis from collecting the maximum amount of tax to ensuring that corporations pay the right amount of tax, promoting equality under the law and thus encouraging improved tax morale. Today, the Swedish Tax Agency is one of the highest valued public authorities in Sweden.

Source: (OECD, 2019[74]), *Tax Morale: What Drives People and Businesses to Pay Tax?*; (OECD, 2022[75]), *Tax Morale II: Building Trust between Tax Administrations and Large Businesses*; (Stridh and Wittberg, 2015[76]), *From Feared Tax Collector to Popular Service Agency*.

The worldwide tax regime for corporations makes the tax system in Lao PDR resource-intensive to administer

Lao PDR should also reconsider tax design features that make the tax system more resource-intensive to administer, but that likely generate little additional revenue. Lao PDR has a pure worldwide system of taxation in which income earned abroad by resident corporations is integrated into the domestic CIT base. Such systems create a heavy administrative burden for the economies implementing them. In practice, income earned abroad will have been taxed in the host economy where the income was earned under that economy’s CIT and/or withholding tax. The Lao PDR tax administration then has to assess the difference between taxes paid abroad and the remaining domestic tax liability (if the host economy has a lower tax rate), granting a tax credit as a relief against double taxation. This administrative burden has to be balanced against the potential revenue from foreign-sourced income in order to assess whether a worldwide system of taxation offers a net benefit.

In theory, there are two models for the taxation of cross-border business income: (i) worldwide taxation systems that tax corporations on their worldwide income; and (ii) territorial tax systems that only tax income that has its source in the economy in question. In recent decades, most OECD member countries have adopted territorial tax systems, although in practice most apply a combination of both systems. OECD member countries with territorial tax systems commonly exempt most active earnings from tax if they are repatriated from subsidiaries that are incorporated in the host countries.

Lao PDR is unlikely to raise enough revenue from the taxation of foreign-sourced income (generated by resident corporations) to justify the high administrative costs of a pure worldwide tax system. Potential revenues are limited by the low CIT rate in Lao PDR, meaning that the taxes paid at the source on foreign income are very likely to be higher than those payable in Lao PDR. The country should conduct a cost-benefit analysis of the merits of its worldwide system of taxation. Moreover, businesses may deduct the costs they incur in order to earn foreign-sourced income, which would put tax revenues under further pressure. Under a territorial tax system, these costs would not be deductible to the extent that the foreign-sourced income is not taxable in Lao PDR.

Excise taxes could be streamlined in order to reduce administrative costs

Lao PDR's taxation system includes a large number of non-traditional, product-specific excise taxes (Table 4.5). These excise taxes contribute to the complexity of the tax system and complicate tax enforcement in the country. Excise taxes are levied on many goods and services outside the usual realm of health- and environment-related products (such as alcohol, tobacco and fuel). Instead, excise taxes in Lao PDR can be levied on technical products (such as phones or cameras), products used for leisure activities (such as golf carts or bowling) or "luxury goods" (such as perfumes or gem stones). While such non-traditional excise taxes are common in the Southeast Asian region, Lao PDR's approach stands out due to its long list of products and varied rates. Tax rates have also changed frequently over the last years. Levying many product-specific excise taxes adds layers of complexity and administrative burden to the tax system because the excise tax must be paid in addition to the VAT. It also makes enforcement burdensome, as similar goods and services can face different tax treatments under the excise tax. For example, beauty salons face an excise levy, whereas hairdressers do not.

Streamlining these excise taxes into a uniform "luxury" rate might be a sensible move if Lao PDR wishes to retain higher taxation on these goods and services. A revenue breakdown for each product-specific excise duty would be useful in order to weigh the revenue potential against the administrative cost of tax collection. It is likely that excises on fuel and vehicle sales make up the large majority of non-health-related excise tax revenue and that certain product-specific excises generate little revenue. Eventually, integrating these taxes into the VAT system – and, possibly, into a luxury excise tax – would help reduce the administrative burden and improve the efficiency and equity of the tax system. Businesses cannot recover excise taxes that were paid on products they purchased as an input. It is also worth mentioning that the tax system effectively amplifies excise taxes by 7%, as these taxes are calculated before the application of VAT.

Table 4.5. Examples of product-specific excise taxes levied in addition to the VAT in Lao PDR (non-exhaustive)

Product or service	Excise tax rate
Golf carts and vehicles used on golf courses	15%
Sightseeing passenger cars	5%
All-terrain vehicles and go-karts	25%
Sound systems for vehicles	25%
Decorative accessories for vehicles	20%
Carpets made from wool and animal parts	20%
Perfumes and cosmetics	25%
Traditional rockets, fireworks and firecrackers	85%
Playing cards and gambling materials	100%
Satellite television signal receivers	15%
Audio-video players, cameras, telephones, audio-video recorders and musical instruments	15%
Aerial drones, aerial cameras, parachutes and paragliders, and small jet engines	25%
Billiard tables, snooker tables, bowling equipment and football playing tables	35%
Nightclubs, discotheques and karaoke	40%
Bowling services	24%
Beauty services	13%
Golfing services	25%
Motor racing, horse racing and cockfighting	30%

Source: VDB Loi (2023[49])

It appears that through this complex excise tax system, Lao PDR also tries to tap into the revenue potential of foreign tourists. If generating revenue from tourist activities is a primary policy goal, a per-person per-night tourist tax could be a more straightforward alternative to excise taxes levied on activities that are popular among tourists.

Tax policy analysis remains under-developed

Tax policy should be evaluated regularly by a dedicated analytical unit within the MOF. Proper evaluation ensures that tax policies are effective and efficient, and that policy errors are not repeated over time. Tax policy analysis can also reveal additional areas where the current tax system is malfunctioning, indicating potential areas for reform. It is best practice that the tax policy analysis functions as a data hub to which different entities inside and outside the MOF deliver tax-related data. The analytical unit would also maintain different microsimulation models (adapted to the needs and capabilities of the unit) in order to quickly respond to demands to evaluate tax policy reform proposals.

Examples of areas where additional tax policy analysis by a dedicated analytical unit would be crucial include the following:

- *Tax expenditure analysis:* Tax expenditure reporting is under-developed in Lao PDR even though the tax system provides a substantial number of tax expenditures (reduced rates, tax exemptions, non-standard tax deductions, etc.). The analytical unit could be made responsible for compiling a comprehensive list of all tax expenditures, which should be updated annually.[31] This requires that Lao PDR first defines a benchmark tax system against which the actual system can be compared. Such an exercise usually involves different experts from the MOF, but the process could be led by the analytical unit. The analytical unit would then quantify as many tax expenditures as possible on an item-by-item basis in terms of the forgone tax revenue. Initially, the focus could be on large tax expenditures (such as the SEZ regime or VAT reductions), and a move towards a cost-benefit analysis should be considered for the largest tax expenditures. Where possible, distributional analysis should be integrated gradually as well, because many tax expenditures are likely regressive and deliver larger benefits to higher-income and wealthier individuals.

- *VAT registration:* It would be important to evaluate whether the reduced VAT rate has resulted in an increased number of businesses registering for VAT. Business formalisation has been stated as the goal of reducing the VAT rate, and an analysis would show whether this goal has been achieved.
- *Behaviour of enterprises as a result of the presumptive tax regime:* The analysis would establish how enterprises with reported turnover around the eligibility threshold behave and whether there is evidence that the presumptive tax regime prevents enterprises from growing. The analysis could also focus on enterprises that are approaching the three-year eligibility threshold and study the behaviour of these enterprises.
- *Taxes paid by MNEs:* Lao PDR needs to be prepared for the international adoption of the GloBE rules, and it also needs to assess to what extent MNEs are taking advantage of the lack of an international taxation framework in the country. For example, the analysis would calculate the effective tax rate paid by MNEs in Lao PDR according to the GloBE rules, and would also determine the drivers behind the (potentially) lower effective tax rate paid by these businesses.
- *SEZs:* The set of investment tax incentives provided to investors in SEZs would require the increased attention of the analytical unit because of their generosity and their impact on a large number of taxes. Preliminary analysis should focus on assessing what types of enterprises benefit from the SEZ regime and how these enterprises behave once tax benefits are phased out. A cost-benefit analysis that integrates the different cost and benefit components created by the SEZ regime could be developed over time.
- *Social security registration:* The analysis would establish which enterprises register their workers with the social security administration and how workers behave once they have been registered for the first time (for example, whether workers continue to be registered when they switch employers). The assessment would also focus on gaining a better understanding of the determinants for non-registration.
- *Distributional analysis:* Inequality in Lao PDR is high, and taxes could play a larger role in reducing inequality. Analysis should be conducted in the tax policy unit in order to better understand the distributional impact of taxes, with a focus on the VAT and PIT.

Box 4.5. Key recommendations

- **Strengthen the buoyancy of the tax system in order to ensure that the tax-to-GDP ratio increases when the economy grows:**
  - Address concrete tax design flaws across all types of taxes.
  - Change the approach to designing, administering and evaluating the tax system.
  - Identify a set of reforms that gradually increase tax revenue buoyancy (and raise tax revenue) while also turning the tax system into a positive force that helps address other developing challenges, such as high inequality, inadequate social protection, high informality or the lack of investment.
- **Reconsider the suboptimal tax incentive strategy in SEZs and the CIT system based on differentiated rates by sector:**
  - Grant tax incentives according to predetermined, uniform and clearly declared criteria; the authority to grant tax benefits should lie exclusively with the MOF.
  - Shift the focus away from profit-based tax incentives and towards expenditure-based ones.

  - Move away from providing reduced CIT rates according to economic sector.
  - Levy a top-up tax on certain businesses in SEZs, bringing their effective tax rate to the new global minimum tax rate of 15%.
  - Make tax benefits in SEZs more conditional on the employment or training of local workers and on complying with other laws, such as registering workers for social security.
  - Assess the tax revenue impact of interactions between SEZs and the national economy.
  - Launch a thorough cost-benefit evaluation of the SEZ regime's impact on investment.
- **Gradually work towards a consistent international taxation framework to reduce revenue leakages:**
  - Consider transitioning to a worldwide tax regime for personal income in order to tax the foreign-sourced income of individuals who are Lao PDR tax residents.
  - Conversely, consider switching to a territorial tax system for business income to reduce the administrative burden linked to a worldwide business tax regime.
  - Implement transfer pricing guidelines.
  - Sign up for international tax information sharing to gain access to information about financial accounts held by Lao PDR residents in foreign jurisdictions (which will be relevant if the country decides to switch to a worldwide system of taxation for personal income).
  - Analyse the tax revenue risk from other tax planning strategies that are potentially being employed by MNEs (for example, through gaining access to CbC reports).
- **Reform other features of the tax system that introduce distortions or that contribute to low revenues and the limited equity of the tax system:**
  - Introduce an official land register and better-defined land property rights. Devise a mechanism to link property taxes to the evolution of land prices. Increase the land tax, and charge a higher land tax for holding empty residential property that is not owner-occupied and is being withheld from the rental market in urban areas. Move from a purely land-based tax to a recurrent tax on immovable property (accounting for the value of buildings and land improvements).
  - Cap the freelancer regime for self-employed workers to avoid revenue loss from tax arbitrage.
  - Deny former employees access to the presumptive tax regime if they continue working for their previous employer as a self-employed business.
  - Analyse who earns capital income in Lao PDR in order to make an assessment as to whether the withholding rates levied on different forms of capital income could be increased.
  - Base the tax applied to the sale of shares and to the sale of immovable property on the capital gain rather than on the transaction value.
  - Consider an upward adjustment of the PIT and SSC maximum contribution thresholds and index the thresholds to inflation. Consider adjusting higher tax brackets downward to increase the progressivity of the PIT.
  - Make social security registration mandatory for the self-employed. Consider subsidising the contributions of self-employed individuals whose actual income would be below the minimum wage if the minimum level of contribution were to be levied.
  - Maintain the increased CIT rate for the natural resource sector, but evaluate whether it is effective at taxing resource rents or entirely undermined by tax incentives or profit shifting. Prioritise and increase the role of royalties if the CIT surcharge fails to deliver significant revenues.

- Enhance customs procedures and border checks in Lao PDR to reduce high levels of fraudulent behaviour and reduce the administrative cost faced by importers. Reduce the number of different taxes and levies to be paid when importing goods and services.
- Reform the deemed profits tax and consider integrating it into the VAT or import tariff system.
- Ensure the proper functioning of the VAT aligned with the *International VAT/GST Guidelines*.
- Increase the effective taxation of harmful products (health taxes) and develop a consistent tobacco tax strategy. Evaluate the design of health taxes.
- Explore innovative strategies to raise revenue and reduce environmentally harmful behaviour, such as carbon credits.
- Consider streamlining non-standard excise taxes into a uniform "luxury" rate or integrating these taxes into the VAT. Compile a revenue breakdown of excise taxes by product in order to weigh the revenue generated against the administrative cost.
- Refrain from pursuing further untargeted tax cuts and instead prioritise improving the design and enforcement of the tax system to increase tax buoyancy. Co-ordinate with neighbouring countries to avoid or limit harmful tax competition.

- **Improve the design of the presumptive tax regime to increase its effectiveness at encouraging formalisation and to limit tax revenue loss:**
  - Lift the presumptive tax regime's three-year eligibility limit.
  - Remove the additional eligibility rule based on asset ownership.
  - Include SSCs in the scheme.
  - Introduce a transition path between the presumptive and the standard tax system.
  - Evaluate the introduction of sector-specific taxes on turnover.
  - Offer a one-stop tax office.
  - Limit abusive practices related to the presumptive tax regime.
- **Increase the role of the tax system as a tool to promote the formalisation of workers and businesses:**
  - Abolish fees to register workers with the social security system.
  - Make social security forward-looking to help ensure that enterprises do not have to pay SSCs retroactively if they register workers.
  - Disallow enterprises from deducting the labour cost of workers as a business expense if the workers are not registered with the social security administration.
  - Make investment tax incentives conditional on compliance with other legal obligations, including registering workers for social security.
  - Advertise that future "insurance-type" government benefits (such as support for businesses and workers during the COVID-19 pandemic) are conditional on registration as a formal worker or business and having contributed to social security.
  - Consider introducing a progressive SSC schedule with reduced rates for lower-income workers that are matched by government contributions.
  - Allow workers to view the contributions that they have made to social security and their accumulated pension rights (e.g. through an online portal) in order to counter the perception that these contributions are "lost".

- **Overhaul the approach to designing, evaluating and administering the tax system:**
    - Increase collaboration among ministries and other government institutions.
    - Stop misusing the tax system in order to try to solve problems (e.g. introducing new layers of tax incentives in order to support investment in certain sectors) that could be better addressed in different ways.
    - Strengthen the MOF's position as the key actor in tax policy making and make the MOF's consent mandatory for any tax policy change (including changes to SSCs and investment tax incentives).
    - Unify all legal provisions pertaining to one type of tax in one tax law that is made available online for taxpayers to consult.
    - Consider establishing an independent tax revenue agency that would be responsible for revenue collection.
    - Devise a formal dispute resolution mechanism in order to resolve tax disputes.
    - Increase efforts to prioritise non-cash payments in order to settle tax bills.
    - Maintain and strengthen recent initiatives to modernise and digitalise the tax administration.
    - Establish and strengthen a stand-alone tax policy analysis unit within the MOF that evaluates and assesses tax policy (including potential tax reforms, tax expenditures, the distributional impact of taxes, etc.).

Notes

[1] Tax revenue includes the revenues raised through social security contributions (SSCs) according to Organisation for Economic Co-operation and Development (OECD) definitions. However, the tax revenue data for Lao PDR in the OECD Global Revenue Statistics Database does not include SSC revenue.

[2] The long-term buoyancy should eventually converge towards unity once a country has reached a sufficiently high tax-to-GDP ratio.

[3] There are differences between the 2021 tax-to-GDP ratio recorded in the OECD Global Revenue Statistics Database (9.7%), by the World Bank (10.1%) and by the Association of Southeast Asian Nations (ASEAN)+3 Macroeconomic Research Office (9.5%). The national development plan records a higher tax-to-GDP ratio for the year 2020 (11.05%) than the other sources. These discrepancies suggest that there is scope to improve the reporting of government finances, as highlighted by a recent International Monetary Fund (IMF) technical assistance report (IMF, 2022[17]). However, the recent decline in Lao PDR's tax-to-GDP ratio is robust across sources (OECD, 2022[4]; Government of Lao PDR, 2021[2]; World Bank, 2023[3]; AMRO, 2022[54]).

[4] Concession agreements in growth sectors are also draining government resources through more indirect channels. A case in point is the state-owned electricity production company Électricité du Laos (EDL), which purchases electricity from project operators and co-operates on a large number of hydropower facilities. Rather than supporting public finances, the company is heavily indebted and in need of financial support from the general government budget. This is because EDL pays higher prices when purchasing electricity from the project operators than it is allowed to charge domestic customers (AMRO, 2022[54]).

Electricity exported to the People's Republic of China (hereafter: China) or Thailand has also been sold at a loss.

[5] The costing in the National Social Protection Strategy suggests that the cost of providing "core" social protection schemes would be 0.1% of GDP in (Government of Lao PDR, 2020[16]). However, these estimates are based on a means-tested cash transfer of LAK 100 000 per month, which would be equal to 8% of the minimum wage at the time of introduction in 2019 (or around EUR 10 per month based on 2019 exchange rates).

[6] The OECD has developed a joint assessment tool for healthcare financing that aims to assist countries that plan to graduate from donor financing in the area of public health provision. The tool could be made available to Lao PDR.

[7] The CIT gap refers to the difference between potential and actual revenues. Tax non-compliance and tax incentives can widen the CIT gap.

[8] Earmarking of tax revenue, although generally not recommended, could be reconsidered if evidence for such a moral hazard problem were found in Lao PDR. This applies in particular to SSCs, health taxes and environmentally related taxes.

[9] The gap is smaller if values are adjusted for purchasing power parity.

[10] The *National Green Growth Strategy of the Lao PDR till 2030* states that "socio-economic development and poverty reduction in the past period were achieved through significant, inefficient, wasteful and unstainable use of natural resources" (Secretariat for Formulation of National Green Growth Strategy of the Lao PDR, 2018[78]).

[11] Agriculture still accounted for almost 60% of total employment in 2021 according to the International Labour Organization (ILO).

[12] The average tax-to-GDP ratio in OECD member countries is around 34% (OECD, 2022[4]).

[13] SEZs are developed either by the government or by foreign or domestic private developers that frequently come from the country neighbouring the SEZ. Individual businesses therefore have the option to invest in a SEZ that a developer has created.

[14] Different tax rates apply in the different SEZs after the CIT exemption period has expired. It is also worth noting that the first SEZ was established in 2003, and as a result, Lao PDR may soon face requests to extend the tax exemption period.

[15] Businesses have indicated that the current process for administering the VAT exemption is not well suited to their needs. For example, businesses must submit a "master list" detailing everything that they will import over the coming 12 months, which does not leave room for additional needs that may arise during the year.

[16] The GloBE rules, agreed in October 2021 by 137 countries, will introduce a global minimum corporate tax rate of 15%. The rules create the possibility of a top-up tax whenever the effective tax rate of the multinational enterprise, determined on a jurisdictional basis, is below the global minimum rate. While Lao PDR is not a part of the OECD/Group of 20 (G20) Inclusive Framework on base erosion and profit shifting (BEPS), businesses operating subsidiaries in Lao PDR could be liable for a top-up tax on profits

generated in Lao PDR under GloBE rules if their effective tax rate in Lao PDR remains under 15% and if Lao PDR does not implement a top-up tax.

[17] The Lao PDR tax system does not use the concept of a "permanent establishment" as is commonly used in international tax treaties, although some of the tax treaties signed by Lao PDR are based on this concept.

[18] In Lao PDR's tax terminology, this tax is referred to as the "foreign withholding tax".

[19] However, this type of treaty relief is, in practice, not granted in Lao PDR.

[20] Even though the tax seeks to tax the profit of foreign suppliers, (i) they do not transmit the tax; (ii) they cannot deduct the tax from their CIT liability; and (iii) the tax does not depend on the foreign suppliers' actual profitability. The deemed profits tax is not completely identical to an import tariff because it only applies to imports facilitated by Laotian businesses and not individuals. This could put Lao retailers in border regions at a disadvantage, as individuals would prefer to order products directly from foreign retailers. Note also that even if the tax burden of the deemed profits tax were to fall on the foreign supplier, the tax would be regressive with respect to the profitability of the supplier (as the effective tax rate is lower for businesses that have a higher profit margin than the deemed profit rate).

[21] The first income tax bracket of 5% was temporarily abolished for a period of three months in 2021 as part of the COVID-19 relief measures. During that period, taxpayers were only liable for PIT if their monthly income exceeded the threshold for the 10% tax bracket.

[22] Private land ownership is not permitted in Lao PDR because all land is public property. However, Laotian individuals can own permanent land use rights, which include transfer and inheritance rights. In practice, permanent land use rights are thus similar to land ownership. Buildings and structures erected can be privately owned.

[23] Land sold in 2022 in the vicinity of the new train station in Vientiane has been valued at THB 2 500 (Thai baht), or LAK 1.4 million per square metre, according to news reports (https://www.rfa.org/english/news/laos/land-07062022143130.html).

[24] A draft law on a land tax reform was presented by the Lao MOF in July 2023 https://laotiantimes.com/2023/07/10/lao-minister-of-finance-proposes-new-draft-law-on-land-tax/). It seeks to ensure that the land tax increases in line with GDP growth and inflation in the future.

[25] LAK 100 million is equivalent to around EUR 4 700 at 2023 exchange rates.

[26] In fact, the enterprise benefiting from the agreement operates as a joint venture between a leading international tobacco producer and the Lao PDR government, making the government of Lao PDR a shareholder in the tobacco business.

[27] Laotian rice whiskey is considered "the cheapest alcohol in the world" (Wade, 2010[79]), with prices below USD 1 per bottle.

[28] There are reports that the government of Lao PDR is considering introducing a carbon tax in the near future. However, the design of such a potential tax is unclear.

[29] One example is the REDD+ (reducing emissions from deforestation and forest degradation in developing countries) framework. In 2021, Lao PDR and the World Bank's Forest Carbon Partnership Facility (FCPF)

signed an agreement under which the World Bank provides up to USD 42 million between 2021 and 2025 to support Lao PDR's efforts to reduce emissions from deforestation and forest degradation.

[30] This procedure has been recommended to some taxpayers, according to some sources, but no provision is included in the formal VAT law (JETRO, 2022[52]).

[31] Classifying tax provisions as tax expenditures does not necessarily mean that these tax expenditures need to be reformed or abolished. Certain tax expenditures may be justified, but transparency should be improved regarding which provisions exist and how much they cost.

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Annex 4.A. Special Economic Zones

Annex Table 4.A.1. Special Economic Zones (SEZs) in Lao PDR as of 2023

SEZ (year established)	Location details	Developer	Type of activity
Savan-Seno SEZ (2003)	Border with Thailand	Government (Lao PDR)	Industrial
Boten Beautiful Land SEZ (2003)	Border with China	Government (Lao PDR and China)	Trade and logistics
Golden Triangle SEZ (2007)	Borders with Myanmar and Thailand	Government (Lao PDR) and private (China)	Tourism and urban centre
Saysettha Development Zone (2010)	Vientiane	Government (Lao PDR and China)	Industrial
Phoukhyo Specific Economic Zone (2010)	Border with Thailand	Private (Lao PDR)	Industrial
Vientiane Industrial and Trade Area (2011)	Vientiane	Government (Lao PDR) and private (Taiwan)	Industrial
That Luang Lake SEZ (2011)	Vientiane	Private (China)	Tourism and urban centre
Longthanh – Vientiane Specific Economic Zone (2012)	Vientiane	Private (Viet Nam)	Tourism and urban centre
Dongphosy Specific Economic Zone (2012)	Vientiane	Private (Malaysia)	Trade and logistics
Thakhek SEZ (2012)	Border with Thailand	Government (Lao PDR)	Trade and logistics
Luangprabang SEZ (2015)	United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Site city, Luang Prabang	Private (Lao PDR)	Tourism and urban centre
Champasak SEZ (2015)	Borders with Cambodia and Thailand	Private (China, Japan and Lao PDR)	Mixed

Note: Lao PDR's capital city, Vientiane, is located on the border with Thailand.
Source: (Ministry of Planning and Investment, 2021[77]), *Special Economic Zones in Lao PDR*, https://laosez.gov.la/pdf/SEZ_PCL_2021_en.pdf (accessed on 23 November 2023).

5 Fostering sustainable investment in Lao PDR

This chapter examines trends in investment and investment policies in Lao People's Democratic Republic (Lao PDR) through a sustainability lens and provides recommendations on how to attract more sustainable investment to the country. Lao PDR experienced an impressive increase in foreign direct investment (FDI) inflows between 2006 and 2017, which has been one of the main drivers of economic growth. However, the country would benefit from FDI that generates more positive spillovers to the local economy and is more conscious of the environment and local communities. Attracting more sustainable investment – which advances environmental and social goals – first and foremost requires improving the overall enabling environment for investment in the country. It would also be important for Lao PDR to integrate environmental and social considerations into investment policies and strengthen the implementation of social and environmental safeguards for investment projects.

Introduction and strategic priorities for fostering more sustainable investment in Lao PDR

Lao PDR experienced an impressive increase in FDI inflows between 2006 and 2017, from USD 187.4 million (United States dollars) to USD 1.69 billion. This strong growth in FDI can be attributed to the government's Turning Land into Capital (TLIC) (*nayobay han din pen theun*) policy, which facilitated large concession investment projects (World Bank, 2006[1]) in hydropower (64% of investment in Lao PDR between 2017 and 2021), mining (15% of investment) and agriculture (6% of investment). More recently, FDI inflows into Lao PDR decreased in the context of the COVID-19 pandemic in 2020, but remain significant. As a result of the impressive growth in FDI inflows in Lao PDR, the country is performing well in terms of FDI as a share of gross domestic product (GDP) compared with other member states in the Association of Southeast Asian Nations (ASEAN) region and elsewhere in the world. Lao PDR's FDI stock amounts to 80% of its GDP, which is 20 percentage points higher than in Thailand and 30 percentage points higher than in Viet Nam. FDI inflows (as a percentage of GDP) to Lao PDR were three times as high as those in Thailand, almost twice as high as the average among the ASEAN member states and above those in Viet Nam between 2020 and 2022. The People's Republic of China (hereafter "China") is the main country of origin of FDI in Lao PDR: it accounted for 66% of FDI inflows and for 63% of Lao PDR's FDI stock in 2021 (IMF, 2023[2]).

FDI has been one of the main drivers of economic growth in Lao PDR. Between 2006 and 2017, when FDI inflows to Lao PDR increased dramatically, GDP growth averaged 7.7% annually. This compares with only 3.5% GDP growth in Thailand, 5.4% in ASEAN member states and 6.3% in Viet Nam. Among ASEAN member states, only Myanmar experienced higher average GDP growth during this period (8.9%) than Lao PDR (World Bank, 2024[3]). FDI in Lao PDR contributed to economic growth mainly through capital accumulation and the exploitation and export of Lao PDR's natural resources (OECD, 2017[4]; CDE/University of Bern/MRLG, 2019[5]).

However, Lao PDR would benefit from FDI that generates more positive spillovers to the local economy and is more conscious of the environment and local communities. Natural resource sectors such as mining and hydropower (which receive the bulk of FDI in Lao PDR) are capital intensive, and activities are often conducted in isolation and typically create few jobs and business linkages with domestic companies. At the same time, these sectors are highly susceptible to creating environmental and social risks if environmental safeguards are not respected. In Lao PDR, large-scale hydropower dams have been associated with negative effects on the environment and local communities. These effects relate to water quality and sediment flows, hydrology and water levels, aquatic ecosystems, and food security (Yong, 2022[6]; OECD, 2017[4]; Intralawan et al., 2018[7]). Additionally, as a result of their effect on the scenery and natural sites, power plants and mining developments can also discourage tourism. Agriculture, on the other hand, has been linked to deforestation, soil pollution and land degradation (Sylvester, 2018[8]; Village Focus International/National University of Laos, 2019[9]; CDE/University of Bern/MRLG, 2019[5]). Finally, it would be critical to ensure that Lao PDR reaps a sufficiently large share of the benefits which accrue from hydropower development (Yong, 2023[10]).

Policy priorities for harnessing FDI in order to support Lao PDR's sustainable development

Improving the enabling environment for investment and integrating environmental and social considerations into investment policies could allow Lao PDR to attract more sustainable investment that advances environmental and social goals. This includes investments that create a significant number of good-quality jobs, generate local linkages and spillovers such as technology and skills transfers, contribute to skills development, and adhere to strict environmental and social standards (OECD, 2022[11]). By reducing the cost and complexity of investing in Lao PDR, a better enabling environment for investment could allow more investors to make the additional effort and invest the additional resources required in order to limit the negative social and environmental impacts of their investment projects. Improving the enabling environment first and foremost requires a whole-of-government approach to investment, as well as improving access to skilled labour and land, upgrading transportation infrastructure, and reducing opportunities for corruption. It also involves strengthening the regulatory framework. In addition, it would be important to strengthen the implementation of social and environmental safeguards for investment projects and to more actively advance environmental and social goals through investment promotion policies, tax incentives and a better policy framework for responsible business conduct (RBC).

Reforms in several policy areas would be particularly important and should be prioritised. Key priorities for policy reforms include the following:

- **Improve co-ordination between different government entities and between the public and private sectors**. Countries that have been successful in attracting investment have mastered a whole-of-government approach to investment promotion and facilitation (OECD, 2015[12]). In Lao PDR, there is scope for better inter-institutional co-ordination and alignment of strategic objectives and priorities among the different government entities involved in the design and implementation of investment policies. This could be achieved through the establishment of more formal channels for co-ordination between the Ministry of Planning and Investment (MPI), the Ministry of Industry and Commerce (MOIC), the Ministry of Natural Resources and Environment (MONRE), and sectoral ministries. One possibility would be establishing an advisory board to the Investment Promotion Department (IPD) of the MPI that includes representatives both from these government entities and from the private sector. Similarly, Lao PDR would benefit from better communication between the public and private sectors. An effective and institutionalised public-private dialogue process at a high level could allow for more easily solving investors' grievances and for better prioritising the reforms required in order to facilitate doing business in Lao PDR.
- **Improve the availability of skilled labour in Lao PDR through in-house training in private enterprises and the provision of better information on those skills that are in demand in the labour market**. Different policies (such as tax incentives for training, for example) could encourage more in-house training by private enterprises. In addition, improved co-ordination between the private sector, the government and educational institutions could help better align Lao PDR's educational offerings with those skills that are in demand in the labour market. This process could be facilitated through the regular engagement of relevant stakeholders in a dedicated council or committee. Finally, an effective skills assessment and anticipation (SAA) system could identify the types of occupations, qualifications and fields of study that are in demand in the labour market in Lao PDR, or that may become so in the future (OECD, 2019[13]).
- **Improve institutional capacity and inter-institutional co-ordination in land administration and management, and accelerate the implementation of the 2019 Land Law.** A significant share of land in Lao PDR is not formally registered, and the responsibility for land use management is divided among a large number of institutions (National Assembly, 2019[14]), which lack sufficient co-ordination (MRLG/LIWG, 2021[15]). This can create challenges for investors in accessing land. While a World Bank project is already in the process of significantly expanding formal land registration (World Bank, 2023[16]), going forward, it would be beneficial to simplify the institutional set-up for land management and to enhance inter-institutional co-ordination between MONRE and line ministries. In addition, in order to ensure clarity for investors on land rights in rural areas that are governed by customary land rights and in state forest areas, it would be important to accelerate the implementation of the 2019 Land Law. Finally, additional reforms to Lao PDR's legal framework for land rights are required in order to add further clarity to existing legislation on customary land rights and formal tenure documents in relation to state forest land (Derbidge, 2021[17]; Derbidge, 2021[18]; Derbidge, 2021[19]).

- **Enhance Lao PDR's capacity for public-private partnership (PPP) delivery, strengthen infrastructure planning and improve the management of PPP-related fiscal risks.** This could allow for making use of PPPs in order to improve Lao PDR's transportation infrastructure in the long term. In order to improve PPPs' value for money, it would be important to strengthen Lao PDR's capacity to prepare, procure and manage PPP projects. In order to ensure that those projects with the greatest benefits are implemented first, Lao PDR requires a medium- to long-term infrastructure plan, including a pipeline of infrastructure and PPP projects with clear prioritisation based on a cost-benefit analysis. In light of the negative impact that past PPPs have had on public finances in Lao PDR, which account for almost one-half of the country's public and publicly guaranteed (PPG) debt stock, it would also be important to improve the management of PPP-related fiscal costs and risks throughout the project life cycle. Allowing for effective risk sharing with private investors requires reducing the country's high amount of public debt (see Chapter 3 on sustainable development financing) (OECD, 2017[4]; OECD, 2012[20]).
- **Improve the predictability of the regulatory framework for investment and the effectiveness of the court system while introducing policy tools that promote integrity among public officials.** Gift-giving and informal payments, both on a small scale and in order to buy political support, can affect the efficiency of enterprises operating in Lao PDR (GAN Integrity, 2020[21]; ECCIL, 2022[22]). In order to reduce opportunities for corruption, first and foremost, Lao PDR requires a more stable, clearer, more predictable and more consistently applied regulatory framework for investment and an effective, fair and independent court system. An effective public procurement system that disburses public funds sustainably and efficiently is another critical element (OECD, 2015[12]). In addition, improved human resource management, training and counselling could enhance the integrity of lower-ranking public officials in Lao PDR. Integrity tools and mechanisms in high-risk areas such as conflict of interest and lobbying, as well as political whistleblower mechanisms, could also enhance public officials' integrity (OECD, 2015[12]).

In addition, there are several other policy areas where implementing reforms would be highly beneficial. Recommended reforms include the following:

- **Simplify Lao PDR's institutional and regulatory framework for starting an investment project.** A large number of institutions are involved in this process, and there are three different avenues for obtaining an investment licence, depending on the sector and type of investment. Combining the responsibility for issuing investment licences for different types of investments under the umbrella of a single institution and reducing the number of institutions involved in the allocation of investment licences could speed up the licensing process, enhance efficiency, increase transparency and solve co-ordination problems between entities.
- **Strengthen the implementation of social and environmental safeguards for investment projects.** Lao PDR's Law on Investment Promotion contains detailed social and environmental obligations for investors. In addition, two types of environmental impact studies exist in Lao PDR, and environmental impact assessments (EIAs) are mandatory for most investment projects. However, it has been reported that EIAs are treated as just a formality, with limited follow-up or impact on project design. In addition, the monitoring and inspection of environmental obligations could be improved.
- **Develop more sophisticated and better targeted policies, activities and tools for investment promotion, which should include a greater focus on environmental and social sustainability.** Lao PDR would benefit from a clear and coherent inward investment promotion strategy that articulates the government's vision on the contribution of investment towards environmental protection and social development. More targeted investment promotion efforts, including investor targeting and lead generation, could attract greater investment in Lao PDR's nine priority sectors, many of which advance social and environmental goals. Tools such as a local supplier database, business matchmaking and supplier development services could encourage more local linkages

between international investors and domestic enterprises. It would also be important to introduce more key performance indicators (KPIs), both for selecting priority investments and for monitoring and evaluating the IPD's activities, including KPIs linked to the environmental and social impacts of investment projects. Finally, in order to allow the IPD to develop these tools and activities, it would be beneficial to gradually endow it with more and better human and financial resources, as well as technical and managerial skills.

- **Increase positive spillovers from Special Economic Zones (SEZs) to the local economy and improve SEZs' social and environmental performance.** Investment in Lao PDR's SEZs has increased impressively since 2014. SEZs can facilitate access to land for investors in Lao PDR and offer spaces for policy experimentation. They can generate FDI, create jobs, contribute to economic diversification and upgrading, and allow for the transfer of knowledge, technology and skills. However, SEZs also generate costs, including administrative costs, forgone tax revenues as a result of tax incentives, and the cost of resettling local communities. Potentially significant profits earned by SEZ developers, combined with discretion in granting approval for new SEZs, could also create opportunities for rent seeking. In addition, international experience shows that SEZs often face challenges in generating linkages with the local economy and creating quality jobs. Lao PDR could increase the positive impacts and spillovers from SEZs to the local economy through the right policy and regulatory mix, by encouraging local business linkages, and through skills development. At the same time, comprehensive and strategic planning of SEZ development could reduce opportunities for rent seeking. There is also scope to improve the regulation of the social and environmental aspects of SEZs in order to limit their negative externalities on the environment and local communities.
- **Redesign tax incentives to be based on expenditure rather than income and to more actively advance social and environmental goals.** A good enabling environment is more important for attracting and retaining investors than generous tax incentives are. While investment tax incentives can be complementary to a good enabling environment for investment, Lao PDR could consider phasing out the use of income-based incentives in favour of expenditure-based incentives, such as accelerated depreciation and tax allowances or credits. Income-based tax incentives generally attract investments that are already profitable early in the tax relief period, while expenditure-based tax incentives reduce specific costs, thereby encouraging investments that might not occur without the incentives. In addition, incentives should be designed to encourage positive spillovers to the economy and society, such as local linkages, training and skills development, and environmental protection. Incentives for investors that offer training could potentially contribute to bridging Lao PDR's skills gap. It would also be important to reduce discretion in the allocation of incentives for concessions (which creates avenues for corruption) and to improve monitoring and evaluation of investment tax incentives.
- **Intensify efforts aimed at promoting and implementing international RBC and due diligence standards in the local context**. First and foremost, this includes developing an institutional and policy framework for RBC, including a special dedicated RBC body or government focal point and a national RBC policy or action plan. RBC efforts should also be incorporated more systematically into investment promotion activities. In addition, home-grown RBC programmes targeted at specific high-risk industries, such as the mining, hydropower and agricultural sectors, could be developed in order to raise awareness and encourage the implementation of due diligence in business practices. Lao PDR would also benefit from better access to remediation and grievance mechanisms for addressing the negative impacts of investment projects (particularly the negative environmental and social impacts). RBC for concession investments could be improved through including stronger safeguards in concession agreements and making these agreements public.

This chapter, which is organised into eight sections, examines how to encourage more sustainable investment in Lao PDR that contributes to social and environmental goals. The first section examines trends in and characteristics of FDI as well as the impacts of such investment on the environment and society. The following subsections evaluate policies to better harness investment for Lao PDR's sustainable development. Section two analyses overarching challenges for investors in Lao PDR and presents policy options to tackle these challenges. Section three assesses the governance and institutional framework for investment, and section four analyses the legal and regulatory framework. Section five analyses investment promotion and facilitation policies in Lao PDR, while section six evaluates Lao PDR's SEZs. Section seven examines Lao PDR's framework for investment tax incentives. Finally, section eight assesses RBC in Lao PDR.

Trends, characteristics and impacts of FDI in Lao PDR

In 1986, Lao PDR started a structural reform process to gradually transition from a centrally planned economy to a more open, market-led economy under the New Economic Mechanism. Lao PDR joined ASEAN in 1997. This supported its integration into the regional and global economy. Lao PDR's accession to the World Trade Organization (WTO) in February 2013 and the creation of the ASEAN Economic Community (AEC) in 2015 further accelerated the country's economic reforms and integration into the world economy (OECD, forthcoming[23]; OECD, 2017[4]).

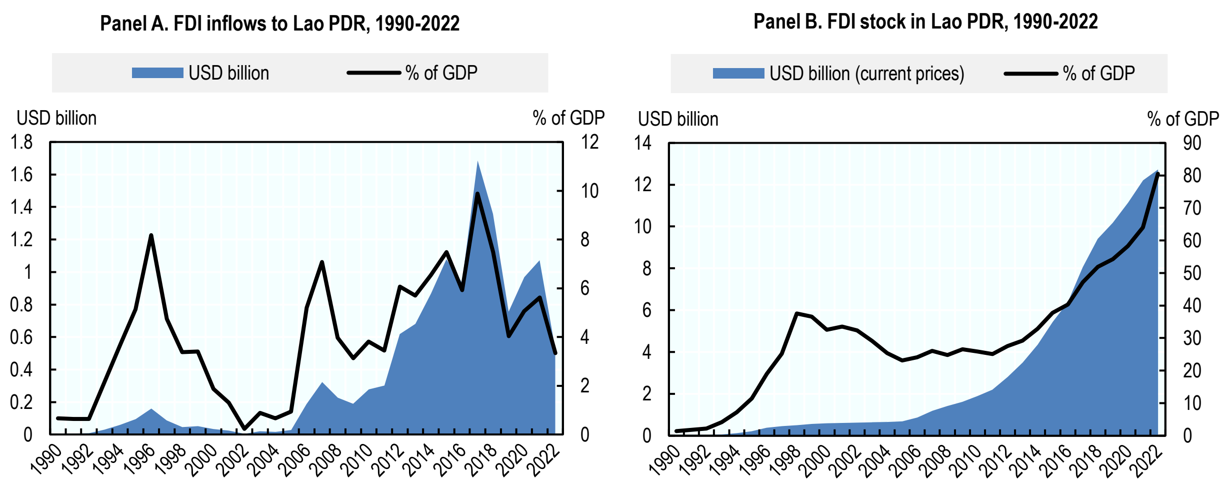
Since 2006, FDI inflows to natural resource sectors in Lao PDR from China and other neighbouring countries have increased impressively

FDI inflows to Lao PDR increased impressively between 2006 and 2017, following a brief peak in 1996 (Figure 5.1, Panel A). FDI inflows to Lao PDR peaked in 1996, but declined thereafter as a result of the Asian Economic Crisis (IFC, 2021[24]). In 2006, FDI started rising sharply as a result of the Lao PDR government's TLIC (*nayobay han din pen theun*)[1] policy, which facilitated large concession investment projects in the hydropower and mining sectors and, to a lesser extent, in the agricultural sector (largely focused on rubber, eucalyptus and cash crops) (World Bank, 2006[1]). Many of these investment projects were facilitated through PPP, especially in the case of hydropower. Following a decline during the 2007-08 global financial and economic crisis (IFC, 2021[24]), FDI started expanding rapidly again in 2012, peaking at inflows of USD 1.69 billion in 2017. This compares with inflows of USD 187.4 million in 2006. Since 2012, Lao PDR has more than quadrupled its FDI stock in terms of absolute value (Figure 5.1, Panel B).

FDI inflows to Lao PDR have decreased gradually since 2017, but remain significant. FDI inflows started declining in 2018, experienced a short rebound in 2020-21, but continued decreasing in 2022. This decline can be attributed to Lao PDR's high amount of public debt and deteriorating creditworthiness, which has rendered risk sharing between private investors and the government through PPPs more difficult (see the Chapter 3 on sustainable development financing). The COVID-19 pandemic, which hit the country in 2020, has also contributed to the decline in FDI inflows. In addition, Lao PDR's challenging macroeconomic situation is discouraging investors. Despite this decline, however, FDI inflows to Lao PDR remain significant.

FDI has been one of the main drivers of economic growth in Lao PDR over the last two decades. Between 2006 and 2017, which is the period during which FDI inflows to Lao PDR increased most dramatically, GDP growth averaged 7.7% annually. This compares with only 5.4% GDP growth in ASEAN member states, 3.5% in Thailand and 6.3% in Viet Nam. Among ASEAN Member States, only Myanmar experienced higher average GDP growth during this period (8.9%) than Lao PDR (World Bank, 2024[3]). FDI has contributed to economic growth in Lao PDR mainly through capital accumulation and the exploitation and export of Lao PDR's natural resources (OECD, 2017[4]; CDE/University of Bern/MRLG, 2019[5]).

Figure 5.1. FDI inflows to Lao PDR have increased impressively since the mid-2000s

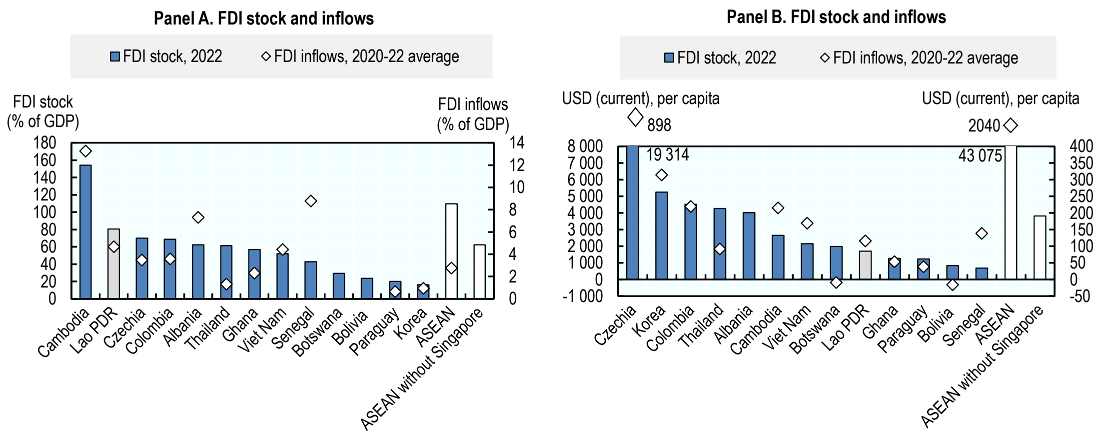


Source: (UNCTAD, 2023[25]), *Bilateral FDI database on flows and stocks*, https://unctadstat.unctad.org/datacentre/dataviewer/US.FdiFlowsStock (accessed on 15 October 2023).

StatLink https://stat.link/olc78y

Lao PDR is performing well in terms of FDI as a share of GDP compared with other countries in the ASEAN region and elsewhere in the world, but less so when FDI is measured per capita. Lao PDR's FDI stock amounts to 80% of its GDP; this is more than the share in most comparator countries and is 20 percentage points higher than in Thailand and 30 percentage points higher than in Viet Nam (Figure 5.2, Panel A). In ASEAN member states, only Cambodia and Singapore have a higher FDI stock than Lao PDR when measured as a share of GDP. Average FDI inflows to Lao PDR (as a percentage of GDP) were almost three times higher than in Thailand, almost twice as high as in ASEAN member states and above those in Viet Nam between 2020 and 2022. However, Lao PDR's good performance can be partly attributed to the country's relatively low GDP per capita, and the country is not performing as well when considering the FDI stock and inflows per capita (Figure 5.2, Panel B): Lao PDR's FDI stock per capita is only 40% of Thailand's and 60% of Cambodia's. FDI inflows per capita were 30% lower on average than those in Viet Nam between 2020 and 2022.

Figure 5.2. Lao PDR is performing well compared with other countries in the Southeast Asia region and with countries elsewhere in the world in terms of FDI as a share of GDP, but FDI remains relatively low when measured on a per-capita basis



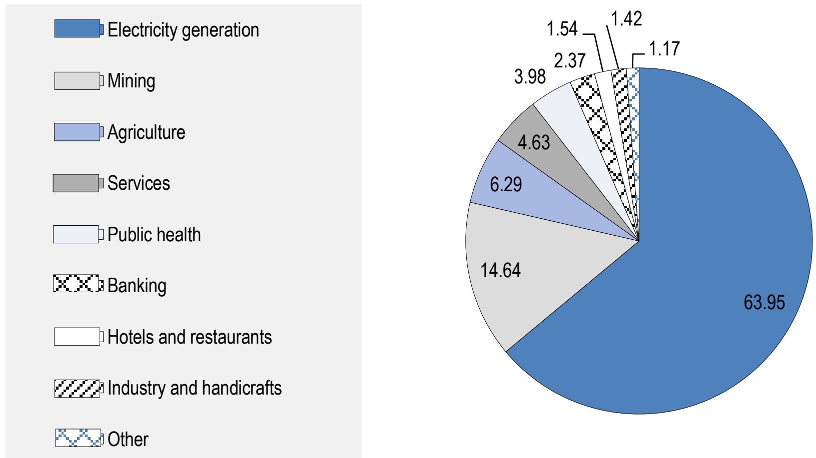
Note: “Bolivia” refers to “Plurinational State of Bolivia”.
Source: (UNCTAD, 2023[25]), *Bilateral FDI database on flows and stocks*, https://unctadstat.unctad.org/datacentre/dataviewer/US.FdiFlowsStock.

StatLink https://stat.link/miy348

Most FDI in Lao PDR is directed towards natural resource sectors, largely through land concessions. FDI in Lao PDR is concentrated in electricity generation, largely hydropower (63.7%) and mining (14.6%) (Figure 5.3). Agriculture is the third-largest recipient sector of FDI (6.3%). On the other hand, investment in more technology- and labour-intensive sectors such as manufacturing (handicrafts and industry: 1.4%) remains relatively low. Investment in tourism (hotels and restaurants: 1.5%) accounts for only a small share of total FDI as well. Most investment in natural resources occurs through land concessions, frequently through PPPs, especially in the case of hydropower: between 1989 and 2018, the area under land concessions in Lao PDR increased from approximately 200 000 hectares (ha) to approximately over a million ha. Forty-five percent of these concessions are agriculture concessions, 41% are mining concessions, 14% are tree plantation concessions and 1% are concessions for hydropower stations (CDE/University of Bern/MRLG, 2019[5]).

Figure 5.3. Investment in Lao PDR is concentrated in electricity generation and mining

Approved foreign and domestic investment projects by sector, 2017-21



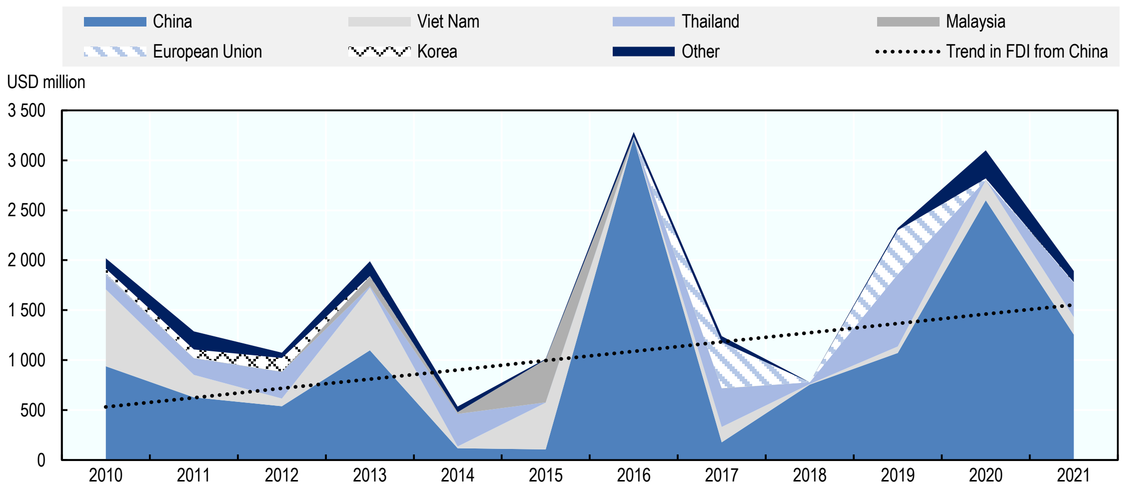
Source: (IPD, 2021[26]), *Statistics*, https://investlaos.gov.la/resources/statistics/ (accessed on25 September 2023).

StatLink https://stat.link/ogk3ix

FDI in Lao PDR is dominated by China, which accounted for 66% of FDI inflows to Lao PDR and for 63% of Lao PDR's FDI stock in 2021 (Figure 5.4). FDI from China has been increasing over time: between 2012 and 2016, an average of 42.5% of Lao PDR's FDI inflows originated from China, but this number rose to 60.6% between 2017 and 2021. FDI from China peaked in 2016 at USD 3.2 billion and again in 2020 at USD 2.6 billion. These peaks and the overall increase in Chinese FDI coincide with the construction of the Boten–Vientiane railway (which connects Vientiane with the town of Boten on the Chinese border) between 2016 and 2021, and the expressway connecting Vientiane with Vang Vieng, both of which were funded by Chinese investors through PPPs (Medina, 2021[27]; Xinhua, 2020[28]). In addition, China has been one of the most important investors in hydropower and mining in Lao PDR in the past, and it has also invested in agriculture, real estate, and entertainment and tourism sites. Other important countries of origin of FDI in Lao PDR are Thailand, Viet Nam and France; Thailand accounted for 31.5% of Lao PDR's FDI stock in 2021 (IMF, 2023[2]).

Figure 5.4. China is the main country of origin of FDI inflows to Lao PDR, and FDI inflows from China have been increasing

FDI inflows to Lao PDR by region of origin, 2010-21



Note: The linear trend line for FDI inflows from China is calculated based on the actual values for FDI inflows from China using the method of least squares.
Source: (IPD, 2021[26]), *Statistics*, https://investlaos.gov.la/resources/statistics/ (accessed on 25 September 2023).

StatLink https://stat.link/zvhxb1

There is scope to increase the number of jobs created, local linkages and other positive spillovers from FDI to the local economy

There is some evidence for business linkages between foreign and domestic enterprises in Lao PDR's manufacturing sector. The evidence suggests that foreign enterprises in Lao PDR's manufacturing sector sourced approximately one-half (49%) of inputs locally in 2018, in line with the East Asian and Pacific average (50% of inputs sourced locally) (World Bank, 2018[29]). This relatively high share of locally sourced inputs can most likely be attributed to the subcontracting of local garment producers by foreign enterprises for activities such as cut, make and trim (OECD/UNIDO, 2019[30]). In addition, this result relies on a very small number of foreign manufacturing enterprises and may not be representative of the whole sector.

Overall, however, Lao PDR would benefit from FDI that creates more quality jobs and business linkages with the local economy. Lao PDR's manufacturing sector is small and receives only a small share of FDI. The bulk of FDI in Lao PDR is directed towards natural resource sectors such as mining and hydropower, which are capital intensive, unsustainable over time and conducted in isolation from other economic activities, and these sectors create few jobs and business linkages with domestic enterprises. In addition, foreign enterprises often experience difficulties in hiring skilled labour locally in Lao PDR and therefore tend to import a relatively large share of workers in sectors such as construction (OECD, 2017[4]; IFC, 2021[24]). Even in SEZs, which host many of Lao PDR's foreign manufacturing companies where jobs are more labour-intensive than on natural resource projects, the number of jobs created remains only moderate, at 8.9 jobs overall and 4.9 jobs for domestic workers per USD 1 million invested (SEZO, 2023[31]). This compares with 12.8 jobs per USD 1 million invested in SEZs in Poland (as of 2018) (UNCTAD, 2019[32]).

Lao PDR could encourage more positive spillovers from FDI in terms of local environmental practices. Foreign investors can have a positive impact on environmental safeguards and protection because of the more climate-friendly business practices they adopt in order to conform to more stringent international environmental standards. One of the most important channels for such spillovers is through supply chain relationships with domestic suppliers, partners and buyers. Foreign enterprises can, for example, influence their suppliers' practices by requiring environmental certifications or adherence to certain standards as a precondition for doing business. Foreign enterprises may also share knowledge and technologies with their suppliers in order to help improve the environmental outcomes associated with their economic activities (OECD, 2022[33]). Since the bulk of FDI in Lao PDR is directed to natural resource sectors, few supply chain linkages occur and there are thus limited opportunities for positive spillovers in terms of environmental and social standards and protection. In the hydropower sector, dam projects financed by international donors such as the Asian Development Bank (ADB) usually take the EIA process very seriously and aim to comply with international social and environmental safeguards, such as the "No Net Loss Biodiversity" principle (OECD, 2017[4]). However, potential positive spillovers to suppliers or to hydropower dam projects financed by other investors have not been evaluated.

Opportunities and challenges in key investment sectors

Electricity generation

Lao PDR is one of the richest countries in hydropower resources in Southeast Asia and is one of the region's largest generators of hydroelectric power. Approximately 70% of electricity in Lao PDR is generated from hydropower, while the remainder is largely generated from coal (IRENA, 2023[34]). Lao PDR has more than 80 operational hydropower dams, two of them on the Mekong River, with a total generating capacity of 9 483 megawatts (MW). An additional 30 hydropower dams are under construction and more than 200 are planned (IHA, 2023[35]).

FDI in hydropower in Lao PDR originates mainly from China and Thailand and has been influenced by growing demand for electricity in neighbouring countries. Lao PDR has experienced rapid growth in installed hydropower capacity since 1993, when it opened the electricity generation sector to foreign investment. Thailand is the largest investor in hydropower in Lao PDR and the largest market for Lao PDR's hydropower exports. In 1993, Lao PDR and Thailand signed their first memorandum of understanding (MOU), aiming to achieve 1.5 gigawatts (GW) of installed hydropower capacity in Lao PDR to supply the Thai market. This MOU has been amended several times since 1993, and in 2022, Lao PDR signed an agreement with Thailand to export 10 500 MW of hydropower to the Thai market (Yong, 2023[10]; IHA, 2023[35]). Viet Nam is a much less important importer of Laotian electricity than Thailand, but it does plan to expand electricity imports from Lao PDR. In 2022, Lao PDR signed MOUs with Viet Nam to export 8 000 MW of electricity to serve the Vietnamese market by 2030 and to implement 25 projects with a combined capacity of 2.18 GW (IHA, 2023[35]; Greater Mekong Subregion Secretariat, 2022[36]). In 2021, Lao PDR exported 21 872 gigawatt hours (GWh) of electricity to neighbouring countries, more than 50% of the total amount of electricity it generated (World Bank, 2023[37]; IRENA, 2022[38]).

Improving the environmental and social sustainability, safety, and rentability of hydropower development in Lao PDR

It is important to reduce adverse social and environmental impacts of hydropower development. Large-scale hydropower dams in Lao PDR have been associated with negative effects on water quality and sediment flows, hydrology and water levels, aquatic ecosystems, biodiversity, fish migration and capture fisheries, food security, and the livelihoods of local populations. Fluctuating water levels and the loss of nutrient-rich sediment flows, which are blocked by dams, negatively affect agricultural productivity and the livelihoods of communities that depend on agriculture. Mekong River hydropower dams also obstruct fish migration routes, thereby affecting food security and the livelihoods of local communities that rely on fishing. Fish constitutes an important source of protein in Lao PDR, particularly for vulnerable and poor communities (Yong, 2022[6]; OECD, 2017[4]; Intralawan et al., 2018[7]). The total cost[2] of the two already constructed and seven planned hydropower dams on the mainstream Mekong River in Lao PDR, plus two hydropower dams in Cambodia, is estimated at USD 18 billion. This outweighs the benefits from electricity generation, improved irrigation and flood control from these dams, which are estimated at USD 11 billion (Intralawan et al., 2018[7]).

It would also be beneficial to improve the safety of hydropower dams in Lao PDR. Maintenance of dams is often limited because of the Lao PDR government's lack of capacity and a shortage of skilled workers such as maintenance technicians and engineers. This has led to concerns about the safety of many older dams. In 2018, the Xe Pian-Xe Namnoy dam in Champassak province collapsed, causing 71 deaths, displacing 14 440 people, and severely damaging 4 160 ha of farmland, which remains largely covered with mud and debris as of 2024. Similar so-called "saddle dams" exist in several other locations in Lao PDR and have not been replaced or reinforced since the collapse of the Xe Pian-Xe Namnoy dam (RFA Lao, 2022[39]; Inclusive Development International and International Rivers, 2019[40]).

There is scope to increase the benefits linked to hydropower development for Lao PDR through an improved design of power purchase agreements (PPAs) and better export management. Many hydropower dams in Lao PDR have been delivered through PPPs. The conditions of the PPAs signed by Électricité du Laos (EDL) with the private owners of hydropower dams are in many cases unfavourable for EDL (see the section on PPPs). For example, an independent review found that the 29-year PPA between the government of Lao PDR and the Electricity Generating Authority of Thailand (EGAT) for the Xayaburi Dam, the first dam built on the mainstream Mekong River in Lao PDR, places the government of Lao PDR in a risky and disadvantaged position with EGAT (Yong, 2023[10]). Moreover, despite being a net electricity exporter, Lao PDR has to import electricity during the dry season as a result of fluctuating water levels combined with a fragmented electricity grid. The cost of these electricity imports from Thailand (USD 0.11 per kilowatt hour (kWh)) is twice the rate of Lao PDR's electricity exports to Thailand (USD 0.05 per kWh) (Yong, 2023[10]).

Abundant investment opportunities remain in Lao PDR's energy generation sector despite several challenges

Despite the challenges outlined above, abundant investment opportunities remain in Lao PDR's electricity generation sector. Other renewables (such as wind or solar power, which are frequently used to complement hydropower) and storage technologies (such as battery storage or pumped storage) constitute opportunities: complementing hydropower with these technologies could enable a reduction in the seasonality of electricity generation and the variability of Lao PDR's power supply, thereby allowing the country to become a more reliable energy exporter and to increase the prices it charges for power exports. One example of such complementary power generation is the 600 MW Monsoon Wind Power Project close to the Vietnamese border, which is currently under development. The Monsoon Wind Power Project is financed by several international financial institutions, donors and private investors, including the ADB (ADB, 2023[41]). In addition, there are also opportunities to expand electricity exports to Cambodia, Malaysia, Singapore, Thailand and Viet Nam; however, exports to Malaysia and Singapore are constrained by weak interconnecting infrastructure in central and Southern Thailand (World Bank, 2021[42]).

In order to continue expanding electricity generation and fully exploiting existing hydropower, significant investment in Lao PDR's transmission and interconnection infrastructure would be required. Lao PDR's electricity grid is fragmented across three regional grids. As a result of this fragmentation, surplus electricity generated cannot always be used or exported. Further expansion of hydropower generation capacity and exports as well as those of other renewable energy sources would require investment in domestic transmission infrastructure and in the regional interconnection of Lao PDR's electricity grid (OECD, 2017[4]). Investment needs in domestic transmission and interconnection infrastructure are estimated at USD 1.2-1.7 billion (World Bank, 2021[42]).

In planning and designing additional hydropower dams, it will be important to carefully assess the impact of climate change. Climate change may affect Lao PDR's hydropower generation capacity through prolonged droughts and water shortages. This was already the case between 2019 and 2021, when water levels in the Mekong River fell to unprecedentedly low levels. This can potentially compromise the economic viability of hydropower dams in Lao PDR. In addition to climate change, uncoordinated investment in hydropower dams by different operators could also affect water levels and, in turn, Lao PDR's hydropower generation capacity (Yong, 2022[6]).

Reducing the debt of Lao PDR's public electricity company Électricité du Laos (EDL) could facilitate future investment in Lao PDR's electricity sector. EDL accounts for 45% of PPG debt, which stood at 112% of Lao PDR's GDP in 2022 (World Bank, 2023[43]). This debt is largely the result of disadvantageous investments in electricity generation (mainly hydropower) and transmission infrastructure by EDL, financed to a large extent through PPPs with limited investment rationale and which were not appropriately designed and managed (see the section on PPPs) (World Bank, 2021[42]). This significant amount of debt compromises EDL's creditworthiness and limits its scope for signing PPAs for new investment projects in renewable energies. One option for electricity producers to circumvent this problem is signing PPAs for new power plants directly with the utility companies in neighbouring countries such as Thailand or Viet Nam. This option is especially feasible when these plants are located close to Lao PDR's borders. In the long term, it would be important to reduce EDL's debt and to increase its creditworthiness.

Mining

Mining is the second-largest recipient of FDI in Lao PDR (15% of FDI inflows), and mining products account for more than 30% of Lao PDR's exports. Copper, gold, silver, lignite, anthracite and gypsum account for the largest share of mining production in Lao PDR. Zinc, lead, bauxite and aluminum are also extracted in the country (Ngangnouvong, 2019[44]; IFC, 2021[24]). There are currently 49 enterprises operating in Lao PDR's mining sector, and mining concessions are dominated by China and Viet Nam (Ngangnouvong, 2019[44]; Financial Times, 2023[45]). The largest mines in Lao PDR are Phu Bia Mining Ltd.'s Phu Kham mine (which is 90% owned by PanAust Ltd. and 10% by the Lao PDR government) and Lane Xang Minerals Ltd.'s Sepon mine (which is 90% owned by Chifeng Jilong Gold Mining Co., Ltd . and 10% by the Lao PDR government). Both are Chinese-owned and Australian-operated enterprises (OECD, 2017[4]; Ngangnouvong, 2019[44]).

In the planning and preparation process of new mines and power plants, it will be important to carefully assess such projects' effects on the tourism sector. Mining projects and hydropower dams are frequently located in protected areas or close to important tourism and natural sites. These projects' adverse impacts on the environment and scenery can discourage tourism. For example, the construction of two new coal power plants – Boualapha Power Plant, located in the Boualapha District in Khammouane province, and Xekong Power Plant, located in Xekong province – is currently planned or ongoing (Phonesack Group, n.d.[46]). Boualapha Power Plant was originally planned for construction very close to Hin Nam No National Park, which is proposed as a United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Site, but the government of Lao PDR is reconsidering construction of the power plant following a call from international donors to stop the project. Going forward, it will be important to more systematically take into account the impacts of mines and power plants on tourism when deciding on the location of new projects.

Agriculture

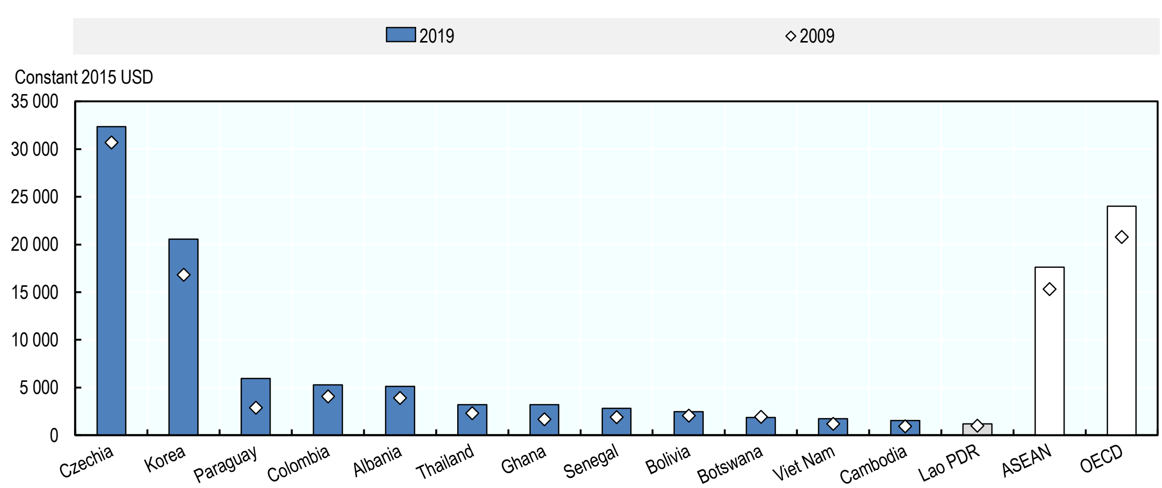
Agriculture is the third-largest FDI recipient sector (6%) in Lao PDR, and agriculture, food and forestry products account for more than 30% of the country's exports. Timber, rubber and sugar are important recipients of FDI and, more recently, there have also been increasing investments in banana producers. FDI in forestry and agriculture originates largely from China (primarily directed towards the acacia, eucalyptus and rubber industries), Thailand (largely sugar) and Viet Nam (mainly rubber) (OECD, 2017[4]; Financial Times, 2023[45]; CDE/University of Bern/MRLG, 2019[5]; Sylvester, 2018[8]). Investors largely fund producers of agricultural commodities for export, and China is the biggest export market for these products (Village Focus International/National University of Laos, 2019[9]). There has been a trend away from large-scale state land concessions and towards contract farming and non-state land leasing in Lao PDR's agricultural sector. This has been influenced by both government policies and investors seeking alternatives to large-scale land concessions as a result of the challenges linked to accessing land (CDE/University of Bern/MRLG, 2019[5]; Sylvester, 2018[8]).

Lao PDR's agricultural sector constitutes an important part of the country's economy. The agricultural sector's contribution to Lao PDR's GDP has declined from close to 50% in 1990 to 14.6% in 2022. Nevertheless, this remains elevated compared with other ASEAN member states (11%) and OECD member countries (1.4%). Moreover, as much as 58.1% of Lao PDR's population works in the agricultural sector compared with 4.8% of the population in OECD member countries and 46.5% in ASEAN Member States on average (as of 2021) (World Bank, 2024[3]). Seventy percent of agricultural land in Lao PDR is used for the cultivation of rice. Maize, Job's tears (or adlay millet), sweet corn, rubber and coffee account for a large share of the remaining agricultural land area. In recent decades, with the increase in agricultural land concessions, exports of agricultural products and contract farming, Lao PDR's agricultural sector has transitioned from subsistence agriculture to a more commercial orientation (Village Focus International/National University of Laos, 2019[9]; CDE/University of Bern/MRLG, 2019[5]).

Agricultural productivity remains low in Lao PDR. Agricultural productivity in Lao PDR, measured as value added per worker in agriculture, forestry and fishing, is only 6.7% of the ASEAN average and increased at an annual rate of only 1.8% between 2009 and 2019 (Figure 5.5). This is too slow to catch up with the agricultural productivity of more developed countries (ECCIL, 2022[22]; World Bank, 2024[3]).

Figure 5.5. Labour productivity in Lao PDR's agricultural sector is the lowest among regional and other comparators

Value added per worker in agriculture, forestry and fishing



Note: Agricultural productivity can be defined as agricultural production per unit of input. Inputs include not only labour but also land and capital. As such, land productivity (agricultural output per unit of land) and capital productivity (agricultural output per unit of capital) constitute other measures of agricultural productivity (FAO, 2017[47]).
Source: (World Bank, 2024[3]), *World Development Indicators* (database), https://databank.worldbank.org/source/world-development-indicators (accessed on 25 September 2023).

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Agriculture is linked to deforestation, soil pollution and land degradation. The annual deforestation rate in Lao PDR amounted to 0.3% between 1982 and 2010, and agricultural land increased by 59% between 1999 and 2011. As of 2018, forest coverage in Lao PDR amounts to 43.5% (CDE/University of Bern/MRLG, 2019[5]). Deforestation and land degradation can be attributed to an increase in investment in commercial plantations of short-cycle so-called "cash crops" (which are often planted in monocultures), such as cassava, bananas, starch, Job's tears or maize, for export to neighbouring countries. These crops rapidly deplete the soil and are drivers of deforestation (Sylvester, 2018[8]). In addition, the agrochemicals used in these plantations contaminate soil and water sources (Village Focus International/National University of Laos, 2019[9]). Illegal logging, influenced by bans on logging in neighbouring countries and increased demand for timber, has also contributed to deforestation and land degradation in Lao PDR. Hydropower development and the construction of transportation infrastructure in order to access mining sites are additional but less important drivers of deforestation (OECD, 2017[4]). Land degradation is exacerbated by the high land erosion risk in Lao PDR as a result of its steeply sloping terrain and relatively shallow soil (CDE/University of Bern/MRLG, 2019[5]). Lao PDR's vulnerability to climate change is further exacerbating these challenges.

The commercialisation of agriculture in Lao PDR can have adverse social impacts, including health risks and rural indebtedness. The expansion in the use of agrochemicals such as fertilisers, pesticides and herbicides and the resulting increase in pollution has created significant health risks in rural areas, especially for the communities living in these areas (Village Focus International/National University of Laos, 2019[9]). In addition, contract farming has contributed to rural indebtedness as farmers borrow money for agricultural inputs in order to improve their yields. It has also contributed to food insecurity as communities reorient their production towards market commodities (CDE/University of Bern/MRLG, 2019[5]).

These challenges in Lao PDR's agricultural sector translate into ample opportunities for productivity- and sustainability-enhancing investment in the sector. Investment in the mechanisation and modernisation of agriculture, combined with the traditional knowledge of the sector and a better organisation of smallholder farmers, could increase the sector's productivity and expand agricultural production and the value added generated by agriculture. The expansion of longer-cycle crops (such as coffee, tea, sugar cane, and non-timber forest products such as certain mushrooms) could reduce the damage to the environment caused by short-cycle crops such as cassava or bananas. In addition, Lao PDR's geographic location, improving regional connectivity and the availability of suitable land constitute advantages for investment in tree plantations.

Tourism

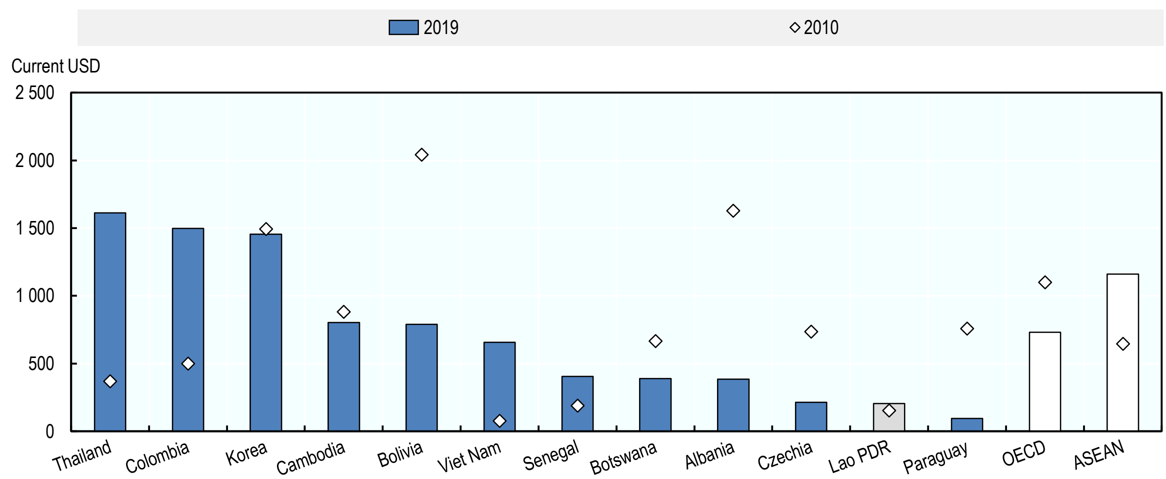
Lao PDR's tourism sector accounts for only a small share of FDI inflows (1.5%), but its contribution to Lao PDR's economy is increasing. In 2020 (prior to the COVID-19 pandemic), Lao PDR registered 4.79 million international tourist arrivals, tourism receipts accounted for 13.9% of the country's exports, and the tourism sector accounted for 9.1% of GDP and created 300 000 jobs. Tourists originated mainly from other Asian countries, most importantly Thailand (45% of international tourist arrivals in 2019), China (21%), Viet Nam (19%) and Korea (4%) (UNDP, n.d.[48]). There are several large tourism investment projects by Chinese enterprises in development, such as a USD 9 billion project by enterprises from Hong Kong, mainland China and a Lao PDR SEZ in Champasak province, which aims to transform the have area into one of the leading tourism sites in Southeast Asia in order to attract 1.3 million visitors per year (MOIT Vietnam, 2021[49]; Clark, 2021[50]).

Lao PDR's relatively low tourism receipts per arrival open opportunities for expanding tourism value added by attracting more tourists who stay longer and spend more money. Tourism receipts in Lao PDR amounted to only USD 203.30 per arrival in 2019, prior to the COVID-19 pandemic; this was less than one-fifth of the ASEAN average (USD 1 159.70) (Figure 5.6). In addition, tourism receipts per arrival have not increased quickly enough since 2010 to catch up with other countries in the region.

Lao PDR's low tourism receipts per arrival can be attributed to tourists' short average length of stay in the country; many tourists from neighbouring countries visit Lao PDR for only one day (for example, to visit a temple), while tourists coming from farther away combine a vacation in Thailand with a short stopover in Lao PDR. Lao PDR could increase tourism receipts per arrival by designing policies to attract tourists for longer periods of time and by expanding the high-end segments of its tourism industry. Facilitating access to the country's numerous tourist sites through improved connectivity and transportation infrastructure would be key to encouraging tourists to stay longer.

Figure 5.6. Tourism receipts per arrival in Lao PDR are only one-fifth of the ASEAN average

Tourism receipts per arrival, 2010 and 2019



Source: (World Bank, 2024[3]), *World Development Indicators* (database), https://databank.worldbank.org/source/world-development-indicators (accessed on 25 September 2023).

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There are many opportunities to increase the contribution of tourism to Lao PDR's economy by diversifying the sector. This includes the diversification of both the source markets of tourists and of tourism products (UNDP, n.d.[48]). The latter includes ecotourism and nature tourism, historical sites, ethnocultural tourism, adventure tourism, agriculture tourism, and wellness tourism. Improving the tourism products offered in Lao PDR could also help attract tourists for longer stays and increase the amount of money they spend in the country.

Better protecting UNESCOWorld Heritage Sites and reducing pollution from slash-and-burn agriculture around tourism sites could help make Lao PDR more attractive to tourists. Slash-and-burn agriculture is a traditional farming method that consists of burning vegetation in order to create a nutrient-rich layer of soil. Widespread seasonal burnings in Lao PDR close to key tourism sites, such as the city of Luang Prabang, cause severe air pollution and smog. This negatively affects the tourism sector through booking cancellations, tourists deciding against visiting Lao PDR during the burning season, and by tarnishing Lao PDR's reputation as a tourism destination (Delgado and Siviero, 2023[51]; Rieger, 2020[52]). In this context, developing an effective strategy for reducing slash-and-burn agriculture in areas close to important tourist sites could boost tourist arrivals during the slash-and-burn season. In addition, it would also be important to better preserve and protect special tourism zones such as Luang Prabang. In Luang Prabang, this would require the regular maintenance and repair of traditional buildings using appropriate techniques and materials (UNESCO, 2023[53]), as well as minimising loud noise and disturbing music and preserving the traditional cityscape by preventing the over-commercialisation of the traditional city centre (Liu et al., 2019[54]).

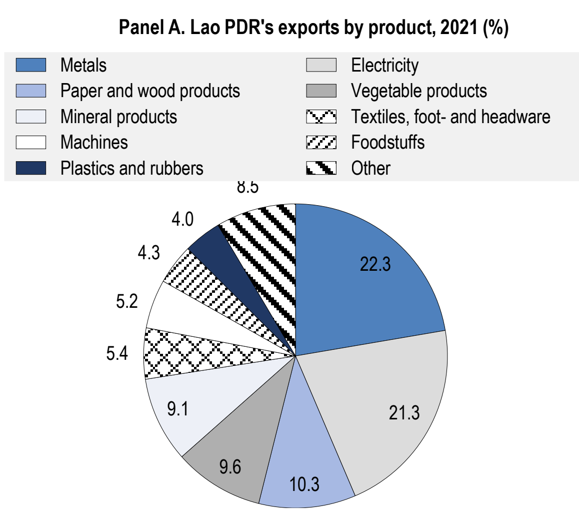
Manufacturing

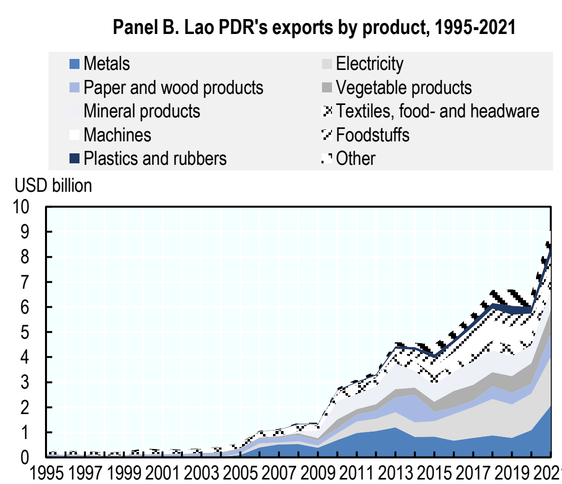
There is scope to expand Lao PDR's manufacturing sector, which remains small and receives much less FDI (1.4% of FDI inflows) than the country's natural resource sectors. Manufacturing accounts for only 8.7% of Lao PDR's GDP compared with 20.5% on average in ASEAN Member States, 24.8% in Viet Nam and 27% in Thailand, 18.1% in Cambodia (in 2022) and 13.2% in the OECD (in 2021) and the sector's contribution to GDP has stagnated and even moderately decreased over the last two decades (World Bank, 2024[3]). This reflects a very slow and stagnating structural transformation from agriculture to manufacturing and services in Lao PDR. The country's manufacturing sector is dominated by textiles and clothing (15.7% of the manufacturing sector in 2017) and food processing (33.4% of the manufacturing sector in 2017) (IFC, 2021[24]; World Bank, 2024[3]). In addition, an electrical components manufacturing industry is developing in Lao PDR (World Bank, 2021[42]). Medium- and high-technology manufacturing accounts for only 3.8% of the sector's value added (World Bank, 2024[3]). Manufacturing enterprises in China, Thailand and Viet Nam that want to diversify their production bases present a potential opportunity for Lao PDR to expand its manufacturing base (ECCIL, 2022[22]).

Lao PDR's exports are dominated by natural resources and are largely directed to neighbouring countries

Lao PDR's exports consist largely of natural resources and raw materials (approximately 70%), reflecting the focus of FDI. Metals (22.3% of exports) and electricity (21.3% of exports) are Lao PDR's most important export goods, followed by paper and wood products (10.3%), vegetable products (9.6%) and minerals (9.1%) (Figure 5.7, Panel A). FDI in Lao PDR in the hydropower, mining and agricultural sectors is a major generator of and contributor to exports (OECD, 2017[4]). Lao PDR's electricity, metal and mineral exports started expanding rapidly in 2005-06 as a result of the increase in FDI inflows in land-based investments in the mining and hydropower sectors in the context of the TLIC policy (Figure 5.7, Panel B). Since then, Lao PDR's electricity exports have increased at an annual growth rate of 24%, from USD 62.8 million in 2005 to USD 1.96 billion in 2021, while the country's metal and mineral exports have increased at an annual rate of 22.9%, from USD 106.4 million in 2005 to USD 2.9 billion in 2021.

Figure 5.7. Lao PDR's exports are concentrated in natural resources and raw materials





Source: (OEC, 2023[55]), *The Observatory of Economic Complexity*, https://oec.world/en (accessed on 25 September 2023).

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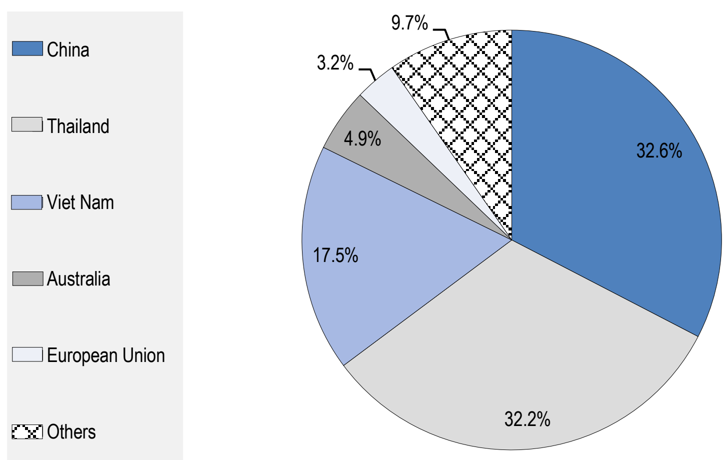
Lao PDR's main export destination countries are China (32.6% of exports in 2021), Thailand (32.2%) and Viet Nam (17.5%) (Figure 5.8). Exports to China consist largely of raw materials, including minerals and gold, paper and pulp, and agricultural products, especially bananas and rubber. These reflect Chinese FDI in the mining sector, the agricultural sector, and the wood and paper industry. More than one-half of Lao PDR's exports to Thailand are electricity (59.9% in 2021), reflecting the large amount of Thai investment in hydropower. Other important export goods to Thailand are precious metals (mainly gold), agricultural products (mainly cassava) and intermediate manufacturing goods, which serve as inputs for manufacturing enterprises in Thailand such as parts for consumer electronics and optical equipment. Exports to Viet Nam consist largely of agricultural products such as rubber, beef, sugar, cassava and coffee, as well as electricity, minerals and wood products, and a small amount of intermediate manufacturing goods (Datawheel, n.d.[56]).

Figure 5.8. More than 80% of Lao PDR's exports are directed to China, Thailand and Viet Nam

Lao PDR's exports by partner economy, 2021



Source: (UN, 2023[57]), *UN Comtrade*, https://comtradeplus.un.org/ (accessed on 25 September 2023).

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Key opportunities to improve the investment climate

There are numerous opportunities to improve Lao PDR's investment climate and to reduce the cost of doing business in the country. This includes increasing the availability of skilled labour and the supply of capable workers more generally. This also encompasses facilitating access to the land that the government has allocated to investors through land concessions and leases. Investment in transportation infrastructure and, in turn, a more vibrant logistics sector could reduce transportation costs. An effective judiciary and robust and fully enforced regulatory framework for investment could reduce opportunities for corruption. Better co-ordination and policy alignment among those institutions involved in the investment process could reduce red tape and long and cumbersome business procedures.[3] It would also be important to streamline and simplify the process of starting an investment project, which remains complex and involves three different channels for obtaining an investment licence. Moreover, Lao PDR requires a more stable, more predictable, clearer and more consistently applied set of policies, rules and regulations. In addition to these opportunities, it would be beneficial to stabilise Lao PDR's macroeconomic environment. This includes reducing inflation and currency depreciation.

Improving Lao PDR's business environment could encourage more investors to engage in activities that would limit the negative social and environmental impacts of their investment projects. This includes giving more importance to the EIA process; respecting environmental management plans; adhering to voluntary international social and environmental safeguards, such as Free, Prior and Informed Consent (FPIC); and conducting public consultations with local communities and providing them with appropriate compensation for resettlement and expropriation. All these environmental and social safeguards generate additional business costs, which add to the already high overall cost of doing business in Lao PDR. Improving Lao PDR's business environment and tackling overarching challenges to doing business there could allow more investors to pay these costs and ensure the sustainability of their investment projects.

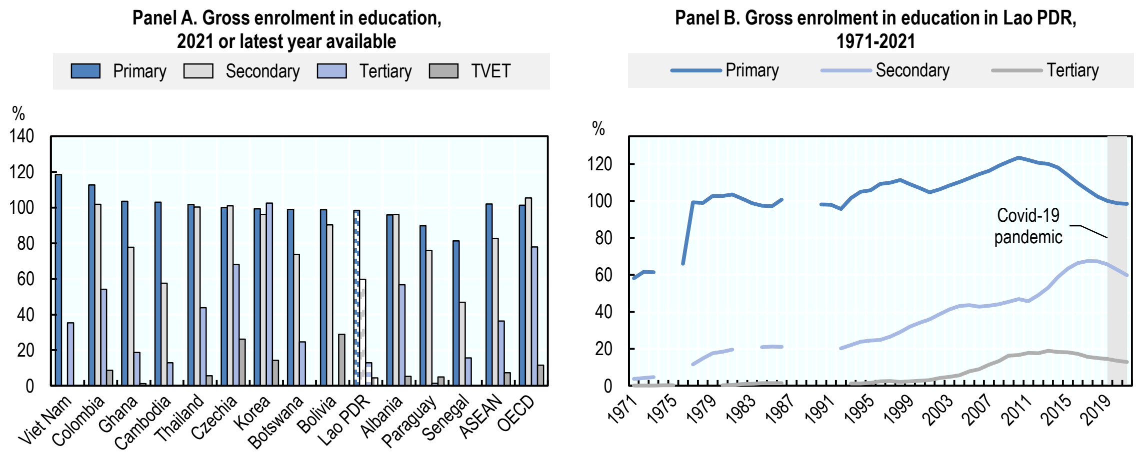
This section focuses on the opportunities for policy reforms to tackle four overarching challenges for investors in Lao PDR. First, encouraging in-house training in private enterprises and improving information on those skills that are in demand in the labour market could enhance the availability of skilled labour in Lao PDR. Second, improving institutional capacity and inter-institutional co-ordination in land administration and management and fully implementing Lao PDR's 2019 Land Law could facilitate access to land for private investors. Third, PPPs could support the development of transportation infrastructure in Lao PDR. And fourth, a more predictable regulatory framework for investment and an independent court system combined with policy and regulatory tools that promote the integrity of public officials could reduce opportunities for corruption. The following subsections will discuss challenges for investors linked to governance and the institutional set-up, the legal and regulatory framework, and the implementation of investment policies in Lao PDR.

Investment policy options to improve the availability of skilled workers in Lao PDR

Improving the availability of skilled labour and human capital for private investors could significantly improve the investment climate in Lao PDR (IFC, 2021[24]; ADB, 2011[58]; ECCIL, 2022[22]; ECCIL, 2018[59]). Private investors in Lao PDR commonly experience shortages in technical and vocational workers such as mechanics, maintenance workers for heavy machinery, technicians and technical workers for dam maintenance, construction workers, and nurses, as well as a lack of engineers. Soft skills such as reliability, timeliness, work morale and a general willingness to work can also be difficult for investors to find. For example, some investors report that workers abandon the workplace to help their families during harvesting season and expect to return after the season is over (OECD/UNIDO, 2019[30]), while others report that workers in factories sleep during working hours. In order to fill vacancies, employers frequently have to offer higher salaries (which in many cases exceed the relatively low levels of labour productivity) or import labour from neighbouring countries, even for relatively low-skilled positions (ECCIL, 2018[59]). Both offering higher salaries and importing labour are expensive and generate additional business costs.

Lao PDR has achieved high primary school enrolment rates. Gross primary school enrolment stands at 98.5% in Lao PDR, which is in line with the average of ASEAN member states of 101.9% and the OECD average of 101.3%, as well as with most comparators in the Southeast Asian region and elsewhere around the world (Figure 5.9, Panel A). Primary school enrolment in Lao PDR has increased impressively over the last 50 years, from only 58% in 1971, but has experienced a decline between 2012 and 2021(Figure 5.9, Panel B).

Figure 5.9. Lao PDR performs worse than most comparators in secondary, tertiary and TVET enrolment, and enrolment has declined since 2012



Note: Panel A: Latest data available: Thailand (2022 instead of 2021); Bolivia, Colombia, Czechia, Ghana and OECD (2020 instead of 2021). Primary enrolment: Paraguay (2015 instead of 2021). Secondary enrolment: Paraguay (2012 instead of 2021). Tertiary enrolment: Paraguay (2013 instead of 2021). TVET indicates enrolment in vocational education among 15-24-year-olds.

Source: (World Bank, 2024[3]), *World Development Indicators* (database), https://databank.worldbank.org/source/world-development-indicators; (World Bank, 2023[60]), *Education Statistics*, https://databank.worldbank.org/source/education-statistics-%5E-all-indicators (accessed on 20 September 2023).

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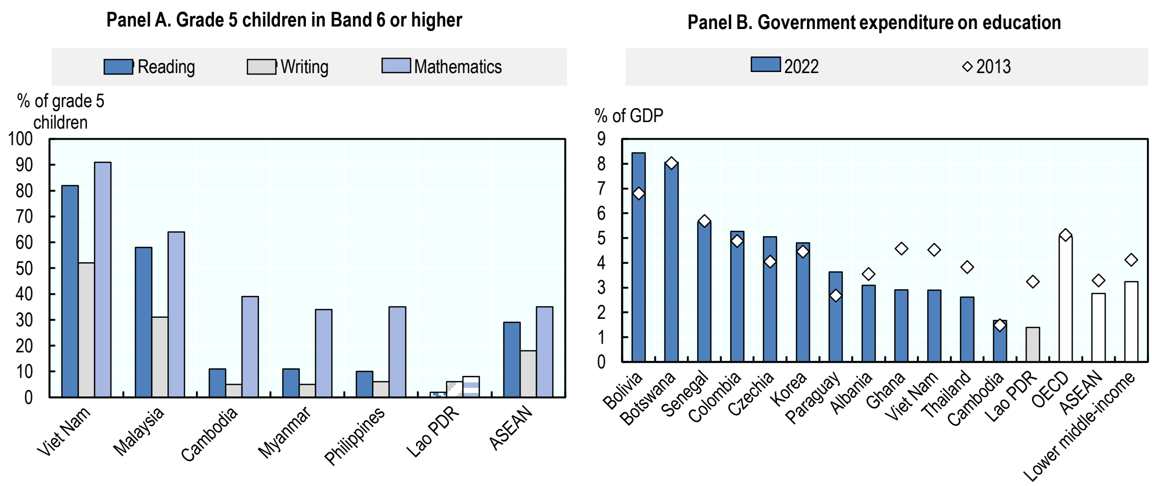
However, challenges in the quality of education and low enrolment rates above the primary level contribute to skilled labour shortages in Lao PDR. Student performance on standardised tests in Lao PDR is among the lowest in the Southeast Asian region (Figure 5.10, Panel A), indicating a low quality of education in Lao PDR. As a result, job prospects for graduates are limited. These limited job prospects do not incentivise student enrolment in school. This is reflected in low enrolment rates above the primary level: enrolment in secondary and tertiary education and in technical and vocational education and training (TVET) in Lao PDR is lower than in comparator countries in the Southeast Asian region and elsewhere around the world (Figure 5.9, Panel A). The challenges in educational quality are linked to a lack of funding in the education sector. Lao PDR is the country that spends the least on education (as a share of GDP) among the included comparators (Figure 5.10, Panel B) (World Bank, 2023[61]).

Figure 5.10. Limited funding for education in Lao PDR contributes to the country's low levels of student performance on standardised exams compared with other countries in the region and around the world



Note: Panel A. The performance of grade 5 children is evaluated in six bands for reading, in eight bands for writing and in nine bands for mathematics.

Source: Panel A: (UNICEF/SEAMEO, 2020[62]), *SEA-PLM 2019 Main Regional Report, Children's learning in 6 Southeast Asian countries*, https://www.unicef.org/eap/media/7356/file/SEA-PLM%202019%20Main%20Regional%20Report.pdf; Panel B: (World Bank, 2024[3]), *World Development Indicators* (database), https://databank.worldbank.org/source/world-development-indicators (accessed on 20 September 2023).

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The COVID-19 pandemic and the current economic crisis in Lao PDR have further exacerbated these challenges. As a result of these crises, government spending on education has decreased significantly from its already low levels, from 3.2% of GDP in 2013 1.4% of GDP in 2022 (Figure 5.10, Panel B). At the same time, official development assistance (ODA) has also been decreasing since 2018, and private financing for education is likely constrained by the economic crisis and the COVID-19 pandemic. In addition, the pandemic and the economic crisis have accelerated the gradual increase in unemployment in Lao PDR, which had already been observed prior to the pandemic.[4] This has further reduced the already low private returns on investment in education and households' incentives to enroll their children in school. As a consequence of the decrease in funding and the decline in the returns to education, student enrolment has further declined: primary enrolment declined from 106% (gross) in 2017 to 98.5% in 2021, secondary enrolment declined from 67.5% (gross) in 2017 to 59.8% (gross) in 2021, and tertiary enrolment declined from 15.7% in 2017 to 12.9% in 2021 (Figure 5.9, Panel B) (World Bank, 2024[3]).

High migration to neighbouring countries is another cause of the skills shortages that private investors experience in Lao PDR. Most skilled and unskilled workers in Lao PDR who are willing to work in a factory environment emigrate to neighbouring countries, where minimum wages largely exceed those in Lao PDR and there is a high demand for low-skilled labour in sectors such as infrastructure, services, manufacturing and agriculture. At present, the minimum wage in Thailand (THB 354 (Thai baht) per day, which is equivalent to approximately THB 9 000 or USD 240 per month) is three times the minimum wage in Lao PDR (LAK 1.6 million (Lao kip), or approximately USD 80 per month) (ECCIL, 2022[22]). In 2018, prior to the COVID-19 pandemic, 277 845 Laotians migrated to neighbouring countries. While this figure decreased during the COVID-19 pandemic when many workers returned to Lao PDR (IOM, 2020[63]), it is reported that migration has picked up again in 2022-23 and that the number of migrants exceeds those registered in 2018. This recent increase in migration can be attributed to the difficult macroeconomic conditions in Lao PDR, including high and accelerating inflation and declining real wages. As a result of the increase in emigration, hiring workers has become increasingly challenging for enterprises in Lao PDR independent of workers' skill level. This is reported in the tourism sector as well as in SEZs, where demand for labour exceeds supply (SEZO, 2023[31]).

There is scope to improve the quality of TVET in Lao PDR and to better align those skills produced by TVET institutions with demand in the labour market. TVET institutions in Lao PDR are reported to experience shortages in qualified and trained teachers, which has been aggravated by the economic crisis. Teachers frequently lack teaching skills and industry experience. TVET curricula are often outdated, not aligned with private sector needs, and do not involve sufficient practical training. Many TVET institutions lack modern facilities and the equipment, machines and tools required for the practical training of students. Private sector involvement in TVET through financing, curriculum development and delivery of practical training could be improved. TVET enrolment has been declining in high-demand skill areas where skill shortages are greatest, such as the construction sector (ADB, 2011[58]; ECCIL, 2018[59]; UNESCO/UNEVOC, 2020[64]).

Encouraging in-house training and improving information on skills that are in demand in the labour market

In order to improve the availability of workers with the right skills in Lao PDR, it will be important to encourage more in-house training by private investors. Only 24.4% of enterprises in Lao PDR offer formal training to their workers, compared with 31.2% of enterprises in East Asia and the Pacific on average (World Bank, 2018[29]). This can be partly explained by the perception among employers in Lao PDR that in-house training might be seen as a benefit-in-kind and therefore taxed. It would be important to ensure that this perception changes and employers offering in-house training to their workers are not subject to any additional tax payments or charges (ECCIL, 2018[59]). In addition, in order to encourage more in-house training by private enterprises, tax incentives for training could be introduced, such as making training costs fully or partially tax-deductible (see the section on investment tax incentives). In the context of a limited budget for education and the structural challenges in Lao PDR's education system, private enterprises are critical for equipping workers with the right skills and bridging the skills gap in the short term.

It would also be critical to improve co-operation and co-ordination between the private sector, the government and educational institutions (ECCIL, 2022[22]). For this purpose, stakeholders in Lao PDR (such as business associations, employers and businesses, trade unions and non-governmental organisations, educational institutions, and government institutions) could be regularly engaged through a dedicated council or committee. This process should be as inclusive as possible and should involve a sufficiently wide range of stakeholders, including those from emerging sectors of the economy such as new technology enterprises and training providers, which may be less well-represented in traditional institutions and entities (OECD, 2019[13]). Better co-ordination between the private sector, the government and educational institutions could help better align the educational opportunities with those skills that are in demand in the labour market.

Lao PDR already has a public-private co-ordination body for TVET: the National TVET and Occupational Skills Consultation and Development Council. It is chaired by the Minister of Education and Sports. The Minister of Labour and Social Welfare and the President of the Lao National Chamber of Commerce and Industry (LNCCI) are its vice chairs. Other members include the Assistant Minister of Education and Sports, the Assistant Minister of Labour and Social Welfare, the Directors-General of relevant departments, the chairs of relevant TVET associations, specialised experts, and representatives of TVET facilities. The National TVET and Occupational Skills Consultation and Development Council's role is designing legislation, regulation, policies, strategies and projects for the development and management of TVET and occupational skills training, and advising the government of Lao PDR on TVET policies and skills development issues (National President of Lao PDR, 2014[65]).

However, the National TVET and Occupational Skills Consultation and Development Council has not succeeded in building strong linkages between the public and private sectors in TVET (ADB, 2011[58]; ECCIL, 2018[59]). In practice, the Council does not convene regularly and suffers from a lack of leadership. Its members are at a very high level and the Council's budget is limited. Twelve trade working groups were established under the Council with the objective of overseeing skills, occupational and professional standards and curricula development, and of co-ordinating with the private sector. However, no information is available on whether these working groups still exist and convene on a regular basis. As a result of these challenges, the National TVET and Occupational Skills Consultation and Development Council has not been very successful in practice in better aligning Lao PDR's TVET system with private sector needs or in facilitating exchanges between businesses, the government and educational institutions (UNESCO/UNEVOC, 2020[64]; ADB, 2023[41]; ILO, 2016[66]).

In order to better align its education system (and in particular TVET) with the private sector's needs, Lao PDR requires information on those skills that are either readily available or lacking in the labour market. Individuals and enterprises alike require this information in order to make decisions about which skills to develop. The government of Lao PDR needs this information to design relevant education and training policies and programmes. An effective SAA system could identify the types of occupations, qualifications and fields of study that are currently in demand in the labour market, or that may become so in the future. Such systems should use both quantitative and qualitative methods, as well as both short- to medium-term and longer-term evaluations in order to allow for robust analysis (OECD, 2019[13]). Both Norway and Portugal have developed comprehensive SAA systems that rely on effective policy co-ordination between different public and private institutions (Box 5.1). A labour market information system, such as a robust labour market observatory with sufficient technical capabilities, could also contribute to identifying skills needs in Lao PDR.

Box 5.1. Norway and Portugal have developed regular SAA exercises and dedicated bodies for policy co-ordination in skills development

SAA exercises and policy co-ordination in Norway

The Norwegian Committee on Skill Needs was formed in response to the need for an evidence-based understanding of the country's future skills needs. The Committee plays a key role in co-ordinating between different ministries and stakeholder bodies in the area of skills needs assessments and responses. The Committee is funded by the Ministry of Education and Research, and its secretariat is within the Norwegian Directorate for Higher Education and Skills in the Ministry of Education and Research. The Committee includes 18 members who represent social partners, ministries and researchers. It is tasked with compiling evidence on Norway's future skills needs, contributing to open discussions and the better utilisation of resources between stakeholders, and producing an annual report with analyses and assessments of Norway's future skills needs.

The Norwegian Committee on Skill Needs uses a comprehensive set of methods and tools in order to determine Norway's current and future skills needs. These include employer surveys, surveys of workers or graduates, quantitative forecasting models, sector studies, qualitative methods and labour market information systems. The Committee also makes use of projections. Norway forecasts skills needs 10-80 years into the future in the healthcare sector, and 35 years into the future in the education sector. Furthermore, it carries out 20-year general occupational forecasts, and estimates employment trends in specific industries 1 year in advance as a direct input for the planning of training and employment policy. Unusually, these skills needs are forecast at both the national and regional levels.

SAA exercises and policy co-ordination in Portugal

Portugal's skills needs assessment system, the Sistema de Antecipação de necessidades de Qualificação (SANQ), was created in 2014. The SANQ is co-ordinated by Portugal's National Agency for Qualification and Vocational Education and Training. It has a consultative board that encompasses the public employment service and representatives of workers and employers, and that board receives technical assistance from the International Labour Organization (ILO). Its diagnostic exercises assess skills needs through both a retrospective analysis of labour market trends and a forecast of the future demand for certain qualifications. The system is used to plan the delivery of TVET for young people, and Portugal is considering expanding its use in order to plan the supply of adult learning programmes. Moreover, Portugal uses inputs of skills needs assessments in order to provide young people with career guidance through its network of Qualifica centres.

Source: (OECD, 2023[67]), *Multi-dimensional Review of El Salvador: Strategic Priorities for Robust, Inclusive and Sustainable Development*, OECD Development Pathways, based on (OECD, 2019[13]), *OECD Skills Strategy 2019: Skills to Shape a Better Future*.

In addition, it would also be important to improve the quality of education in Lao PDR (including TVET) and to increase funding for education, but that topic is beyond the scope of this chapter. This chapter focuses on the issue from an investment policy perspective. Investment policies include the provision of in-house training and strategies to improve the information available on those skills that are most in demand in the labour market. Developing detailed policy advice on how to deal with structural challenges in Lao PDR's education system is therefore beyond the scope of this chapter.

Policy options to facilitate access to land for private investors in Lao PDR

In 2019, Lao PDR adopted a new Land Law, which has significantly improved the legislative and regulatory framework for land management. The 2019 Land Law is much more detailed, informative and clear than the 2003 Land Law. The 2019 Land Law provides clearer and more detailed regulations on concessions and leases of land by foreigners and specifies that concession rights can be traded. The new law also provides clearer and more detailed information on the zoning and classification of land; land surveys and protection; changes to land categories; land administration; the acquisition, use and loss of land use rights; and the management of state land. In addition, it makes MONRE's central and co-ordinating role in land management clearer and defines each ministry's rights and obligations in the management of the use of land clearly. The law also introduces national and provincial land allocation master plans, land use strategies and strategic land use plans. It also includes a prohibition on encroachment and clarifies land use rights in the context of condominiums. Going forward, in order to facilitate its implementation, the 2019 Land Law would benefit from additional details and clarity (MRLG/LIWG, 2021[15]; National Assembly, 2019[14]).

The 2019 Land Law allows for land titles and land use rights to be used as collateral. Under the previous 2003 Land Law, land use rights could not be used as collateral. The 2019 Land Law abolishes this restriction, which had been a major impediment to accessing finance for private entrepreneurs in the past. Land titles and land use rights as a result of a lease or concession can now be used as collateral in order to access credit from foreign and domestic banks (OECD, 2017[4]).

Under the 2019 Land Law, Lao PDR continues to apply restrictions on foreign ownership of land. Domestic entities may obtain "land use rights", whereas foreign investors, including minority foreign-owned established entities, may only lease land or receive land in concession from the state. The lease or concession of land by the state to a foreign-owned enterprise registered in Lao PDR is limited to 50 years under the 2016 Law on Investment Promotion and the 2019 Land Law. The lease of land by a Laotian citizen to a registered foreign-invested company is limited to 30 years. Foreign investors are entitled to own the structures and developments made on leased land, and they are also entitled to own apartments that are part of condominiums (OECD, forthcoming[23]; National Assembly of Lao PDR, 2016[68]; National Assembly, 2019[14]).

Going forward, it would be important to improve foreign investors' access to the entire area of state land that they have been granted in land concessions and leases by the government. This can be a particular challenge for investors, especially in sectors that require a large amount of land, such as agriculture and forestry. The land that investors are allocated by the government is often already in use for other purposes, such as customary use for residential and farming purposes by local communities, especially in rural areas. As a result, investors frequently have to revert to contract farming or to leasing land from local communities, especially those investors pursuing socially sustainable investment models. This is costly and means that investors have to pay both the government (for concessions or leases) and local communities in order to access land (Sylvester, 2018[8]). Alternatively, rather than being allocated available land by the government based on national and local land allocation plans, investors have to identify suitable land themselves before receiving a concession or lease from the government. In practice, this requires first consulting with local communities on which land areas are available and only thereafter receiving government approval (Village Focus International/National University of Laos, 2019[9]). Finally, even after investors have identified available land or entered into leases with local communities, illegal land grabs can be a challenge as a consequence of incomplete enforcement of land legislation.

It would also be critical to avoid expropriations and the loss of collective land used for agriculture and forestry by local communities as a result of land concessions to investors. Not all investors respect local communities' claims on land in concession areas that they have been allocated by the government. This can lead to expropriations of both land holdings by individuals in rural communities and collectively used land, as well as resettlements. In many cases, compensation offered for expropriation is insufficient or non-existent, and there would be scope to improve dispute resolution mechanisms and make them more easily accessible for rural communities. There are also concerns about corruption in the land administration, and the process for granting land concessions lacks transparency (CDE/University of Bern/MRLG, 2019[5]; GAN Integrity, 2020[21]).

Enhancing institutional capacity in land administration and improving land registration

Improving land registration in Lao PDR could facilitate access to land for private investors. Currently, only approximately 40% of land plots in Lao PDR are formally registered. A large share of land rights are still transferred in informal markets, especially in rural areas. Although existing land registries are generally well-maintained and most land transfers are registered in urban areas, this is not always the case in rural areas, where land registries are not always aligned with the actual status of property rights. The incomplete record of land registries and the absence of a cadastre in many rural areas result in frequent land disputes and can lead to opportunities for corrupt practices. In the absence of a clear and updated land cadastre and registration system, it is often difficult to identify whether a land parcel is available or not (OECD, 2017[4]). In addition, local land use and management plans do not always exist, and those plans that do exist do not always reflect the reality on the ground in the context of customary land use and contract farming (Village Focus International/National University of Laos, 2019[9]).

A World Bank project could significantly improve land registration and titling in Lao PDR outside state-owned forest land. The World Bank's Enhancing Systematic Land Registration Project is currently working on the formal registration of the remaining land plots outside of state-owned forest land in Lao PDR and aims to finalise the registration of these land plots within the next five years (World Bank, 2023[16]). However, approximately 30% of land plots that are located in state-owned forest land will remain without formal registration. In the past, formal tenure documents could not be issued for state-owned forest land.

The 2019 Land Law did introduce Land Use Certificates for state-owned forest land, but such certificates have not been issued yet (see below).

There is scope to improve institutional capacity for land use management and administration, especially at the provincial and district levels. The Department of Land Allocation and Development in MONRE is responsible for formulating and implementing land policy in Lao PDR, while MONRE's district offices are responsible for land registration and maintaining land registries at the local level (National Assembly, 2019[14]). However, the institutional capacity of local offices of the Department of Land Allocation and Development is often relatively low. Although land registration is digitalised through the Lao LandReg desktop application at the central level, district and provincial offices are still using paper records, which need to be manually transferred to the central database. The World Bank is currently working on a new version of Lao LandReg, which will involve rolling this version out to district offices, automating updates to the central database and moving the new database to a government data centre (World Bank, 2023[16]). In order to build on the World Bank's work going forward, it should be a priority to endow MONRE with the skills and the human, financial and technical resources required to fully implement the 2019 Land Law, especially at the provincial and district levels.

Simplifying the institutional set-up for land use planning and management and improving inter-institutional co-ordination

The responsibility for land use management and planning in Lao PDR is divided among a large number of institutions. The 2019 Land Law defines eight categories of land, each of which is managed by a different sectoral ministry (Table 5.1). In addition, MONRE is assigned as the leader and co-ordinator of land management among these different institutions (National Assembly, 2019[14]). This complex land classification system does not always reflect the reality on the ground, but rather Lao PDR's institutional set-up in terms of sectoral ministries.

Table 5.1. The responsibility for land use planning and management is divided between a large number of institutions in Lao PDR

Government entities responsible for land use planning and management in Lao PDR

Type of land	Responsible entity
Agricultural land	Ministry of Agriculture and Forestry (MAF)
Forestry land	Ministry of Agriculture and Forestry (MAF)
Industrial land	Ministry of Industry and Commerce (MOIC); Ministry of Energy and Mines in mining areas and Ministry of Planning and Investment (MPI) in SEZs
Cultural land	Ministry of Information, Culture and Tourism
Land for national defense and security purposes	Ministry of Defense; Ministry of Public Security
Communication land	Ministry of Public Works and Transport
Construction land	Ministry of Public Works and Transport
Water area land	The ministry responsible for the category of land within which the water area land falls

Source: (National Assembly, 2019[14]), *Land Law*, https://faolex.fao.org/docs/pdf/lao77471.pdf.

Simplifying the institutional set-up for land management and enhancing inter-institutional co-ordination would be critical for streamlining land management in Lao PDR. The 2019 Land Law makes MONRE's central role in land management much clearer than the previous Land Law and requires all line ministries to co-ordinate with MONRE (Articles 31, 167 and 168). However, in practice, co-ordination between MONRE and sectoral ministries on land management remains rather limited, and a formal co-ordinating mechanism has not been established by the law (MRLG/LIWG, 2021[15]). The only existing co-ordinating mechanism between MONRE and sectoral ministries is a land subsector working group under MONRE, but it remains donor-driven and relatively weak. This lack of co-ordination has resulted in multiple and overlapping land use and management plans. In addition to this lack of inter-institutional co-ordination, land use planning and management is also hampered by weaknesses in local authorities' capacity to fulfil their land use planning and management obligations. Inter-institutional co-ordination could be improved by setting up a formal inter-ministerial co-ordination mechanism for land management that would meet regularly. There is also the need for inter-ministerial data- and information-sharing mechanisms (Derbidge, 2021[69]).

The World Bank's Enhancing Systematic Land Registration Project could facilitate information sharing on land registration and planning among different entities. In the context of this project, the World Bank is planning to design a new version of the Lao LandReg desktop application, which allows different government agencies and other institutions to access land use data, including the Ministry of Finance for property tax collection and commercial banks for mortgages. It would be important to also include the IPD in this process in order to improve the allocation of land concessions to investors. In the long term, Lao PDR should consider revising the legal framework to include fewer institutions in land management processes.

Accelerating the implementation of Lao PDR's 2019 Land Law and further improving the legislative framework for land management

Formal tenure documents in rural areas governed by customary land rights and in state forest areas could facilitate access to land for investors and better protect local communities. Most farmers in rural areas in Lao PDR do not have formal land tenure documents and their land parcels are not registered. They rely on customary tenure systems based on traditions and agreements with communities (Derbidge, 2021[17]; Derbidge, 2021[18]). In addition, the 2003 Land Law did not provide any legal basis for formalising land tenure in Lao PDR's three categories of state-owned forest land (protection, conservation and production forests), which are reported to account for 63% of Lao PDR's land area and to host more than 3 000 communities (Derbidge, 2021[19]) (which comprise approximately 25% of Lao PDR's population). The lack of formal tenure documents in rural areas and on state-owned forest land can result in conflicts with investors that have been allocated concessions in these areas. Such conflicts can either lead to expropriations (sometimes without appropriate compensation) or the inability of investors to exploit the land areas that they have been allocated as concessions. Those investors that are respectful of local communities frequently have to pay local communities to use the land which the investors have already been allocated as a concession, thereby facing additional business costs.

The 2019 Land Law offers a solution for formalising customary land rights, but scope remains for further improving the legislative framework. The law protects customary land use rights and allows for the issuing of land titles to individuals who have occupied and used land for more than 20 years before the adoption of the 2019 Land Law (Article 130) (National Assembly, 2019[14]). However, the 2019 Land Law does not mention the protection of the customary rights of collective or communal land areas. Rural communities in Lao PDR are highly dependent on collective land for agriculture, livestock raising and forestry. Moreover, the law does not protect the customary rights established more recently than 20 years prior to the adoption of the 2019 Land Law. Finally, the law does not provide information on the implementation of the protection of individual customary rights and the issuing of land titles (Derbidge, 2021[17]; Derbidge, 2021[18]). Providing clarity on these points, introducing formal land use rights for collective land through land titles or land use certificates, and advancing the issuance of land titles and registration of customary land would be important in order to provide investors with more accurate information on which land parcels are available for concessions and to reduce conflicts between rural communities and investors (Derbidge, 2021[17]).

Similarly, the 2019 Land Law also offers a solution for issuing formal tenure documents for state-owned forest land, but some challenges remain. According to the 2019 Land Law, the members of communities living on state-owned forest land are eligible to obtain land use certificates (Article 44) (National Assembly, 2019[14]). This is a major improvement over the 2003 Land Law, which did not provide any legal basis for formalising land tenure in state-owned forest land. However, the implementation of the issuance of such certificates remains challenging, and the law fails to specify the rights that are granted by these certificates, or whether the land use rights granted by these certificates are permanent or temporary. There have been discussions between MONRE and MAF to issue land titles rather than land use certificates for land holders of permanent residential and agricultural land in villages located inside state forest areas that already existed before the official declaration of the respective forest land (Derbidge, 2021[19]). However, issuing land titles for state-owned forest land would require reforming or amending the 2019 Land Law once again, and given resistance by the National Assembly of Lao PDR and the Ministry of Justice, this is likely to be feasible only in the medium term.

The new 2019 Land Law improves citizens' rights with respect to expropriation and other negative externalities of investment projects, but would benefit from additional details. The law introduces an obligation to pay compensation prior to expropriation, and limits expropriation to state investment purposes. The new law also introduces the obligation for concessionaires and lessees to compensate those affected by their operations (Article 122) (National Assembly, 2019[14]). However, the law would benefit from more clarity on whether the compensation clause in cases of expropriation also applies to customary land rights. Moreover, it would be beneficial to make the participation and consultation of landowners and local communities in decisions about expropriation mandatory (Derbidge, 2021[69]). Going forward, it would be important to more clearly define the rights emanating from customary tenure (Derbidge, 2021[17]).

In order to ensure that investors respect local communities, mandatory public consultations and tenure investigations could be introduced for all investment projects involving large amounts of land. Such detailed tenure investigations or analyses and public consultations could be conducted prior to the implementation of investment projects. This could allow for the better protection of local communities. Such an obligation could apply to all investment projects involving land at the village level (Derbidge, 2021[18]). At present, investors must conduct public consultations only as part of EIAs and only if investment projects involve compensation or resettlement (Sylvester, 2018[8]; National Assembly of Lao PDR, 2016[70]).

Better land dispute resolution mechanisms and awareness raising constitute other opportunities. The 2019 Land Law lacks clear provisions on grievance redress and dispute resolution mechanisms, beginning with a simple administrative review process, semi-formal reviews by local officers, appeals at the provincial level and, finally, appeals to the courts. Furthermore, there is a general lack of awareness of land rights and regulations and of access to legal support in rural areas in Lao PDR (Derbidge, 2021[69]; MRLG/LIWG, 2021[15]). In this context, it would be important to establish competent, efficient, transparent and independent institutions to resolve land disputes (OECD, 2015[12]). This requires, first and foremost, strengthening the independence of Lao PDR's judiciary and the effectiveness of its court system. This could also include the creation of specialised land courts (OECD, 2017[4]). Negotiation, mediation and arbitration mechanisms could also facilitate the settling of disputes (OECD, 2015[12]). In addition, it would be important to raise the public's awareness of all aspects and processes regarding expropriation and compensation and the rights of landholders; access to information; and, in cases of disputes, people's access to grievance mechanisms and legal support, especially in rural areas (Derbidge, 2021[69]).

There are already some initiatives to improve land dispute resolution mechanisms. Notably, a European Union (EU)-funded project by the Gesellschaft für Internationale Zusammenarbeit (GIZ), Citizen Engagement for Good Governance, Accountability and the Rule of Law (CEGGA), is currently engaging with the National Assembly of Lao PDR and the country's Provincial People's Assemblies in order to improve the assemblies' petition systems. These petition systems are one of the key judicial grievance redress mechanisms in Lao PDR, which also receive many complaints related to land rights (GSWG, 2022[71]; WFD, 2022[72]; GIZ, 2017[73]).

Policy options to improve Lao PDR's transportation infrastructure and to reduce transportation costs

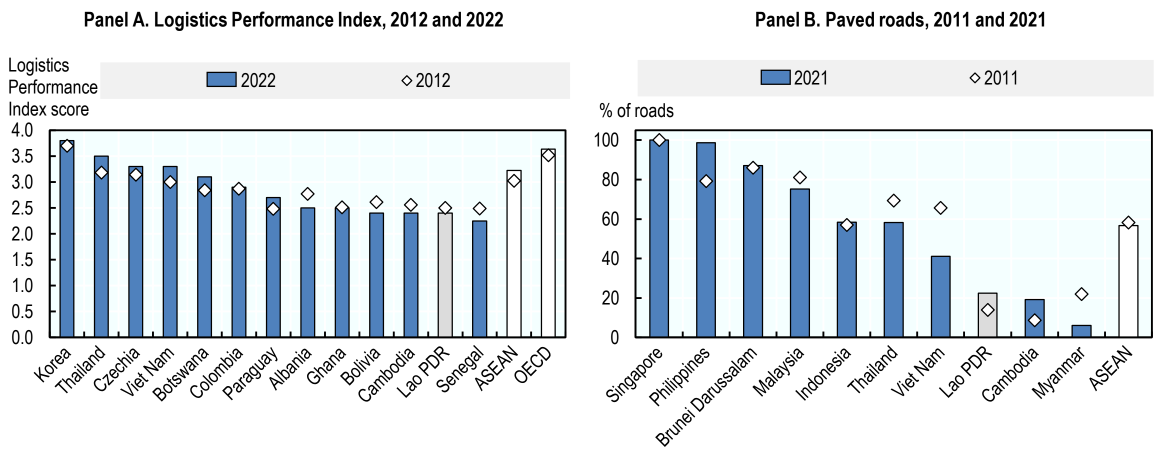
Recent investments in road and railway infrastructure have improved Lao PDR's transportation connectivity. A highway connecting Vientiane to Vang Vieng was opened in 2020, and a high-speed railway from Vientiane to the town of Boten on the Chinese border and connecting Vientiane with the city of Kunming in Yunnan province, China, was opened in 2022. Thanaleng Dry Port, which is located close to the Thai border (within one kilometre (km) of the Thai–Lao Friendship Bridge over the Mekong River), was opened in December 2021. These investments have facilitated access to key tourism sites (such as Luang Prabang and Vang Vieng), and the Vientiane-Boten railway is facilitating tourism from China. They have also improved export routes from Lao PDR to China and potentially reduced transportation costs. Estimates indicate that the Boten–Vientiane railway could reduce transportation costs within Lao PDR by 20-40%, between Vientiane and Kunming by 40-50%, and between the Laem Chabang Port in Thailand and Kunming by 30-50% (World Bank, 2020[74]). However, investment in adjacent road and logistics infrastructure (last-mile connectivity) in Lao PDR would be required in order for the country to fully benefit from the improved connectivity facilitated by the Boten–Vientiane railway (World Bank, 2021[42]).

The Boten–Vientiane railway could increase trade flows between Lao PDR and China, as well as trade transiting through Lao PDR. This includes trade flows from ASEAN Member States, most importantly Malaysia, Singapore and Thailand. In 2016, only 37% of bilateral merchandise trade between Lao PDR and China was transported by land and a mere 5% of merchandise trade between China and Malaysia, Singapore and Thailand was transported on land via Lao PDR (the remainder was transported by sea). In the future, part of the trade through maritime transport could be transported via the Boten–Vientiane railway, thereby reducing transportation costs and transit times. In addition, the Boten–Vientiane railway could also increase trade flows between Lao PDR and China, and could facilitate an increased volume of Lao PDR exports in particular (World Bank, 2020[74]).

Going forward, pursuing further improvements in connectivity and reducing transportation costs could significantly improve Lao PDR's investment climate. High transportation costs remain a challenge for many private investors in Lao PDR, particularly in the agricultural sector, for export-based manufacturers and in the tourism sector. Deficiencies in Lao PDR's transportation infrastructure render access to many tourism sites difficult and have resulted in a concentration of tourism in Lao PDR's capital city, Vientiane, despite Lao PDR's many historical cultural sites and natural assets in other regions. Vientiane accounts for more than 40% of international tourist arrivals and approximately 50% of investments in hospitality (OECD, 2017[4]). A 2018 study by the World Bank estimates that the average road transportation costs in Lao PDR per tonne-km are USD 0.028-0.070, with an average cost of USD 0.059 per tonne-km (World Bank, 2018[75]). A 2017 study by the Japan External Trade Organization's Institute of Developing Economies estimates that the transportation costs are USD 0.11 per tonne-km for full container loads and USD 0.37 per tonne-km for partial container loads. This compares with road transportation costs in Viet Nam of USD 0.04 per tonne-km for long-haul operators and of USD 0.11 per tonne-km for short-haul operators (Lam, Sriram and Khera, 2019[76]), and with average road transportation costs in Thailand of USD 0.05 per tonne-km (World Bank, 2021[42]). The Institute of Developing Economies' study finds that transportation costs along important trade corridors are between 1.4 and 2.2 times higher in Lao PDR than in Thailand (IDE-JETRO, 2017[77]).

Upgrading Lao PDR's transportation infrastructure could reduce transportation costs. The high transportation costs in Lao PDR partly reflect its geography as a landlocked country. As a result, the bulk of freight and passenger transportation in Lao PDR is road transportation. However, at the same time, there are significant deficiencies in Lao PDR's transportation infrastructure: only 22.4% of roads in Lao PDR are paved, compared with an average of 56.6% in ASEAN Member States (Figure 2.12, Panel B). Even though this is an improvement compared with 2011 (when only 13.9% of roads in Lao PDR were paved), progress has been slow. Within ASEAN member states, only Cambodia and Myanmar perform worse than Lao PDR in this respect. Similarly, Lao PDR performs worse than most comparators on the World Bank's Logistics Performance Index (LPI) (Figure 2.12, Panel A). The LPI measures how easy or difficult it is to transport merchandise within a country. It comprises different logistics-related factors beyond transportation, including warehousing, brokerage, express delivery, terminal operations, related data and information management (IFC, 2021[24]). In the past, most of the public investment in Lao PDR's road infrastructure was directed towards extending the road network, while funding for maintaining and upgrading the existing road network has been limited (OECD, 2017[4]). Going forward, improving road, rail and river transportation infrastructure would be important in order to facilitate both access to tourism sites and exports of agriculture, forestry and manufacturing goods.

Figure 5.11. Lao PDR performs worse than comparators in the South East Asia region and elsewhere in the world in terms of road transportation infrastructure and logistics



Note: Panel A: 1 is low and 5 is high. Senegal: data are from 2018 instead of 2022. Panel B: Indonesia, Lao PDR and Myanmar: data are from 2020 instead of 2021; Viet Nam: data are from 2017 instead of 2021.
Source: Panel A: (World Bank, 2024[3]), *World Development Indicators* (database), https://databank.worldbank.org/source/world-development-indicators; Panel B: (ASEAN, 2023[78]), *ASEANstats*, https://www.aseanstats.org/ (accessed on 20 September 2023).

StatLink https://stat.link/2ld9eo

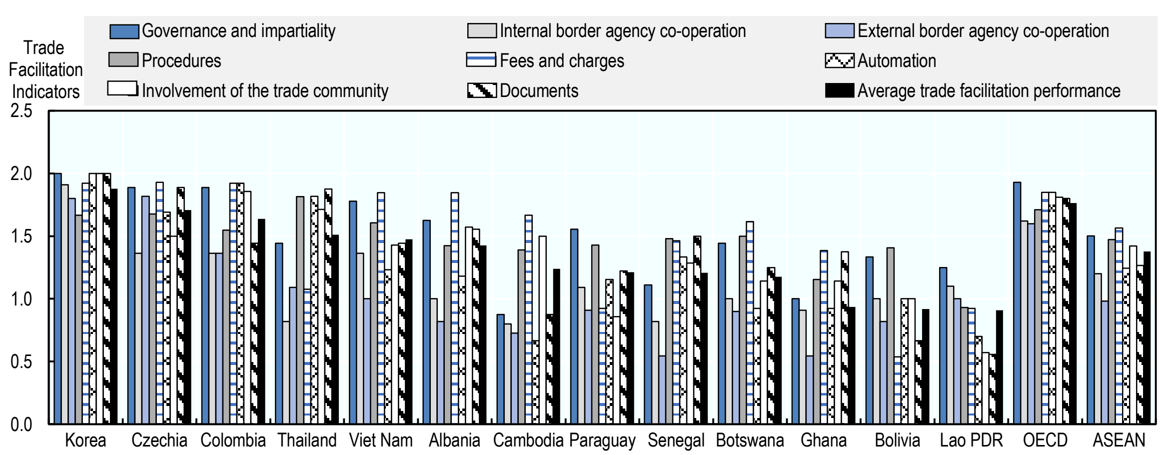
Expanding the offer and quality of logistics services in Lao PDR and opening the transportation sector up to competition could reduce transportation costs. Lao PDR's logistics market is dominated by local providers offering traditional logistics services. The availability of logistics services – such as door-to-door multimodal transport, container leasing, inventory management or cold chain services – is limited. Moreover, the market is segmented between different regions and provinces. This is the result of limited competition in the domestic logistics market due to restrictive, complex and unevenly applied regulations, such as entry and ownership restrictions and minimum capital requirements. Complex regulations and restrictions prevent international players from entering the market. In order to reduce transportation costs for investors, reduce transit times and improve the quality and variety of logistics services offered, it would be important to reform regulations so as to simplify market entry and remove restrictions and operational barriers. Given the limited expertise among domestic operators, the skills and know-how of foreign enterprises are critical to improving logistics services in Lao PDR (World Bank, 2020[74]).

Simplifying and reducing the cost of import and export procedures could also reduce transportation costs in Lao PDR. This includes discretionary fees for import licences, fees paid at unofficial checkpoints throughout the country (e.g. at traffic light intersections, weighing stations and the borders between provinces) and additional high fees at border checkpoints using an X-ray scanner system (ECCIL, 2022[22]). Furthermore, non-tariff measures, manual paper-based border clearance processes and widespread physical inspections by customs officials at the border contribute to long border clearance times (World Bank, 2021[42]). Despite the introduction of a new electronic system, Smart Tax, for collecting customs fees and charges, customs fees and charges are still collected manually in many cases (ECCIL, 2022[22]). Lao PDR would also benefit from an appropriate international transit management system other than its current system, which requires time-consuming controls for a large share of shipments (60% in 2016) (World Bank, 2020[74]). These challenges are reflected in Lao PDR's weak performance on the OECD's Trade Facilitation Indicators (0.910/2 in Lao PDR compared with the ASEAN average of 1.378/2 in 2022) (Figure 5.12) (OECD, 2023[79]).

Administrative reforms, digitalisation, the simplification of procedures and improved inter-agency co-ordination could facilitate cross-border trade in Lao PDR. In order to reduce delays at border crossings, it would be important to allow imports and exports to be cleared at inland ports. In addition, planning and co-ordination among border control agencies within Lao PDR (such as the Lao Customs Department, the Department of Immigration of Lao PDR, the Quarantine Division, and the Food and Drug Department) could be improved. There is also a need for an integrated risk management system, the simplification of procedures for non-tariff measures and border clearance, and full utilisation of the electronic customs system (World Bank, 2020[74]). These reforms are particularly important in light of the recent opening of the Boten–Vientiane railway, which facilitates trade between Lao PDR and China. In order to fully take advantage of the railway for the transport of goods, it would also be important to enhance co-operation among customs agencies in China, Lao PDR and Thailand, including the exchange of pre-arrival information (World Bank, 2021[42]).

Figure 5.12. Lao PDR performs worse than comparators in South East Asia and elsewhere in the world on the OECD's Trade Facilitation Indicators

Selected OECD Trade Facilitation Indicators, 2022



Note: "Average trade facilitation performance" refers to the overall Trade Facilitation score. In addition to the overall score, a selection of the eight most relevant indicators have been selected.
Source: (OECD, 2023[79]), *Trade Facilitation Indicators 2022 edition*, http://www.compareyourcountry.org/trade-facilitation/en/ (accessed on 20 September 2023).

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Enhancing Lao PDR's capacity for the planning, delivery and management of fiscal risks linked to public-private partnerships (PPPs)

In the long term, PPPs could be one option to support transportation infrastructure development in Lao PDR. PPPs could allow for mobilising the sources of capital required for investment in transportation infrastructure, which would otherwise be difficult to finance. PPPs can further increase the efficiency of infrastructure improvement projects and enhance value for money in the use of public finances for infrastructure development through an efficient risk allocation process, increased competition, the use of private sector managerial and technological skills, and an incentive to minimise costs (OECD, 2015[12]; OECD, 2017[4]). PPPs also allow private investors to share risks with the government (ECCIL, 2022[22]). Other options to finance investment in Lao PDR's transportation infrastructure include land value capture tools[5] (which capture revenues from the indirect and proximity benefits generated by transportation infrastructure), green bonds for sustainable transportation infrastructure such as railways in the long term[6] (OECD, n.d.[80]), and ODA. Discussing these options in detail is beyond the scope of this chapter.

However, developing transportation infrastructure in Lao PDR through PPPs would require improved PPP planning and delivery and better management of PPP-related fiscal risks. In addition, in order to allow for effective risk sharing with private investors, it would be important to reduce the country's high amount of public debt (see Chapter 3 on sustainable development financing). The OECD Recommendation of the Council on the Governance of Infrastructure provides countries with practical guidance for developing efficient, transparent and responsive decision-making processes in infrastructure investment, including PPPs (Box 5.2).

Box 5.2. The OECD Recommendation of the Council on the Governance of Infrastructure 2020

Infrastructure governance is crucial to ensuring that public investments contribute to sustainable growth while strengthening infrastructure resilience, particularly for challenges such as climate change and inclusive growth.

The Recommendation of the Council on the Governance of Infrastructure, adopted by the OECD Council in July 2020, provides countries with practical guidance for developing efficient, transparent and responsive decision-making processes in infrastructure investment. It supports a whole-of-government approach and covers the entire life cycle of infrastructure projects, putting special emphasis on regional, social, gender and environmental considerations. It includes the following principles:

- developing a long-term strategic vision for infrastructure
- guarding fiscal sustainability, affordability and value for money
- ensuring efficient procurement of infrastructure projects
- ensuring transparent, systematic and effective stakeholder participation
- co-ordinating infrastructure policy across levels of government
- promoting a coherent, predictable and efficient regulatory framework
- implementing a whole-of-government approach to managing threats to integrity
- promoting evidence-informed decision making
- making sure the asset performs throughout its life
- strengthening critical infrastructure resilience.

Source: (Ruiz Rivadeneira, Dekyi and Cruz, 2023[81]), "OECD infrastructure governance indicators: Conceptual framework, design, methodology and preliminary results", *OECD Working Papers on Public Governance*, No. 59.

Lao PDR has the highest PPP capital stock in the world as a share of GDP (over 60%) (see Chapter 3 on sustainable development financing, Figure 3.8.) (World Bank, 2023[43]). There have been 36 PPPs in Lao PDR since the 1990s, with the bulk of projects (30 projects and 76% of the capital invested) occurring in the energy sector (largely hydropower dams and one wind farm), followed by the Boten–Vientiane railway (23% of capital invested). The remaining PPP projects consist of the Thanaleng Dry Port, the Vientiane International airport and projects in the telecommunications sector (World Bank, 2023[82]).

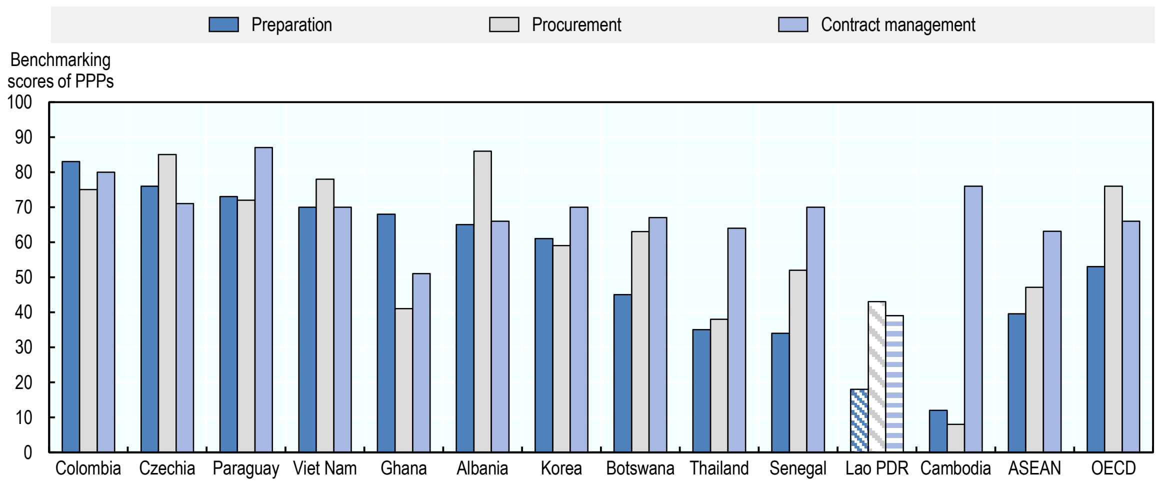
In the past, deficiencies in PPP preparation and delivery and in the management of the associated fiscal risks have generated significant fiscal liabilities for Lao PDR. PPPs can generate considerable fiscal risks for the government through contingent liabilities (World Bank, 2023[43]). As mentioned previously, contingent liabilities from PPPs in Lao PDR's energy sector account for almost one-half of the country's PPG debt stock. Many of these PPPs are hydropower dams owned by private investors. These PPPs were selected based on unsolicited proposals without appropriate screening and competition. As a result, in many cases, the investment rationale and value for money of these dams was limited. Some of these dams have not performed well due to a lack of water, while others lack buyers for the electricity they produce. The PPAs that EDL signed with the private owners of hydropower dams frequently have unfavourable terms for EDL, sometimes even resulting in a net loss. These PPAs require EDL to buy the electricity generated by these dams at high prices in foreign currencies while EDL is frequently able to sell electricity only at considerably lower prices, or in some cases cannot sell it at all, and electricity bills are paid in LAK. Moreover, the average tariff EDL pays independent electricity producers through PPAs is higher than the export tariff to Thailand. In addition, EDL needs to pay capacity charges for the electricity produced by independent electricity producers even if it cannot resell that electricity, further adding to its financial burden (RFA, 2022[83]; World Bank, 2021[42]).

Lao PDR recently improved its legislative framework for PPPs by adopting a PPP Decree. The PPP Decree came into force in January 2021 and provides the institutional framework governing PPPs as well as the regulatory framework for preparing, tendering, awarding and implementing PPPs. It fills the legal void on PPPs in Lao PDR, introduces competitive tendering at the selection stage of PPPs, and sends a positive signal to potential investors by providing a clear regulatory framework for PPPs. The decree assigns the MPI as the government institution responsible for PPPs and for co-ordinating with sectoral authorities (Government of Lao PDR, 2020[84]; Farrands, Xu and Newby, 2023[85]). Previously, Lao PDR did not have a legislative and regulatory framework for PPPs, and PPP projects were directly negotiated, awarded and implemented as concessions based on the Law on Investment Promotion (Farrands, Xu and Newby, 2023[85]). The new PPP Decree could attract more private investment in PPPs and limit the scope for awarding PPPs with limited value for money and highly unfavourable conditions, as has previously been the case in Lao PDR's energy sector. Establishing a credible institutional and regulatory environment is critical to reducing policy uncertainty and inducing private investment in infrastructure (OECD, 2017[4]).

In order to effectively implement this new legislation, it would be important for Lao PDR to improve its capacity to prepare, procure and manage PPP projects. Lao PDR scores low in PPP preparation and procurement on the World Bank's Benchmarking Infrastructure Development index, which is based on a survey of the characteristics of the PPP procurement process (Figure 5.13). Given how recently the PPP Decree was adopted, Lao PDR lacks human resources that are familiar with PPPs, and also lacks knowledge on and experience with the PPP process (World Bank, 2021[86]). A significant number of PPPs implemented in Lao PDR in the past were largely based on the concession investment model (Farrands, Xu and Newby, 2023[85]). Going forward, it would be important to enhance Lao PDR's human resources and skills in PPP preparation and delivery, in particular in the central PPP unit (World Bank, 2021[86]). It would also be beneficial to improve co-ordination among different government institutions involved in the PPP preparation, procurement and management process in Lao PDR (World Bank, 2023[43]).

Figure 5.13. Lao PDR is performing worse than most comparators in the preparation, procurement and contract management of PPPs

Benchmarking PPPs



Source: (World Bank, 2024[87]), *Benchmarking Infrastructure Development*, https://bpp.worldbank.org/ (accessed on 10 March 2024.

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Furthermore, Lao PDR would benefit from a medium- to long-term infrastructure plan, including a pipeline of infrastructure and PPP projects with clear prioritisation based on a cost-benefit analysis. This would maximise the benefits of PPPs by ensuring that those projects with the greatest benefits are implemented first. It could also make infrastructure development more attractive for private investors. A credible pipeline of projects facilitates competition in the market and allows potential investors to build their strategies on a portfolio of opportunities rather than on a project-by-project basis. Moreover, an infrastructure plan and project pipeline could help promote greater policy co-ordination and alignment across levels of government and assure investors of the government's long-term commitment to infrastructure development. In addition, such a plan and project pipeline would create a basis for prioritising, assessing and awarding PPPs, thereby limiting opportunities for corruption and untransparent project prioritisation and awards. A medium- to long-term infrastructure plan should be aligned with development objectives (OECD, 2017[4]).

The project pipeline should be based on a cost-benefit analysis and should determine which investment method is likely to yield the most value for money. The cost-benefit analysis should take into account the entire project lifetime, alternative modes of delivery and efficiency in project delivery. It requires co-ordination among different government agencies and levels of government (OECD, 2017[4]). The procurement path of individual projects should be determined through a careful assessment of which investment method is likely to yield the most value for money (OECD, 2017[4]; OECD, 2012[20]). This is especially important given that the PPP Decree defines eight different investment models for PPPs while also allowing for other investment models, but does not provide any guidance in determining the most appropriate investment model for a project (Farrands, Xu and Newby, 2023[85]).

In light of the fiscal challenges linked to past PPPs' contingent liabilities, it would be critical to improve the management of PPP-related fiscal costs and risks throughout the project life cycle. PPPs should be assessed for their affordability during the preparation process in order to determine the exact amount of expenditures and contingent liabilities for the government and whether they can be accommodated in the budget throughout the project life cycle. This includes expenditures such as costs related to resettlements, which are often high, or the construction of access roads or other infrastructure. Furthermore, all costs and contingent liabilities linked to PPPs should be assessed thoroughly and disclosed in the government budget. This includes PPPs or PPP-like arrangements managed by public institutions other than the central government, such as state-owned enterprises (e.g. EDL) (OECD, 2012[20]).

Lao PDR should carefully evaluate the costs and benefits of unsolicited PPP projects. Lao PDR's PPP Decree allows for unsolicited PPP projects but introduces several safeguards: unsolicited proposals must undergo a tendering process, and they must use new technology and innovation and yield high returns. In addition, unsolicited projects cannot benefit from tax incentives, financial support or risk sharing with the government (Government of Lao PDR, 2020[84]). Despite these safeguards, PPP projects can still be awarded on a negotiated basis, since the Law on Investment Promotion and the Law on Electricity (which applies to PPPs in the electricity sector), which are both of a higher rank than the PPP Decree and therefore take precedence over it, do not require competitive bidding (World Bank, 2021[86]). The existence of unsolicited PPP projects can give rise to the prioritisation of projects with comparatively fewer economic and social benefits. This remains a particular concern in the context of significant levels of corruption and rent seeking in Lao PDR (see the section on policy options to reduce opportunities for corruption).

It would be important to improve infrastructure procurement choices in Lao PDR. Lao PDR's PPP Decree lists eight different delivery models for PPPs, and also allows for other delivery models as determined by the government. However, it provides no guidance on how to determine the best delivery model for any given PPP project (Government of Lao PDR, 2020[84]; World Bank, 2021[86]). The Support Tool for Effective Procurement Strategies (STEPS), developed by the Queensland University of Technology and the OECD, could allow Lao PDR to improve its infrastructure delivery model and other procurement choices. STEPS is an evidence-based tool grounded in economic theory that is available to inform the procurement strategy of major projects (see Box 5.3).

Finally, there is scope to better clarify the content of the PPP Decree; for example, through the development of guidelines. Detailed guidelines and standards are required in particular for PPP preparation, appraisal and selection. Such guidelines would be particularly important to ensuring the quality and comparability of project proposal and feasibility studies. There is also a need for detailed guidance on assessing unsolicited proposals (OECD, 2017[4]).

Box 5.3. The Support Tool for Effective Procurement Strategies (STEPS)

Infrastructure projects are often affected by cost overruns, delays, conflict and litigation, among other issues, which are caused by poor stakeholder management, failures in risk assessment and other factors. But even if a project owner could do everything perfectly right up to the point of procurement, the project could still fail if the owner pursues an inadequate procurement strategy. Indeed, procurement choices can have major consequences, such as:

- A low number of bidders: Breaking down the project into contracts (the "packaging problem") and the associated risk allocation co-determine the competitive response. Having two bidders instead of six may result in a 20% difference in the project cost.
- The wrong choice of delivery model (e.g. design-bid-build, design and build, collaborative models, etc.): This can, in itself, lead to exorbitantly more expensive infrastructure. The current state of the procurement process promotes a one-size-fits-all logic, ignoring the fact that activities in major projects are not homogenous in terms of risk or uncertainty.

In order to improve procurement choices, the Queensland University of Technology and the OECD developed STEPS. STEPS is an evidence-based tool grounded in economic theory that is available to help inform the procurement strategy of major projects. STEPS seeks to prevent three key pre- and post-contract procurement failures:

- competition failures (i.e. too few bidders)
- hold-up (events in which the supplier's bargaining power leads to high-cost premia)
- inadequate risk allocation (one-size-fits-all commercial arrangements).

Applying STEPS to the procurement of infrastructure can reduce costs, delays, conflict and litigation, and avoid a loss of innovation potential. The outcome of the application of STEPS is a comprehensive procurement strategy that helps define (among others) the capabilities to retain in-house, the contract scoping of projects and the commercial terms of those contracts.

Source: (OECD, 2022[88]), *Support tool for effective procurement strategies: Informing the procurement strategy of large infrastructure and other bespoke projects*, https://web-archive.oecd.org/2023-05-24/629218-STEPS-brochure-april-23.pdf.

Policy options to reduce opportunities for corruption

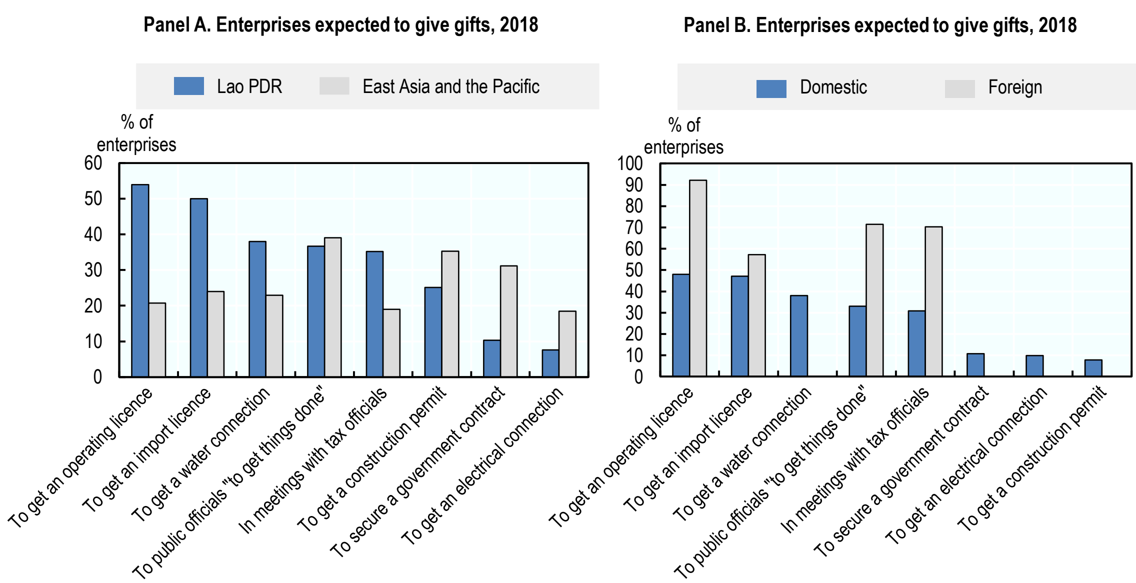
Lao PDR has taken measures to reduce opportunities for corruption and promote integrity among public officials. Lao PDR has had an Anti-Corruption Law since 2005 which criminalises abuse of power, embezzlement, passive bribery[7] and fraud in the public sector. Fraud in the public sector refers in particular to public procurement and the allocation of concessions. The Anti-Corruption Law provides the legal basis for the State Inspection Agency, which was established in 2001 (GAN Integrity, 2020[21]; National Assembly of Lao PDR, 2005[89]). In addition, in 2019, Lao PDR adopted the Decree on the Ethics of Civil Servants in order to improve public services. This decree prohibits civil servants from abusing their power for personal gain or for the benefit of their relatives and people associated with them, and introduces disciplinary measures. It also prohibits public officials from accepting gifts. In addition, the decree asks civil servants to treat all citizens – irrespective of their gender, age, ethnicity or other characteristics – with fairness, kindness and politeness, and to deliver public services on time (Kang, 2019[90]; Prime Minister of Lao PDR, 2019[91]).

Going forward, additional efforts to reduce informal payments and gift-giving would be important to improve Lao PDR's investment climate. Informal payments and gift-giving remain common in Lao PDR's business culture. Such payments are frequently required in order to speed up administrative procedures (ECCIL, 2022[22]). It is also reported to be common practice for investors to buy political support (GAN Integrity, 2020[21]). These practices can affect the efficiency of enterprises operating in Lao PDR and generate additional business costs. In 2022, Lao PDR ranked 126th out of 180 countries on Amnesty International's Corruption Perceptions Index, scoring 30 out of 100[8] (Amnesty International, 2022[92]). Among enterprises in Lao PDR, 40.3% report having been requested to pay at least one bribe compared with an average of 25.8% of enterprises in East Asia and the Pacific. Enterprises in Lao PDR were requested to give gifts or make informal payments in 35.8% of public transactions, compared with only 21.1% of transactions in East Asia and the Pacific on average. Low wages for government officials, as well as nepotism and political patronage in the recruitment of administrative personal, favour and sustain corruption (GAN Integrity, 2020[21]).

There is scope to reduce informal payments and gift-giving, particularly in the tax, customs and land administrations, in public procurement, in the processes of acquiring permits and licences, and in public utilities. Land disputes, which are frequent in Lao PDR as a result of the country's incomplete cadastre (see the section on access to land), are in many cases solved through informal payments to officials. Long and cumbersome border procedures (see the section on transportation infrastructure) open up avenues for bribe payments to speed up importing and exporting processes. In public procurement, it is reported that government contracts are frequently awarded to enterprises with close ties to government officials. In line with these findings, private enterprises report that the expectation to give a gift is particularly high if they are trying to get an operating licence, an import licence or a water connection, and in meetings with tax officials (Figure 5.14, Panel A) (World Bank, 2018[29]).

Reducing bribery and informal payments could encourage more foreign investment. Foreign enterprises are more affected by bribery than domestic enterprises (Figure 5.14, Panel B). For foreign enterprises, the bribery incidence (having experienced at least one bribe payment request) is 70.7% compared with only 33.7% for domestic enterprises. Moreover, foreign enterprises report that an informal payment or gift is expected in 62.9% of public transactions, while domestic enterprises reported that this is the case in only 23.7% of public transactions (World Bank, 2018[29]). As a result, foreign enterprises face an even higher cost of doing business in Lao PDR than domestic enterprises. This can be a deterrent for FDI.

Figure 5.14. Gift-giving is most widespread in Lao PDR for getting an operating or import licence, and foreign enterprises are more affected by gift-giving requests than domestic enterprises



Note: Panel B: Foreign enterprises are defined as enterprises with 10% or more foreign ownership. There were no data available on foreign enterprises regarding expectations to give gifts in order to get a water connection, to secure a government contract, to get an electrical connection or to get a construction permit.
Source: (World Bank, n.d.[93]), *Enterprise Surveys*, https://www.enterprisesurveys.org/en/enterprisesurveys (accessed on 20 September 2023).

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A more predictable regulatory framework for investment and an independent court system should be combined with policy tools to promote integrity among public officials

In order to tackle opportunities for corruption, first and foremost, Lao PDR requires a fair, clear, predictable and fully enforced regulatory framework for investment and an effective, fair and independent court system. Such a regulatory framework for investment and its consistent application are fundamental if markets are to function properly. Uncertainty about the enforceability of lawful rights and obligations can encourage corruption: investors may be more likely to seek to protect or advance their own interests through bribery, and government actors may seek undue benefits. When contracts cannot be enforced or disputes cannot be resolved in a timely and cost-effective manner, enterprises may depend more heavily on personal and family connections. The court system has a fundamental role in enforcing contracts and settling disputes, both among private actors and between investors and the state. Therefore, the efficiency, effectiveness, integrity and independence of the courts are essential for creating a sound enabling environment for investment. The court system can be made more attractive to investors by strengthening the independence of judges, creating efficient and predictable court procedures and effectively executing judgments (OECD, 2015[12]).

It would be important to fully implement existing anti-corruption legislation, including the Anti-Corruption Law and the Decree on the Ethics of Civil Servants. Despite the adoption of the Anti-Corruption Law in 2005, the prosecution of public officials under this law remains uncommon. Those who are prosecuted under the Anti-Corruption Law are largely lower-ranking officials. Except for two provincial governors who lost their jobs as a result of corruption allegations in 2017-18, higher-ranking and senior officials are rarely targeted. The Lao PDR government intensified its anti-corruption rhetoric in 2016, but this has yet to translate into a significantly improved implementation of anti-corruption legislation. It would also be important to introduce a legal obligation for appointed or elected officials to publicly disclose their assets or income (GAN Integrity, 2020[21]; Bertelsmann Stiftung, 2022[94]).

Reducing discretion in the granting of concessions for investment as well as investment incentives for concessions could reduce potential opportunities for rent seeking by government officials (OECD, 2017[4]). Both land concessions and investment incentives for concessions are negotiated on a case-by-case basis between the government and the investor, thereby leaving space for discretionary decision making and rent-seeking behaviour (see the section on investment tax incentives). Investors report that the amount of incentives granted depends on personal relationships and vested interests. Furthermore, it is also reported that, in some cases, tax incentives are granted on an ad hoc basis without any legal grounding (IFC, 2021[24]).

Integrity tools and mechanisms could limit political capture and build safeguards to protect the public interest in high-risk areas in Lao PDR, such as conflicts of interest, lobbying and political financing. Such tools include the effective management of conflicts of interest and adequate lobbying and political finance regulations. According to the OECD guideline *Managing Conflict of Interest in the Public Sector* (2005), effective management of conflicts of interest should identify risks to the integrity of public organisations and public officials; prohibit specific unacceptable forms of private interest; make public organisations and individual officials aware of the circumstances in which conflicts can arise; and ensure that effective procedures are deployed for identifying, disclosing, managing and promoting the appropriate resolution of conflict-of-interest situations. The *OECD Principles for Transparency and Integrity in Lobbying* (2010) provide guidance to decision-makers on promoting good governance in lobbying (OECD, 2005[95]) (OECD, 2010[96]) (OECD, 2015[12]).

An effective public procurement system that disburses public funds sustainably and efficiently is another critical element for preventing opportunities for corruption. This is particularly important in the context of the large number of PPPs in Lao PDR (see the section on PPPs). Such a system should include the sound and effective planning, design and delivery of public procurement. An effective public procurement system serves the public's needs; provides customer satisfaction; delivers value for money in a fair, open, competitive and transparent way; ensures a level playing field for all enterprises; and is regularly measured and evaluated for improvement. The OECD Recommendation of the Council on Public Procurement provides clear and effective guidance on how to implement an effective public procurement system that disburses public funds sustainably and efficiently (OECD, 2015[12]). The Methodology for Assessing Procurement Systems (MAPS), developed by the OECD, in turn provides countries with a comprehensive approach to assessing their procurement systems (see Box 5.4). Lao PDR's PPP Decree (adopted in 2019) is a first step in this direction (see the section on PPPs).

Improved human resource management, training and counselling could also enhance integrity among public officials in Lao PDR. Effective human resource policies can provide public officials with suitable conditions and incentives for integrity. This includes basing recruitment and promotion on merit, providing adequate remuneration, and taking ethical considerations into account in recruitment and performance appraisal. Training and counselling can also raise awareness among employees and help develop their skills for meeting integrity standards in daily practice (OECD, 2015[12]).

Reporting suspicion of misconduct by public officials could be either required by law or facilitated by organisational rules in Lao PDR's public sector. So-called whistleblowing – the act of raising concerns about misconduct within an organization – is important in order to ensure transparency and accountability and should be encouraged in the public sector. An ombudsman or inspector general, official complaint or whistleblower procedures, and help desks or dedicated telephone lines could all facilitate the reporting of suspicious or corrupt behaviour by public officials and citizens in Lao PDR (OECD, 2015[12]). At present, Lao PDR does not have an ombudsman (GAN Integrity, 2020[21]; Bertelsmann Stiftung, 2022[94]). In addition to making such a whistleblowing mechanism available, it would be essential to effectively protect whistleblowers against potential retaliation in order to encourage the reporting of wrongdoing (OECD, 2015[12]).

Box 5.4. Using public procurement as a strategic policy tool: Sustainable Public Procurement

Used strategically, public procurement can help make societies more sustainable, economies more productive, public sectors more efficient and institutions more trustworthy.

Public procurement is increasingly recognised as a potential strategic instrument and a lever for achieving government policy goals (e.g. stimulating innovation, delivering on the green transition, creating a circular economy, helping small and medium-sized enterprises (SMEs) to access furtherpublic procurement opportunities, and promoting social values).

Sustainable Public Procurement (SPP) is a strategic approach that promotes the integration of the three pillars of sustainable development: economic development, social development and environmental protection. SPP has emerged as a powerful strategic instrument that governments are increasingly using in order to help achieve national policy objectives. Most prominently, the UN's 2030 Agenda for Sustainable Development calls on governments to promote public procurement practices that are sustainable in accordance with their own national policies and priorities. SPP builds on the principles and good practices of public procurement and considers additional factors in order to appropriately achieve social, environmental and economic benefits for procuring entities, their supply chains and society as a whole. SPP introduces new practices in order to contribute to social development and environmental protection, achieve value for money, and stimulate innovation.

The 2015 OECD Recommendation of the Council on Public Procurement promotes the strategic and holistic use of public procurement. It emphasises the importance of achieving the right balance between various policy objectives so that public procurement systems support the achievement of broader outcomes. It calls for developing an appropriate strategy for the integration of strategic policy objectives into public procurement systems and employing an appropriate impact assessment methodology in order to measure the effectiveness of procurement in achieving strategic policy objectives.

MAPS: SPP supplementary module

MAPS is an international standard and the recognised universal tool with which to evaluate public procurement systems anywhere in the world. MAPS assessments provide countries with useful information in order to monitor the performance of their public procurement systems and design reforms to improve them.

The MAPS core methodology provides a comprehensive approach for assessing procurement systems. It uses an objective set of indicators in order to identify gaps in the use of best practices and proposes recommendations based on a country context analysis.

Supplementary modules complement this core assessment methodology. These modules focus on specific policy areas of public procurement and can be used by countries to deepen their understanding of these areas. The MAPS SPP supplementary module allows countries to assess how well their public procurement systems support and promote sustainability principles. It considers economic, social and environmental dimensions, including elements such as green and gender-responsive procurement.

Source: (OECD, 2018[97]), *Methodology for Assessing Procurement Systems (MAPS)*, https://www.mapsinitiative.org.

Transparency in government operations and review mechanisms for assessing the anti-corruption performance of public institutions are other important opportunities. Ensuring the independence and impartiality of such reviews is critical. For example, they can be undertaken by independent external investigators such as an ombudsman or inspector general. The scrutiny of such reviews can help hold public officials accountable for their actions. Similarly, transparency in government operations can encourage citizen participation and ensure accountability. Freedom of information legislation, digitalisation and electronic procedures can all advance transparency and public scrutiny of public officials' behaviour, as can an active media and well-organised interest groups (OECD, 2015[12]).

Finally, improved public-private dialogue is required in Lao PDR in order to combat corruption (see the section on public-private dialogue). Public-private co-operation is essential in combating corruption and other misconduct. Combating corruption requires standards, measures and setting the right incentives in both the public and private sectors. This includes, for example, measures to encourage enterprises to invest in compliance systems (OECD, 2015[12]).

Governance and institutional framework for investment

Lao PDR would benefit from better co-ordination among those institutions that are involved in investment policy making and implementation. The main institutions responsible for the design and implementation of investment policies in Lao PDR are the MPI (particularly the IPD) and the MOIC. Until 2022, the Committee for Investment Promotion and Management (CIPM) had an important role in the design of investment policies and the approval of investment projects, but it is currently being abolished. The Special Economic Zone Promotion and Management Office (SEZO) serves as the MPI's secretariat for all SEZ-related activities. Lao PDR's MONRE is involved in the investment process in Lao PDR through its role in EIAs and land administration and management. Sectoral ministries are involved in the review and approval of investment projects. In addition, many institutions – such as the IPD, the CIPM and MONRE – are subdivided into entities at both the central and provincial levels. However, few formal challenges to co-ordination and the alignment of policy objectives exist among these institutions, or between them and the private sector.

In order to increase efficiency and predictability for investors, Lao PDR requires a whole-of-government approach to investment policy. Countries that successfully attract investment have mastered a whole-of-government approach to investment promotion and facilitation. This includes effective co-ordination among various authorities involved in the design and implementation of investment policies, including at local government level. Poor co-ordination can increase the risk of duplication, inefficient spending, lower-quality services, and contradictory objectives and targets, all of which can undermine investor confidence. A whole-of-government approach can facilitate the development of public policies and services for investors that are integrated and correspond to their needs and that are not defined by siloed administrative structures. A whole-of-government approach to policy design and delivery can allow for the integration of cross-disciplinary perspectives into policy, improve co-ordination and facilitate resource sharing (OECD, 2015[12]).

Institutions responsible for investment policy making and implementation in Lao PDR

The main institutions responsible for the design and implementation of investment policies in Lao PDR are the MPI (particularly the IPD) and the MOIC. The MPI is officially responsible for all matters that relate to investment, and its IPD is Lao PDR's dedicated investment promotion agency (IPA) (OECD, 2017[4]). In addition, SEZO, which is attached to the MPI, is responsible for supervising all SEZs in Lao PDR. The MOIC is responsible for enterprise registration in uncontrolled business activities (business activities that do not affect Lao PDR's "national security, public order, national fine tradition and environment, society and nature" (National Assembly of Lao PDR, 2016[98]); see the section on simplifying the process for starting a business) (OECD, forthcoming[23]; OECD, 2017[4]; National Assembly of Lao PDR, 2016[98]).

Established in 2004, the IPD is 1 of the 12 departments of the MPI. It is fully government funded (rather than being an autonomous body) and has little room to manoeuvre in comparison with most IPAs worldwide (OECD, 2017[4]; OECD, 2018[99]). The IPD is made up of eight divisions: international investment co-operation; PPPs; project appraisal; one-stop service; contract appraisal and management; project supervision, planning and evaluation; administration; and investment promotion (IPD, 2023[100]). In addition to the central office in Vientiane, the IPD has an office in each province (OECD, forthcoming[23]; OECD, 2017[4]; National Assembly of Lao PDR, 2016[98]).

The IPD's mandate encompasses investment promotion and facilitation, as well as regulatory and administrative functions. This includes promoting Lao PDR as an investment destination, offering investment incentives, screening investment projects, collecting investment data and monitoring investment operations. The IPD is also in charge of investment policy making, including preparing investment laws and negotiating international investment agreements (OECD, 2017[4]).

Going forward, it would be important to set out a clearer structural delineation between the IPD's regulatory and promotional functions. Evidence shows that IPAs focusing exclusively on investment promotion perform better in attracting investment than those that carry out both regulatory/administrative and promotional functions (OECD, 2017[4]; Griffin, Ortega Sotes and Whyte, 2011[101]). An institution engaged in both investment promotion and regulation can potentially face conflicts of interest between maximising investment and ensuring rigorous regulation (IFC, 2021[24]).

The IPD is strongly focused on investment in concessions and controlled business activities. Granting business licences to projects in these sectors falls within its remit, whereas uncontrolled business activities are the responsibility of the MOIC. Granting the IPD responsibility for investment approvals only in concessions and controlled business activities means that the IPA lacks a good incentive to actively promote FDI in all sectors of the economy (OECD, 2017[4]). Going forward, it would be important to better align the IPD's incentives with its role of promoting FDI in all sectors of Lao PDR's economy.

The MPI is responsible for formulating relevant policies for and regulating, supervising and managing SEZs in Lao PDR. SEZO has the status of a department of the MPI and serves as the MPI's secretariat for all SEZ-related activities (Government of Lao PDR, 2018[102]). Previously, the National Committee for Special Economic Zones (NCSEZ) and its secretariat, which was attached to the Prime Minister's Office, were responsible for SEZ-related matters. However, as a result of the 2016 reform of the Law on Investment Promotion and the 2018 reform of the Decree on Special Economic Zones, responsibility for all SEZ-related matters was transferred to the MPI, and specifically to SEZO (National Assembly of Lao PDR, 2016[98]; Government of Lao PDR, 2018[102]). Bringing together both investment promotion and SEZ policies under the umbrella of one single institution allows for better co-ordination and a more integrated approach to the implementation and design of investment and SEZ policies.

Until 2022, the CIPM had an important role in the design of investment policies and the approval of investment projects. The CIPM is a government-established, inter-ministerial organisation with the role of providing the strategic orientation for and co-ordinating investment promotion within Lao PDR, as well as approving concession investments, investments in controlled business activities and investments in business activities in SEZs for which SEZ authorities cannot give approval. The CIPM has 12 members and is chaired by the Deputy Prime Minister.[9] In addition to the CIPM at the central government level, there are CIPM offices in each province. The one-stop service division of the MPI (which is in practice a division of the IPD) serves as the CIPM's secretariat (OECD, forthcoming[23]; OECD, 2017[4]; National Assembly of Lao PDR, 2016[98]; Government of Lao PDR, 2018[103]; National Assembly of Lao PDR, 2016[98]). However, as of 2022, those investments that previously required approval from the CIPM are now approved by the Prime Minister's Office based on the IPD's recommendation. An ongoing reform of the 2016 Law on Investment Promotion will ultimately result in the formal abolition of the CIPM (National Assembly, 2023[104]).

The benefits of abolishing the CIPM should be carefully weighed against the drawbacks. Abolishing the CIPM could reduce red tape by decreasing the number of steps involved in the approval process for investment projects. This could, in turn, reduce opportunities for patronage and corruption. However, abolishing the CIPM might also diminish scrutiny and increase opportunities for discretionary decision making. Excessive administrative discretion in the hands of public officials can, in turn, increase the risk of corruption and undermine good governance objectives, which are fundamental to an attractive and enabling environment for investment (OECD, 2015[12]).

It would be beneficial to transfer the CIPM's role in providing the strategic orientation for investment policies to an advisory body that includes private sector representatives. IPAs in other ASEAN Member States (such as Malaysia and Thailand) have governing boards that offer advice, supervise the work of these countries' national IPAs and provide the strategic orientation for their national investment policies. These boards include private sector representatives. Thailand's Office of the Board of Investment (BOI) has 13 members, including 3 private sector representatives: the Chairman of the Thai Chamber of Commerce and the heads of the Thai Bankers' Association and the Federation of Thai Industries (OECD, 2021[105]; IFC, 2021[24]). At least 6 of the 14 members of the board of the Malaysian Investment Development Authority are from the private sector (mainly from large private enterprises and large chambers of commerce in Malaysia), and 1 of its members is from academia (IFC, 2021[24]; MIDA, 2023[106]). Given that Lao PDR's IPA is a department of the MPI, setting up a governing board for the IPA might prove difficult. However, Lao PDR could establish an advisory board for the IPD that includes private sector representatives to advise the organisation and provide it with a strategic orientation. Such an advisory board with private sector representation could benefit from greater responsibility for providing a strategic orientation for investment policies than the CIPM and would ensure that business perspectives and interests are taken into account.

The role of other public entities in the investment process

Lao PDR's MONRE is involved in the investment process in Lao PDR through its role in EIAs and land administration and management. MONRE is the government institution responsible for policy making and regulation in the areas of natural resources and the environment. MONRE's Department of Land Allocation and Development is responsible for land management and registration, including land use planning, issuing land titles and certificates, and mapping and managing land registration. MONRE's Department of Environmental and Social Impact Assessments is in charge of reviewing and approving EIAs and for monitoring the implementation of environmental management plans (Prime Minister of Lao PDR, 2011[107]).

Line ministries are involved in the review and approval of investment projects. Investment projects in controlled business activities and concession investments require approval from line ministries ("sector authorities") before they can be granted a business licence (National Assembly of Lao PDR, 2016[98]). These ministries include the MICT, the MAF, the Ministry of Public Works and Transport, the Ministry of Education and Sports, the Ministry of Energy and Mines, and the Ministry of Health. Moreover, a large number of sectoral ministries are members of the CIPM (which is chaired by the MPI), including the Ministry of Finance (MOF), MONRE, the Ministry of Energy and Mines, the MAF, the Ministry of Labour and Social Welfare, the Ministry of Public Works and Transport, the MICT, and the Ministry of Public Security (National Assembly of Lao PDR, 2016[98]).

The National Assembly of Lao PDR has to approve investments with specific characteristics, primarily large concession investments. Investments that require the National Assembly of Lao PDR's approval include the following: PPP projects with a state equity participation of more than LAK 20 billion (approximately USD 1 million); the construction of a nuclear power plant; casino and gambling businesses; the extension of the concession term of a SEZ; businesses involving the conversion of a national reserved forest and protected forest; businesses that have a serious impact on the environment, nature and society (e.g. projects involving the diversion of a natural water flow or that would result in the resettlement of hundreds of families); and projects benefitting from special incentives (see the section on investment tax incentives) (National Assembly of Lao PDR, 2016[98]).

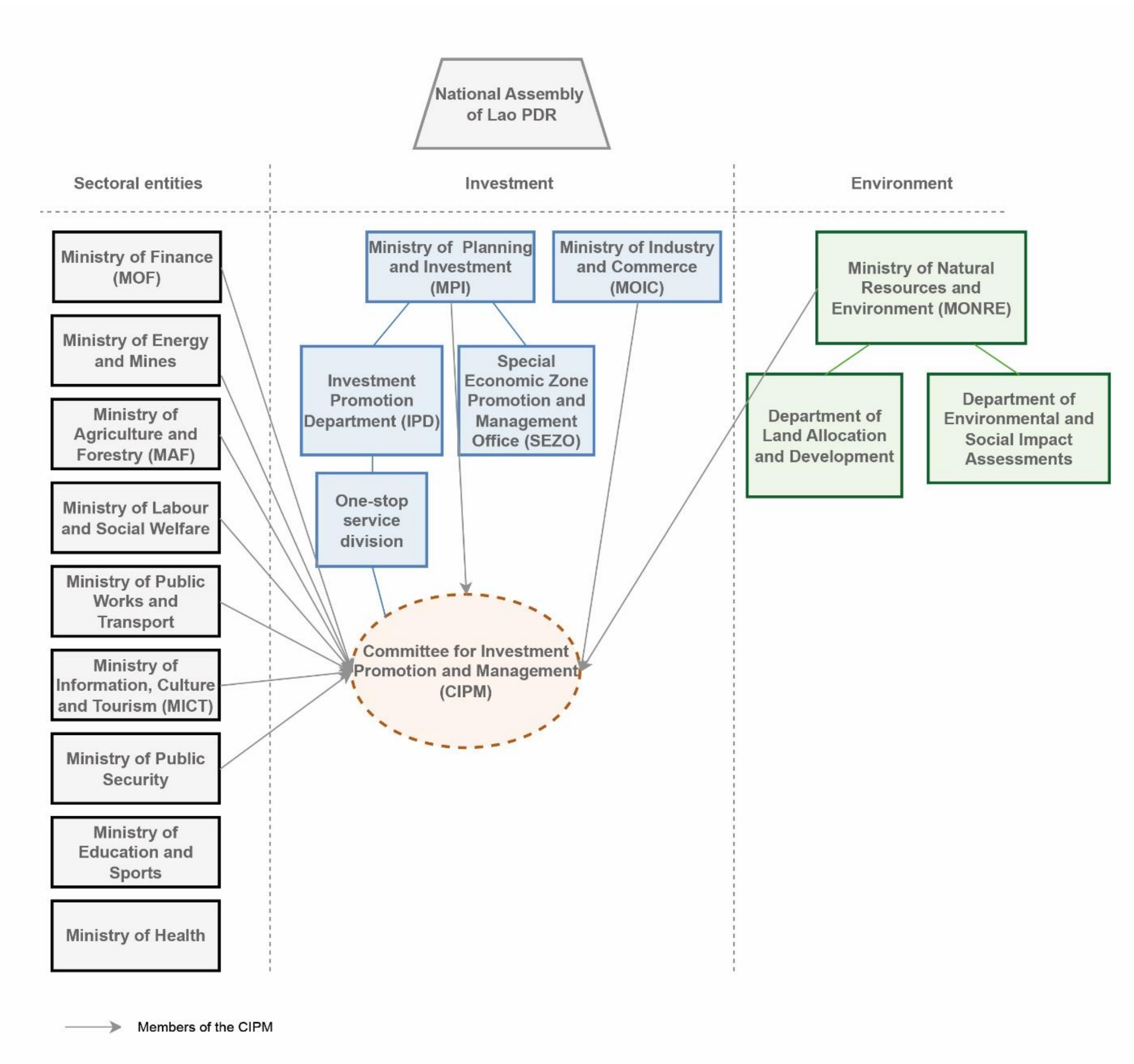
Towards better inter-institutional co-ordination and clearer multilevel governance processes

Co-ordination between institutions responsible for investment policies and those responsible for environment, tourism, land and other sector-specific policies could be improved. The MPI (and, more specifically, the IPD) aims to maximise investment in Lao PDR without giving much consideration to the negative externalities of investment projects on the environment, local communities or tourism sites. There is a lack of co-ordination and alignment of strategic objectives and priorities between the MPI and MONRE, the MICT and other sectoral ministries. On the other hand, there is also insufficient co-ordination between the MPI and MONRE's Department of Land Allocation and Development on concessions and the availability of land for concessions.

It would be beneficial to establish more formal channels for co-ordination between the MPI, MONRE, the MICT and other institutions involved in investment, environmental and tourism policies. The only formal co-ordination mechanism involving representatives of MPI as well as those of MONRE and the MICT is the CIPM, which is currently being abolished (Figure 5.15). Given these co-ordination challenges, it would be critical to either maintain the CIPM and to extend its mandate to the co-ordination of investment, environmental and tourism policies in Lao PDR and the alignment of these policies' goals, or to establish an alternative effective co-ordination mechanism for investment, environmental and tourism policies.

Figure 5.15. The only formal co-ordination mechanism between the different institutions involved in the investment process is the CIPM, which is currently being abolished

Institutions involved in the investment process in Lao PDR



Source: Authors' elaboration.

Multiple levels of government are involved in many investment processes in Lao PDR. This includes central-, provincial- and district-level government institutions. These institutions' competencies, duties and functions are not always clearly defined and sometimes overlap. For example, a large number of government institutions at the central and provincial levels are involved in the process of starting an investment project. This includes IPD offices and investment promotion and management committees at both the central and provincial levels (IFC, 2021[24]). These overlapping and sometimes conflicting rules, procedures and responsibilities across levels of government can create confusion and a complex administrative burden for investors. They can also render inter-institutional co-ordination more difficult (OECD, 2015[12]). Even though decentralisation can have important benefits, in the context of investment processes in Lao PDR, it would be important to carefully weigh these benefits against the cost of decentralisation and to consider reducing the number of levels of government involved in investment processes or to improve central level co-ordination.

Improving public-private dialogue

The Lao PDR government's main public-private dialogue platform is the Lao Business Forum (LBF). The LBF is supposed to gather government officials and representatives of the private sector to discuss options to improve the business environment in the country. It was established in 2005 with the support of the International Finance Corporation (IFC) based on the success of other public-private dialogue models, such as those in Cambodia and Viet Nam. The LBF's Secretariat is hosted at the LNCCI, the largest and most representative chamber of commerce in Lao PDR. A focal point for the public sector was established by the MOIC's Department of Planning and Co-operation and has the role of overseeing the LBF and following up on the outcomes of public-private dialogue (LNCCI, n.d.[108]; OECD, 2017[4]).

Public-private dialogue is organised through annual events, a consultation committee and working groups. The LBF organises an annual event gathering public and private sector stakeholders. Following a disruption in the organisation of these annual events in 2010 as a result of the termination of the IFC's support for the LBF, annual events resumed in 2016-17 with the technical support of the Second Trade Development Facility (TDF-2).[10] The annual forum was last organised in March 2023. In addition to this annual forum, Public Private Consultation Meetings are organised twice per year, and 15 specialised working groups convene on a regular basis; these working groups are: information and communication technology, Manufacturing, Services, Agro-processing, Handicrafts, Transportation and Logistics, Construction, Mining, Tourism, Banking and Insurance, Hydropower, State-owned Enterprises, SMEs, Businesswomen, and a cross-cutting working group (LNCCI, n.d.[108]; OECD, 2017[4]).

There is scope for improving communication between the public and private sectors in Lao PDR. The LBF's success in resolving the private sector's grievances has been limited, since it does not operate at a sufficiently high level of the public administration.[11] This is demonstrated by the choice of the public sector focal point for the LBF. In addition, access to the LBF's annual event is highly selective, and private sector participants are mainly from large enterprises, chambers of commerce and other business associations. There are few other channels for communication between the private sector and government institutions in Lao PDR. Members of the private sector are not always sufficiently consulted during the development of legislation and changes in regulations that may affect them (Village Focus International/National University of Laos, 2019[9]; CDE/University of Bern/MRLG, 2019[5]) despite the legal requirement in Lao PDR to submit laws to public consultations during the drafting and adoption process (National Assembly of Lao PDR, 2012[109]). This can lead to the adoption of laws that do not work in the local context and are difficult to implement (Village Focus International/National University of Laos, 2019[9]), as well as to frequently changing regulations, which can affect the profitability of private investments.

Going forward, it would be important to establish an effective institutionalised mechanism for public-private dialogue in Lao PDR. Lao PDR could consider reforming the LBF and providing it with stronger political backing. Alternatively, Lao PDR could create a new institution to play this role, which would be governed jointly by the public and private sectors. In Viet Nam, the Vietnam Business Forum (VBF) has a very similar structure to the LBF but is a more effective channel of communication between the public and private sectors than the LBF. Since its establishment, the VBF has gradually evolved into a fully effective mechanism for interaction between the public and private sectors in Viet Nam. This process has been facilitated by the government of Viet Nam's strong commitment to the VBF and to a constructive partnership with the business community, as exemplified by the former Prime Minister of Viet Nam's participation in the VBF (Box 5.5).

Box 5.5. Public-private dialogue in Viet Nam: The Vietnam Business Forum

In Viet Nam, the Vietnam Business Forum (VBF) serves as both a regular and high-level, not-for-profit and non-political channel of communication between the business community and the government. The VBF allows the government to involve the private sector in policy design and to collect private enterprises' feedback on issues affecting their operations. It was established in 1997 with the support of the World Bank Group. The objective was to create a platform for nurturing public-private dialogue in order to develop a favourable business environment that attracts both domestic and foreign private sector investment and stimulates sustainable economic development in Viet Nam. As of today, the VBF seeks to work with the government of Viet Nam in order to create pathways to long-term and sustainable business performance, to promote the interests of the national and international business communities in Viet Nam, and to enhance investment and trade in local and overseas markets. The VBF engages in research and legal analysis, identifies problems and provides practical solutions.

Public-private dialogue is organised primarily through high-profile biannual forums between the business community and Vietnamese leadership and through specialised sectoral Working Groups. Working Groups exist for a number of sectors, such as agri-business, automotive, banking, capital markets, customs, education and training, governance and integrity, infrastructure, investment and trade, mining, and tourism. The forums that take place every two years are co-chaired by Viet Nam's Minister of Planning and Investment, the World Bank's Viet Nam Country Director, the IFC's Country Manager for Viet Nam, and the co-chairmen of the Consortium.

The VBF Secretariat is led by the business sector. In early 2012, the co-ordination function of the VBF Secretariat was transferred from the World Bank Group to a consortium of international and local business associations and chambers of commerce. This allowed the private sector to play a bigger role in the VBF's sustainable development. The consortium is led by 5 consortium members and supported by 11 associate members, which are foreign and local business associations and chambers of commerce in Viet Nam. Viet Nam's IPA, the Foreign Investment Agency, is the VBF's contact point in the government of Viet Nam and is in charge of redirecting issues raised during the meetings to the relevant parts of Viet Nam's Ministry of Planning and Investment and other ministries.

Since 1997, the effectiveness of the VBF as a channel of communication between the public and private sectors in Viet Nam has gradually improved. Although the VBF was created more than two decades ago, members of the foreign investment community report that it is only since the WTO accession that the central government of Viet Nam consults them more systematically and is truly attentive to their concerns. WTO transparency commitments have helped through their emphasis on making draft laws and regulations readily available for public comment before they are enacted.

Public-private dialogue reached a new level beginning in 2014, when former Prime Minister Nguyen Tan Dung started participating personally in the VBF's biannual forums. The Prime Minister's participation in the biannual forums since then has been very well received by the private sector, as it sent a strong signal of the government's commitment to a constructive partnership with the business community. Since 2014, the private sector reports that it fully recognises the VBF as a useful mechanism through which to interact with the government and suggest reforms that can provide concrete results towards delivering a better business environment in Viet Nam. Thanks to the VBF, foreign investors in Viet Nam consider their ability to influence policies as one of the country's greatest competitive advantages, according to the survey of foreign-owned enterprises conducted to prepare the Provincial Competitiveness Index.

Source: (OECD, 2018[110]), *OECD Investment Policy Reviews: Viet Nam 2018*, OECD Investment Policy Reviews.

The role of investment in Lao PDR's national development plan and strategic documents

Enhancing investment quality and effectiveness has become a top priority in Lao PDR's *9th Five-Year National Socio-Economic Development Plan (2021-2025)*. The National Socio-Economic Development Plan (NSEDP) aims at maximising investment that aligns with and contributes to the plan's overarching priorities. [12] In terms of FDI, the NSEDP aims to attract more investment in the nine priority sectors defined in the 2016 Law on Investment Promotion. Priorities for FDI are encouraging more technology transfers and innovation, import substitution, and labour-intensive FDI, thus creating a large number of jobs. Another goal of the NSEDP is promoting PPPs for large-scale transportation infrastructure, energy, education and health projects, specifically capital-, technology- and innovation-intensive projects. The 9th NSEDP puts a stronger emphasis and focus on enhancing the quality of investment and attracting more quality investment than the 8th NSEDP did (Government of Lao PDR, 2021[111]).

The 9th NSEDP includes several references to enhancing the contribution of private investments to environmental protection and sustainability. It mentions the importance of "improving legislation and management of the use of land and natural resources to ensure the sustainability of investment projects" (Government of Lao PDR, 2021[111]). The NSEDP also aims at increasing the participation of private investors in the conservation and restoration of forests and at expanding commercial tree plantations as a means to regenerate forests in order to achieve 70% forest cover, however, the definition remains to be clarified (FAO, 2021[112]). It also targets the expansion of ecotourism and the development of sustainable and organic agriculture, and particularly crop rotation in order to reduce soil degradation, as well as limiting the cultivation of monoculture crops or growing a single crop for an extended period of time (Government of Lao PDR, 2021[111]).

In recent years, there has been an increasing focus on green growth and environmental protection in Lao PDR within and beyond the 9th NSEDP (Sylvester, 2018[8]). The 9th NSEDP aims to enhance environmental protection and sustainability in the use and management of natural resources. It includes a 70% target for forest cover by 2025 (Government of Lao PDR, 2021[111]). Moreover, Lao PDR published the *National Green Growth Strategy of the Lao PDR till 2030* in 2018, which defines green growth in the context of Lao PDR as "raising the efficiency, effectiveness and sustainability of the utilization of limited natural resources" (Government of Lao PDR, 2018[113]) and sets green growth objectives for different sectors and policy areas. In addition, Lao PDR's MAF has published a *Green and Sustainable Agriculture Framework for Lao PDR to 2030* (MAF, 2021[114]).

In order to attract more private investment, the 9th NSEDP (2021-2025) has a strong focus on improving procedures and regulations for doing business in Lao PDR. This includes the implementation of the 2018 Prime Minister's Order on Improvement of Regulations and Co-ordination Mechanism on Doing Business in Lao PDR and the 2020 Prime Minister's Order on the Improvement of Services Related to the Issuance of Investment and Business Licenses. The 2018 Prime Minister's Order aims to improve procedures and regulations for doing business and to make concrete progress in the ten indicators of the World Bank's ease of doing business index. The 2020 Prime Minister's Order aims to simplify the process for issuing investment and business licences and to make this process more transparent and uniform (Government of Lao PDR, 2021[111]; Prime Minister of Lao PDR, 2018[115]).

Going forward, it would be important to focus on improving the business environment in Lao PDR beyond reducing red tape and the World Bank's former ease of doing business index. In the past, the World Bank's ease of doing business index (which was discontinued in 2021) was widely used by businesses worldwide as a first reference point against which to evaluate a country's business climate. However, it captures only part of what makes a good investment climate, and less regulation is not always better than more regulation (Thomsen, 2019[116]). Improving the enabling environment for investors – including the availability of skills, access to land, governance and transportation infrastructure – should be the Lao PDR government's top priority.

Legal and regulatory framework for investment

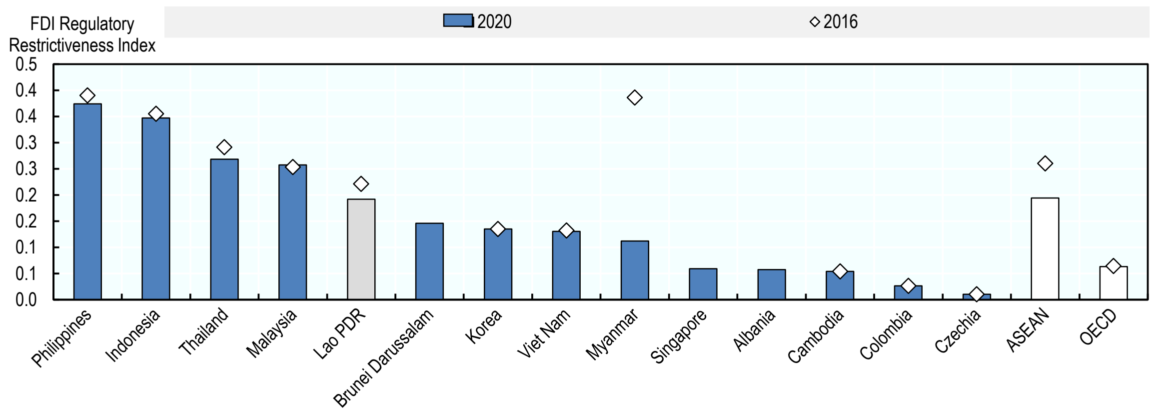
Lao PDR's Law on Investment Promotion provides the legal framework for foreign and domestic investment and provides investors with a number of safeguards and rights. The Law on Investment Promotion Law underwent a reform in 2016, which improved the law significantly (OECD, 2017[4]). In line with best practices, Lao PDR's Law on investment Promotion covers both domestic and foreign investment under the same umbrella. This limits the risk of treating foreign and domestic investors unequally and sends a positive signal to investors. The law gives investors guarantees that they are allowed to invest, manage business operations and hire employees, and provides them with a right of residence and free repatriation of capital. It also contains a provision protecting against unlawful expropriation, as well as a dispute settlement provision (Part X) (OECD, 2017[4]; National Assembly of Lao PDR, 2016[98]).

The Law on Investment Promotion would benefit from the addition of further details and the provision of clarity on the guarantees for investors and the role of the IPD. The law does not contain an explicit principle of non-discrimination, but only provides an implicit reference to the equality of foreign and domestic investors. Moreover, the provision against expropriation remains relatively broad and vague, and would benefit from the addition of more details with regard to indirect expropriation. The Law on Investment Promotion does not provide the IPD with a clear mandate to conduct investment promotion activities and could more clearly describe the role and core functions of the IPD, such as image building, investment generation, investment facilitation, aftercare and policy advocacy. A more solid legal framework could strengthen the IPD and avoid inefficiencies (OECD, 2017[4]; National Assembly of Lao PDR, 2016[98]; IFC, 2021[24]).

In terms of investment restrictions, Lao PDR is generally aligned with its ASEAN peers but is more restrictive than OECD member countries under the OECD FDI Regulatory Restrictiveness Index. It maintains greater restrictions on foreign investment than most countries other than the Southeast Asian region (Figure 5.16). Lao PDR does not maintain foreign ownership ceilings or require local equity participation outside of controlled sectors; locally incorporated enterprises may be fully foreign-owned (Article 27 of the Law on Investment Promotion). The 2016 amendment to the Law on Investment Promotion had abolished the remaining minimum capital requirements for foreign investors which had existed under the previous Law on Investment Promotion from 2009 (OECD, forthcoming[23]; National Assembly of Lao PDR, 2016[98]). However, minimum capital requirements exist for many sectors that fall under the category of controlled business activities, including tourism, transportation and logistics, and manufacturing (MOIC, 2015[117]; OECD, forthcoming[23]). In addition, Lao PDR restricts some activities to Laotian natural or legal persons, including certain activities within the forestry, manufacturing, energy and tourism sectors (MOIC, 2015[118]; OECD, forthcoming[23]).

Figure 5.16. Lao PDR has a similar level of FDI restrictions as ASEAN Member States on average, but is generally more restrictive than OECD countries

OECD FDI Regulatory Restrictiveness Index, 2016 and 2020



Note: 0 = open; 1 = closed. No data were available for Albania, Brunei Darussalam or Singapore for 2016.
Source: (OECD, 2024[119]), *FDI restrictiveness*, https://doi.org/10.1787/c176b7fa-en (accessed on 20 September 2023).

StatLink https://stat.link/d7zc8s

Towards a more transparent, clear and predictable regulatory framework for investment and an independent and effective judiciary

In order to attract more sustainable investment, Lao PDR requires a more stable, predictable, clear and consistently applied set of policies, rules and regulations. A fair, transparent, clear and predictable regulatory framework for investment is a critical determinant of investment decisions and their contribution to development. It is especially important for foreign investors who may have to function within regulatory systems, cultures and administrative frameworks that are very different from their own. Uncertainty about the enforceability of lawful rights and obligations can raise the cost of doing business, thereby weakening enterprises' competitiveness and reducing the level of investment (OECD, 2015[12]; ECCIL, 2022[22]).

It would be important to better align different laws and regulations with each other and to apply laws and regulations more consistently. In Lao PDR, new laws and regulations are not always aligned with existing ones, and regulations adopted by the provinces are not always consistent with national-level regulations. This can lead to the inconsistent and uneven application and enforcement of these laws and regulations across administrative bodies and provinces; for example, investors complain about the variable interpretation of the Law on Investment Promotion in Lao PDR. In other cases, new regulations are not applied due to public agents lacking the information or training necessary in order to properly apply them. Another challenge is that regulations change frequently without advance notice to, or consultation with, private investors. This can create uncertainty for investors and discourage investment (OECD, 2017[4]; ECCIL, 2018[59]; Sylvester, 2018[8]).

It would also be beneficial to accelerate the implementation of newly adopted laws and regulations and to enhance the clarity of laws and regulations. This could strengthen the predictability of Lao PDR's regulatory framework for investment. The adoption of secondary legislation for the implementation of new laws in Lao PDR is frequently delayed. This can create confusion about the timing of the implementation of new laws among both investors and government authorities. The lack of clarity and the ambiguity of many laws and regulations can, in turn, favour discretionary decision making and create opportunities for corruption (see the section on legal and regulatory framework). These challenges can ultimately discourage investment (OECD, 2017[4]; ECCIL, 2018[59]; Sylvester, 2018[8]).

In order to tackle these challenges, first and foremost, it would be important to strengthen the independence of Lao PDR's judiciary and the effectiveness of its court system. Good dispute resolution mechanisms enhance predictability in commercial relationships by assuring investors that their contractual rights will be upheld promptly. When disputes cannot be resolved in a timely and cost-effective manner, enterprises may restrict their activities (OECD, 2015[12]). The court system plays a fundamental role in enforcing contracts and in settling disputes both among private actors and between an investor and the state. The efficiency, effectiveness, integrity and independence of the courts are important considerations for all investors (OECD, 2015[12]). Lao PDR's judiciary is not endowed with sufficient capacity to efficiently deal with commercial disputes. It also suffers from a lack of independence and autonomy from the executive power, and the reasoning behind judgments and the availability of appeals mechanisms are not always clear. For example, it can be difficult to challenge the destruction of commercial property in court. In addition, administrative decisions cannot be challenged before an independent body or court; for example, there are no dispute resolution mechanisms for disputes between investors and the MPI other than contesting decisions before the MPI itself. Only foreign investors that are covered by the provisions of bilateral investment treaties have recourse to international arbitration in order to solve their disputes against the government of Lao PDR (OECD, 2017[4]).

It would also be important to strengthen Lao PDR's infrastructure for commercial arbitration, which suffers from several shortcomings. As a result of the challenges linked to Lao PDR's court system, investors tend to favour non-judicial means of dispute settlement, including arbitration, mediation and conciliation (OECD, 2017[4]). The Law on the Resolution of Economic Disputes (which was amended in 2018) governs mediation and arbitration mechanisms in Lao PDR (Bhamra, 2019[120]). The institution in charge of implementing arbitration and mediation mechanisms is the Economic Dispute Resolution Centre (EDRC), which is part of the Ministry of Justice and was created in 1995. The EDRC's arbitrators are appointed by the Ministry of Justice. However, the EDRC lacks capacity in terms of human and financial resources, skills and knowledge, and autonomy as a fully integrated part of the Ministry of Justice. It is more similar to a first instance dispute resolution body than to a fully fledged arbitration body, since it is mandatory to go to the EDRC in order to solve economic disputes through arbitration before being allowed to go to the courts or international arbitration. Going forward, access to and the quality of arbitration in Lao PDR could be improved by creating a private arbitration body (OECD, 2017[4]).

A set of other measures and policy and regulatory approaches could also improve the quality of Lao PDR's regulatory framework for investment and strengthen implementation. This includes consulting with interested stakeholders, simplifying and codifying legislation, drafting in clear and concise, developing registers of existing and proposed regulations, and expanding the electronic dissemination of regulatory material. The effective implementation of Lao PDR's regulatory framework for investment could be improved by ensuring that officials responsible for applying regulations have adequate credentials, are well-trained and provided with fair salaries, and have sufficient resources for carrying out their tasks. Officials should be fully accountable for their actions, particularly those involving discretionary decision making (OECD, 2015[12]).

Simplifying the process for starting an investment project in Lao PDR

The 2016 Law on Investment Promotion defines two types of investments: (i) general activities; and (ii) concession investments. Concession investments are defined as "concessions of land, the development of special economic zones, zones for industrial processing for export, mining, electricity generation and transmission, aviation and telecommunications" in the Law on Investment Promotion (Article 41) (National Assembly of Lao PDR, 2016[68]; OECD, forthcoming[23]), and more details are provided in Annex 2 of the Controlled Business List Decree adopted in 2019 (Prime Minister of Lao PDR, 2019[121]). Infrastructure development through PPPs also falls into this category (National Assembly of Lao PDR, 2016[68]; OECD, forthcoming[23]).

General activities are subdivided into two categories: (i) business activities under the controlled business list; and (ii) business activities outside the controlled business list. Controlled business activities are defined as activities that have an impact on Lao PDR's "national security, public order, national fine tradition and environment, society and nature" (Article 34 of the Law on Investment Promotion) (National Assembly of Lao PDR, 2016[68]; OECD, forthcoming[23]). The complete list of controlled business activities is set out in Annex 1 of the Controlled Business List Decree (Prime Minister of Lao PDR, 2019[121]). It includes agriculture and forestry, mining, waste management, air transportation, accommodation (hotels), media, and financial activities, among others (Prime Minister of Lao PDR, 2019[121]).

There are three different processes for obtaining an investment licence in Lao PDR depending on the type of investment. The MOIC is responsible for granting investment licences for projects in uncontrolled business activities. This process is governed by the 2013 Enterprise Law, and the same terms apply to both foreign and domestic investors. The approval of both controlled business activities and concessions follows a multilevel approval process involving both central and local- or provincial-level authorities. The one-stop service division in either the IPD's central office or provincial office, depending on the size and location of the investment project, is responsible for granting investment licences to concessions and projects in controlled business activities. Concession investments become effective upon the signing of a concession agreement between the investor and the Lao PDR government (National Assembly of Lao PDR, 2016[68]; OECD, forthcoming[23]). For controlled business activities, upon the clearance of the enterprise registration and the receipt of its investment licence, the investor is required to obtain specific business licences from sectoral agencies and authorities in order to carry out the controlled activity (Prime Minister of Lao PDR, 2019[121]). These licences need to be renewed annually (ECCIL, 2022[22]). Investments in SEZs are directly approved either by the SEZ management authority or by the IPD for a number of business activities for which the SEZ management authority cannot give approval (Government of Lao PDR, 2018[102]). In addition, investments with specific characteristics – generally large concession investments – require the National Assembly of Lao PDR's approval.

Lao PDR's institutional and regulatory framework for starting an investment project is complex and involves a large number of institutions. This can create confusion for investors, as well as inefficiencies. Deadlines are not always respected and delays are reported to be frequent. Investors are supposed to obtain their business licence from the MOIC within 10 working days for investments in uncontrolled business activities, within 25 working days for controlled business activities and within 65 working days for concessions. The deadline is usually met for uncontrolled business activities; however, for those projects requiring consultation with and approval from line ministries, the process can take much longer and lacks transparency (OECD, 2017[4]).

Going forward, it would be important to simplify Lao PDR's institutional and regulatory framework for starting an investment project. It would be beneficial to combine the responsibility for issuing business licences for different types of investments under the umbrella of a single institution in order to reduce the number of institutions involved in the process of obtaining an investment licence and to streamline the consultation and approval process with line ministries. This could speed up the process, enhance efficiency, increase transparency and solve co-ordination problems between entities (IFC, 2021[24]; OECD, 2017[4]). In addition, the long list of controlled business activities could be shortened to a small number of strategic sectors subject to screening – for example, sectors related to national security interests. At the same time, the list of uncontrolled business activities, which remains incomplete and excludes many innovative business activities, could be entirely removed. This could simplify the process of starting an investment project in a large number of sectors. It would also be important to regularly review and update these lists (ECCIL, 2022[22]; IFC, 2021[24]).

Enhancing the implementation of social and environmental safeguards

The Law on Investment Promotion contains detailed social and environmental obligations for investors. Article 73 is fully dedicated to investors' social obligations, and Article 74 is fully dedicated to environmental obligations. Environmental obligations include compliance with environmental standards and prioritising the protection of the environment, redressing any environmental damage incurred, respecting the environmental obligations set out in international treaties to which Lao PDR is a party and contributing financially to environmental protection. Social obligations include the implementation of social security schemes for employees, respecting and supporting worker organisations such as unions, respecting local customs, compensating those affected by business operations, promoting local businesses and the development of the localities where the businesses are located, and contributing financially to social development (National Assembly of Lao PDR, 2016[98]). These obligations are more detailed than what is commonly included in investment laws (OECD, 2017[4]).

In addition to these detailed social and environmental obligations, the Law on Investment Promotion contains several other provisions that encourage sustainable investment. The law's objective is defining principles, regulations and measures for foreign and domestic investment promotion and administration "in line with green growth and sustainability" (Article 1) (National Assembly of Lao PDR, 2016[98]). In addition, "Protecting and utilizing natural resources effectively in compliance with the policy of green growth and sustainability" (Article 5) (National Assembly of Lao PDR, 2016[98]) is one of the principles for investment promotion. "Business having serious impact on environment, nature and society, for instance, a diversion of a natural water flow, a resettlement of five hundred families or more, a concession of land of ten thousand hectares or more" and "business involving the conversion of a national reserved forest and protected forest" (Article 49) (National Assembly of Lao PDR, 2016[98]) require the National Assembly of Lao PDR's approval . Provincial People's Assemblies have to approve smaller projects and concessions of degraded forest land (National Assembly of Lao PDR, 2016[98]). The 2016 Law on Investment Promotion also includes clearer mechanisms for dispute resolution (Part X) and for monitoring (Part XI) than the previous Law on Investment Promotion from 2009 (Sylvester, 2018[8]; OECD, 2017[4]).

Environmental impact assessments

Two types of environmental impact studies exist in Lao PDR: comprehensive environmental impact assessments (CEIAs) and preliminary environmental impact assessments (PEIAs) (Government of Lao PDR, 2022[122]). Investment projects with little or no impact on the environment – generally smaller projects, such as small power plants, mining activities on a small scale in rivers, or laboratories and scientific research activities – require PEIAs, whereas investment projects that have a significant impact on the environment – generally larger projects, such as large power plants, large mining projects and large infrastructure projects – require CEIAs (Article 9). Instruction No. 358 by MONRE provides detailed lists of project characteristics by sector (energy, mining, agriculture and forestry, manufacturing, infrastructure, and laboratories and research) subject to PEIAs and CEIAs (Ministry of Natural Resources and Environment, 2023[123]). Upon approval of PEIAs and CEIAs, investors receive an environmental certificate. Public participation is mandatory for both PEIAs and CEIAs in all three project stages: preparation and planning, construction and operation, and project conclusion (Government of Lao PDR, 2022[122]).

Both CEIAs and PEIAs are governed by the Environmental Impact Assessment Decree and fall within the responsibility of MONRE. This decree (No. 389) was reformed most recently in 2022 (Government of Lao PDR, 2022[122]). The 1999 Environmental Protection Law (No 29/NA), which was revised in 2012, provides the legal basis for the Environmental Impact Assessment Decree and lays out the framework for national safeguards that help mitigate the impacts of investment in natural resources (OECD, 2017[4]). MONRE is the government institution responsible for the overall environmental impact assessment regulation, for reviewing and approving PEIAs and CEIAs, and for issuing environmental certificates (Government of Lao PDR, 2022[122]).

MONRE and project owners are both responsible for the monitoring and inspection of environmental aspects of investment projects. Project owners must report the results of regular inspections to MONRE and line ministries, and detailed reporting intervals are laid out in environmental certificates. Accidents causing serious damage to the environment must be reported within 24 hours. In addition, MONRE conducts regular inspection visits two to four times per year. For complex projects, Environmental Management Unit of MONRE is used in the field for inspection and monitoring and is composed of representatives of MONRE and the institutions responsible for investment, as well as specialist foreign and domestic experts from the public and private sectors (Article 55). The project owner is responsible for covering the cost of this unit. The reformed Decree on Environmental Impact Assessment (No. 389) also introduces Article 56, which provides clarity on the fee that project owners must pay to MONRE for monitoring and inspection activities (Government of Lao PDR, 2022[122]).

The 2022 reform of the Decree on Environmental Impact Assessment has reduced the delays in reviewing and approving CEIAs and PEIAs. During the latest reform of the Environmental Impact Assessment Decree in 2022, Lao PDR significantly shortened the delays in government authorities' review of EIAs and PEIAs that are submitted by investors, from 40 to 25 days for PEIAs and from 90 to 50 days for PEIAs for normal projects, and from 120 to 80 days for PEIAs for complex projects. Delays for other EIA- and PEIA-related procedures, such as verifying the completeness of the documents submitted, were shortened as well (Government of Lao PDR, 2022[122]). Although this measure reduces red tape and could have a positive impact on the business environment, there is a possibility that these shorter delays for reviewing and approving EIAs could further reduce the rigour of reviews and the effectiveness of the review process if they are not combined with improvements in MONRE's capacity for planning, implementing and monitoring EIAs.

The revised Environmental Impact Assessment Decree would benefit from more clarity for the committee approving complicated CEIAs, and from the addition of information on dispute resolution mechanisms. The decree introduces a MONRE-appointed, non-permanent Review Committee for complicated CEIAs for complex projects, which consists of experts, stakeholders, legal entities, and public and private institutions (see Chapter 6). However, the decree remains rather vague on the composition of this Review Committee, leaving much discretion to MONRE in appointing the members. Finally, the section on dispute resolution was removed from the revised decree, thereby reducing clarity on the available options and legal measures that investors can take in the case of disputes concerning EIAs (Government of Lao PDR, 2022[122]).

While the preparation of PEIAs has been reformed recently, removing the remaining restrictions on CEIA preparation could enhance the quality of these assessments. Prior to the 2022 reform of the Environmental Impact Assessment Decree, both PEIAs and CEIAs had to be developed by a licensed technical service provider. According to the 2022 Environmental Impact Assessment Decree, PEIAs can be carried out by the project owners themselves or by a technical service provider, but CEIAs must be carried out by an environmental service provider licensed by MONRE (Article 58) (Government of Lao PDR, 2022[122]). In practice, this change for PEIAs has only been implemented on a pilot basis for projects in tourism and. However, while this change facilitates the PEIA process, CEIA preparation remains restricted to environmental service providers that are licensed by the government of Lao PDR. At present, there are only five licensed environmental service providers, and new licences are not available from the government. This creates an oligopoly in Lao PDR's CEIA market and does not encourage quality CEIAs or the respect of best practices because it means that many international EIA experts are excluded from the market.

Those projects that are funded by international financial institutions and donors generally take the EIA process very seriously. In most cases, they are required to comply with international environmental safeguard standards, which are stricter than Laotian standards (OECD, 2017[4]). This includes projects in the energy sector, such as hydropower dams and, more recently, a 600 MW wind park on the border between Lao PDR and Viet Nam, which was financed by several international financial institutions and donors, including the ADB, the Canadian Climate Fund for the private Sector in Asia, and other private investors and development finance institutions (ADB, 2023[41]).

However, there is scope to better enforce the EIA process among other private investors. It is reported that many investors that do not rely on financing from international donors or financial institutions treat EIAs as a bureaucratic hurdle rather than an obligation that must be met (Village Focus International/National University of Laos, 2019[9]; OECD, 2017[4]). A study from 2019 by the University of Bern found that fewer than 10% of agricultural investment projects and only 43% of commercial tree plantation projects in Lao PDR have carried out EIAs. Moreover, it found that 70% of EIAs were prepared after land had already been cleared (CDE/University of Bern/MRLG, 2019[5]). In addition, there is often scope to improve the quality of EIA reports (Village Focus International/National University of Laos, 2019[9]; Yong, 2022[6]), and anecdotal evidence suggests that in some cases, EIAs are copied and pasted from international reports available online. Public decision making in the EIA process is often not meaningful and is treated as a rubber stamp by both government institutions and investors (Yong, 2022[6]; Yong, 2023[10]).

Better environmental monitoring and inspection of investment projects could improve the enforcement and implementation of EIAs. In order to improve the monitoring and inspection of investors' environmental obligations, MONRE requires qualified skills and increased human, financial and institutional capacity. MONRE's district offices frequently lack sufficient monitoring tools and technologies, such as equipment for testing soil, water or air quality. One of the reasons for this lack of resources is that, despite the provisions in the Environmental Impact Assessment Decree, few investors contribute to the state budget for monitoring (Village Focus International/National University of Laos, 2019[9]). In addition, the significant role that project owners play in monitoring their environmental obligations, combined with MONRE's lack of resources for monitoring and inspection create moral hazard problems (OECD, 2017[4]). Enterprises frequently do not act upon environmental hazards in the absence of inspection visits or government instructions (Village Focus International/National University of Laos, 2019[9]). MONRE's lack of capacity, skills and experience in environmental management is more pronounced for mining projects than it is in the energy sector. In the energy sector, projects financed by international institutions have demonstrated good environmental safeguards, but this is not the case in the mining sector (OECD, 2017[4]).

Regulations to limit the negative environmental and social impacts of agriculture, forestry and mining

In the past, in order to limit the negative environmental impacts of investments, Lao PDR has banned or placed temporary moratoria on the cultivation of certain commercial crops and on the extraction of certain minerals. For example, a Prime Minister's Order in 2007 banned new concessions for mineral exploration and tree plantations larger than 100 ha. In 2012, a Prime Minister's Order (No. 013) placed a moratorium on new rubber and eucalyptus plantations and concessions for certain minerals. In 2017 a Prime Minister's Order (No. 483) banned expansion of and investment in new banana plantations in six northern provinces, while in July 2018, a Prime Minister's Order lifted this ban on the expansion of organic banana plantations. Lastly, in 2016, a Prime Minister's Order banned timber exports (Village Focus International/National University of Laos, 2019[9]; Sylvester, 2018[8]; CDE/University of Bern/MRLG, 2019[5]).

However, such bans and moratoria can create uncertainty for investors and do not always have the expected positive impacts on the environment. They create an unpredictable, restrictive and confusing legal and regulatory landscape for investors, thereby discouraging investment in sustainable agriculture. In addition, these bans and moratoria can sometimes do more harm than good to the environment. For example, in 2016-17, following the Prime Minister's Order prohibiting investment in banana plantations, some banana investors quickly left the industry without repairing the environmental damage that they had caused to the soil and water, leaving behind degraded land and large quantities of waste. Moreover, local communities suddenly lost their sources of income and did not always receive their final payments from their employers. Although the ban on timber exports reduced illegal logging and unsustainable forestry practices, enterprises exporting processed wood experienced lengthy delays at customs because officials were uncertain whether their products fell under the restriction (Village Focus International/National University of Laos, 2019[9]).

Investment promotion

Lao PDR has developed a proactive policy to promote and facilitate FDI in the country. This includes the establishment of a dedicated investment promotion agency, the IPD, in 2004. The IPD has developed a website with pertinent information for investors, most notably information on laws, regulations and business procedures in Lao PDR. Moreover, Lao PDR has recently adopted several decrees to simplify regulatory procedures and reduce red tape. This includes the 2018 Prime Minister's Order (02/PM) on Improving Regulations and Co-ordinating Mechanisms for Doing Business in Lao PDR and the 2020 Prime Minister's Order (No. 03/PM) on the Improvement of Services Related to the Issuance of Investment and Business Licenses (Government of Lao PDR, 2021[111]; Prime Minister of Lao PDR, 2018[115]). Lao PDR has also established more than 20 SEZs since 2003 and offers qualifying investors in SEZs and other investment zones a set of tax incentives (see the section on investment tax incentives).

There remains scope to further improve investment promotion and facilitation policies in Lao PDR. In a survey on investment facilitation conducted by ASEAN in ASEAN Member States, less than 20% of enterprises interviewed in Lao PDR rated investment facilitation services as either satisfactory or exceeding expectations, compared with between 60% (in Cambodia) and 100% (in Singapore) of investors in other ASEAN Member States. Similarly, close to 90% of enterprises in Lao PDR indicated that there was room for improvement in investment facilitation services compared with approximately 15% (in Indonesia) to 40% (in Cambodia and Malaysia) of enterprises in other ASEAN Member States (ASEAN/UNCTAD, 2022[124]).

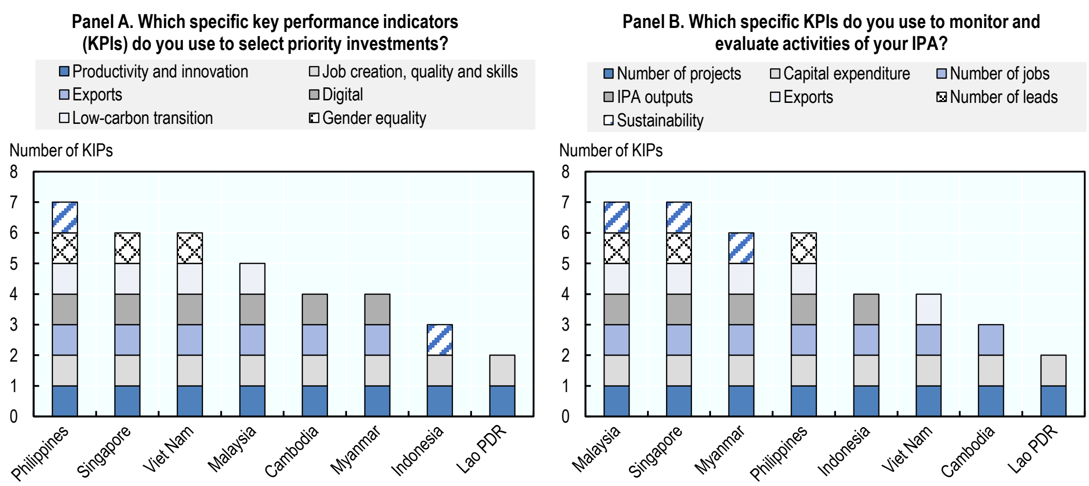
Despite significant differences across countries, in most cases, IPAs perform five key functions: (i) image building, which involves promoting a positive image of the host country and branding it as a profitable investment destination; (ii) investment generation deals, with direct marketing techniques targeting specific industries, activities, enterprises and markets in line with national priorities; (iii) investor servicing, which focuses on providing support to prospective investors in order to facilitate the establishment phase of their projects; (iv) aftercare, which aims to retain established enterprises and encourage reinvestments by proactively responding to investors' needs and challenges after enterprises have been established; and (v) policy advocacy, which includes identifying bottlenecks in the investment climate and providing recommendations to the government on how to address them (OECD, 2017[4]).

Although Lao PDR's Law on Investment Promotion defines investment promotion, it would benefit from including more detailed information on the five key functions of IPAs. Investment promotion is defined as "the formulation of promotion policies and the creation of a favourable investment climate to enable investors to conduct their business in a convenient, expeditious, transparent, fair and lawful manner" and as "[…] formulating policies to create a favourable investment climate, including construction of infrastructure, providing necessary information, granting incentives in terms of custom duty, tax, import of foreign labour, and the land use rights, access to finance […]" (National Assembly of Lao PDR, 2016[98]).

The IPD's activities in the area of investment promotion focus on image building. They include advertising, running public relations campaigns, disseminating brochures, participating in fairs and forums, and developing its website. Proactive investor targeting and lead generation activities targeting specific industries, markets and investors remain relatively limited (OECD, 2017[4]). Moreover, Lao PDR does not have an official investment promotion strategy. The IPD also lacks sufficiently detailed and up-to-date information and statistics on target sectors and activities in different geographic areas and on investment opportunities.

The IPD would benefit from more KPIs for both selecting priority investments and evaluating its performance. The KPIs used for selecting priority investments are linked to productivity and innovation and to job creation, quality and skills (Figure 5.17, Panel A). The KPIs used for evaluating the performance of the IPD include the number of enterprise registrations with the MOIC, the number of investment licences issued by the MPI and the number of investment licences issued in SEZs, as well as the amount of investment capital stated in those licences and in data from the Bank of the Lao PDR on foreign capital inflows (Figure 5.17, Panel B). In comparison with IPAs in other ASEAN member states, Lao PDR's IPA uses KPIs linked to few sustainability dimensions, both for selecting priority investments and for evaluating its activities. The IPD does not use any KPIs linked to environmental sustainability (OECD, 2023[125]).

Figure 5.17. Lao PDR figures among those ASEAN Member States with the fewest KPIs for selecting priority investments and for evaluating the activities of their IPAs



Source: (OECD, 2023[125]), *Survey on IPA Monitoring & Evaluation and Prioritisation for ASEAN Member States* (accessed on 22 September 2023).

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Going forward, it would be important for Lao PDR to adopt a clear and coherent inward investment promotion strategy and to enhance the IPD's institutional capacity. Such a strategy should include clear objectives, activities, and monitoring and evaluation indicators, and be aligned with national economic development priorities. The IPD would also benefit from more and better human and financial resources and technical and managerial skills, particularly with regard to investor targeting and lead generation (OECD, 2017[4]). In addition, sufficient empowerment could enable the IPD to take a stronger role in co-ordinating responsibilities with other institutions involved in the investment process (IFC, 2021[24]). Costa Rica's export promotion agency, Promotora de Comercio Exterior oficial de Costa Rica (PROCOMER), is one example of an IPA that has successfully implemented changes to its methods, strategy and organisation that have enhanced the agency's efficiency and effectiveness in investment promotion and facilitation (Box 5.6).

Box 5.6. Efficiency-enhancing changes to the strategy, methods and organisation of PROCOMER, Costa Rica's export promotion agency

In 2010, changes to the strategy, methods and organisation of PROCOMER, Costa Rica's export promotion agency, greatly improved the institution's effectiveness and efficiency. The government of Costa Rica appointed a businessman from the private sector as Chief Executive Officer of PROCMER in 2010 who had no previous experience from policy making, political or policy studies. Until this appointment, no investment promotion frameworks or related goals had existed, but shortly afterwards PROCOMER produced its first strategic plan to attract investments, with updates planned to take place every two years thereafter. PROCOMER was reorganised with a strong emphasis on monitoring and accountability; the development of KPIs for every department, programme and person within the institution; and extensive use of information technology in order to modernise management, including a customer relationship management system, enterprise resource planning for management and financial purposes, and web-based training tools for PROCOMER's staff and its customers.

Improvements in PROCOMER's efficiency were facilitated by strengthening its human resources and improving its co-ordination with other public institutions. The agency gained enough administrative, political and financial independence to employ staff with the right skills. In particular, mastery of English and formal training in project management were established as requirements. In addition, the metric for job performance evaluation changed. A set of nine different indicators are now used in order to evaluate the success of a project and the performance of the staff involved. These indicators include customer satisfaction, volume of transactions, development of suppliers and fundraising for new projects. PROCOMER also enhanced co-ordination with other public institutions, including other ministries, the Chamber of Commerce of Costa Rica and educational institutions.

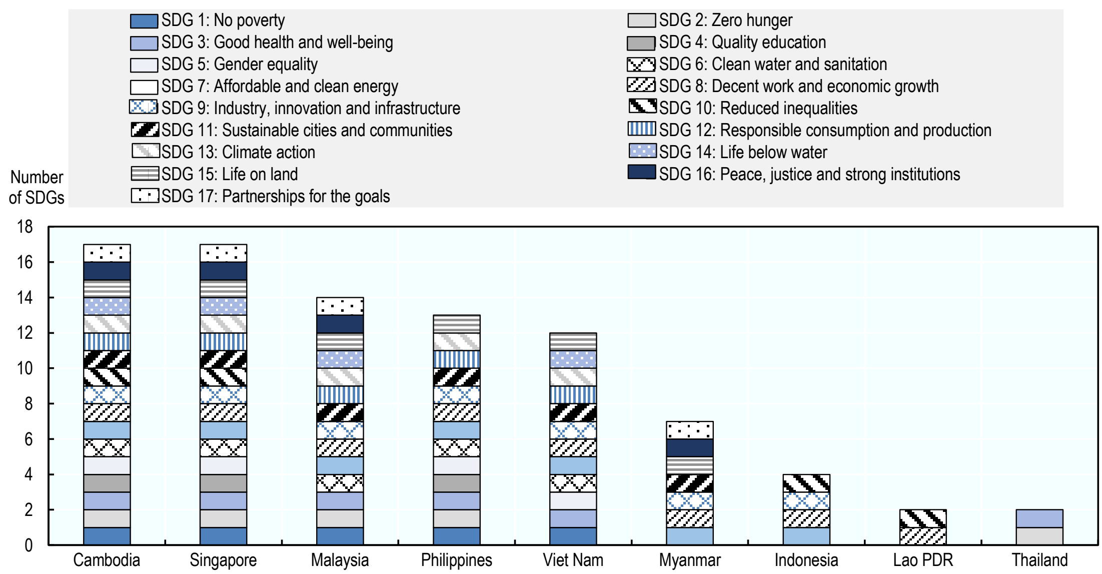
Source: (OECD, 2020[126]), *Multi-dimensional Review of Viet Nam: Towards an Integrated, Transparent and Sustainable Economy*, OECD Development Pathways, based on (OECD/UNIDO, 2019[30]), *Integrating Southeast Asian SMEs in Global Value Chains Enabling Linkages with Foreign Investors* and (Dal Bó et al., 2018[127]), *Building Capabilities for Productive Development*.

It would also be important to concentrate investment promotion efforts on Lao PDR's priority investment sectors, which have attracted little investment in the past. These priority sectors are high and modern technology; clean agriculture; environmentally friendly agro- and forestry processing and handicrafts; cultural and historical tourism and ecotourism; education; healthcare; infrastructure; banking and microfinance focusing on poverty reduction; and modern commercial trading centres (IPD, n.d.[128]; National Assembly of Lao PDR, 2016[98]). According to the results of a survey conducted across all ASEAN member states, investment priorities in Lao PDR are mainly motivated by each country's political agenda, the UN's Sustainable Development Goals (SDGs), and the results of previous monitoring and evaluation activities (OECD, 2023[125]). However, despite these investment priorities, FDI flows to Lao PDR have been largely concentrated in mining and hydropower in the past. More targeted investment promotion efforts – including investor targeting and lead generation, as well as providing potential investors with more detailed information on investment opportunities – could help attract more investors in these target sectors.

It would be beneficial to increase environmental and social sustainability efforts in investment promotion in Lao PDR. At present, the environmental and social sustainability of investment projects seems to play only a minor role in the process of allocating business licences in Lao PDR, and investment projects are rarely stopped as a result of their environmental impact.[13] This is reflected in the IPD's contribution to the SDGs: the IPD believes that it contributes to fewer SDGs than most other IPAs among the ASEAN member states (Figure 5.18). Going forward, in the process of developing an inward investment promotion strategy for Lao PDR, it would be important to ensure that such a strategy articulates the government's vision for the contribution of investment to environmental protection and social development. In addition, an investment promotion strategy should set goals and identify priority policy actions in order to maximise the contribution of FDI to environmental protection and social development and to minimise negative environmental impacts. The IPD could also better tailor its activities in order to attract more investment in its priority sectors by, for example, improving its lead generation activities. Several of the IPD's priority sectors do advance environmental and social goals, but investment in these sectors remains limited (OECD, 2022[11]).

Figure 5.18. Lao PDR's IPA believes that it contributes to fewer SDGs than most other ASEAN member state IPAs

Which of the SDGs do you believe you contribute to as an IPA?



Source: (OECD, 2023[125]), *Survey on IPA Monitoring & Evaluation and Prioritisation for ASEAN Member States* (accessed on 20 September 2023).

StatLink https://stat.link/rw4kem

In order to attract more sustainable investment that contributes to social and environmental goals, the IPD could also introduce KPIs linked to the social and environmental impacts of investment projects. Such KPIs could be introduced both for selecting priority investments and for monitoring and evaluating its activities. In this regard, introducing KPIs linked to the environmental impacts of investment projects would be particularly important in Lao PDR, given that investment projects are frequently reported to harm the country's rich biodiversity. The number of jobs created can also be a useful indicator with which to measure sustainability outcomes if jobs are linked to a specific sustainability-oriented skill set, sector or project (OECD, 2023[129]). Other ASEAN member states, such as Malaysia, Myanmar, the Philippines, Singapore and Viet Nam, as well as several OECD member countries, provide examples of how environmental outcomes can be used in order to select priority investments and evaluate IPAs' performance (Box 5.7).

Box 5.7. KPIs linked to environmental outcomes at IPAs in other ASEAN member states and OECD

Several countries in the Southeast Asian region use KPIs linked to environmental outcomes, gender equality and regional development in order to select priority investments. KPIs related to the low-carbon transition are used by Malaysia, the Philippines, Singapore and Viet Nam. Malaysia uses indicators such as the adoption of green technologies, reuse and recycling activities, and initiatives applying the circular economy model (e.g. pollution and waste management) in order to prioritise investment. The Philippines uses KPIs measuring green processes and the use of modern technology. The carbon emissions rate is one of Viet Nam's KPIs to select priority investments. The Philippines also uses KPIs in order to prioritise investment projects that have a positive impact on nature conservation and the protection of the sea and coastline. In addition, the IPAs in the Philippines, Singapore and Viet Nam employ KPIs that measure gender equality, usually according to the number of female employees in foreign enterprises. Indonesia uses an indicator that relates to the geographical dispersion of FDI – specifically, it measures the value of investment projects outside of Java.

Many IPAs in other ASEAN member states use KPIs linked to innovation and digitalisation, and some IPAs have indicators for skills development. For example, the adoption of Industry 4.0 technologies, investment in R&D and the adoption of digital technologies in enterprise processes are KPIs used to select priority investments in Malaysia. Myanmar uses indicators such as the Global Cybersecurity Index, the number of Internet users and the number of investments in innovation. Skills and knowledge upgrading, future-ready economic development and upskilling, the introduction of new processes, the commercialisation of intellectual property, and the utilisation of Industry 4.0 technologies are KPIs used to select priority investments in the Philippines. Viet Nam measures the share of investment in R&D, the use of modern technologies and the share of employees with higher education degrees.

In OECD member countries, 48% of IPAs use carbon-related KPIs for investment prioritisation purposes. For example, the Industrial Development Agency Ireland has set a target to win 60 environmental sustainability investments between 2021 and 2024. In order to identify priority investments, the Industrial Development Agency Ireland has developed an approach guided by the six sustainable activities set out in the EU taxonomy for sustainable activities. The Industrial Development Agency Ireland has also performed analyses to identify the sustainability opportunities that align with Ireland's core strengths and that are deemed to present the greatest opportunity to attract FDI. In addition to targeting new investments focused on the green economy, the Industrial Development Agency Ireland is also partnering with existing multinational enterprises in Ireland to support decarbonisation and sustainable production.

In Sweden, Business Sweden's Pioneer the Possible' fossil free initiative seeks to increase the share of sustainable investments in Sweden in order for the country to become fossil fuel free by 2045. Business Sweden identifies enterprises, solutions and expertise that can support the reduction of carbon dioxide emissions in Sweden and monitors and adapts its investment promotion priorities and activities accordingly. For this purpose, Business Sweden has developed internal frameworks and definitions based on the EU taxonomy for sustainable activities. Business Sweden has also updated its project database with more than 400 green global business opportunities.' Pioneer the Possible' is overseen by a steering group consisting of Swedish business leaders and experts.

Some IPAs in OECD member countries are also developing sustainability scoring mechanisms. For example, Germany Trade & Invest developed an integrated scoring model in which FDI projects are assessed for sustainability and scored against a set of qualitative and quantitative indicators. The agency then adjusts the promotion and advisory services it provides to investors accordingly. Similarly, Invest in Canada has recently introduced a scoring mechanism to prioritise investment opportunities based on two dimensions: FDI impact and investment potential. The first dimension evaluates the likelihood that the investment will benefit Canada, and one variable within this dimension focuses on social and sustainable development.

Monitoring and evaluating the environmental sustainability of IPAs' activities and the sustainability outcomes of FDI

In other ASEAN member states, such as Malaysia, Myanmar and Singapore have dedicated indicators that measure the environmental sustainability outcomes of the attracted FDI. Malaysia conducts cost-benefit analyses using environmental, social and governance indicators. Myanmar measures the number of investment projects in SDG sectors, the number of EIAs and environmental management plans, and the number of projects in renewable energies.

Among OECD member countries, Finland and the Republic of Türkiye (hereafter "Türkiye") are examples of countries using sustainability-related KPIs and tracking projects in related priority sectors. For example, Türkiye's IPA measures the number of projects that are realised in targeted low-carbon sectors, namely recycling, renewable energy, and the development of energy-efficient components and technologies. In addition, similar to what is done for prioritisation, some IPAs (such as Invest in Finland) introduced scoring mechanisms in order to monitor and evaluate the quality or the sustainability outcomes of the attracted FDI. Invest in Finland also introduced a dedicated sustainability KPI in 2022 that measures FDI in sustainable solutions in Finland.

Invest in Finland evaluates the degree of sustainability of FDI projects in Finland through direct interviews with enterprises based on a predominated set of questions. An advisor for Invest in Finland completes this questionnaire for each FDI project in Finland. By compiling and analysing the responses to these questions, Invest in Finland keeps track of the sustainability outcomes of FDI projects in the country. Answers to the following questions are recorded for each FDI project:

1. Have you discussed environmental and/or social responsibility questions with the investor(s) related to this opportunity?
2. Does this opportunity contribute to new solutions that decrease carbon emissions?
3. Does this opportunity contribute to new business models or solutions based on circular economy or life cycle thinking (i.e. a way of thinking that includes the economic, environmental and social consequences of a product or a process over its entire life cycle)?
4. Does this opportunity contribute to other sustainable development topics like clean energy, sustainable service production, sustainable manufacturing, smart mobility or sustainable health solutions (i.e. is it compliant with the SDGs)?

Source: (OECD, 2023[129]), "Enabling sustainable investment in ASEAN", *OECD Business and Finance Policy Papers*; (OECD, 2023[125]), *Survey on IPA Monitoring & Evaluation and Prioritisation for ASEAN Member States*.

There is also scope for developing more policy tools in order to encourage local linkages between international investors and domestic enterprises. Business linkages between multinational enterprises (MNEs) and domestic enterprises, especially smaller suppliers, can facilitate the transfer of technology, knowledge, and managerial and technical skills (OECD, 2015[12]). At present, when negotiating with foreign investors for concessions, the IPD encourages the use of local labour and local suppliers in order to enable spillovers to the local economy. However, these negotiations remain on a voluntary basis. More local linkages could be encouraged through the development of a local supplier database. Such a database could also include information on environmental criteria and carbon performance in order to encourage environmental protection and the low-carbon transition. In addition, business matchmaking services and supplier development services could be offered to international investors (OECD, 2022[11]; OECD, 2015[12]).

Not only can such services support the creation of local linkages they can also help correct skills mismatches and contribute to skills development. Malaysia and Costa Rica are examples of countries that have successfully implemented supplier development programmes (Box 5.8).

Box 5.8. Supplier development programmes in Malaysia and Costa Rica

The gradual creation of supplier development services in Malaysia

Malaysia has been developing policies to support supplier capacities and SME–MNE linkages since the 1980s. In the context of the Vendor Development Programme (VDP) in the 1980s, Malaysian SMEs were provided with incentives and support to become suppliers of industrial components, machinery and equipment. However, the success of the programme was limited due to the capacity weaknesses of the selected local SMEs.

Since 1996, the Industrial Linkage Programme (ILP) has built on the VDP in order to create better linkages and improve capacity. The ILP involves MNEs in the selection of suitable SMEs and helps local suppliers develop the skills that MNEs need. In addition, selected SMEs and MNEs benefit from income and investment tax reductions. SMEs also benefit from gaining access to financing schemes.

The Global Supplier Programme (GSP) was created in 2000 and trains employees of domestic suppliers in collaboration with MNEs. MNEs define the selection criteria for SMEs and take part in the development of training curricula at different regional training centres and institutes in order to avoid skills mismatches. SMEs then receive subsidies to pay for the training programmes.

The evolution of matchmaking services into supplier development services in Costa Rica

Between 2001 and 2010, Costa Rica's IPA, PROCOMER, launched programmes aimed at matching foreign investors with local providers of inputs and services. In the context of these programmes, PROCOMER identified local capabilities and then tried to match them to the demands of MNEs. However, providers of knowledge-intensive and complex inputs and services were scarce. PROCOMER focused on the volume of linkages, not on the types of linkages or the value of the ensuing transactions. The number of linkages that the agency achieved each year was the only indicator of success.

In 2010, PROCOMER started to upgrade its matchmaking services to comprehensive business development services. These services were provided in response to demand. PROCOMER would first identify MNEs' needs and then survey local capabilities. If such capabilities were lacking but their development was feasible, PROCOMER worked with potential suppliers and other public agencies in order to develop the necessary capabilities. As the tasks involved in developing suppliers extended beyond PROCOMER's capabilities, universities and technical colleges were mobilised to develop specific technical skills for domestic suppliers as required by their potential foreign clients. To ensure effective inter-institutional co-ordination, Costa Rica created an inter-ministerial linkages commission with the participation of PROCOMER; the Ministry of Foreign Trade; the Ministry of Science, Technology and Telecommunications; the Chamber of Commerce of Costa Rica; and numerous tertiary education institutions and scientific councils.

Source: (OECD, 2020[126]), *Multi-dimensional Review of Viet Nam: Towards an Integrated, Transparent and Sustainable Economy*, OECD Development Pathways based on (OECD/UNIDO, 2019[30]), *Integrating Southeast Asian SMEs in Global Value Chains Enabling Linkages with Foreign Investors* and (Dal Bó et al., 2018[127]), *Building Capabilities for Productive Development.*

It would be beneficial to improve the IPD's aftercare services for investors. Even though the IPD offers aftercare services to investors, it does not always succeed in resolving investors' grievances, especially when other government institutions such as line ministries are involved. When successful, delays in providing support to investors in resolving administrative challenges can be as long as one or two months. In order to improve its aftercare services for investors, the IPD could consider establishing a dedicated aftercare division, as well as setting up and maintaining close relationships with a network of well-informed and trained focal points in key government institutions for investors, such as line ministries. It could also be beneficial to develop a formal investor grievance management mechanism and to record and analyse investor grievances (IFC, 2021[24]).

Special Economic Zones

Lao PDR has to carefully weigh the costs of SEZs against the benefits. SEZs can facilitate access to land for investors in Lao PDR and offer spaces for policy experimentation. They can generate FDI; create jobs; contribute to the growth and diversification of exports and to economic diversification and upgrading; and allow for knowledge, technology and skills transfers. However, SEZs also generate direct costs (including administrative costs) and indirect costs (such as forgone tax revenues as a result of generous tax incentives, as well as the cost of resettling local communities). Moreover, SEZs in Lao PDR create opportunities for rent-seeking behaviour and allow developers to capture the bulk of profits earned in SEZs. In addition, international experience suggests that SEZs often face challenges in generating linkages with the local economy and creating quality jobs, and they do not always comply with rigorous social and environmental standards. Lao PDR could increase the positive impacts and spillovers from SEZs through the right policy and regulatory mix, and by encouraging local business linkages and skills development.

Investment in SEZs has been growing strongly in Lao PDR

In Lao PDR, SEZs are defined as areas with a special administration and management mechanism that provide facilities and infrastructure for business operation. They aim to attract "investments using high technology, innovation in the production of agricultural products, and clean production using less natural resources and energy for sustainable and environmentally friendly development"(Article 2) (Government of Lao PDR, 2018[102]). The first SEZ in Lao PDR was established in 2003 (Savan-Seno SEZ in Savannakhet) (OECD, 2017[4]).

Investment in SEZs has increased impressively since 2014. In Lao PDR, there are currently 21 operational SEZs (and 1 SEZ in the planning stage) hosting 1 128 foreign and 163 domestic enterprises and 59 joint ventures, with a total capital of USD 65 billion and a registered capital of USD 20 billion (as of September 2023) (SEZO, 2023[130]). In 2021, investment in SEZs by these enterprises amounted to USD 7.6 billion (Dalavong, 2021[131]). This is a significant increase in investment compared with 2014, when 213 enterprises had invested approximately USD 1.2 billion in the 10 SEZs that existed in Lao PDR at the time (OECD, 2017[4]). The Golden Triangle SEZ (comprising 417 enterprises), the Boten Beautiful Land SEZ (comprising 293 enterprises), the Saysettha Development Zone (comprising 125 enterprises), the Savan-Seno SEZ (comprising 69 enterprises), the That Luang Lake SEZ (comprising 68 enterprises) and the Vientiane-Nonhthong SEZ (comprising 67 enterprises) are the SEZs with the largest number of investors. The SEZs with the most total capital are the Phoukhyo Specific Economic Zone (USD 35.5 billion), the Thakhek SEZ (USD 12.8 billion) and the Golden Triangle SEZ (USD 5.6 billion) (SEZO, 2023[130]). Despite this impressive increase in investment in SEZs in Lao PDR since 2014, in the context of the current economic crisis in the country, decreasing trends in investment, the amount of labour employed and exports have been reported in SEZs in the manufacturing sector.

Investment in SEZs in Lao PDR flows largely into services and commerce, but also into labour-intensive manufacturing and renewable energies. Fifty-six percent of the enterprises in SEZs operate in services, 26% in trade and 18% in industry (SEZO, 2023[130]). In the first 6 months of 2023, 118 enterprises invested in Lao PDR's SEZs: 75 enterprises invested in the services sector (64%), 30 enterprises invested in commerce (25%) and 13 enterprises invested in the industrial sector (11%) (SEZO, 2023[31]). Manufacturing enterprises in SEZs largely produce intermediate goods, which are exported to Thailand and Viet Nam for further processing. This includes garments, electronics and optical equipment (such as lenses for cameras). In the context of ASEAN integration, Malaysian and Thai manufacturing enterprises have also invested in apparel plants in Lao PDR in order to benefit from lower labour costs and preferential market access to the EU (OECD, 2017[4]; Lao NCSEZ, 2014[132]). In addition to services, commerce and manufacturing, a solar power plant has also been built in the Thakhek SEZ in Khammouane province close to the Thai border by a Chinese investor (Open Development Laos, 2019[133]). The bulk of FDI in Lao PDR's SEZs originates from China, followed by Thailand, Japan and Malaysia (Dalavong, 2021[131]) (SEZO, 2021[134]).

Lao PDR would benefit from the creation of more quality jobs for domestic workers in SEZs. According to official statistics, there are 67 579 workers (approximately 8.9 workers per USD 1 million invested) employed in SEZs in Lao PDR, of which 37 019 are Laotian (4.9 Laotian workers per USD 1 million invested) and 30 560 are foreigners (SEZO, 2023[31]; Dalavong, 2021[131]). This is a moderate decrease compared with 2021, when there were 68 483 workers employed in SEZs (Dalavong, 2021[131]). The Golden Triangle SEZ (comprising 46 843 workers), the Vientiane Non Thong SEZ (comprising 6 134 workers), the Saysettha Development Zone (comprising 5 256 workers), the Savan-Seno SEZ (comprising 4 311 workers) and the Non-Tandan Nadi SEZ (comprising 2 232 workers) register the highest numbers of employees as of year 2023 (SEZO, 2023[31]). Foreign workers are reported to work largely in the infrastructure and construction sector, while Laotian workers are mainly employed in the manufacturing sector. Enterprises in SEZs face difficulties in hiring skilled construction workers, but more recently this has also been the case when hiring workers in general, independent of workers' skill level. This may be linked to the recent increase in migration observed in Lao PDR in the context of the economic crisis and high levels of inflation (SEZO, 2023[31]).

SEZs can facilitate access to land and offer spaces for policy experimentation

SEZs can compensate for an adverse investment climate and to overcome administrative issues and market failures (such as a malfunctioning land market) in Lao PDR (Zeng, 2021[135]). In the specific context of Lao PDR, where access to land can be very challenging for investors and constitutes a significant hurdle for attracting investment, SEZs can provide investors with relatively easy and secure access to land.

SEZs could be more actively used for policy experimentation in Lao PDR, thereby playing an important role in the process of economic and investment policy reforms. Where governance is relatively weak or economic reforms are politically sensitive to implement, the enclave nature of SEZs can be an asset. For example, China effectively used its numerous SEZs as a testing lab for the market economy. Beginning in the 1980s, the government in China experimented with liberal economic reforms and new institutions in the Shenzhen SEZ and in other coastal SEZs before gradually introducing them to the wider economy. Recently, the more liberal "negative list" approach for foreign investment (which restricts access only in explicitly listed industries) was first tested in the China (Shanghai) Pilot Free-Trade Zone in 2013, then was further extended to other pilot zones in 2015 and was ultimately adopted as national policy in 2018. Similarly, the true success of the Mauritian Export Processing Zone programme was not job creation, investment or exports, but the economic and political reform process that it catalysed and the ensuing structural transformation of the economy. In a similar vein, SEZs could be used as effective pilot schemes for testing policies to boost the investment climate in Lao PDR. This could include policies in the areas of EIAs, one-stop services, supplier development initiatives or business matchmaking programmes (OECD, 2020[136]).

The success of rolling out pilot schemes in SEZs to the wider economy depends on the framework conditions. For example, in China, the Shenzhen SEZ was only part of the country's overall economic reform landscape. China's framework conditions and wider economic reforms allowed SEZs to serve a catalytic role in the policy reform process. However, what has worked for China since the 1980s will not necessarily work in other contexts. Accompanying measures to build local capabilities in both the private and public sectors can be crucial for expanding pilot projects from SEZs to the wider economy (OECD, 2020[136]).

Towards better planning of SEZ development

SEZs are regulated by the 2018 Decree on Special Economic Zones (Government of Lao PDR, 2018[102]). A new law governing SEZs has already been drafted to upgrade the 2018 Decree on Special Economic Zones to a law. The adoption of this law would be an important milestone that has been planned since the Investment Policy Review carried out by the OECD in 2016-17 (OECD, 2017[4]). A new development strategy for SEZs to replace the *Development Strategy for Special and Specific Economic Zone (SEZ) in the Lao PDR, 2011 - 2020* has already been drafted, but is awaiting adoption by the government.

The regulatory framework for SEZs in Lao PDR allows SEZ developers to potentially earn significant rents. A SEZ developer has the exclusive right to lease the land in its SEZ at a price that it defines, as well as the right to charge fees for the services it offers in the SEZ (electricity supply, water supply, etc.). SEZ developers are further eligible for generous tax incentives (see the section on investment tax incentives) (Government of Lao PDR, 2018[102]). Since there is no competition for land rentals in SEZs, in the absence of competition from other SEZs with similar characteristics and from areas outside of SEZs, SEZ developers can potentially earn significant monopoly profits and extract the maximum amount of land lease fees that investors are willing to pay. This is especially the case in SEZs with a high demand for land and a large number of interested investors.

SEZ developers' potentially large profits, combined with discretion in the granting of approval for new SEZs, could potentially create opportunities for rent-seeking behavior. Neither a SEZ development plan nor a pipeline of SEZs exists in Lao PDR. According to the Decree on Special Economic Zones, "local authorities shall determine and propose Special Economic Zones in their area by collaborating with the Investment Promotion and Supervision Committee at the central level" (Article 9) (Government of Lao PDR, 2018[102]). However, it is reported that in practice, SEZs are frequently proposed directly by investors or by local authorities based on investors' demands. While international best practices show that the establishment of SEZs should indeed be influenced by enterprises, Lao PDR's discretionary approach to SEZ development creates opportunities for rent-seeking behaviour by the government officials responsible for approving new SEZs. This is a particular challenge given the potentially significant rents that SEZ developers can extract through land leases and fees for services offered in their SEZs.

Strategic planning of SEZ development based on comprehensive stakeholder consultations could reduce opportunities for rent seeking. SEZ development could be better integrated into Lao PDR's development planning process. Effective SEZ programmes are integral parts of national, regional or municipal development strategies. Furthermore, Lao PDR could conduct thorough strategic planning exercises and involve all major stakeholders in this process. In the context of SEZ planning, it is particularly important to understand the private sector's needs in terms of SEZ development and to conduct a rigorous assessment of demand for SEZs by the private sector in specific market sectors, including the private sector's demand for industrial infrastructure in the designated area; this can include an investor survey. In addition, before SEZ initiatives are included in a national pipeline or approved, preliminary locations, sectors and potential investors should be identified and a comprehensive cost-benefit analysis should be conducted (Zeng, 2021[135]).

Policy and regulatory tools to encourage positive spillovers from SEZs to the local economy

International experience suggests that SEZs often face challenges in generating linkages with the local economy and in creating quality jobs. This evidence shows that SEZs can be effective in attracting investors in the short term by offering adequate infrastructure, services and incentives, but that they have often stagnated in terms of sustaining innovation and competitiveness over time. Frequently, jobs created in SEZs are low-skilled and limited-quality jobs in low-technology manufacturing. Economic activities within SEZs tend to have weak linkages with the rest of the economy and investors often operate in isolation from the rest of the country. As a result, SEZs risk creating enclaves and parallel economies. Finally, labour and environmental standards within SEZs are often lower than in the rest of the country (OECD, 2015[12]; OECD, 2020[136]).

The implementation of policies to promote positive spillovers from SEZs to the local economy can support the attraction of more quality FDI to Lao PDR. Positive spillovers from SEZs can include knowledge and technology transfers through supply chain linkages with domestic enterprises and improvements in human capital through skills development and transfers. Policies to promote such spillovers include appropriate connectivity between SEZs and the rest of Lao PDR, and engagement with domestic enterprises and educational institutions. They also include specific policies, programmes and incentives that encourage local linkages between international investors in SEZs and domestic enterprises, such as supplier development programmes, matchmaking services or supplier databases (see the section on investment promotion) (OECD, 2017[4]; OECD, 2020[136]). In order to encourage more skills development by SEZ developers and investors in Lao PDR, they could be encouraged through appropriate incentives to retrain, reskill and eventually employ those people who are subject to resettlement and may lose their means of living as a result of SEZ development. This could simultaneously serve to compensate local communities for the negative externalities of SEZs (Zeng, 2021[135]). Investment tax incentives could also be used to advance social and environmental goals (see the section on investment tax incentives).

In order to increase positive spillovers from SEZs and limit their negative externalities, Lao PDR could introduce specific performance-based criteria that investors must meet in order to invest and operate in SEZs. Such criteria can relate to employment, skills transfers and environmental performance. For example, both Cambodia and Myanmar require investors in SEZs to train local workers. The Myanmar Special Economic Zone Law mandates the provision of training and course material on subjects relevant to the business "for the improvement of the skill of the citizen staff". In Cambodia, all investors (both within and outside of SEZs) are required to provide adequate and consistent training to Cambodian staff under the Law on the Investment of the Kingdom of Cambodia. Moreover, SEZ developers have a duty to co-operate with the Ministry of Labour and Vocational Training in order to facilitate the training of Cambodian workers and employees and to promote the development of new knowledge and skills through specifically designed programmes. In terms of employment, Myanmar allows the employment of foreign personnel in SEZs only for activities requiring technical or managerial skills. In addition, the Myanmar Special Economic Zone Law requires enterprises in SEZs to gradually increase the share of Myanmar citizens in their skilled labour force, from at least 25% in the first year of operation to 75% in the fifth year. This approach of gradually reducing the share of foreign employees may be a way of encouraging skills upgrading and anchoring investors to the country, although it entails potentially high administrative costs for monitoring and enforcing the regulation (OECD, 2020[136]).

Improving the social and environmental aspects of SEZ regulation

Lao PDR's Decree on Special Economic Zones contains several provisions on the environmental and social sustainability of SEZs. The Decree on Special Economic Zones defines the objective of SEZs as contributing to "sustainable and environmentally friendly development" (Article 2) (Government of Lao PDR, 2018[102]). Furthermore, according to the decree, SEZs shall "ensure sustainable development, environmental protection and promote and conserve national fine culture" (Article 5) (Government of Lao PDR, 2018[102]). The Decree on Special Economic Zones also includes articles on "environmental, cultural and social protection" (Article 38) and on "Contribution to the Community Development" (Article 39) (Government of Lao PDR, 2018[102]). According to these articles, "the Special Economic Zone Authority (SEZA) shall monitor, inspect and encourage Zone Developers and Investors for the protection and preservation of the environment, society, and national fine culture […] encourage Zone Developers and Investors to contribute to the local community development, such as in agriculture and animal husbandry, handicraft and others" (Government of Lao PDR, 2018[102]).

In order to further improve the environmental and social sustainability of SEZs in Lao PDR, it would be important to develop clear criteria for the approval of SEZs and to conduct public consultations prior to SEZ development. Currently, beyond the requirement for SEZs to complete EIAs, there is no requirement for public consultations in the SEZ approval and development process. Going forward, it would be beneficial to introduce mandatory public consultations that include all relevant stakeholders, especially local communities, and which should be conducted in advance of SEZ development. Public consultations are very important given that SEZs often involve land acquisition and the resettlement of local communities (Zeng, 2021[135]). In addition, it would be important to introduce environmental and social criteria and safeguards into the criteria and development standards for the approval of SEZs (OECD, 2009[137]). Moreover, the government of Lao PDR could regularly monitor the social and environmental performance of SEZs (Zeng, 2021[135]). It would also be beneficial to assess and take measures to combat corruption in SEZs (OECD, 2015[12]).

Investment tax incentives

Lao PDR has a complex system of investment tax incentives. Incentives and eligibility conditions are described in the Law on Investment Promotion, except for investment incentives in SEZs, which are described in the Decree on Special Economic Zones. Investment projects in nine promoted business sectors in three promoted investment zones could benefit from investment tax incentives. Available incentives include corporate income tax (CIT) exemptions and reduced CIT rates, customs duty and value added tax (VAT) exemptions and reductions and exemptions of rental and concession royalties for state land (Table 5.2). Investment tax incentives are contingent on one of the following: (i) a minimum investment of LAK 1.2 billion or the employment of at least 30 Laotian skilled employees; or (ii) the employment of at least 50 Laotian employees (regardless of their skills) with an employment contract of at least 1 year. The large number of tax incentives and their dual categorisation by sector and zone can be confusing for investors and difficult for the administration to manage.

The nine promoted sectors eligible for tax incentives in Lao PDR support sustainable development. These sectors are the same as the priority investment sectors (Table 5.2). Many of them have a focus on environmental sustainability (clean agriculture; environmentally friendly agro-processing and handicrafts; and cultural, historical and ecotourism), social development (education, modern and traditional healthcare, infrastructure, and banking and microfinance institutions focusing on poverty reduction and access to finance in remote areas) and economic diversification into more sophisticated activities (businesses using high and modern technology, and modern commercial centres).

Table 5.2. Lao PDR has a complex system of investment tax incentives

Investment tax incentives in Lao PDR

Sector	Zone	CIT incentives	Concession royalty and state land incentives	Customs duty and VAT exemptions
Cultural, historical and ecotourism Infrastructure Banking and microfinance institutions focusing on poverty reduction and access to finance in remote areas Businesses using high and modern technology Modern commercial centres	Zone 1: Poor and remote areas with socio-economic infrastructure that is unfavourable to investment	Exemption for ten years	Exemption for ten years	• Exemptions from customs duties paid on materials and equipment that cannot be produced or supplied in Lao PDR, and on machinery and vehicles directly used for production • Customs duty exemptions on imported materials, equipment and parts used in production for exports • VAT exemptions on domestic raw materials that are not natural resources and that are used to produce finished and semi-finished products **SEZs (Zone 3):** • VAT exemption and VAT payment at 50% of the VAT rate for the use of electricity and water for factory construction for export • 50% of the VAT rate for the construction and development of infrastructure to support the business operations of investors that are not 100% for exports
	Zone 2: Areas with socio-economic infrastructure that is favourable to investment	Exemption for four years	Exemption for five years	
	Zone 3: SEZs	Exemption for 12 years if located in Zone 1 and for 6 years if located in Zone 2		
Clean agriculture Environmentally friendly agro-processing and handicrafts Education Modern and traditional healthcare	Zone 1: Poor and remote areas with socio-economic infrastructure that is unfavourable to investment	Exemption for 15 years	Exemption for 15 years	
	Zone 2: Areas with socio-economic infrastructure that is favourable to investment	Exemption for seven years	Exemption for eight years	
	Zone 3: SEZs	Exemption for 12 years if located in Zone 1 and for 6 years if located in Zone 2; thereafter, reduced CIT rate at 35% of the normal rate for 5 years		
SEZ developers	Zone 1: Poor and remote areas with socio-economic infrastructure that is unfavourable to investment	Exemption for 16 years; thereafter, reduced CIT rate at 35% of the normal rate for 5 years		VAT exemption for the construction of roads, electricity systems, water supply systems, waste treatment systems and waste disposal systems
	Zone 2: Areas with socio-economic infrastructure that is favourable to investment	Exemption for eight years; thereafter, reduced CIT rate at 35% of the normal rate for five years		

Note: The MPI's Instruction on Granting Investment Incentives on Profit Tax and State Land Rental or Concession Fee from 2021 provides a detailed list of promoted business subsectors as well as a detailed list of cities and districts that are part of investment zones 1, 2 and 3.
Source: (National Assembly of Lao PDR, 2016[98]), *Law on Investment Promotion*; (Government of Lao PDR, 2018[102]), "Decree on Special Economic Zones", https://investlaos.gov.la/wp-content/uploads/formidable/22/Final_IPL_No.14.NA_17Nov2016_Eng_30_Oct_2018.pdf.

A large share of FDI in Lao PDR benefits from tax incentives that do not follow clear criteria and are negotiated on a case-by-case basis. In addition to the tax incentives listed in Table 5.2, which are clearly defined in the Investment Promotion Law and subject to clear eligibility criteria, the Law on Investment Promotion also allows for the allocation of "special incentives" to investors, which are negotiated on a case-by-case basis between the government and the investor (Articles 4 and 19). Such special incentives are not limited to the nine promoted sectors described previously, nor are they dependent on investing in one of the three promoted investment zones. The agreements between the government of Lao PDR and investors detailing these incentives are approved by the National Assembly of Lao PDR (National Assembly of Lao PDR, 2016[98]) and are, in most cases, not publicly available. Projects benefitting from such special incentives are generally large concession investments. They frequently fall into the mining and hydropower sectors, but also fall into the telecommunications, transportation infrastructure, agricultural, forestry and tourism sectors, and constitute the bulk of FDI in Lao PDR (OECD, 2017[4]).

Going forward, it would be important to place a stronger focus on the enabling environment for investment in Lao PDR and reduce the focus on generous tax incentives. Incentives should be used to complement, not replace, wider efforts to improve the country's investment climate. While tax and non-tax incentives can help promote certain types of investment, a country's tax burden is one of many factors (and not always the most important) considered by potential investors when weighing up investment decisions. The macroeconomic and business conditions, the legal and regulatory framework, the market size, the labour force conditions and the location-specific profit opportunities are equally or more important for investors than the tax burden. A higher tax burden in a host country could generally be acceptable to investors if the country's overall enabling framework for investment is attractive (OECD, 2015[12]). In Lao PDR, in order to attract more quality investment, it would be particularly important to improve the availability of well-trained labour, governance and infrastructure, as well as the macroeconomic environment.

It would also be important to reduce discretion in the granting of investment tax incentives for concessions. The current incentive regime for investments in concession activities leaves a lot of space for discretion. Excessive administrative discretion in the hands of public officials can create unnecessary market distortions due to officials favouring some enterprises over others. It can also increase the risk of corruption and create opportunities for rent seeking as enterprises try to "convince" authorities to approve their applications. This can undermine good governance objectives that are fundamental to securing an attractive investment environment (OECD, 2015[12]; OECD, 2017[4]). Indeed, private investors in Lao PDR report that incentives are granted on an ad hoc basis, with different outcomes depending on personal relationships and vested interests (IFC, 2021[24]). In order to reduce the amount of personal discretion, all tax incentives (including those for concession investments), along with their eligibility criteria, could be incorporated into the Law on Investment Promotion Law and other relevant laws and regulations. Eligibility criteria for all tax incentives should be uniform, clearly defined and predetermined.

Furthermore, Lao PDR's incentive system would benefit from simplification and increased transparency, and incentives linked to remote locations could be reconsidered. The large number of tax incentives and their dual categorisation by sector and zone can be confusing for investors and difficult to manage administratively. Providing investors with better and clearer information on the tax incentives available and the conditions linked to those incentives, combined with the simplification of outcome conditions, could improve transparency. Moreover, international evidence suggests that some of the objectives of Lao PDR's investment tax incentives are difficult to attain: incentives have been found to not be very effective in attracting investment to remote and less developed regions. This is likely to be even more true in Lao PDR, given that investors are not required to operate in remote areas in order to benefit from incentives since multiple other avenues exist for benefiting from incentives, including SEZs and special incentives (IFC, 2021[24]; OECD, 2017[4]).

Lao PDR could consider phasing out the use of income-based incentives in favour of expenditure-based incentives, such as accelerated depreciation and tax allowances or credits. In Lao PDR, all CIT incentives for investors consist of income-based tax incentives (CIT exemptions and reduced CIT rates), which reduce the rate applied to income generated and generally attract investment that is already profitable early in the tax relief period (Box 5.9). They tend to favour enterprises with relatively high upfront profits and a limited time horizon in the country. These enterprises may not be those most in need of government support and may have undertaken their investment even without such incentives. On the other hand, expenditure-based tax incentives (e.g. tax allowances or tax credits) relate to the capital or current expenditure of enterprises and allow better targeting of incentives towards reducing specific costs, thereby encouraging investments that might not occur without the incentives. Furthermore, expenditure-based incentives are expected to be less affected by the Global Anti-Base Erosion (GloBE) rules, which introduce a minimum global effective tax rate of 15% for large MNEs (see Chapter 4 on Sustainable Fiscal Revenue) (OECD, 2023[138]).

Box 5.9. Tax incentive instruments

The most commonly observed CIT incentives can be categorised as income-based tax incentives (CIT exemptions and reduced CIT rates), which reduce the tax rate applied to income generated, and expenditure-based tax incentives (tax allowances and tax credits), which relate to enterprises' capital or current expenditure, for instance:

- Tax exemptions provide a full or partial exemption to qualifying taxable income and apply on either a temporary or permanent basis.
- Reduced rates are CIT rates set below the standard rate for a sector or enterprise type and apply on a temporary or permanent basis.
- Tax allowances are deducted from taxable income (i.e. income subject to taxes) and may target current expenditure (e.g. operating expenses) or capital expenditure. Tax allowances may allow for a faster write-off of the value of capital expenditure from taxable income up to 100% of incurred costs (i.e. acceleration) or can go beyond 100% of an acquisition cost (i.e. enhancement). This could include, for example, allowing enterprises to deduct 150% of the value of a new machine. Tax allowances for current expenditure are always enhancing (i.e. the deductible expenditures are higher than the actual costs incurred).
- Tax credits are deductions from the amount of taxes due (i.e. tax liability) that may relate to capital expenditure or current expenditure.

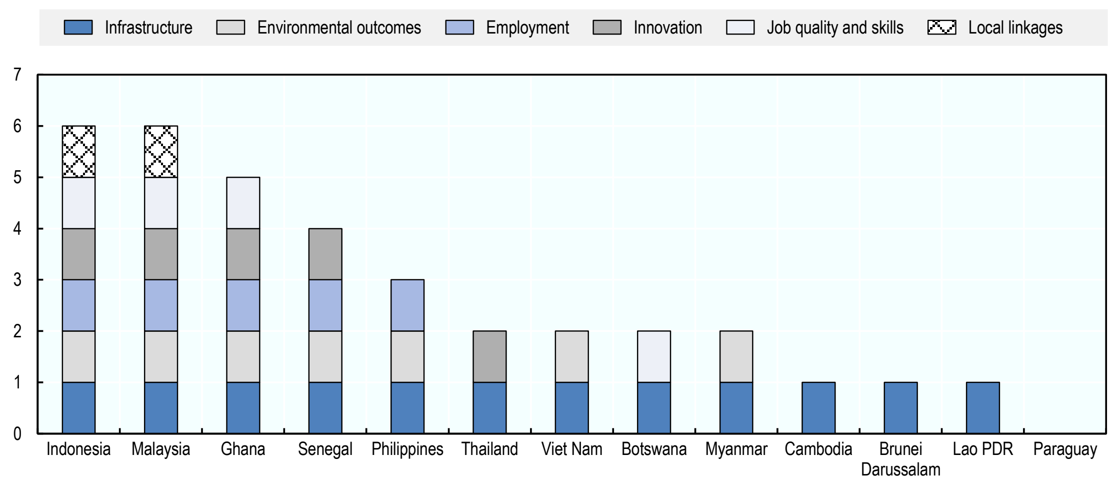
Source: (Celani, Dressler and Wermelinger, 2022[139]), "Building an Investment Tax Incentives database: Methodology and initial findings for 36 developing countries", *OECD Working Papers on International Investment* 2022/01; (OECD, 2022[140]), *Investment Tax Incentive Database (ITID)*, https://www.oecd.org/fr/fiscalite/building-an-investment-tax-incentives-database-62e075a9-en.htm.

It would also be beneficial to use investment incentives more actively in order to advance environmental and social goals (OECD, 2022[11]; OECD, 2022[141]). This would be particularly important given that investment projects are frequently reported to have negative impacts on the environment and communities in Lao PDR. At present, Lao PDR makes less use of incentives in order to advance development goals than other ASEAN Member States and elsewhere around the world (Figure 5.19). Environmental and social goals could be supported through incentive eligibility conditions that require investors to meet certain measurable performance criteria (e.g. job creation, the provision of training or R&D, or no or low levels of pollution) or operate in certain sectors (e.g. renewable energy, organic agriculture or ecotourism), or by designing the incentive to reduce the costs of certain activities (e.g. R&D, training or pollution abatement) and increasing the revenues associated with other activities (e.g. exports). This could encourage enterprises to undertake activities they might not otherwise attempt, such as providing training or implementing measures to reduce pollution (Celani, Dressler and Wermelinger, 2022[139]).

Lao PDR could design incentives to support training, environmental protection and local linkages in particular. Investment incentives could help address Lao PDR's skills shortage, support spillovers to the local economy and reduce negative environmental externalities linked to investment projects. Box 5.10 provides examples of how other countries use tax incentives in order to support environmental protection, to encourage on-the-job training and skills development, and to advance other social goals. In order to cultivate local linkages through tax incentives, Lao PDR could either: (i) require investors benefitting from investment incentives to source a minimum share of inputs from the local market or local SMEs; or (ii) provide accelerated deductions or enhanced allowances for locally sourced inputs or inputs sourced from domestic SMEs (OECD, 2022[140]). As part of the ongoing reform process of Lao PDR's Law on Investment Promotion the IPD is already planning to introduce new eligibility criteria for the allocation of investment incentives that reflect the environmental and social impacts of investment projects.

Figure 5.19. Lao PDR makes less use of CIT incentives to advance development goals than other ASEAN member states and comparators elsewhere in the world

Development goals supported by CIT incentives



Source: (OECD, 2022[140]), *Investment Tax Incentive Database (ITID)*.

StatLink https://stat.link/n5dilf

Outcome-linked incentives should be based on clear and quantifiable criteria, and there should be careful monitoring of whether firms adhere to these criteria and whether the incentives support the stated goals. Outcome conditions are often vague or based on non-quantifiable criteria (e.g. whether they contribute to job creation or are beneficial to the national economy), leaving ample room for discretionary approval of incentives by the awarding authorities. Moreover, performance criteria require close monitoring in order to ensure that enterprises adhere to these criteria and that the desired outcomes have been achieved. This, in turn, requires public resources, sufficient administrative capacity and, often, co-ordination with other government agencies (e.g. cross-checking the number of jobs created or salaries against social security information) (OECD, forthcoming[142]). Given the current challenges in Lao PDR with regard to the inspection and monitoring of investment projects' environmental outcomes (see the section on EIAs), ensuring effective monitoring of environmental outcomes linked to incentives in Lao PDR would require enhanced financial, human and technical resources for environmental inspection and monitoring. Moreover, while it would be important to make better use of investment incentives in order to promote sustainable development, it must be pointed out that other policy instruments can sometimes be more appropriate and important in reaching these goals.

Box 5.10. Using investment incentives in order to advance social and environmental goals

CIT exemptions and reductions for environmental protection, energy and water savings in China

In order to encourage environmental protection and sustainability, specific CIT incentives that promote energy and water savings and environmental protection exist in China. Eligible investment projects benefit from a three-year full CIT exemption, followed by a 50% exemption for another three years. Projects eligible for these incentives include public wastewater treatment, public trash disposal, comprehensive development and utilisation of biogas, upgrades of energy-saving or pollution-discharge-reduction technologies, and seawater desalination projects, among others (Deloitte, 2020[143]; PWC, 2023[144]; OECD, 2022[140]).

In addition, China offers tax credits for the purchase of equipment for environmental protection and workplace safety. Qualifying enterprises purchasing and using equipment for environmental protection, energy and water conservation, or workplace safety are eligible for a tax credit of 10% of the cost of the equipment. Any unused amount of this tax credit can be carried forward and credited in the following five years. However, if the enterprise itself does not use the special equipment purchased for at least five years, but instead transfers or leases it to someone else, it is no longer entitled to the tax credit and must make supplementary tax payments for any tax credit already used (Deloitte, 2020[143]; PWC, 2023[144]).

CIT exemptions for enterprises meeting economic, social and environmental criteria, and tax allowances for corporate social responsibility in Poland

The allocation of CIT exemptions in Poland is based on a scoring mechanism that takes social and environmental criteria into account. Companies can score up to eight points for meeting clear and detailed sustainable economic development criteria linked to Poland's national development policy, R&D, human resource management, investing in national key manufacturing clusters, creating regional links, robotisation and automation (having at least one industrial robot), green energy, or qualifying as a micro, small and medium-sized enterprise. They can score up to five points for sustainable social development criteria, such as creating high-paid or specialised jobs, providing education and training, having a limited negative impact on the environment, introducing employee care measures, and being located in less developed regions. The minimum number of points required in order to be eligible for a CIT exemption varies from 4 to 6 points out of a total possible 13 points, depending on the location of the investment project (PAIH, 2023[145]; PAIH, n.d.[146]; PWC, 2023[147]; PAIH, 2023[148]).

CIT exemptions are more generous in less developed regions and specific subsectors. A lower minimum number of points is required in order to be eligible for a CIT exemption in less developed provinces. Similarly, depending on the location, enterprises can benefit from CIT exemptions for 10-15 years. Again, incentives are more generous in less developed provinces. In addition to scoring 4-6 points depending on their location, enterprises must satisfy different minimum investment capital expenditures, ranging from PLN 0.2 million (Polish zlotys) to PLN 100 million depending on their size and the unemployment rate in the area where the investment takes place. Minimum investment costs are lower in areas with a larger deviation from the national average unemployment rate. Furthermore, minimum cost thresholds are 95% lower for specific technology-intensive subsectors related to information technology and other modern services (PAIH, 2023[145]; PAIH, n.d.[146]; PWC, 2023[147]; PAIH, 2023[148]).

In addition to CIT incentives, Poland offers tax allowances for corporate social responsibility (CSR) linked to sports, culture and education. Investors can deduct 50% of the costs incurred for selected activities from the tax base in their tax return for the tax year in which these costs are incurred. Eligible costs include the purchase of sports equipment and the cost of organising or participating in sports competitions; covering employees' costs for using sports facilities; financing cultural activities and cultural institutions; funding student, research and sports scholarships; covering the costs for an employee pursuing further education; and providing remuneration for students during internships and work placements (PWC, 2023[147]).

Tax allowance for skills development in Indonesia

Indonesia offers a tax allowance to enterprises that provide internships, educational activities, apprenticeships or training programmes. This tax allowance seeks to encourage skills development opportunities for Indonesia's labour force. It enables enterprises to deduct 200% of the costs incurred for relevant activities from their taxable income (ILO, 2019[149]).

Tax deductions for youth employment and training in Angola

Angola recently introduced tax benefits in order to encourage youth employment and social inclusion. In addition to a 100% deduction of the enterprise's taxable income, enterprises hiring young people for professional internships can deduct 50% of the lowest salary for civil servants per intern. The additional deduction increases to 60% of the lowest civil service salary for female interns or interns with disabilities. The benefit requires a contract duration ranging from 6 to 12 months (Morais Leitão, 2022[150]). Angola also offers a training deduction that enables enterprises to deduct an additional 25% of the training costs incurred, provided that the training was carried out by a certified institution. The incentive is capped at a maximum of AOA 1 million (Angolan kwanzas) for training costs (PWC, 2023[151]).

Source: (PWC, 2023[144]), *China, People's Republic of - Corporate - Tax credits and incentives*; (Deloitte, 2020[143]), *Survey of Global Investment and Innovation Incentives - China – 2020*; (PAIH, 2023[145]), *Sustainable Growth - Strategic FDI Priorisation*; (PAIH, n.d.[146]), *Investment Incentives Polish Investment Zone*; (PWC, 2023[147]), *Poland - Corporate - Tax credits and incentives*; (OECD, 2022[140]), *Investment Tax Incentive Database (ITID)*; (ILO, 2019[149]), *Indonesia's tax deduction programme to attract more industries involved in apprenticeship*; (Morais Leitão, 2022[150]), *Angola - The Tax Benefits Code*; (PWC, 2023[151]), *Angola: Corporate - Tax credits and incentives*; (PAIH, 2023[148]), *Public Aid*.

In addition to improving the design of tax incentives in Lao PDR, it is also critical to ensure that there is transparency on all types of incentives available to investors. Investment incentives can be divided into three broad categories: (i) tax, financial and in-kind incentives; (ii) regulatory incentives; and (iii) non-financial incentives. These types can be further categorised by instrument (e.g. CIT incentives, direct grants, or provisions related to infrastructure and land). Ensuring transparency on these different types of incentives is essential in order to facilitate not only their uptake by investors but also the evaluation of their costs and benefits. This requires, first and foremost, that relevant information and legislation on all incentives is up to date and available to investors and the public. Moreover, it is important that this information is easily accessible – for example, through the development of incentive guides or the issuance of consolidated legal acts that combine and streamline all information on investment incentives from relevant legal and regulatory documents (such as the Law on Investment Promotion and the Decree on Special Economic Zones in Lao PDR). Finally, it is necessary to ensure that incentives have a clear design and to avoid overly complex incentive systems (Chafiz, Dressler and Wermelinger, 2023[152]).

Improving the design and increasing the effectiveness of tax incentives in Lao PDR also requires evaluating whether incentives achieve their objectives, and if so, at what cost. While the IPD has produced a brief analysis of the advantages and disadvantages of investment incentives, including revenue losses, this document is not publicly available and a more comprehensive evaluation of investment tax incentives in Lao PDR does not exist. Such an evaluation should assess whether tax incentives are best designed to support the country's policy goals and whether they succeed in generating additional investment. Benefits of tax incentives, which should be taken into account in a comprehensive cost-benefit evaluation of tax incentives, include the amount of investment motivated by incentives; the direct impact of the incentive-motivated investment; and the incentives' indirect and induced impacts due to inter-industry transactions, positive externalities, and social and environmental benefits. The costs that should be included in such an evaluation include revenue forgone due to tax incentives (both directly and indirectly through revenue leakages); costs incurred by taxpayers in order to comply with a given tax incentive programme; the administrative costs of running the tax incentive programmes; and the cost to the economy of creating an "uneven playing field" (OECD, 2017[4]; OECD, 2015[12]).

In addition to a comprehensive cost-benefit evaluation of tax incentives, it would also be important to monitor tax incentives in Lao PDR on a regular basis. This should include the regular collection of data on tax incentive expenditure, as well as tracking investor compliance with qualifying conditions and audits in order to detect potential fraud or abuse. Such data can then be used in order to evaluate whether tax incentives achieve their objectives (OECD et al., 2023[153]; OECD, forthcoming[154]).

Responsible business conduct

RBC means that businesses should avoid and address the adverse effects of their operations and make a positive contribution to economic, environmental and social progress in the countries in which they operate. This applies to all businesses, regardless of their legal status, size, ownership structure or sector. RBC expectations encompass business activities within an enterprise's operations, as well as its relationships within the supply chain. The main international frameworks on RBC are set out in the *OECD Guidelines for Multinational Enterprises on Responsible Business Conduct*, the UN's *Guiding Principles on Business and Human Rights* and the ILO's *Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy* (OECD, 2015[12]; OECD, 2017[4]; OECD, 2023[155]). RBC principles and standards outline the requirement for all enterprises to address the adverse impacts of their activities by engaging in a process known as due diligence. This process involves businesses identifying, preventing and mitigating both actual and potential negative effects, while also being accountable for how they address these impacts (OECD, 2018[156]).

Governments have the role of providing businesses with an enabling framework for RBC. An enabling framework of this nature can contribute to attracting higher quality and more responsible investment and to minimising the adverse impacts of investment projects. Governments' increasing focus on RBC through both voluntary initiatives and regulations, as well as the growing significance of environmental, social and governance factors in the decision-making processes of consumers and investors, have transformed RBC into a critical factor to consider for any country seeking to maintain its competitiveness as a destination for sourcing and investment on the global stage.

Awareness of RBC and due diligence remains low among businesses in Lao PDR. Some foreign investors, especially those that receive funding from international financial institutions, do engage in RBC: for example, forestry enterprises adhering to the FPIC principles, or wind and hydropower plants financed by international donors. Furthermore, the IPD is making some efforts to encourage investors to engage in RBC. Overall, however, Lao PDR's government has undertaken few initiatives to promote RBC and provide businesses with a comprehensive enabling framework for RBC, which has yet to be developed.

RBC could contribute to addressing the environmental and social issues linked to investment projects discussed previously (see the section on opportunities and challenges in key investment sectors), as well as issues linked to forced labour and human trafficking. It is reported that in some cases, human traffickers persuade Laotian men, women and children to move abroad to neighbouring countries with false promises of legitimate jobs or fraudulent recruitment for jobs on the Internet. These individuals are then forced to serve as manual labourers or sex workers. Complex formal migration procedures, especially in the aftermath of the COVID-19 pandemic, have favoured informal migration, with migrants frequently resorting to using human traffickers. Human traffickers have also been reported to force Laotians and foreigners to work for cyber and telephone scams in Lao PDR, especially in SEZs. Child pornography rings are also an issue. Foreign and Laotian workers in SEZs and working at or near foreign-owned or foreign-operated agricultural operations and transportation infrastructure construction sites are particularly affected by forced labour and sex trafficking. Local communities in Lao PDR that are displaced by natural disasters or foreign investment projects are also vulnerable to trafficking. The COVID-19 pandemic opened up new opportunities for human trafficking by increasing economic hardship in Lao PDR, especially among migrant workers returning from abroad and their families in Lao PDR, who lost an important part of their incomes in the form of remittances (U.S. Department of State, 2023[157]).

RBC could also contribute to reducing child labour. Child labour is reported to occur in particular in ethnic minority communities in rural areas (RFA, 2021[158]). According to Save the Children's *Global Childhood Report 2021*, between 2015 and 2020, 28.2% of children aged 5-17 years engaged in child labour in Lao PDR, two-thirds of them in hazardous work (Save the Children, 2021[159]; Save the Children, 2023[160]). According to UNICEF's *Lao Social Indicator Survey II 2017*, in 2017, 42% of children in Lao PDR aged 5-17 years engaged in labour, and child labour was more widespread among ethnic minorities. Moreover, 29% of children aged 5-17 years worked under hazardous conditions (UNICEF, 2020[161]). In many cases, children forgo education in order to perform agricultural work or stay at home taking care of younger siblings (RFA, 2021[158]; Save the Children, 2021[159]; Save the Children, 2023[160]).

There are several donor-influenced initiatives to improve RBC in Lao PDR. For example, in the context of the Poverty Environment Action for the Sustainable Development Goals initiative established by the United Nations Development Programme (UNDP) and the United Nations Environment Programme (UNEP), CSR guidelines for investors were developed and ten hotels in Luang Prabang participated in a programme to improve CSR in Lao PDR's tourism sector. Another initiative is the Improving Performance, Accountability, Conduct, and Transparency of Businesses in Lao PDR (IMPACT Biz) project, which is supported by the government of Japan. The IMPACT Biz project seeks to advance RBC in Lao PDR by supporting the government to develop a policy and legal framework for RBC, supporting businesses in the EIA process, and assisting civil society in monitoring RBC (UNDP, 2022[162]). In addition, Germany's GIZ published a baseline assessment of social and environmental regulations and standards and CSR in several sectors in 2015 (GIZ/BGR, 2015[163]).

Joint initiatives by the private sector, the public sector and international donors to encourage RBC have surfaced recently in Lao PDR. The Lao Responsible Business Conduct Forum has been organised four times since 2015, most recently in March 2023 by the MOIC, the Embassy of Canada in Lao PDR, and the UNDP. The Responsible Business Conduct Forum seeks to provide a platform for the government, the private sector, civil society, academia and development partners to explore the implementation of international RBC standards in Lao PDR (UNDP, 2023[164]). In addition, since 2021, the Lao Responsible Business Awards (previously called the Lao CSR Awards) have been awarded annually to those applicants from the private sector performing best in different categories of CSR. The Lao CSR Awards are a joint initiative by the Embassy of Canada in Lao PDR, Civitas Consulting, the Australian Chamber of Commerce in Lao PDR, the British Business Group Lao PDR, the European Chamber of Commerce and Industry in Lao PDR, the Embassy of Japan in Lao PDR and the LNCCI (LNCCI, 2023[165]; BBG Lao PDR, 2023[166]; BBG Lao PDR, 2022[167]; LNCCI, 2021[168]).

Lao PDR has ratified many international human rights, labour, environmental and anti-bribery conventions. Lao PDR has ratified seven of the nine UN core conventions on human rights (OHCHR, 2023[169]), and five of the eight fundamental ILO conventions on labour rights are in force in the country (ILO, 2023[170]). Lao PDR has also adhered to important climate change agreements, including the Kyoto Protocol and the Paris Agreement, and has ratified the Convention on Biological Diversity. Lao PDR has adhered to the United Nations Convention against Corruption but has not ratified the Voluntary Principles on Security and Human Rights (OECD, 2023[129]).

There is scope to better enforce the implementation of these conventions. Steps have been taken to translate these conventions into national policies, laws and regulations, but implementation remains a challenge. For example, the Labour Law of 2006 prohibits the employment of children aged under 14 years and bans the employment of children aged under 18 years in sectors that are dangerous to their health. The law also limits working hours for children aged 14-18 years to 8 hours per day and prohibits night work (RFA, 2021[158]). However, as mentioned previously, despite these regulations, child labour (including related to hazardous work) remains an issue in Lao PDR.

Going forward, it would be important for Lao PDR's government to develop an institutional and policy framework for RBC. Lao PDR could consider creating a special dedicated body or appointing a focal point within the government that is responsible for co-ordinating RBC activities and promotion (OECD, 2017[4]; OECD, 2015[12]). In addition, a national action plan on RBC or on business and human rights, or a national RBC policy, is a key component of a comprehensive policy framework that guides specific government actions in order to promote RBC. NAPs have already been adopted in the region by Thailand (in 2019), Pakistan (2021) and Viet Nam (2023), and are currently being developed by India and Nepal (DIHR, 2023[171]). Such a document should be aligned with Lao PDR's NSEDP and with international best practices, and should be based on consultations with all relevant stakeholders, including business associations and private enterprises, government agencies, worker associations, employer associations, civil society, and local communities (OECD, 2017[4]; OECD, 2015[12]). Given that many investors in hydropower, mining and agriculture (sectors that have an adverse social and environmental impact) originate from neighbouring countries, including China, Thailand and Viet Nam, it would be important to include actors from these countries in this process. Furthermore, RBC initiatives in these countries, such as the Chinese *Guidelines for Sustainable Development of Natural Rubber (2017),* should be taken into account in this process (Sylvester, 2018[8]).

RBC could be more actively encouraged through targeted programmes and through investment promotion and facilitation activities. Lao PDR could establish industry-specific, home-grown programmes in order to raise awareness of and encourage RBC and the implementation of due diligence among businesses. Such programmes could, for example, target the mining, hydropower or agricultural sectors, all of which have a considerable negative social and environmental impact (see the section on opportunities and challenges in key investment sectors). In addition, investment promotion efforts could be targeted at MNEs that have strong environmental and social safeguards and would be willing to source inputs locally. Supplier databases with RBC criteria could also be developed (OECD, 2017[4]).

RBC could help Lao PDR bridge the skills gap and improve environmental protection. It would be important to communicate to private enterprises that contributing to human capital formation and environmental protection are both part of RBC, and to give recognition and visibility to those enterprises involved in education and training, as well as those enterprises with rigorous environmental safeguards or that are involved in environmental protection and conservation activities. Lao PDR could also provide enterprises with incentives to provide on-the-job training, learning opportunities, apprenticeships, traineeships and internships; for example, through tax incentives (OECD, 2017[4]) (see the section on investment tax incentives). Similarly, Lao PDR could provide enterprises with incentives to adopt strong environmental safeguards and to engage in environmental protection and conservation (for example, to participate in reforestation efforts through tax or other incentives).

Lao PDR requires better remedy and grievance redress mechanisms for dealing with the negative externalities of investment projects, particularly environmental and social impacts. This includes both enterprise-level grievance mechanisms and public grievance mechanisms for local communities or investors that are negatively affected by investment projects (for example, through soil, water or air pollution) (Sylvester, 2018[8]; Village Focus International/National University of Laos, 2019[9]; OECD, 2017[4]). At present, many agricultural investors resolve complaints directly with villagers (through village meetings or on the phone), but they lack formal and effective grievance mechanisms (Sylvester, 2018[8]; Village Focus International/National University of Laos, 2019[9]).

It would be important to improve RBC for concession investments in particular. Sectors that are reported to have significant negative environmental and social impacts, including the hydropower, mining and agricultural sectors, tend to be heavily focused on concession investments. The design of concession agreements could be improved by incorporating strong environmental and social safeguards into these agreements. There is also scope to improve the implementation and respect of EIAs (see the section on EIAs). In addition, transparency could be increased by making concession agreements publicly available, which could lead to stronger accountability (Sylvester, 2018[8]).

Notes

[1] This policy aimed at generating economic value (including government revenues and economic development) from the marketisation of land, and has since been the driving force of land-based investment in Lao PDR. In the context of this policy, Lao PDR increasingly opened the door to FDI, especially land-based FDI (CDE/University of Bern/MRLG, 2019[5]; Sylvester, 2018[8]).

[2] This estimate includes the loss of capture fisheries, nutrient-rich sediment flows and social migration measures for resettlement at net present value (with a 10% discount rate) (Intralawan et al., 2018[7]).

[3] According to the ASEAN SME policy index 2024, a slow improvement in the environment for small- and medium sized enterprises (SMEs) has been noted compared to 2018. Apart from the Lao SME Service Center (SSC) established in 2017 in Vientiane there are now six provincial branches, Luang Prabang (opened in 2019), Champasak (opened in 2019), Savannakhet (opened in 2020), and Oudomxay and Bolikhamxay (opened in 2022) and Luang Namtha (opened in 2023) (ERIA/OECD, forthcoming[173]).

[4] The increase in unemployment can be attributed to a loss in competitiveness and a loss of private sector jobs up to 2019, as well as to public sector downsizing in the context of the pandemic and the economic crisis (World Bank, 2023[61]).

[5] Examples of land value capture tools include tax increment financing (TIF) districts, development charges, development rights and joint development (OECD, n.d.[80]).

[6] Similar to PPPs, green bonds would be an option for financing sustainable transportation infrastructure in Lao PDR only in the long term (not in the short to medium term), given that Lao PDR is in debt distress (see Chapter 3 on sustainable financing).

[7] “Passive bribery” refers to the offence committed by an official who receives a bribe.

[8] The index uses a scale from 1 (highly corrupt) to 100 (very clean).

[9] The central CIPM’s Deputy Chairmen are the Minister of Planning and Investment and the Minister of Industry and Commerce. Other members of the central-level CIPM include the deputy ministers of the MPI, the Ministry of Finance, MONRE, the Ministry of Energy and Mines, the MAF, the Ministry of Public Works and Transport, the Ministry of Information, Culture and Tourism (MICT), the Ministry of Labour and Social Welfare, and the Ministry of Public Security (Article 76 of the Law on Investment Promotion) (National Assembly of Lao PDR, 2016[98]).

10 TDF-2 is a multi-donor programme financed by Australia, the EU, Germany, Ireland, the United States and the World Bank focusing on improving trade and private sector development in Lao PDR (Bank, 2017[172]).

11 According to interviews with private sector representatives in Lao PDR.

12 These priorities are as follows: (i) production and services sectors that can promote green and sustainable economic growth, increase production in order to substitute imports and promote exports, and create more diversified jobs; (ii) human resource development, especially in order to improve the quality of education, health and skills development; (iii) research and development (R&D); (iv) rural development and poverty alleviation; (v) improving public governance and administration; and (vi) infrastructure development (Government of Lao PDR, 2021[111]).

13 According to interviews with non-governmental organisations in Lao PDR.

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6 Strengthening environment statistics to support sustainable development

Lao People's Democratic Republic (Lao PDR) has the potential to unlock green and climate financing using environment statistics. Mechanisms such as green bonds, debt-for-nature swaps and carbon credits require robust monitoring and reporting mechanisms and strict transparency and verification processes, of which environment statistics are the cornerstone. This chapter analyses the state of play of Lao PDR's environment statistics system for responding to the data demands of climate financing mechanisms. The key findings reveal that supportive legislation prioritises environment statistics, and establishing the Department of Environment and Stability Statistics (DoES) in the Lao Statistics Bureau (LSB) will help to create a robust institutional framework. Overall, environment statistics underpin Lao PDR's 9th National Socio-Economic Development Plan (NSEDP) and its associated Financing Strategy. Despite progress, persistent information gaps, co-ordination challenges between data producers and users, and poor data sharing hinder effective climate financing in Lao PDR. This chapter recommends prioritising data demands, implementing harmonised data templates for improved data sharing, and enhancing capacity development across the National Statistical System (NSS) beyond individual ministries.

Strengthen environment statistics to unlock opportunities in green and climate financing

Environment statistics are crucial for different green and climate financing modalities

Green financing is defined as financial flows from the public, private and not-for-profit sectors to sustainable development priorities (UNEP, 2015[1]). As the impacts of climate change become more evident, a subset of green financing dedicated to supporting mitigation and adaptation actions to address climate change, referred to as climate finance (GIH, 2023[2]), is becoming more relevant. Three broad types of green finance instruments have been developed (Box 6.1).

Box 6.1. Green finance instruments

Three types of green finance instruments:

- **Green bonds** are fixed-income debt instruments issued by a government or a corporation where the proceeds are exclusively used to partially or fully finance or refinance new and/or existing eligible green projects (ICMA, 2021[3]).
- **Debt-for-nature swaps** are financial transactions where a creditor or donor government provides debt relief to the debtor government on the condition that savings from the reduced debt are invested in nature conservation projects (IMF, 2022[4]).
- **Carbon finance** refers to funding mechanisms that put a monetary value on carbon emissions, allowing, for example, enterprises wishing to offset their greenhouse gas (GHG) emissions to buy carbon credits earned by organisations that remove emissions from the atmosphere or prevent them from being emitted (SINAI, 2021[5]). The cornerstone of carbon markets is carbon credits, which rely on high-quality and trusted data in order to measure emissions reductions/removals and to allow third-party verifications of such measurements.

Green finance instruments have proven successful in multiple country contexts:

- **Green bonds in Indonesia:** The Green Bond and Green Sukuk Initiative, launched in 2018, reached USD 1.25 billion (United States dollars) to support Indonesia's goal of reducing GHG emissions (UNDP, 2018[6]).
- **Debt-for-nature swaps in Belize and Ecuador:** In Belize, a deal with The Nature Conservancy reduced the country's external debt by 10% of its gross domestic product (GDP) and is helping to protect the longest coral reef in the Western Hemisphere (IMF, 2022[7]). In Ecuador, the Galapagos debt-for-nature swap will save USD 1.1 billion in debt service payments between 2023-2040 (GGGI, 2023[8]).
- **Carbon finance in Costa Rica:** In 2013, Costa Rica created the Domestic Carbon Market, a voluntary mechanism for generating carbon credits (which are to be marketed nationally or internationally) at the local level from projects or activities committed to reducing/removing GHG emissions (World Bank, 2020[9]). In 2022, the Forest Carbon Partnership Facility (FCPF) paid Costa Rica USD 16.4 million for reducing 3.28 million tonnes of carbon emissions during 2018 and 2019 through its REDD+ (reducing emissions from deforestation and forest degradation in developing countries) strategy, positioning Costa Rica as the first country in Latin America and the Caribbean to receive payments for reducing carbon emissions (World Bank, 2022[10]).

Green and climate finance can offer opportunities for Lao PDR. As highlighted in the *9th National Socio-Economic Development Plan Financing Strategy (2023-2025)*, increasing financial flows for green growth and climate-resilient development is a national priority (Government of Lao PDR, 2023[11]). The

Government of Lao PDR can consider using the three types of green finance instruments to increase financial flows in order to support the environment and mitigate and adapt to climate change.

Carbon finance stands out as the most immediate opportunity for Lao PDR. Lao PDR has significant revenue potential from carbon markets that could be based on emissions reductions in several of its largest economic sectors. This includes the carbon capture potential of the restoration or establishment of new forest (reforestation and afforestation) of deforested areas and of standing forests, as well as the emissions reduction potential in sectors such as agriculture and mining. The country has the largest intact forest cover in Indochina and is uniquely positioned to contribute to the global fight against climate change through carbon financing initiatives. Green bonds and debt-for-nature swaps are largely forms of sovereign borrowing, linking their potential to many of the reforms necessary for solving the current public debt crisis in Lao PDR (see Chapter 3). Furthermore, green bonds would require reliable reporting systems on corporate and public environmental, social and governance standards to determine to what extent bonds can be identified as green.

High-quality and trusted data and registries build the core capabilities necessary for mobilising any type of carbon finance. Quality environmental data and statistics are pivotal to ensuring robust monitoring and reporting, which are in turn crucial for transparency and verification by third parties. Carbon finance depends on high-quality and trusted data to measure emissions reductions/removals and allow third-party verifications of such measurements. For debt-for-nature swaps, the regular availability of quality statistics on the extension of protected terrestrial areas and the number of protected flora and fauna species disaggregated by location, management category and type of species would be crucial for monitoring and reporting.

A robust environment statistics system is vital to boost carbon financing in Lao PDR

The functioning of carbon markets relies on carbon credits, which are tradable certificates representing one tonne of carbon dioxide equivalent (tCO_2eq) that has been either prevented from being emitted (e.g. due to renewable energy sources) or removed from the atmosphere (e.g. via forest restoration). High-quality and trustworthy data to measure and monitor the emissions that are either prevented from being emitted or are removed from the atmosphere are crucial for the functioning of carbon markets.

Carbon registries are needed to track carbon credit issuance, transfer and use. A carbon registry is a system or database that tracks and records information related to GHG emissions and carbon offset projects. In 2022, Ghana became the first country to adopt a comprehensive institutional and regulatory framework for issuing carbon credits that countries can trade between one another. One of the critical actions for Ghana to enter the carbon market was establishing a carbon registry (Box 6.2).

Apart from quality environmental data, a common data system and strong data infrastructure are needed to collect, manage and structure openly accessible data throughout the life cycle of carbon credits and to enhance transparency, trust and integrity (CADTrust, 2023[12]). Such a system should measure the amount of emissions – whether emitted, removed or prevented from being emitted – over a set period of time, and should report the findings to an accredited third party which then verifies the results so that these can be certified and an emissions reduction credit can be issued (World Bank, 2022[13]). Carbon registries serve as a platform for companies and organisations to participate in the carbon market, facilitating the transparent exchange of carbon assets. Under Article 6.2 of the Paris Agreement, each country participating in a co-operative approach should have a registry that tracks and records emissions reductions, including their authorisation, transfers, acquisition and use towards nationally determined contributions (NDCs).

Box 6.2. The Ghana Carbon Registry for the rice industry

As presented in Chapter 3 of this report (Box 3.2), the carbon credits project in Ghana will support several thousand rice farmers to reduce methane emissions by converting to more sustainable forms of agriculture. The farmers covered by the project account for about 80% of Ghana's rice production and will be able to increase their income through revenues generated from the sale of internationally transferred mitigation outcomes (ITMOs).

Ghana has established the Ghana Carbon Registry in order to track the issuance, transfer and use of ITMOs according to the guidelines in Article 6 of the Paris Agreement. The Ghana Carbon Market Office creates ITMOs by issuing a unique identifier for each ITMO on the Ghana Carbon Registry. These identifiers make the ITMOs traceable to the mitigation outcomes they represent.

The Ghana Carbon Registry was established to:

- keep records on eligible mitigation activities that seek to create authorised mitigation outcomes for international transfer as ITMOs
- host the ITMO accounts of mitigation activity developers (the organisations that implement the climate mitigation activities), each of which is required to have an account in order to undertake transactions in the Ghana Carbon Registry
- Document and hold information on ITMOs' authorisation; first and subsequent transfers acquisitions; use towards NDCs; authorisation for use towards other international mitigation purposes; and voluntary cancellation (including for the overall mitigation of global emissions, if applicable). Cancellation refers to the action of permanently retiring the ITMO from the market so that it cannot be reused.

Source: Developed by the authors based on countries' experiences with sovereign carbon credits presented in Chapter 3 of this report, "Opportunities and challenges in Lao PDR's sustainable development financing landscape".

Although carbon registries track carbon credits, the mechanism used in order to prove that an activity has actually avoided or removed harmful GHG emissions so that actions can be converted into credits with a monetary value is the measurement, reporting and verification (MRV) system (World Bank, 2022[14]). The MRV system refers to the multistep process used in order to measure the amount of GHG emissions reduced by a specific mitigation activity over a set period of time and report these findings to an accredited third party (World Bank, 2022[13]).

An MRV process is the key to unlocking climate finance, but the process is costly and requires data, technical capacity and a strong innovation and technology infrastructure. In terms of data, every emissions reduction programme must determine a baseline against which performance is measured periodically. This requires granular statistics so that accounting methodologies can be used in order to calculate emissions reductions (which vary by sector and programme scale), and also so that an emissions report can be produced and subjected to third-party verification. The measurement and analysis process requires technical expertise and data infrastructure capacity, which many low-income countries lack. They often rely on international enterprises, which can be costly and undermine sustainability and country ownership. Expanding the use of smart sensors, satellites and drones, cloud computing, artificial intelligence, and blockchain encryption will help to reduce the cost of emissions reduction credit issuances (World Bank, 2022[14]).

Not only are carbon registries and MRV systems necessary for entering the carbon market and upholding a transparent process but they also play an essential role in reporting on the progress of NDCs, particularly under Article 6 of the Paris Agreement.

The NSS needs to build capacity in order to establish robust carbon registries and an MRV system for climate financing

According to the *First Biennial Update Report of Lao PDR*, the country does not have a harmonised and robust MRV system (Government of Lao PDR, 2020[15]). Lao PDR is working on developing an MRV system for GHG mitigation actions and effects under the leadership of the Ministry of Natural Resources and Environment (MONRE), in accordance with the United Nations Framework Convention on Climate Change. Simultaneously, other ministries are working on their own sectoral MRVs. For example, the Ministry of Agriculture and Forestry (MAF) is responsible for the MRV under the National REDD+ strategy framework to protect forests as part of the Paris Agreement, and the Ministry of Public Works and Transport leads on the MRV for the aviation sector. These different initiatives need to be harmonised and integrated in order for a national MRV system to be operational.

Based on the data gap analysis conducted by the Partnership in Statistics for Development in the 21st Century (PARIS21), evidence shows that data on crucial areas for the carbon markets in Lao PDR (such as GHG emissions and forests) mainly depend on sources from global databases. For example, forest data come from the Global Forest Resources Assessment (FRA), which is updated every ten years. This is a challenge when carbon markets require regularly updated and disaggregated data.

Furthermore, although critical sectors for carbon markets (such as forestry, agriculture and mining) have been identified, it is recommended that a specific sector or sectors and specific mitigation activities within them are determined as a starting point. This would facilitate identifying the data required in order to measure the emissions, as well as building the capacity within the NSS in order to scale up for use in other sectors and more complex carbon emissions transactions.

Current statistical production efforts cover only some of the areas where data demand is expected to increase. The DoES in the LSB is currently working to produce statistics based on the United Nations Statistics Division's (UNSD's) Framework for the Development of Environment Statistics (FDES 2013), prioritising the areas of environmental conditions and quality, environmental resources and their use, and residuals (UNSD, 2024[16]). Figure 6.1 shows a non-exhaustive list of key data areas where data demand is expected to grow if Lao PDR leverages various financing mechanisms, including carbon markets. Although the ongoing statistical production plans cover most of these key areas, areas such as emissions removals and sustainable agriculture do not fall into the current prioritised data production.

Not all data and statistics needed to unlock green and climate financing will necessarily be provided by the LSB. As the development of financing mechanisms advances, collaborations with other line ministries and non-state actors, such as the private sector or civil society and development partners, may be needed in order to fulfil data demands. However, the LSB and the NSS agencies should leverage these collaborations so as to ensure the sustainability of data production, dissemination and use by strengthening the system as a whole and not only one agency or ministry.

Figure 6.1. A non-exhaustive list of key data areas for green and climate financing in Lao PDR

Source: Authors' elaboration.

Environmental data and statistics underpin Lao PDR's 9th NSEDP and its Financing Strategy, but significant information gaps persist

Environmental data and statistics are at the core of Lao PDR's 9th NSEDP, but its monitoring and evaluation framework has limitations

Lao PDR's 9th NSEDP relies on data for monitoring the progress towards its objectives, particularly in relation to emerging areas around the environment, which have been strengthened in this version of the NSEDP. The monitoring and evaluation (M&E) framework of the 9th NSEDP outlines 23 indicators (Annex 6.A) related to the environment, representing more than 14% of the whole M&E framework (Government of Lao PDR, 2021[17]). Environmental indicators can be mainly found under the following:

- Outcome 4: Environmental protection enhanced, and disaster risks reduced, under the following outputs:
  - Output 1: Natural resources sustainably used and managed, including forest land, land management, river basins, and air quality (six indicators)
  - Output 2: Green growth promoted and actions taken towards climate change mitigation, including greenhouse gases, clean energy, and waste disposal (four indicators)
  - Output 3: Capacities for disaster prevention, management and recovery enhanced, including meteorological system, disaster management, and disaster risk mapping (five indicators).

Additionally, a few indicators related to agriculture and the environment can be found under other outcomes:

- Outcome 1: Continuous quality, stable and sustainable economic growth achieved under the following outputs:
  - Output 1: Quality and sustainable economic growth, including livestock and agricultural production (four indicators)

- Outcome 2: Improved quality of human resources to meet development, research capacity, science and technology needs, and to create value-added production and services, under the following output:
    - Output 1: More inclusive and better-quality healthcare services, including access to clean water (one indicator).

Overall, the 9th NSEDP's M&E indicators generally align with the policy objectives proposed in the plan. Each indicator in the M&E framework includes the geographic coverage (national, provincial and/or village scale), the frequency of monitoring, the institution responsible and baseline data (Government of Lao PDR, 2021[17]). All of these elements provide comprehensive metadata that allow the NSS to produce user-centric information. However, it is important to note that there are certain limitations to the M&E framework proposed by the 9th NSEDP in the area of environment, which are related to a lack of coverage of certain topics, inadequate indicators, actions without indicators and a lack of granular information.

The main limitation of the 9th NSEDP's M&E framework is the nature of the indicators included in the framework. One-half of the environment-related indicators in the framework refer to process indicators rather than impact indicators. This means that the monitoring of the 9th NSEDP focuses heavily on government processes and services but has little information on whether these actions affect environmental outcomes. A clear example can be found under Outcome 4, Output 2, where the action states: "Reduce greenhouse gas emissions from deforestation to about 30 million tonnes of carbon dioxide equivalent (tCO2e) and sell forest carbon credits worth at least USD 95 million", and its corresponding indicator is "Sales value of forest carbon credits" (Government of Lao PDR, 2021[17]) *rather than* the emissions level that the action targets. This is a problem across the 9th NSEDP, but it is especially important in the area of the environment, where targeted actions sometimes do not have the expected results.

In addition, there remain a few actions without corresponding indicators, which hinders policy makers' ability to monitor progress on their implementation. These include the construction of vehicle charging/biofuel stations and the establishment of energy efficiency standards. Identifying impact indicators for these actions will make the monitoring of the 9th NSEDP more meaningful and allow for rectifying actions and investments by the government of Lao PDR. In the same way, the M&E framework should be reviewed in order to ensure that all of the priority areas on the environment are well covered, and that the necessary data are produced in a timely manner. A well-developed M&E framework is an important tool for guiding statistics production and prioritising statistical activities in countries with low capacity and resources to manage a statistical system, such as Lao PDR.

Finally, all of the indicators in the 9th NSEDP have nationally aggregated information, and only two look at provincial- or village-level information. This becomes a problem when policy makers need to decide on actions at subnational levels, which is crucial in the context of environmental action due to the variability of phenomena across a country such as Lao PDR. It is particularly problematic when the indicator refers to the effects of the environment on the population and does not include disaggregation variables such as gender, income or others. For example, "Number of people killed and missing from the disaster per 100 000 population" (Government of Lao PDR, 2021[17]) is defined in the M&E as a national aggregate, but this information should be examined from a local and population-specific perspective.

Lao PDR's statistical system does not produce all the indicators needed in order to monitor environment targets set out in the 9th NSEDP, the Sustainable Development Goals and the National Green Growth Strategy

The 9th NSEDP, the United Nations' Sustainable Development Goals (SDGs) and Lao PDR's National Green Growth Strategy (NGGS) encompass the country's most prioritised data demand, representing the key areas for government intervention in the area of environment statistics. It is worth noting that Lao PDR has localised the SDGs, and 64 indicators are related to the environment

(Annex 6.B). This comprises roughly 25% of total localised SDG indicators. By analysing how well the data produced in the NSS align with these demands, it is possible to identify how useful the data are and whether the investment in statistics production reflects national concerns.

In Lao PDR, there are four main producers of official statistics in the area of environment, including MONRE, the LSB, the MAF and the Ministry of Labour and Social Welfare. The Ministry of Public Works and Transport and the Ministry of Health will also have environmental indicators available to the public in 2025. The NSS currently produces a total of 64 indicators related to the environment (Annex 6.A, Annex 6.B, Annex 6.C). Most of the information is collected through administrative records, with a few indicators produced from surveys, as shown in Table 6.1.

Table 6.1. Main data producers of environmental indicators to monitor the 9th NSEDP, the SDGs and the NGGS

Name of main data producers	Number of unique indicators produced
MAF	26
Ministry of Labour and Social Welfare	12
LSB	9
MONRE	8
Others	5
Total unique indicators	60

Note: "Total unique indicators" avoids double counting of indicators by counting those that are repeated across plans as only one indicator (there are four indicators present in more than one plan).
Source: Authors' calculations based on data available in the LAOSIS (Lao Statistics Bureau, 2019[18]), LSB Statistical Yearbook (Lao Statistics Bureau, 2024[19]) State of the Environment Report and MAF Statistical Yearbook (Ministry of Agriculture and Forestry, 2024[20]).

Data gaps are identified by comparing the data demanded across the 9th NSEDP, the SDGs and the NGGS (98 unique indicators) and the data produced across the NSS (60 indicators). Lao PDR's NSS produces 61% of the indicators needed to monitor the targets in the three plans. The current data gaps represent 39% of indicators that are still not produced, as shown in Table 6.2. A complete list of indicators for each plan can be found in Annex 6.A, Annex 6.B and Annex 6.C. Ultimately, the data are unavailable unless they are being produced by the government or externally, even though the government of Lao PDR has previously committed to producing such data annually. The LSB is also working in co-operation with the government of Luxembourg to address these data gaps and improve the information available in the LAOSIS. These changes were completed in early 2024.

Table 6.2. Existing data gaps for environmental indicators listed in the 9th NSEDP, the SDGs and the NGGS

Name of the development plan	Number of environmental indicators in the plan	Number of environmental indicators available	Number of environmental indicators not available
9th NSEDP	23	23	0
SDGs	64	32	32
NGGS	15	9	6
Total	102	64	38
Total unique indicators	98	60	38

Note: "Total unique indicators" avoids double counting of indicators by counting those that are repeated across plans as only one indicator (there are four indicators present in more than one plan).
Source: Authors' calculations based on data available in the LAOSIS (Lao Statistics Bureau, 2019[18]), LSB Statistical Yearbook (Lao Statistics Bureau, 2024[19]), State of the Environment Report and MAF Statistical Yearbook (Ministry of Agriculture and Forestry, 2024[20]).

The presence of data gaps varies across plans: 100% of environmental indicators needed in order to monitor the 9th NSEDP are available, whereas 50% of indicators needed for the SDGs and 60% of those needed for the NGGS are available. However, it is worth noting that the complete data coverage of the 9th NSEDP is also related to the nature of the indicators, as discussed in the section above. Environmental indicators in the 9th NSEDP are mainly process indicators related to government services that can be compiled easily through administrative records. The coverage of the M&E frameworks will have to improve in order to cover key areas related to environmental accounting that can unlock climate financing.

Frequency of data collection for the indicators already produced

One of the main concerns of users and producers of statistics is ensuring that timely data are available in order to inform decisions. However, frequent and regular data collection is not always possible, which can lead to problems with the availability of timely data for the comparison of indicators, or even recent data being entirely unavailable.

In Lao PDR, the frequency of data collection for environmental indicators varies across different indicators (Table 6.3).

Table 6.3. Data collection for the available environmental indicators from the 9th NSEDP, the SDGs and the NGGS

Latest data collection

	Two years ago or less (2022-21)	Two to five years ago (2020-18)	More than five years ago (2017 or earlier)
From the 60 unique available indicators	21	18	21

Note: "Total unique indicators" avoids double counting of indicators by counting those that are repeated across plans as only one indicator.
Source: Authors' calculations based on data available in LAOSIS; (Lao Statistics Bureau, 2019[18]), *LSB Statistical Yearbook*; (Lao Statistics Bureau, 2024[19]), *State of the Environment Report and MAF Statistical Yearbook*; (Ministry of Agriculture and Forestry, 2024[20]), *Website*.

Geographic representation of the indicators already produced

The effectiveness of monitoring policies and development targets ultimately depends on how well the data can reveal differences between different geographic areas within a country. The level of representation of the data will determine the level at which the indicators can be tracked beyond national averages, and how well actions can be targeted.

The geographic representativeness of the data varies across the different indicators (Table 6.4).

Table 6.4. Geographic coverage of the available environmental indicators from the 9th NSEDP, the SDGs and the NGGS

	National	Subnational	National and subnational
From the 60 unique available indicators	47	5	8

Note: "Total unique indicators" avoids double counting of indicators by counting those that are repeated across plans as only one indicator.
Source: Authors' calculations based on data available in the LAOSIS (Lao Statistics Bureau, 2019[18]), *LSB Statistical Yearbook*; (Lao Statistics Bureau, 2024[19]), *State of the Environment Report and MAF Statistical Yearbook*.

From the analysis of the 9th NSEDP, the SDGs and the NGGS, it is clear that Lao PDR's NSS does produce some core information on the environment, but there are gaps in the data that could become obstacles to achieving the goals outlined across those plans. Prioritising the production of these indicators will make monitoring the targets possible and will promote the use of statistics for policy making.

Data production across Lao PDR's institutions needs to be aligned with national and international M&E frameworks in order to be resource-efficient and user-centric

Lao PDR's Strategy for the Sustainable Development of the National Statistical System (SDNSS) aims to strengthen the NSS in an effort to provide high-quality, credible and timely official statistics to support the country's development goals and enable it to meet international standards and commitments. The SDNSS has identified the production of 68 environment and natural resource indicators between 2016 and 2025 as a priority for the NSS, but these are not detailed in the strategy document (Government of Lao PDR, 2017[21]). The alignment between these 68 indicators and the data required in order to monitor the 9th NSEDP, the SDGs and the NGGS needs to be carefully assessed, particularly as a total of 98 unique indicators are required for monitoring the three plans (see Table 6.2). In case there is a need to prioritise data production – due to issues with technical or financial resources, for example – such an assessment should be carried out in consultation with the Department of Planning and Cooperation (DoP) and relevant policy makers.

Beyond the SDNSS, the DoES in the LSB is currently working to produce statistics based on the UNSD's FDES 2013. The FDES 2013 is a statistical framework that offers an organised structure (the Basic Set of Environment Statistics) to guide the collection and compilation of environment statistics (UNSD, 2013[22]). The Basic Set contains a list of 458 individual statistics and the data needed in order to produce them. This includes, for example, guidance on the unit of measurement that can be used for a given statistical variable, the possible levels of disaggregation and sources for further methodological guidance (UNSD, 2018[23]).

The LSB plans to produce statistics listed in FDES 2013 components 1-3 before 2029. These components are:

- Component 1 – Environmental conditions and quality: This includes statistics on the physical, biological and chemical characteristics of the environment and their changes over time.
- Component 2 – Environmental resources and their use: This includes statistics on natural resources, such as subsoil resources (minerals and energy), soil resources, biological and water resources, and land resources. The resources monitored may be naturally renewable (e.g. fish, timber or water) or non-renewable (e.g. minerals). These statistics are closely related to the assets and physical flow accounts (flows from the economy to the environment) of the System of Environmental-Economic Accounting (SEEA) Central Framework.
- Component 3 – Residuals: This includes statistics on the amount and characteristics of residuals generated by human production and consumption processes, their management, and their final release into the environment. These statistics are closely related to the physical flow accounts of the SEEA Central Framework.

The FDES 2013 is an effective tool for producing statistics once there is clarity on the kind of statistics that are required in accordance with the indicators demanded by the M&E frameworks of national and international plans and commitments. In order to ensure that the data production is fit for purpose for policy making, environmental data need to be analysed and presented in a way that is congruent with monitoring practices. This is also the case for environmental accounts that have been identified as priorities for production by the DoES (material flow accounts and physical energy flow accounts) (Chanthalavong and Leost, 2023[24]). The system of environmental accounts planned should be carefully assessed so as to ensure its alignment with the data needed for monitoring national priorities and international commitments. The first step in improving the availability and use of relevant environmental data in Lao PDR should be for the DoP and policy makers in relevant ministries to conduct a review of the M&E frameworks that underpin national plans. The frameworks need to improve on how environmental concerns are addressed and specify the data needed for the different types of monitoring, including monitoring related to climate financing. The current M&E frameworks are over-reliant on process indicators and their coverage of environmental concerns is too narrow; these characteristics are not conducive to producing more and better indicators for monitoring core environmental phenomena, as discussed below.

Lao PDR can adopt good practices for the production of environment statistics from regional and global examples

Environmental reporting through Voluntary National Reviews in the Asia-Pacific region

Strengthening the environmental dimension of the SDGs remains a challenge for countries in Asia and the Pacific. The United Nations Environment Programme (UNEP) report *Strengthening the environmental dimension of the voluntary national reviews in Asia-Pacific: lessons learned, and ways forward* looks at the Voluntary National Review (VNR) structure and preparation, issues of governance (institutions and metagovernance), and common approaches for SDG implementation in the Asia-Pacific region (UNEP, 2022[25]). The review of 50 VNRs (spanning different countries and years) found that, on average, only 29% of the 92 environment-related indicators were reported in the VNRs. In the case of Lao PDR's reporting, the 2018 VNR included 23% of the environment-related indicators, which increased to 38% in the 2021 VNR (UNEP, 2022[25]). Since Lao PDR is a landlocked country, indicators related to the oean and sea are not relevant. Lao PDR should aim to produce the 76 indicators applicable to the country (Annex 6.F). This is aligned with Table 6.2 t that showed that despite efforts by the LSB and the line ministries, there are still data gaps in the area of the environment. These crucial areas are also part of environment accounts and MRV systems. Improving SDG monitoring will also help to improve the NSS as a whole and the capacity to monitor different climate financing initiatives.

Although large data gaps remain within the Lao PDR M&E framework, there are some good examples of countries in the Asia-Pacific region that have tried to improve SDG reporting. For example, Japan has expended great effort in adopting global standards for environmental indicators, and Bangladesh and Papua New Guinea have closed significant data gaps. In its 2017 VNR, Bangladesh reported on 29% of the environment-related indicators, but reached 100% in its 2020 VNR. Papua New Guinea has reported on 75% of the environment-related indicators (UNEP, 2022[25]).

In addition to adopting global standards and definitions, countries are also strengthening evidence-based SDG reporting by developing or improving the statistical annexes of the VNRs. These annexes include the compilation of indicators used for national monitoring, with clear definitions (including specified units) and details on corresponding SDG targets and global SDG indicators, as well as state and time series data on the indicator in question (UNEP, 2022[25]). As Lao PDR is working on its third VNR, it can take these good practices into account moving forward in order to strengthen its M&E framework while simultaneously producing the necessary environmental data. Lao PDR should continue to align its national development plans with the SDGs, as this practice helps create more focused outcomes and outputs, resulting in strengthened M&E frameworks.

List of environmental indicators by the United Nations Economic Commission for Europe

Beyond the Asia-Pacific region, the United Nations Economic Commission for Europe (UNECE) provides a set of regional environmental indicators that are standardised and designed to address key policy questions and to serve as a basis for sound and informed policy making (UNECE, 2014[26]). The thematic areas covered include air pollution and ozone depletion, climate change, water, biodiversity, land and soil, agriculture, energy, transport, waste, and environmental financing; there are a total of 49 indicators spread across the thematic areas (Table 6.5) A full table of indicators and their availability in the LAOSISan be found in Annex 6.E.

Table 6.5. UNECE standard environmental indicators produced in Lao PDR

UNECE environment areas covered	Number of standard UNECE indicators	Number of indicators produced by the Lao PDR NSS
Air pollution and ozone depletion	3	1
Climate change	3	3
Water	16	4
Biodiversity	6	4
Land and soil	2	0
Agriculture	4	0
Energy	6	1
Transport	4	0
Waste	4	3
Environmental financing	N/A	N/A
Total available	49	16

Note: The thematic area on environmental financing has not yet been published.
Source: Authors' calculations based on data available in the LAOSIS (Lao Statistics Bureau, 2019[18]), *LSB Statistical Yearbook*; (Lao Statistics Bureau, 2024[19]), *State of the Environment Report and MAF Statistical Yearbook*; (Ministry of Agriculture and Forestry, 2024[20]), *Website*; and (UNECE, 2014[26]), *Guidelines for the Application of Environmental Indicators*.

Based on the review, the Lao PDR NSS has produced 16 of the 49 indicators identified by the UNECE as the core list of standardised environmental information, which is essentially one-third of the indicators needed. The thematic areas of water, climate change and biodiversity contain 25 indicators, of which Lao PDR covers 11 indicators. None of the indicators in the areas of land and soil, agriculture, and transport are available.

Policies like the9th NSEDP, the NGGS and other sectoral strategies should include areas that are less developed in the NSS in order to ensure their production by ministries and agencies. This would also help to improve the M&E framework of the national plans that are heavily reliant on process activity-based indicators instead of relying on target- or impact-based monitoring. Improved M&E frameworks for policies and plans should include clear metadata on what indicators should be produced, how they should be measured and by which responsible institution. In order to support the development of national metadata for Lao PDR's M&E indicators, the DoP, in collaboration with relevant ministries, could use tools from other countries or regions and adapt them to Lao PDR's needs and priorities. For example, the UNECE has developed guidelines to assist countries in their efforts to monitor and assess the status of, and trends in, their natural environment, including the harmonisation of approaches and preparing indicator-based environmental assessments (UNECE, 2014[26]).

Since 2017, the enabling environment needed in order to ensure high-quality environment statistics in Lao PDR has improved significantly

A favourable legislative framework for environment statistics

Lao PDR's Statistics Law was amended in 2017, and environment statistics are included in the key areas of statistical production for the NSS. The Statistics Law defines the rules, regulations and measures regarding the organisation, management and inspection of statistical activities in the Lao PDR NSS (Lao Statistics Bureau, 2017[27]). It governs the production, management, dissemination and use of statistics;

refers to the fundamental principles of statistical works; and states the rights and duties of institutions within the NSS, including the LSB, which is mandated to produce and disseminate high-quality official statistics and co-ordinate the NSS.

This process laid the foundations for producing, disseminating and enabling the use of environment statistics with the same level of importance and priority as those from other fields, such as social and economic statistics. Although environment statistics were already recognised in Statistics Law 2010 (Lao Statistics Bureau, 2010[28]), the 2017 amendment places a stronger emphasis on environment statistics as a priority for data production and covers a broader scope of sectors within this field.

Within its definitions, the Statistics Law 2010 recognises and defines environment and natural resources statistics as the "statistics on the development conditions of environment and natural resources, including geography, geology, land, minerals, meteorology, hydrology, disasters, pollutants, waste, chemicals and treatment, environmental balance, human and development and other statistics related to the environment and natural resources (…)" (Lao Statistics Bureau, 2017[27]). Recognising and defining environment statistics in the Statistics Law 2017 has three main advantages. First, it recognises the need to invest and strengthen the capacity and funding for environment statistics in the country. Second, it helps the LSB and other actors in the NSS to identify the critical sectors and stakeholders relevant to environment statistics, thus facilitating co-ordination. Third, it provides clear guidance on the mandates of the LSB and other data actors in the production, management, sharing, dissemination and use of environment statistics. However, despite its strong legal foundations, implementation of the law is happening at a slower pace. For example, the LSB only created the DoE in 2022.

Environmental laws and decrees place environmental data at the centre of the NSS

Laws and decrees supporting environmental protection provide the legal and regulatory systems necessary to protect the environment. In doing so, they promote monitoring the state of the environment in order to measure changes and identify trends and needs for policy action. The 2012 Environmental Protection Law (Revised Version) defines principles, regulations and measures related to environmental management and places emphasis on monitoring the state of the environment. The law highlights the importance of data collection and analysis activities (Government of Lao PDR, 2012[29]). Similarly, the Decree on Climate Change (2019) determines the principles, regulations and measures (including monitoring) to prevent, protect and decrease the potential impacts of climate change (Government of Lao PDR, 2019[30]).

In addition to the above-mentioned legislation, there are also laws and decrees for specific sectors that are critical to the environment. Some examples include the Water and Water Resources Law (1996) (which mandates data collection) (Government of Lao PDR, 1996[31]) and the Law on Forestry (Revised) (2019) (which has a dedicated article on forest data and information) (Government of Lao PDR, 2019[32]), as well as the Protected Area Decree (2023) for better management and governance of biodiversity-rich zones (WCS, 2023[33]), among others. Highlighting monitoring as one of the critical aspects in the laws and decrees related to the environment brings relevance to data and statistics and can stimulate the demand for and production of more and better environment statistics.

The creation of the DoES in the LSB provides a clear responsible institution for environment statistics

The LSB leads the production and co-ordination of environment statistics in Lao PDR. The amended 2017 Statistics Law mandates the LSB with the co-ordination of the NSS[1] and has established the LSB as an independent institution (Lao Statistics Bureau, 2017[27]) as cited in (UNESCAP, 2020[34]). As part of its duties, the LSB must co-ordinate with line ministries, equivalent organisations, local authorities and key stakeholders involved in statistical activities in order to respond to Lao PDR's information demands (Lao Statistics Bureau, 2017[27]). Increasing the production of environment statistics is among the priorities and main objectives stated in the SDNSS data strategy in order to meet domestic and international data demands (Lao Statistics Bureau, 2017[35]).

As a reflection of policy recognition across government sectors of the need to improve the production of environment statistics, in 2022 the LSB, in conjunction with the Ministry of Planning and Investment (MPI), established the DoES. The 2017 Statistics Law guides the DoES's mandate. The DoES has four primary responsibilities with regard to environment statistics: (i) co-ordinate environment statistics-related work within the NSS; (ii) act as the main data producer in response to national and international demands; (iii) provide technical support guided by internationally agreed standards within the LSB and at the NSS level; and (iv) advocate for and disseminate environment statistics (Lao Statistics Bureau, 2017[27]; Lao Statistics Bureau, 2023[36]).

The DoES has three divisions that co-ordinate different areas of work related to environment statistics: (i) Environment Statistics that works with the production of natural resources and socio-economic statistics related to the environment; (ii) Stability Statistics covering food security, disasters, risks and livelihoods and SDGs-related work; and (iii) Statistics and Methodologies in charge of the design, planning, maintenance and dissemination of environment statistics.

Capacity to produce environmental indicators across Lao PDR's NSS remains low, despite increased attention on environmental data

Technical capacity and co-ordination among the main producers of environment statistics need to be strengthened, including the LSB's role as co-ordinator of the system

Technical capacity to produce environment statistics is lacking across the NSS, with very few statisticians in the relevant ministries and a recently appointed team dedicated to environment statistics at the LSB. There is a need to improve knowledge across sectors and to train environmental statisticians in the key NSS agencies, including the LSB, MONRE, the MAF and the Ministry of Energy and Mines (MEM). An ongoing collaboration with the Embassy of Luxembourg has been providing support in this area since 2017. The National Institute for Statistics and Economic Studies in Luxembourg has been providing support to the LSB in the area of environment statistics, and it provides training for LSB staff in emerging areas such as environmental accounts. The provision of additional support by STATEC for capacity building will increase the production of statistics, improve data quality, and improve data management practices and systems in ministries.

Ensuring effective co-ordination within the NSS in its vertical (between national and subnational levels) and horizontal (across the various line ministries) lines is one of the biggest challenges facing the LSB and the entire NSS (UNESCAP, 2020[34]), including the recently established DoES. The lack of co-ordination mechanisms can lead to differences and conflicting views on priorities between the LSB and other ministries and agencies (UNESCAP, 2020[34])which can hamper the production of environment statistics. Beyond the issue of producing environment statistics, co-ordination is crucial for accessing climate financing. As highlighted in Chapter 3 of this report, an uncoordinated approach could endanger the credibility and success of climate financing initiatives such as carbon credits.

Although overall co-ordination has gradually improved through mechanisms for data collection and dissemination, and through annual meetings (Lao Statistics Bureau, 2017[35]), it remains one of the LSB's core priorities. The SDNSS has one goal dedicated to establishing and improving an efficient and effective co-ordination mechanism, and enhancing co-operation across the NSS in order to avoid duplication and waste of resources (Lao Statistics Bureau, 2017[35]). However, there are no activities in the SDNSS on co-ordination that specifically relate to environment statistics, whereas there are activities on co-ordination for some other sectors, such as health and education (Lao Statistics Bureau, 2017[35]).

Since the DoES commenced operations, it has collaborated closely with MONRE, the MAF and the MEM to produce data on the areas of natural resources, energy, food, land, water resources and climate change (Lao Statistics Bureau, 2023[36]). The DoES is trying to improve co-ordination through discussions with these key ministries on which data are collected through administrative records, and by creating standard templates for administrative data reporting. As part of these efforts, a memorandum of understanding (MOU) on co-ordination has been signed between the LSB and MONRE (Chanthalavong and Leost, 2023[24]). However, there is a need to formally establish co-ordination mechanisms for environment statistics activities with other partners, as the templates are not being widely used across ministries due to statistical capacity challenges. A more systematic approach to data production and data sharing is needed in order to ensure efficient collaborations, particularly as data sharing between ministries and the LSB and among ministries is not standardised. The creation of the Working Group on Environment Statistics (WGES) is helping this situation, but the sustainability and relevance of the group need to be ensured (Chanthalavong and Leost, 2023[24]).

In some cases, co-ordination is also hampered by the lack of clarity within institutional mandadets on responsibilities regarding data. The DoES has the mandate to co-ordinate environment statistics activities, but it has not yet fully implemented co-ordination mechanisms such as working groups. With regard to other ministries, while MONRE's mandate clearly states that data and information on natural resources and the environment (including natural disasters and climate) must be provided (Government of Lao PDR, 2003[37]), the Decree on Ministry of Agriculture and Forestry Organizational Structure and Operations (2021) only refers to expanding the statistical database system and information on agriculture, forestry and rural development.

Building a solid co-ordination architecture with clear focal points, areas of work and tasks can help the LSB, the DoES and the NSS to improve data collection, harmonisation, quality and dissemination. A shared space for co-ordination activities would also be helpful in order to identify demands for environmental data and indicators, and would avoid duplication of efforts when working across different ministries. Such an initiative would be compatible with the activities of the WGES, as one of its aims of the group is to co-ordinate the data actors to support the monitoring of national and international development plans (Chanthalavong and Leost, 2023[24]).

Quality assurance processes are lacking, hampered by low levels of data sharing

According to the Statistics Law 2017, as the lead agency for the statistical system in Lao PDR, the LSB also has a mandate and the right to oversee quality assurance processes in relation to of statistics production in the country and to collect data from other agencies for certification. Below is a list of articles that reflect LSB's mandate:

Article 23. Statistics Centre of line ministries and agencies must report to Lao Statistics Bureau (LSB) […]

Article 26. Statistics Centre of line ministries, […] announce and disseminate official statistics […] through the technical certification and endorsement from Lao Statistics Bureau (LSB);

Article 32. [LSB's responsibilities] Monitor, examine and evaluate the use of sound statistical methodologies; […]

Article 37. [Ministries' responsibilities] Direct, manage and implement the statistics activities in their sectors, provide data to Lao Statistics Bureau and other users (Lao Statistics Bureau, 2017[27]).

In the implementation of the Statistics Law, however, the role of the LSB as the responsible institution for quality processes is not evident in the area of environment statistics. Despite ongoing efforts to collaborate and standardise data collection within ministries, there are challenges around overseeing data quality assurance of administrative records (Lao Statistics Bureau, 2023[36]), which represent the main source of environment statistics in Lao PDR.

Currently, the LSB plays a secondary role in overseeing quality assurance, as it reviews final products, using outliers to identify quality issues. In the case of the statistical yearbooks across line ministries, the statistics unit in each ministry calculates and compiles the reports themselves, without the involvement of the LSB, despite the fact that some of these units have low statistics production capacity. With regard to the statistical yearbook produced by the LSB, the ministries send out already processed indicators without sharing complete metadata and raw data which would enable the LSB to carry out a more in-depth quality assurance process. This is aligned to the overall state of the quality assurance process in the NSS, where the Lao Official Statistics Quality Assurance Framework (LOSQAF) is currently only used for the LSB process and products. The Lao Official Statistics Quality Assurance Framework (LOSQAF) document states that the use of the quality assurance process across the statistical system will be used at a later stage (Lao Statistics Bureau, 2020[38]). The creation and implementation of quality standards across the NSS is also one of the areas identified for improvement in the SDNSS (Government of Lao PDR, 2020[39]) and was highlighted as a particular challenge in the area of environment statistics by the LSB (Lao Statistics Bureau, 2020[38]).

In order to provide a solution to data sharing problems, the LSB is currently working with MONRE, the MAF and the MEM to standardise reporting templates as part of the Master Plan for the Development of Environment Statistics (MPDES). This initiative will help reduce the number of quality assurance problems, including the need to standardise methodologies and definitions, but a more systematic approach to quality assurance and data sharing is needed in order to ensure that environment-related data disseminated by ministries and the LSB are of high quality, are harmonised across data producers and are fit for purpose for policy making. Quality assurance processes are particularly important, as an assessment of environment data in the country by the Lao PDR-Luxembourg Cooperation Project in Statistics (LLPS) identified that most data in this area “were not collected and therefore not fit for statistical purpose with no centralized repository, no time series, lack of appropriate formats, uncertain frequency, etc.” (Chanthalavong and Leost, 2023, p. 112[24]).

Another limitation of the data that are currently used and disseminated for environment statistics, which affects the quality assurance process, is the lack of metadata for administrative records. Given the ministries’ responsibilities to produce their own statistics yearbooks, there is limited availability of documentation around data collection, management and analysis in the reports, portals and websites of the main line ministries producing indicators on environment statistics. This hinders the producers’ and users’ ability to assess the data presented in the different statistical products and ensure that the interpretation of the data is aligned to the definitions used in the administrative records.

So as to ensure the return on investment in statistical production, data dissemination should be improved in order to promote data use

In this new era where there is demand for large volumes of available and demand, National Statistics Offices need new and diversified ways to disseminate statistical information in order to promote better data use (UNSD, 2022[40]). The Lao PDR NSS offers several dissemination channels and products that provide access to 98 environmental indicators (see Table 6.2). The channels used for data dissemination include the LAOSIS, the VNR, the statistical yearbooks (the LSB, Agricultural report), the Social indicator survey report and the State of environment report. Each ministry has its own website, where data are mainly disseminated through reports. Yet, datasets are held by the ministries’ statistical units and are not fully shared with the public. Better collaboration between ministries and the LSB, in addition to improving dissemination channels, is necessary in order to ensure the optimum promotion of data use. In addition, in order to achieve return on investment, funding allocations must unlock resources not only for data producers but also for data users.

The LAOSIS is a centralised statistical database operated by the LSB where the 18 environmental indicators in the 9th NSEDP and the SDGs can be found (Annex 6.A and Annex 6.B). Currently, the

LAOSIS provides statistics divided into 27 categories, 4 of which (energy and mines, agriculture, natural resources and environment, and geography) have environmental indicators. The LAOSIS provides user-friendly tools such as selection criteria for data, downloadable data in Microsoft Excel format, a data search function, charts and figures, and analysis of data functions. The data portal also shows that there is co-ordination between ministries, as indicators from other ministries are disseminated in the LAOSIS (Table 6.6). However, there are no specific data sources listed for the indicators (i.e. the survey, census or administrative records that collected the data are not specified). Furthermore, the LAOSIS does not provide metadata for the available indicators. The definitions, classifications and methodologies used to produce the indicators are also not explained in the LAOSIS. The LAOSIS platform could also benefit from having a feature that enables the sharing of data with social media platforms. Social media is essential for increasing the use and dissemination of data among the general public, as well as ensuring the impact of data (Lacoma, 2021[41]). Ultimately, the LAOSIS should aim to be a data portal designed to attract more and different types of users in order to create wider use and recognition of official statistics and greater public trust in them (PARIS21 and ODW, 2021[42]).

Table 6.6. Environmental data dissemination products

Dissemination products	Years for which reports are available
VNR	2018, 2021
Agricultural Statistics Yearbook	2019, 2021
Lao PDR Social Indicator Survey (LSIS) Report	2011-12, 2017
LSB Statistical Yearbook	Every year since 2001
State of the Environment Report	2001, 2012, 2016-20

The VNR was last published in 2021 and was developed based on key recommendations from the first VNR (2018) and the conclusion of the 8th NSEDP (Government of Lao PDR, 2021[43]). The report remains a vital SDG dissemination product for Lao PDR as it provides access to 237 localised Lao PDR national SDG indicators, 64 of which are environmental indicators. The statistical annex in the VNR is categorised by SDGs and includes information such as baseline year, data source, frequency and latest year of data collection for the indicators. However, the information in the VNR only covers the period 2016-19. The third VNR is currently in preparation and will be released in June 2024 to incorporate the latest data. Data disaggregation and localisation of the SDGs is necessary in order to ensure optimal monitoring of the SDG targets. The statistical annex of the VNR should also be made available in Microsoft Excel format so as to ensure improved accessibility.

In parallel with the VNR, the Laos Open SDG Data Platform is a national statistical platform that is operated by the LSB. As a gateway for Lao PDR's official statistics, it provides information on the monitoring and evaluation of progress in implementing the SDGs (Lao Statistics Bureau, 2021[44]). However, the platform only includes 3 of the 32 available localised SDG environmental indicators. The last update to the data was made in June 2021, thus emphasising the need to ensure that the updating of data on the platform is carried out more frequently (Lao Statistics Bureau, 2021[44]). The agriculture yearbook, the social indicator survey (LSIS) report, the LSB statistical yearbook and the state of environment report (Table 6.6) are important dissemination products that can be accessed on the LSB website under the statistics production section. The combination of products listed above are the dissemination channels for 28 of the total 60 available environmental indicators identified (Government of Lao PDR, 2021[43]) The dissemination reports are as follows and further described in Table 6.7:

- The *Agriculture Statistics Yearbook* is published every year and provides data disaggregation at the provincial level. In addition to data, it provides an analysis of the data trends using figures and graphs. The most vital metadata components, including the methodologies used in the calculation of the indicators, are not presented in the yearbook. In addition, the data can only be found in the yearbook and cannot be downloaded in Microsoft Excel format. Finally, no microdata are provided.

- The *Lao Social Indicator Survey* (LSIS) report is produced every five years and focuses on social indicators. Some data disaggregation is provided at both the provincial and regional level, but generally, data disaggregation is provided at the national level. The report provides information on the survey methodology and other important metadata characteristics, such as data sources. There is no analysis of data trends, and the data can only be found in the report and cannot be downloaded in Microsoft Excel format. Finally, no microdata are provided.
- Each year, the LSB publishes a *Statistical Yearbook* with the most up-to-date official statistics across provincial and national levels. The yearbook provides limited analysis of data trends in the form of charts and graphs. However, it does not provide any metadata except for a data source. There is no reference to the methodology used in the calculation of the indicators. The data can only be found in the yearbook and cannot be downloaded in Microsoft Excel format. Finally, no microdata are provided.

Table 6.7. Characteristics of environmental data reports available in Lao PDR

Dissemination reports	Data producer	Production	Metadata	Data disaggregation	Downloadable data in Microsoft Excel
Agriculture Statistics Yearbook	MAF; Department of Planning and Cooperation	Every ten years	Yes	Provincial level	No
Lao Social Indicator Survey	LSB; Ministry of Health; Ministry of Education and Sport	Every five years	Yes	Mostly national level	No
Lao Social Indicator Survey	LSB	Every year	No	Provincial and national level	No
State of the Environment	MONRE; LSB	Every five years	No	No	No

Recommendations to improve environment statistics in Lao PDR in order to unlock opportunities for climate financing

Short-term recommendations

- **Define an initial core set of environmental data needed to activate climate financing** aligned to the climate financing mechanisms that will be implemented. A useful guideline for prioritising data production might be to consider the subsectors where carbon finance has the most potential. For example, in the case of Ghana, carbon finance was first introduced in the area of sustainable agriculture, specifically for the rice industry. This type of information will indicate what data and statistics decision makers might require.
- **Map the key sectors and actors – including non-government actors – related to the immediate climate financing mechanisms that will be implemented.** This could facilitate the identification of key producers and users of environment statistics and the role they can play in improving the production, dissemination and use of environment statistics. The leading agency on climate financing should co-operate in identifying data demands so that the LSB, MONRE, the MEM and other agencies can identify the data sources available or required and start to harmonise information across the system.
- **Enhance the sharing and harmonisation of environment statistics across the NSS.** A one-stop shop for environment statistics is crucial for building certification and verification systems to access climate financing. The current data quality assurance and data harmonisation practices are

insufficient to create an interconnected system across institutions that provides the same figures for all indicators. A first start step towards achieving that goal would be to use harmonised data templates for data sharing, particularly with the LSB, and committing to sharing raw data for quality assurance purposes. Better data sharing and harmonisation on methodologies, data collection processes and definitions of variables are prerequisites for creating the digital data systems needed for climate financing, such as carbon registries.

- **Use existing co-ordination mechanisms to liaise with policy makers and data users in general.** Existing mechanisms can help facilitate dialogue and consultations with selected data users, particularly those in the most strategic climate financing sectors, as it may provide information about their policy planning and existing monitoring frameworks. Such dialogue and consultations can also provide an opportunity to evaluate data demands and determine whether current data production is aligned.
- **Use the momentum of climate finance opportunities to advocate for production and use of statistics and to mobilise funding for data infrastructure, core systems and capacity development.** A high demand for environment statistics provides an excellent opportunity to use these statistics as the key to unlocking climate financing and mobilising resources (both internal and external) to improve the NSS in order to better serve the emerging needs of data users, particularly those of policy makers.

Medium-term recommendations

- **Develop statistical capacity across the NSS for climate financing.** Data systems needed for climate financing, such as carbon registries and MRV systems, require data, technical capacity, and a solid foundation for innovation and technology in all relevant institutions where climate financing initiatives will be established. Although developing the capacities of MONRE and the LSB is crucial for the production of environment statistics, the data demands derived from the systems to support climate finance require improving the NSS in order to develop a solid data infrastructure, prevent duplication of efforts and make more efficient use of resources.
- **Identify opportunities for collaboration between Government and non-government actors.** Non-state actors (such as the private sector, civil society or academic institutions) can often be strategic partners in mobilising resources, advocating for using environmental data, or leveraging innovative data sources and techniques in order to make current data collection processes more efficient through the use of technology. Collaborations with these actors could help the NSS explore the use of smart sensors, satellites, drones and artificial intelligence for the development and improved functioning of carbon registries and MRV systems.

Notes

[1] The NSS as defined by the Statistics Law refers to the compilation of data at central and local levels, from official statistics, action plans, infrastructure and the national statistics organisation (Lao Statistics Bureau, 2017[27]).

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Annex 6.A. 9th NSEDP M&E framework: Environmenta data availability

9th NSEDP outcome, output	Indicator	Type of indicator (PARIS21 evaluation)	Is the indicator available?	Latest data collection	Data produce
Outcome 4: Environmental protection enhanced and disaster risks reduced	Proportion of forest cover in the whole country	Impact	Yes	2020	MAF
	Number of people killed and missing from a disaster per 100 000 population (compared to 7 million)	Impact	Yes	2022	Ministry of Labour and Social Welfare (MLSW)
	Reduce greenhouse gas emissions from deforestation	Impact	Yes	2020	MAF
Outcome 4, Output 1: Natural resources sustainably used and managed	Plantation and reforestation areas – plantation – reforestation	Impact	Yes	2022	MAF
	Upgrade the protected areas to a national park	Process	Yes	2022	MAF
	Number of land titles issued (increased from 1.5 million to 3.1 million)	Process	Yes	2020	MONRE
	Develop land management plans, comprehensive management of natural resources and environment at the provincial level throughout the country	Process	Yes	2020	MONRE
	Number of stations measuring air quality based on particulate matter with 2.5 microns or smaller (PM2.5)	Process	Yes	2020	MONRE
	Develop a priority catchment management plan	Process	Yes	2020	MONRE
Outcome 4, Output 2: Green growth promoted and actions taken towards climate change mitigation	Sales value of forest carbon credits	Process	Yes	2019	MAF
	Provide information on the risks of climate change	Process	Yes	2020	MONRE
	Rates of clean energy use in transportation (Vehicle Statistics 2017)	Impact	Yes	2020	Ministry of Posts, Telecommunicatio and Communicatio

	Proportion of waste disposal services in Vientiane Capital, three capitals and four cities along the Mekong subregion in general waste and infectious and hazardous waste	Impact	Yes	2020	MPTC
Outcome 4, Output 3: Capacities for disaster prevention, management and recovery enhanced	Number of meteorological stations (cumulative figure)	Process	Yes	2020	MONRE
	Number of hydrological stations (cumulative figure)	Process	Yes	2020	MONRE
	Disaster Risk Management Committee revised and established in accordance with Decree No. 239/PM dated 18 May 2020 Number of districts that revised the Disaster Risk Management Committee Number of villages that established a Disaster Risk Management Committee	Process	Yes	2020	MLSW
	Establish provincial and district central disaster management funds Central level Provincial level District level	Process	Yes	2020	MLSW
	Develop provincial, district and village disaster risk reduction strategies Central level Provincial level District level	Process	Yes	2020	MLSW
Outcome 1: Continuous quality, stable and sustainable economic growth achieved Output 1: Quality and sustainable economic growth	Annual livestock growth	Impact	Yes	2022	MAF
	Average annual paddy rice production	Impact	Yes	2022	MAF
	Average crop production per year: coffee, feed corn, cassava, sugar cane, bananas	Impact	Yes	2022	MAF
	Fish farming and aquaculture growth	Impact	Yes	2022	MAF
Outcome 2: Improved quality of human resources to meet development, research capacity, science and technology needs, and to create value-added production and services Output 1: More inclusive and better-quality healthcare services and nutrition	Proportion of the population using clean drinking water compared with the total population (clean water consumption rate)	Impact	Yes	2017	LSB/Ministry of Health (MOH)

Annex 6.B. SDGs: Environmental indicators from VNR availability

Indicator	Is the indicator available?	Latest data collection	Data producer
1.5.1 Persons per 100 000 population directly affected (dead, missing, homeless/displaced) by natural disasters – Dead	Yes	2022	Department of Planning and Cooperation, Ministry of Lab and Social Welfare
Persons per 100 000 population directly affected (dead, missing, homeless/displaced) by natural disasters – Injury	Yes	2022	Department of Planning and Cooperation, Ministry of Lab and Social Welfare
Persons per 100 000 population directly affected (dead, missing, homeless/displaced) by natural disasters – Missing	Yes	2022	Department of Planning and Cooperation, Ministry of Lab and Social Welfare
Persons per 100 000 population directly affected (dead, missing, homeless/displaced) by natural disasters – Homeless/displaced	Yes	2022	Department of Planning and Cooperation, Ministry of Lab and Social Welfare
1.5.2 Percentage of damages affected from natural disasters relative to GDP	Yes	2022	Department of Planning and Cooperation, Ministry of Lab and Social Welfare
1.5.6 The number of national advance warning centres and the number of meteorological and hydrological parameter measuring institutions that have been improved and activated	No		
2.1.4 Food production (in tonnes) – Rice	Yes	2022	Department of Planning and Cooperation, Ministry of Agriculture and Forestry
2.1.4 Food production (in tonnes) – Sweetcorn	Yes	2022	Department of Planning and Cooperation, Ministry of Agriculture and Forestry
2.1.4 Food production (in tonnes) – Vegetables	Yes	2022	Department of Planning and Cooperation, Ministry of Agriculture and Forestry
2.1.4 Food production (in tonnes) – Meat and fish	Yes	2020	Department of Planning and Cooperation, Ministry of Agriculture and Forestry
6.1.1.a Proportion of population using an improved drinking water source (well and stream – Nam Lin and Nam Badan) – Rural	Yes	2017	Lao Statistics Bureau/Ministry of Health

6.1.1.a Proportion of population using an improved drinking water source (well and stream – Nam Lin and Nam Badan) – Urban	Yes	2017	Lao Statistics Bureau/Ministry of Health
6.1.1.b Proportion of population using an improved drinking water source (pipe water – Nam Pa Pa) – Rural	Yes	2017	Lao Statistics Bureau/Ministry of Health
6.2.1 Proportion of population using an improved sanitation facility: Rural	Yes	2017	Lao Statistics Bureau/Ministry of Health
6.2.1 Proportion of population using an improved sanitation facility: Urban	Yes	2017	Lao Statistics Bureau/Ministry of Health
6.3.1.a Percentage of population using water for drinking (well and stream –Nam Lin and Nam Badan) free from zero E-coli sources	Yes	2017	Lao Statistics Bureau/Ministry of Health
6.3.2 Quality of water in the bodies of water	No		
6.4.3 Percentage of water use from bodies of water	No		
6.4.4 Data on drought area	No	2022	Department of Planning and Cooperation, Ministry of Lab and Social Welfare
6.5.1 Number of river basins with a water resource management plan	No		
6.5.2 Number of transboundary basin areas with an operational arrangement for water co-operation	No		
6.6.2 Two water areas boundary management plan: Beung Kietngong and Xechamphone	No		
6.a.2 Number of projects and value on water resources	No		
7.2.1 Renewable energy share in the total final energy consumption	Yes	2015	LSB
11.5.2 Direct disaster economic loss in relation to GDP, including disaster damage to critical infrastructure and disruption of basic services	Yes	2022	Department of Planning and Cooperation, Ministry of Lab and Social Welfare
11.6.1.a Percentage of solid waste regularly collected and with adequate final discharge with regard to the total waste generated in Vientiane Capital	No		
11.6.2 Annual mean concentrations of fine particulate matter (PM 10 µg/m6)	No		
11.b.1 Percentage of district governments with local disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015-2030	No		
11.b.3 Number and value of projects on climate change adaptation	No		
11.b.4 Number of provinces with disaster risk reduction strategies and action plans	No		

12.1.1 Sustainable consumption and production (SCP) national action plans or SCP mainstreamed as a priority or target into national policies	No		
12.2.2 Domestic material consumption per capita and per GDP	No		
12.3.1 Food Loss Index	No		
12.4.1 Volume of hazardous waste produced in Vientiane Capital	No		
12.4.3 Volume of general waste generated in 12 provinces	No		
12.5.1 Percentage of waste reuse compared with total waste in Vientiane	No		
12.8.1 Primary and secondary curricula integrated sustainable development in: Primary Teacher Education Programmes	No		
12.8.1 Primary and secondary curricula integrated sustainable development in: Secondary Teacher Education Programmes	No		
13.1.3 Number of districts with disaster risk reduction strategies and action plans	No		
13.2.2 Reporting on Lao PDR's National Adaptation Plan	No		
13.3.1 Number of schools and villages that received information on disasters and climate change	No		
13.3.3 Number of provinces with capacity to report on the situation of climate change	Yes	2015	MONRE
13.a.1 Number and value of the projects that apply climate change adaptation	No		
13.b.1 Number of provinces and districts with projects on climate change	No		
14.4.1 Number of fish conservation zones	Yes	2016	MAF
14.6.1 Development and implementation of national plan of action (NPOA) to combat illegal, unreported and unregulated fishing in line with the International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (IPOA-IUU)	Yes	2016	MAF
14.b.1.a Existence of instruments that specifically target or address the small-scale fisheries (SSF) sector	Yes	2019	MAF
14.b.1.b Ongoing specific initiatives to implement the SSF Guidelines	No		MAF
14.b.1.c Existence of mechanisms enabling small-scale fishers and fish workers to contribute to decision-making processes	Yes	2019	MAF
15.1.1 Percentage of forest area as a percentage of total land area	Yes	2020	MAF

15.1.2 Percentage of land area covered by National Protected Areas, provincial and district protected areas	Yes	2012	MAF
15.2.1.a Production forest area with certification in hectares (e.g. FSC, FLEGT)	Yes	2015	MAF
15.2.1.b Forest area with management plans in million hectares	Yes	2016	MAF
15.3.1 Percentage of rural villages reporting land degradation: light, moderate, severe	Yes	2011	MAF
15.4.1 Proportion of land area under protection	Yes	2017	MAF
15.5.1 Number of species threatened with extinction	Yes	2017	MAF
15.7.1 Proportion of traded wildlife that was poached or illicitly trafficked (total wildlife seizures to total wildlife traded/export permits issued)	No		
15.8.1 Adoption of national legislation relevant to the prevention or control of invasive species	No		
15.9.1 Progress towards biodiversity national targets, as reported by the 9th NSEDP	No		
15.a.1.a Net official development assistance provided for biodiversity/ecosystems (USD)	Yes	2015	MPI
15.a.1.b Public expenditure on biodiversity/ecosystems	Yes	2015	MPI
15.b.2.a Net official development assistance provided for forestry/forest development (USD)	Yes	2015	MPI
15.b.2.b Public expenditure on forestry/forest development	No		
15.c.1 Proportion of traded wildlife that was poached or illicitly trafficked	No		

Annex 6.C. NGGS M&E framework environmental indic availability

Indicator	Is the indicator available?	Latest data collection	Data producer	
2.2.2. Proportion of population with access to clean water (%)	Yes	2014	LSB/MOH	Prov
3.1.2. Efficiency of agricultural land use	No			
3.1.2.1. Average productivity of rice production in wet season (tonne/hectare)	Yes	2022	MAF	
3.1.2.1. Average productivity of rice production in dry season (tonne/hectare)	Yes	2022	MAF	
3.1.3. Proportion of export of natural resources in the gross value of export (%)	No			
3.2.1. Proportion of greenhouse gas emissions to GDP (tonne/GDP million)	No			
3.2.2. Average production of garbage or waste per person (kilogrammes/person/year)	No			
3.2.3. Percentage of garbage or waste that is reused or disposed through proper methods and sites (%)	No			
3.2.4. Rate of forest cover (%)	Yes	2020	MAF	
3.2.5. Proportion of use of clean energy (hydroelectricity, solar energy and wind energy) (%)	Yes	2015	MEM	
3.2.6. Proportion of import of fuel and gas (%)	No			
3.2.8. Average greenhouse gas emissions per person (tonne/person/year)	Yes	2015	World Bank/IEA	
3.3.1. Percentage of economic losses caused by natural disasters (% of GDP)	Yes	2022	MLSW	
3.3.2. Average number of population affected by natural disasters	Yes	2022	MLSW	
3.3.3. Percentage of production value of agriculture in GDP (%)	Yes	2015	LSB	

* Note: Please note that Lao PDR is actively working to increase the availability of data. These improvements will be reflected in 2024.

Annex 6.D. Environment statistics available on the LAOSIS platform

Geography
List of protected forests in Lao PDR
List of national production forest area (NPFA) in Lao PDR
Agriculture
Lowland rain-fed paddy (area, yield and production by provinces)
Dry season paddy (area, yield and production by provinces)
Upland rain-fed paddy (area, yield and production by provinces)
Vegetables (area, yield and production by provinces)
Cotton (area, yield and production by provinces)
Sugar cane (area, yield and production by provinces)
Coffee (area, yield and production by provinces)
Forest planted
Reforested area
Capture fish/meat production
Cultured fish/ meat production
Total rice paddy (rain-fed and dry season rice): area, yield and production by provinces
Energy and mining
Share of renewable energy supply in total energy supply
Natural resources and environment
Atmosphere, Climate and Weather Statistics
Hydrographical Characteristics Statistics
Extreme Events and Disasters Statistics
Natural disaster events
Amount of economic losses caused by natural disasters
The population and infrastructure affected by natural disasters
Environment Account
Main indicators

Annex 6.E. UNECE standard environmental indicators and their availability in Lao PDR

Thematic areas	UNECE indicators	Does Lao PDR produce this indicator?
Air pollution and ozone depletion	Emissions of pollutants into the atmospheric air	No
	Ambient air quality in urban areas	Yes
	Consumption of ozone-depleting substances	No
Climate change	Air temperature	Yes
	Atmospheric precipitation	Yes
	Greenhouse gas emissions	Yes
Water	Renewable freshwater resources	Yes
	Freshwater abstraction	No
	Total water use	Yes
	Household water use per capita	No
	Water supply industry and population connected to water supply industry	No
	Connection of population to public water supply	Yes
	Water losses	No
	Reuse and recycling of freshwater	No
	Drinking water quality	Yes
	BOD and concentration of ammonium in rivers	No
	Nutrients in freshwater	No
	Nutrients in coastal seawaters	N/A
	Concentrations of pollutants in coastal seawater and sediments (except nutrients)	N/A
	Population connected to wastewater treatment	No
	Wastewater treatment facilities	No
	Polluted (non-treated) wastewaters	No
Biodiversity	Protected areas	Yes
	Biosphere reserves and wetlands of international importance	No
	Forests and other wooded land	Yes
	Threatened and protected species	Yes
	Trends in the number and distribution of selected species	No
	Invasive species	Yes
Land and soil	Land uptake	No
	Area affected by soil erosion	No
Agriculture	Irrigation	No
	Fertilizer consumption	No
	Gross nitrogen balance	No
	Pesticide consumption	No
Energy	Final energy consumption	No
	Total primary energy supply	No
	Energy intensity	No
	Renewable energy consumption	Yes
	Final electricity consumption	No
	Gross electricity production	No
Transport	Passenger transport demand	No
	Freight transport demand	No
	Composition of road motor vehicle fleet by fuel type	No
	Age of road motor vehicle fleet	No

Waste	Waste generation	Yes
	Management of hazardous waste	Yes
	Waste reuse and recycling	No
	Final waste disposal	Yes
	Total available	**16**

Annex 6.F. UNEP environment-related SDG indicators applicable to Lao PDR

92 environment-related SDG indicators	Is it applicable to Lao PDR?
1.4.2 Proportion of total adult population with secure tenure rights to land, (a) with legally recognized documentation, and (b) who perceive their rights to land as secure, by sex and type of tenure	Yes
1.5.1 Number of deaths, missing persons and directly affected persons attributed to disasters per 100 000 population	Yes
1.5.2 Direct economic loss attributed to disasters in relation to global gross domestic product (GDP)	Yes
1.5.3 Number of countries that adopt and implement national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015-2030	No
1.5.4 Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies	Yes
2.4.1 Proportion of agricultural area under productive and sustainable agriculture	Yes
2.5.1 Number of plant and animal genetic resources for food and agriculture secured in either medium or long-term conservation facilities	Yes
2.5.2 Proportion of local breeds classified as being at risk of extinction	Yes
3.9.1 Mortality rate attributed to household and ambient air pollution	Yes
3.9.2 Mortality rate attributed to unsafe water, unsafe sanitation and lack of hygiene (exposure to unsafe Water, Sanitation and Hygiene Education for All (WASH) services)	Yes
3.9.3 Mortality rate attributed to unintentional poisoning	Yes
4.7.1 Extent to which (i) global citizenship education and (ii) education for sustainable development are mainstreamed in (a) national education policies; (b) curricula; (c) teacher education; and (d) student assessment	Yes
5.a.1 (a) Proportion of total agricultural population with ownership or secure rights over agricultural land, by sex; and (b) share of women among owners or rights-bearers of agricultural land, by type of tenure	Yes
6.1.1 Proportion of population using safely managed drinking water services	Yes
6.2.1 Proportion of population using (a) safely managed sanitation services and (b) a hand-washing facility with soap and water	Yes
6.3.1 Proportion of domestic and industrial wastewater flows safely treated	Yes
6.3.2 Proportion of bodies of water with good ambient water quality	Yes
6.4.1 Change in water-use efficiency over time	Yes
6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources	Yes
6.5.1 Degree of integrated water resources management	Yes
6.5.2 Proportion of transboundary basin area with an operational arrangement for water cooperation	Yes
6.6.1 Change in the extent of water-related ecosystems over time	Yes
6.a.1 Amount of water- and sanitation-related official development assistance that is part of a government-coordinated spending plan	Yes
6.b.1 Proportion of local administrative units with established and operational policies and procedures for participation of local communities in water and sanitation management	Yes
7.1.2 Proportion of population with primary reliance on clean fuels and technology	Yes
7.2.1 Renewable energy share in the total final energy consumption	Yes
7.3.1 Energy intensity measured in terms of primary energy and GDP	Yes
7.a.1 International financial flows to developing countries in support of clean energy research and development and renewable energy production, including in hybrid systems	Yes
7.b.1 Installed renewable energy-generating capacity in developing countries (in watts per capita)	Yes

8.4.1 Material footprint, material footprint per capita, and material footprint per GDP	Yes
8.4.2 Domestic material consumption, domestic material consumption per capita, and domestic material consumption per GDP	Yes
9.4.1 CO_2 emission per unit of value added	Yes
11.2.1 Proportion of population that has convenient access to public transport, by sex, age and persons with disabilities	Yes
11.3.1 Ratio of land consumption rate to population growth rate	Yes
11.3.2 Proportion of cities with a direct participation structure of civil society	Yes
11.4.1 Total per capita expenditure on the preservation, protection and conservation of all cultural and natural heritage, by source of funding (public, private), type of heritage (cultural, natural) and level of government (national, regional, and local/municipal)	Yes
11.5.1 Number of deaths, missing persons and directly affected persons attributed to disasters per 100 000 population	Yes
11.5.2 Direct economic loss in relation to global GDP, damage to critical infrastructure and number of disruptions to basic services, attributed to disasters	Yes
11.6.1 Proportion of municipal solid waste collected and managed in controlled facilities out of total municipal waste generated, by cities	Yes
11.6.2 Annual mean levels of fine particulate matter (e.g. $PM_{2.5}$ and PM_{10}) in cities (population weighted)	Yes
11.7.1 Average share of the built-up area of cities that is open space for public use for all, by sex, age and persons with disabilities	Yes
11.b.1 Number of countries that adopt and implement national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015-2030	No
11.b.2 Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies	Yes
12.1.1 Number of countries developing, adopting or implementing policy instruments aimed at supporting the shift to sustainable consumption and production	No
12.2.1 Material footprint, material footprint per capita, and material footprint per GDP	Yes
12.2.2 Domestic material consumption, domestic material consumption per capita, and domestic material consumption per GDP	Yes
12.3.1 (a) Food Loss Index and (b) Food waste Index	Yes
12.4.1 Number of parties to international multilateral environmental agreements on hazardous waste, and other chemicals that meet their commitments and obligations in transmitting information as required by each relevant agreement	No
12.4.2 (a) Hazardous waste generated per capita; and (b) proportion of hazardous waste treated, by type of treatment	Yes
12.5.1 National recycling rate, tons of material recycled	Yes
12.6.1 Number of companies publishing sustainability reports	Yes
12.7.1 Degree of sustainable public procurement policies and action plan implementation	Yes
12.8.1 Extent to which (i) global citizenship education and (ii) education for sustainable development are mainstreamed in (a) national education policies; (b) curricula; (c) teacher education; and (d) student assessment	Yes
12.a.1 Installed renewable energy-generating capacity in developing countries (in watts per capita)	Yes
12.b.1 Implementation of standard accounting tools to monitor the economic and environmental aspects of tourism sustainability	Yes
12.c.1 Amount of fossil-fuel subsidies per unit of GDP (production and consumption)	Yes
13.1.1 Number of deaths, missing persons and directly affected persons attributed to disasters per 100 000 population	Yes
13.1.2 Number of countries that adopt and implement national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015-2030	No
13.1.3 Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies	Yes
13.2.1 Number of countries with nationally determined contributions, long-term strategies, national adaptation plans, strategies as reported in adaptation communications and national communications	No
13.2.2 Total greenhouse gas emissions per year	Yes
13.3.1 Extent to which (i) global citizenship education and (ii) education for sustainable development are mainstreamed in (a) national education policies; (b) curricula; (c) teacher education; and (d) student assessment	Yes
13.a.1 Amounts provided and mobilized in United States dollars per year in relation to the continued existing collective mobilization goal of the $100 billion commitment through to 2025	Yes
13.b.1 Number of least developed countries and small island developing States with nationally determined contributions long-term strategies, national adaptation plans, strategies as reported in adaptation communications and national communications	No

14.1.1 (a) Index of coastal eutrophication; and (b) plastic debris density	Yes
14.2.1 Number of countries using ecosystem-based approaches to managing marine areas	No
14.3.1 Average marine acidity (pH) measured at agreed suite of representative sampling stations	No
14.4.1 Proportion of fish stocks within biologically sustainable levels	Yes
14.5.1 Coverage of protected areas in relation to marine areas	No
14.6.1 Degree of implementation of international instruments aiming to combat illegal, unreported and unregulated fishing	Yes
14.7.1 Sustainable fisheries as a proportion of GDP in small island developing States, least developed countries and all countries	Yes
14.a.1 Proportion of total research budget allocated to research in the field of marine technology	No
14.c.1 Number of countries making progress in ratifying, accepting and implementing through legal, policy and institutional frameworks, ocean-related instruments that implement international law, as reflected in the United Nations Convention on the Law of the Sea, for the conservation and sustainable use of the oceans and their resources	No
15.1.1 Forest area as a proportion of total land area	Yes
15.1.2 Proportion of important sites for terrestrial and freshwater biodiversity that are covered by protected areas, by ecosystem type	Yes
15.2.1 Progress towards sustainable forest management	Yes
15.3.1 Proportion of land that is degraded over total land area	Yes
15.4.1 Coverage by protected areas of important sites for mountain biodiversity	Yes
15.4.2 Mountain Green Cover Index	Yes
15.5.1 Red List Index	Yes
15.6.1 Number of countries that have adopted legislative, administrative and policy frameworks to ensure fair and equitable sharing of benefits	No
15.7.1 Proportion of traded wildlife that was poached or illicitly trafficked	Yes
15.8.1 Proportion of countries adopting relevant national legislation and adequately resourcing the prevention or control of invasive alien species	Yes
15.9.1 (a) Number of countries that have established national targets in accordance with or similar to Aichi Biodiversity Target 2 of the Strategic Plan for Biodiversity 2011–2020 in their national biodiversity strategy and action plans and the progress reported towards these targets; and (b) integration of biodiversity into national accounting and reporting systems, defined as implementation of the System of Environmental-Economic Accounting	No
15.a.1 (a) Official development assistance on conservation and sustainable use of biodiversity; and (b) revenue generated and finance mobilized from biodiversity-relevant economic instruments	Yes
15.b.1 (a) Official development assistance on conservation and sustainable use of biodiversity; and (b) revenue generated and finance mobilized from biodiversity-relevant economic instruments	Yes
15.c.1 Proportion of traded wildlife that was poached or illicitly trafficked	Yes
17.7.1 Total amount of funding for developing countries to promote the development, transfer, dissemination and diffusion of environmentally sound technologies	Yes
17.9.1 Dollar value of financial and technical assistance (including through North-South, South-South and triangular cooperation) committed to developing countries	Yes
17.14.1 Number of countries with mechanisms in place to enhance policy coherence of sustainable development	No
17.16.1 Number of countries reporting progress in multi-stakeholder development effectiveness monitoring frameworks that support the achievement of the SDGs	No
17.18.1 Statistical capacity indicator for Sustainable Development Goal monitoring	Yes
Total environmental indicators applicable to Lao PDR	**76**

Source: (UNEP, 2021[45]), *Monitoring Progress Section*.

Annex A. Recommendations for Lao PDR to strengthen its sustainable development finance

Table A A.1. Recommendations to be implemented in the short term

Objectives	Detailed recommendations	Chapter
Address the country's fiscal challenges in order to break the vicious cycle of escalating debt, currency depreciation and high inflation.	Seek debt relief from the country's primary lender (i.e. China) in order to free up fiscal space and alleviate short-term payment pressures.	3
	Co-ordinate and communicate transparently with development partners in order to avoid moral hazard concerns, ensuring that any new concessional financing results in additional investment in development.	3
	Gradually shift the emphasis of fiscal consolidation efforts from expenditure reduction to increased revenue generation and spending efficiency in order to ensure the sustainability and credibility of the fiscal adjustment.	4
Mitigate mounting fiscal risks arising from contingent liabilities associated with Public Private Partnerships (PPPs) and state-owned enterprises (SOEs).	Audit existing SOEs and PPPs in order to evaluate their fiscal risk profiles and identify urgent threats to macroeconomic stability.	3
	Define and enforce strict criteria for government guarantees in order to minimise fiscal exposure, ensuring that such guarantees are only issued when absolutely necessary.	3
	Identify and enact quick-win reforms (such as cost-cutting and operational efficiency improvements) in those SOEs that present the riskiest profiles in order to stabilise SOE finances.	3
	Communicate clearly with development partners and the public about the short-term fiscal risks identified in SOEs and PPPs, and about the measures being taken to address them.	3
Strengthen the buoyancy of the tax system in order to ensure that the tax-to-GDP ratio increases when the economy grows.	Identify a set of reforms that gradually increase tax revenue buoyancy (and raise tax revenue) while also turning the tax system into a positive force that helps address other developing challenges, such as high inequality, inadequate social protection, high informality or the lack of investment.	4
Improve the design of the presumptive tax regime in order to increase its effectiveness at encouraging formalisation and to limit tax revenue loss.	Lift the presumptive tax regime's three-year eligibility limit.	4
	Remove the additional eligibility rule based on asset ownership.	4
	Include social security contributions (SSCs) in the scheme.	4
	Introduce a transition path between the presumptive and the standard tax system.	4
	Evaluate the introduction of sector-specific taxes on turnover.	4
	Offer a one-stop tax office.	4
	Limit abusive practices of presumptive taxation.	4
	Increase the effective taxation of harmful products (health taxes) and develop a consistent tobacco tax strategy.	4
	Redesign tax incentives to be based on expenditure rather than income and to more actively advance social and environmental goals.	4

Define an initial core set of environmental data needed to activate climate financing aligned to the climate financing mechanisms that will be implemented.	Consider a guideline for prioritising data production for the subsectors where carbon finance has the most potential.	6
Map the key sectors and actors – including non-government actors - related to the immediate climate financing mechanisms that will be implemented.	Identify key producers and users of environment statistics and the role they can play in improving the production, dissemination, and use of environment statistics. The leading agency on climate financing should co-operate in identifying the data demands so Lao Statistics Bureau (LSB), the Ministry of Natural Resources and Environment (MONRE), the Ministry of Energy and Mines, and other agencies can identify the data sources available or required and start to harmonise information across the system.	6 6
Enhance the sharing and harmonisation of environment statistics across the national statistical system.	Set up a one-stop shop for environment statistics is crucial for building certification and verification systems to access climate financing. Introduce use of harmonised data templates for data sharing. Better data sharing and harmonisation on methodologies, data collection processes and definitions of variables.	6 6 6
Use existing co-ordination mechanisms to liaise with policy makers and data users in general.	Existing mechanisms can enable a space for dialogue and consultations with selected data users, particularly those in the most strategic climate financing sectors, to learn about their policy plans and existing monitoring frameworks. Such dialogue and consultations can also provide an opportunity to evaluate data demands and determine whether current data production is aligned with these demands.	6
Use the momentum of climate finance opportunities to advocate for statistics and mobilise funding for data infrastructure, core systems and capacity development.	A high demand for environment statistics provides an excellent opportunity to use these statistics as the key to unlocking climate financing and mobilising resources (internal and external) to strengthen the national statistics system (NSS) to better serve the emerging needs of data users, particularly those from policy makers.	6

Note: “China” refers to People’s Republic of China.

Table A A.2. Recommendations to be implemented in a medium-term

Objectives	Detailed recommendations	Chapter
Address the current fragmentation and lack of co-ordination in the country’s sustainable development financing landscape.	Establish a shared and well-co-ordinated governance of the sustainable development financing agenda among the multiple government stakeholders involved, including the co-chairing of key committees. Ensure adequate resourcing of, and institutional engagement in, the sector and subsector working groups of Lao PDR’s Round Table Process. Secure the active participation of, and garner contributions from, all relevant development partners in strategic development and aid co-ordination mechanisms, including the Integrated National Financing Framework. Develop a clear and coherent governance framework for sovereign carbon finance in order to promote a co-ordinated approach across the government, avoiding inefficiencies and reputational risks that could jeopardise this new financing source. Improve inter-institutional co-ordination and alignment of strategic objectives and priorities among the different government entities involved in the design and implementation of investment policies. This could be achieved through the establishment of more formal channels for co-ordination between the Ministry of Planning and Investment (MPI), the Ministry of Industry and Commerce, MONRE, and sectoral ministries. One possibility would be establishing an advisory board to the Investment promotion Department (IPD) that includes representatives both from these government entities and from the private sector.	3 3 3 3 5

	Improve public-private dialogue process at a high level could allow for more easily solving investors' grievances and for better prioritising the reforms required in order to facilitate doing business in Lao PDR.	5
Take steps to safeguard the impact and effectiveness of development co-operation.	Reinvigorate the multi-stakeholder dialogue around the Vientiane Declaration on Partnership for Effective Development Cooperation (2016-2025), as well as efforts to monitor the implementation of the Country Action Plan for the Implementation of the Vientiane Declaration on Partnership for Effective Development Cooperation (2016-2025).	3
	With a view to maximising international support for sustainable development, use existing aid co-ordination platforms in order to consult partners on key governance and institutional issues constraining development co-operation flows to Lao PDR.	3
Enhance spending efficiency and build greater capacity for revenue collection.	Explore opportunities with key development partners for enhanced support on public financial management and domestic resource mobilisation appropriate to Lao PDR's fiscal context and challenges.	3
	Develop and implement a comprehensive action plan to increase government revenue, with clear and credible revenue targets.	3
	Review the current investment promotion framework in order to assess its costs and benefits, factoring in the effect of tax incentives on government revenue. Simplify Lao PDR's institutional and regulatory framework for starting an investment project.	5
Create and strengthen a centralised public debt management function with authority over public debt issuance.	The legal framework should clarify which body has the authority to borrow and to issue new debt; to invest; and to undertake transactions on the government's behalf.	3
	Credit risk assessment and validation should be centralised for all public debt issuance, including by SOEs.	3
Strengthen the buoyancy of the tax system to ensure the tax-to-GDP ratio increases when the economy grows.	Address concrete tax design flaws across all types of taxes and change the approach to designing, administering and evaluating the tax system.	4
	Change the approach followed to design, administer and evaluate the tax system.	
Reconsider the suboptimal tax incentive strategy in SEZs and the corporate income tax (CIT) system based on differentiated rates by sector.	Grant tax incentives according to predetermined, uniform and clearly declared criteria; the authority to grant tax benefits should lie exclusively with the Ministry of Finance (MOF).	4
	Shift the focus away from profit-based tax incentives and towards expenditure-based ones.	4
	Move away from providing reduced corporate income tax (CIT) rates according to economic sector.	4
	Levy a "top-up tax" on certain businesses in Special Economic Zones (SEZs), bringing their effective tax rate to the new global minimum tax rate of 15%.	4
	Make tax benefits in SEZs more conditional on the employment or training of local workers and on complying with other laws, such as registering workers for social security.	4
	Assess the tax revenue impact of interactions between SEZs and the national economy.	4
	Launch a thorough cost-benefit evaluation of the SEZ regime's impact on investment.	4
Reform other features of the tax system that introduce distortions or contribute to low revenues and the limited equity of the tax system.	Ensure the well-functioning of the Value Added tax (VAT) aligned with the International VAT/ Goods and Services tax (GST) guidelines.	4
	Consider streamlining non-standard excise taxes into a uniform "luxury" rate or integrate these taxes into the VAT. Compile a revenue breakdown of excise taxes by product to weigh revenue generation against administrative cost.	4
Increase the role of the tax system as a tool to promote the formalisation of workers and businesses.	Abolish fees to register workers for social security.	4
	Make social security forward-looking in order to help ensure that enterprises do not have to pay SSCs retroactively if they register workers.	4
	Disallow enterprises from deducting the labour cost of workers as a business expense if the workers are not registered with the social security administration.	4

	Make investment tax incentives conditional on compliance with other legal obligations, including registering workers for social security.	4
	Advertise that future “insurance-type” government benefits are conditional on registration as a formal worker or business and having contributed to social security.	4
	Consider introducing a progressive SSC schedule with reduced rates for lower-income workers that are matched by government contributions.	4
	Allow workers to view the contributions that they have made to social security and their accumulated pension rights (e.g. through an online portal) in order to counter the perception that these contributions are “lost”.	4
Overhaul the approach to designing, evaluating and administering the tax system.	Increase collaboration among ministries and other government institutions.	4
	Strengthen the MOF’s position as the key actor in tax policy making and make the MOF’s consent mandatory for any tax policy change.	4
	Unify all legal provisions pertaining to one type of tax in one tax law that is made available online for taxpayers to consult.	4
	Consider establishing an independent tax revenue agency that would be responsible for revenue collection.	4
	Devise a formal dispute resolution mechanism in order to resolve tax disputes.	4
	Increase efforts to prioritise non-cash payments in order to settle tax bills.	4
	Maintain and strengthen recent initiatives to modernise and digitalise the tax administration.	4
	Establish and strengthen a stand-alone tax policy analysis unit within the MOF that evaluates and assesses tax policy.	4
Improve the design of the presumptive tax regime to increase its effectiveness at encouraging formalisation and to limit tax revenue loss.	Lift the three-year eligibility limit.	4
	Remove the additional eligibility rule based on asset ownership.	4
	Include social security contributions into the scheme.	4
	Introduce a transition path between the presumptive and the standard tax system.	4
	Implement transfer pricing guidelines.	4
	Evaluate the introduction of sector-specific taxes on turnover.	4
	Offer a one-stop tax office.	4
	Limit abusive practices.	4
	Redesign tax incentives to be based on expenditure rather than income and to more actively advance social and environmental goals.	4, 5
Improving the enabling environment for investment and integrating environmental and social considerations into investment policies could allow Lao PDR to attract more sustainable investment. that advances environmental and social goals.	Improve co-ordination between the private sector, the government and educational institutions could help better align Lao PDR’s Lao PDR’s educational offer offering with those skills that are in demand in the labour market.	5
	Improve the availability of skilled labour in Lao PDR through in-house training in private enterprises and the provision of better information on those skills in demand in the labour market.	5
	Improve institutional capacity and inter-institutional co-ordination in land administration and management and accelerate the implementation of the 2019 Land Law.	5

	Enhance Lao PDR's capacity for delivery of public private partnerships, strengthen infrastructure planning and improve the management of fiscal risks related to public private partnerships.	5
	Improve the predictability of the regulatory framework for investment and the effectiveness of the court system while introducing policy tools, which promote integrity among public officials.	5
Strengthen social and environmental safeguards for investment projects.	Strengthen the implementation of social and environmental safeguards for investment projects by strengthening monitoring and inspection of environmental obligations. Develop more sophisticated and better targeted policies, activities and tools for investment promotion, which should include a greater focus on environmental and social sustainability. Increase positive spillovers from SEZs to the local economy and improve SEZs' social and environmental performance.	5
Intensify efforts aimed at promoting and implementing international responsible business conduct (RBC) and due diligence standards in the local context.	Develop an institutional and policy framework for RBC, including a special dedicated responsible business conduct (RBC) body or government focal point and a national RBC policy or action plan.	5
	Incorporate RBC efforts more systematically in investment promotion activities.	5
	Targeted RBC programmes at specific high-risk industries, such as the mining, hydropower and agricultural sectors, could be developed to raise awareness and to foster the implementation of due diligence in business practices.	5
	Better access to remedy and grievance mechanisms for addressing negative impacts of investment projects, in particular, environmental and social impacts.	5
	Stronger safeguards in concession agreements and render these agreements in public.	5
Develop statistical capacity holistically across the statistics system for climate financing.	Data systems needed for climate financing, such as carbon registries and MRV systems, require data, technical in all relevant institutions where climate financing initiatives will be established.	6
Identify opportunities for collaboration between governmental- and non-governmental actors.	Non-governmental actors such as the private sector, civil society, or academia can often be strategic partners to mobilise resources, advocate for using environmental data or leveraging innovative data sources and techniques to make current data collection processes more efficient through the use of technology.	6

Table A A.3. Recommendations to be implemented in a long-term

Objectives	Detailed recommendations	Chapter
Strengthen the business environment in order to encourage greater private sector development, reducing the strong reliance on public investment.	Carry out an in-depth review of the role, governance and performance of the country's SOEs, which can help inform an action plan to tackle the negative implications of their dominant position in Lao PDR's private sector development.	3
	Strengthen the local banking sector in order to reduce financial sector vulnerabilities and fiscal liabilities while promoting enhanced credit provision to the private sector.	3
	Identify new drivers for foreign private investment, and seek development partner support in order to design an integrated and cross-cutting investment promotion strategy that considers the impacts on various sectors of the economy and aligns with Lao PDR's sustainable development objectives.	5
	Engage with South-South partners and regional platforms in order to exchange knowledge and experiences with regard to maximising the development impact of remittances, including through policies supporting increased human capital and productive investments.	3
Promote sustainable borrowing policies and practices, and	Continue the policy dialogue on debt management initiated with the main international financial institutions and identify key functions of government that require additional technical	3

design formal mechanisms for contingency planning	support.	
	Seek technical support and capacity building from development partners in key areas of sustainable development finance, specifically in order to better harness finance opportunities and to design sound frameworks allowing Lao PDR to tap into innovative or nascent financing instruments in the future, including carbon and biodiversity finance.	3
	Explore and assess the benefits for Lao PDR of mechanisms to stabilise and sustainably manage future revenues from commodity exports such as hydropower and mining.	3
Develop a knowledge base and robust country systems in order to harness innovative financing sources	Strengthen the country's statistical systems and data collection processes – especially with regard to environmental protection and climate adaptation and mitigation – in order to support Lao PDR's efforts to harness innovative financing such as carbon credits.	6
	Keep abreast of developments and the experiences of regional peers with regard to green, social, sustainable and sustainability-linked bonds as possible instruments to consider in the future, once Lao PDR is back to sustainable debt levels.	6
Gradually work towards a consistent international taxation framework in order to reduce revenue leakages.	Consider transitioning to a worldwide tax regime for personal income in order to tax the foreign-sourced income of individuals who are Lao PDR tax residents.	4
	Conversely, consider switching to a territorial tax system for business income in order to reduce the administrative burden linked to a worldwide business tax regime.	4
	Implement transfer pricing guidelines.	4
	Sign up for international tax information sharing in order to gain access to information about financial accounts held by Lao PDR residents in foreign jurisdictions (which will be relevant if the country decides to switch to a worldwide tax system for personal income).	4
	Analyse the tax revenue risk from other tax planning strategies that are potentially being employed by multinational enterprises (for example, through gaining access to country-by-country reports).	4
Reform other features of the tax system that introduce distortions or that contribute to low revenues and the limited equity of the tax system.	Introduce an official land register and better-defined land property rights.	4
	Devise a mechanism to link property taxes to the evolution of land prices, and increase the land tax.	4
	Consider an upward adjustment of the personal income tax and SSC maximum contribution thresholds and index the thresholds to inflation.	4
	Charge a higher land tax for holding empty residential property in urban areas, which is not owner-occupied and withheld from the rental market.	4
	Move from a purely land-based tax to a recurrent tax on immovable property (accounting for the value of buildings and land improvements).	4
	Cap the freelancer regime for self-employed workers to avoid revenue loss from tax arbitrage.	4
	Deny former employees access to the presumptive tax regime if they continue working for the same employer, but as a self-employed business.	4
	Analyse who earns capital income in the country to make an assessment as to whether the withholding rates levied on different forms of capital income could be increased.	4
	Base the tax applied to the sale of shares and to the sale of immovable property on the capital gain rather than the transaction value.	4
	Make social security registration mandatory for the self-employed. Consider subsidising contributions of those self-employed with actual income below the minimum wage if a minimum level of contribution were to be levied.	4

	Maintain the increased CIT rate for the natural resource sector, but evaluate whether it is effective at taxing resource rents or entirely undermined by tax incentives or profit shifting.	4
	Enhance customs procedures and border checks in Lao PDR in order to reduce high levels of fraudulent behaviour and reduce the administrative cost faced by importers.	4
	Reduce the number of different taxes and levies to be paid when importing goods and services.	4
	Co-ordinate with neighbouring countries in order to avoid or limit harmful tax competition. Refrain from pursuing further untargeted tax cuts; instead, prioritise improving the design and enforcement of the tax system in order to increase tax buoyancy.	4

Annex B. Indicators to monitor implementation of recommendations

Table A B.1. Indicators for financing sustainable development in Lao PDR

Chapter	Objective	Key performance indicator	Target	Baseline	Source
Chapter 2: Prosperity: Moving from booming commodities to broad-based opportunities	Increased labour productivity	Annual growth rate of output per worker (as a percentage)	5%	-0.6% (2022)	(Lao Statistics Bureau, 2021[1]), Sustainable Development Goal (SDG) indicator 8.2.1*; LSB (2024[2])**; ILO (2024[3])*
Chapter 2: Prosperity: Moving from booming commodities to broad-based opportunities	Increased access to finance	Enterprises using banks to finance investments (as a percentage of firms)	18.4%[1]	8.6% (2018)	World Bank (2024[4]), Enterprise Surveys**
Chapter 2: Planet: Preserving Lao PDR's abundant natural wealth and fighting air pollution	Improved air quality	Annual average particulate matter with a diameter of 2.5 microns or smaller (PM2.5) concentration (in microgrammes per cubic metre (µg/m³))	15 µg/m³ (annual mean Lao People's Democratic Republic[2]	29.7 µg/m³ (2023)	IQAir (2024[5])*
Chapter 2: Planet: Preserving Lao PDR's abundant natural wealth and fighting air pollution	Reduced deforestation	Area of current forest[3]	70%[4]	57.7% (2019)	FAO (2024[6])*
Chapter 2: People: Making human capital development a priority	Increased quality of education	Average share of grade 6 children in Band 6 or higher in reading, writing and mathematics (as a percentage of the total)	Reading: 29% Writing: 18% Mathematics: 35%[5]	Reading: 2% (2019) Writing: 6% (2019) Mathematics: 8% (2019)	UNICEF/SEAMEO (2020[7]), *SEA-PLM* Southeast Asia Primary Learning Metrics**
Chapter 2: People: Making human capital development a priority	Align public expenditure with national development priorities	Government spending on healthcare and education as a percentage of gross domestic product (GDP)	At or above 4% of GDP	Government expenditure on education (as a percentage of GDP): 1.39% (2022) Current healthcare expenditure (as a percentage of GDP): 2.69% (2020)	World Bank (2024[8])*
Chapter 3: Opportunities and	Restore debt sustainability	Number of debt restructuring	At least one debt restructuring agreement		Ministry of Finance (2024[9]); Ministry of

challenges in Lao PDR's Lao PDR's sustainable development financing landscape		agreements announced by the government	with a major creditor		Foreign Affairs (2024[10]); (IMF, 2024[11]).
Chapter 3: Opportunities and challenges in Lao PDR's Lao PDR's sustainable development financing landscape	Pursue the restructuring of public debt	General government gross debt (as a percentage of GDP)	89.9%[6]	118.7% (2024)	IMF (2024[12])*
Chapter 3: Opportunities and challenges in Lao PDR's Lao PDR's sustainable development financing landscape	Enhance aid and donor co-ordination	Number of participants from Lao PDR's major official creditors and development co-operation providers in the 2024 Round Table Implementation Meeting	At least one representative from each of Lao PDR's major official creditors and development co-operation providers		Ministry of Planning and Investment (2024[13])*
Chapter 4: Sustainable fiscal revenue: Improving the mobilisation and use of government revenue	Increase ratio of tax revenue to GDP	Tax revenue as a percentage of GDP	17%[7]	9.7% (2021)	Ministry of Finance (2024[9]) OECD (2024[14])*
Chapter 4: Sustainable fiscal revenue: Improving the mobilisation and use of government revenue	Increase the size of the formal economy	Proportion of informal employment as a percentage of total employment	78.6%[8]	90.5% (2022)	(Lao Statistics Bureau, 2021[1]), Sustainable Development Goal (SDG) indicator 8.3.1** ILO (2024[15])
Chapter 5: Fostering sustainable investment in Lao PDR	Increase investments in non-natural resource sectors	Investments in non-natural resource sectors (as a percentage of GDP) (investment in sectors other than the energy, agricultural and mining sectors)	7.5%	2.29% (2021)	Investment Promotion Department (2021[16])*
Chapter 5: Fostering sustainable investment in Lao PDR	Improve predictability and stability, thus enhancing confidence for investors	Rule of Law indicator (estimate)	0.09[9]	-0.81 (2022)	World Bank (2023[17])*
Chapter 5: Fostering sustainable investment in Lao PDR	Increased access to transport	Paved roads (as a percentage of total road length)	63%[10]	23% (2022)	ASEAN (2023[18]), Statistics Data Portal*
Chapter 5: Fostering sustainable investment in Lao PDR	Increased land registration	Land plots that are formally registered (as a percentage of total land plots)	70%[11]	40% (2023)	Department of Land, Ministry of Natural Resources and Environment (MONRE) (2023[19]); World Bank (2024[8])*
Chapter 5: Fostering sustainable	Improved investment climate	Foreign direct investment (FDI) Regulatory	0.064[12]	0.192 (2020)	OECD (2024[20])*

investment in Lao PDR		Restrictiveness Index score			
Chapter 6: Strengthening environment statistics to support sustainable development	Develop Lao PDR's carbon finance potential	Issuance of a Decree on carbon markets	At least one decree on carbon markets issued		
Chapter 6: Strengthening environment statistics to support sustainable development	Develop Lao PDR's carbon finance potential	Sales value of forest carbon credits	>USD 95 million (United States dollars)[13]	USD 33.5 million (2019)	Ministry of Agriculture and Forestry (2024[21])
Chapter 6: Strengthening environment statistics to support sustainable development	Improve availability of environmental indicators	Number of available[14]environmental indicators from the 9th NSEDP, the National Green Growth Strategy and the SDGs	60/60	21/60 (2022)	LSB (2024[22]); Ministry of Agriculture and Forestry (2024[21])*
Chapter 6: Strengthening environment statistics to support sustainable development	Enhance the sharing and harmonisation of environment statistics across the National Statistical System (NSS)	Number of standardised formats[15] used in order to share environmental data with the LSB and within the NSS			LSB (2024[23])*

Note: * Reported annually. ** Reported every five years.
1. Target set from average of member states of the Association of Southeast Asian Nations (ASEAN) (World Bank, 2024[4]).
2. Target set from Lao PDR $PM_{2.5}$ air quality standard.
3. "Current forest" (Lao PDR forest classification) includes evergreen forest, mixed-deciduous forest, coniferous forest, mixed-coniferous and broadleaf forest, and plantations (FAO, 2021[24]).
4. Target set in the 9th Five-year national Socio-Economic Development Plan (2021-2025) (Government of Lao PDR, 2021[25]).
5. Target set from the average of six countries (Cambodia, Lao PDR, Malaysia, Myanmar, the Philippines and Viet Nam) (UNICEF/SEAMEO, 2020[7]).
6. Target set in (IMF, 2023[26]).
7. Target set in the *9th Five-year national Socio-Economic Development Plan (2021-2025)* (Government of Lao PDR, 2021[25]).
8. Target from average of ASEAN member states (2022) (ILO, 2024[15]).
9. Target set from average of ASEAN member states (World Bank, 2023[17]).
10. Target set from average of ASEAN member states (ASEAN, 2023[18]).
11. Target set by the World Bank's Enhancing Systematic Land Registration Project (World Bank, 2022[27]).
12. Target set from average of OECD member countries (OECD, 2024[20]).
13. Target set in the *9th Five-year national Socio-Economic Development Plan (2021-2025)* (Government of Lao PDR, 2021[25]).
14. Total available environmental indicators out of the total number of environmental indicators in the 9th NSEDP, the National Green Growth Strategy and the SDGs.
15. "Standardised formats" refers to a structure for organising and presenting data in a consistent and uniform manner across different systems and organisations.

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OECD Development Pathways

Multi-dimensional Review of Lao PDR

FINANCING SUSTAINABLE DEVELOPMENT

Lao People's Democratic Republic (Lao PDR) has made significant headway on its development path over the past three decades. The country's sustained economic growth has been led by booming commodity exports and substantial inflows of external financing. Many Laotians have seen significant improvements in their well-being. Poverty has declined as household income has increased, and many important development goals in education and health have been achieved.

In the face of macroeconomic challenges, a shift from commodity-driven growth to a more inclusive prosperity paradigm that emphasises the creation of broad-based opportunities, human capital development and green sustainability can unlock Lao PDR's future development. This report presents priorities for overcoming the country's current fiscal constraints and finding ways to fund this shift. Recommendations address strengthening Lao PDR's sustainable finance and debt management, revenue generation and tax reform, investment promotion, and data capacity in order to tap into green finance mechanisms.

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