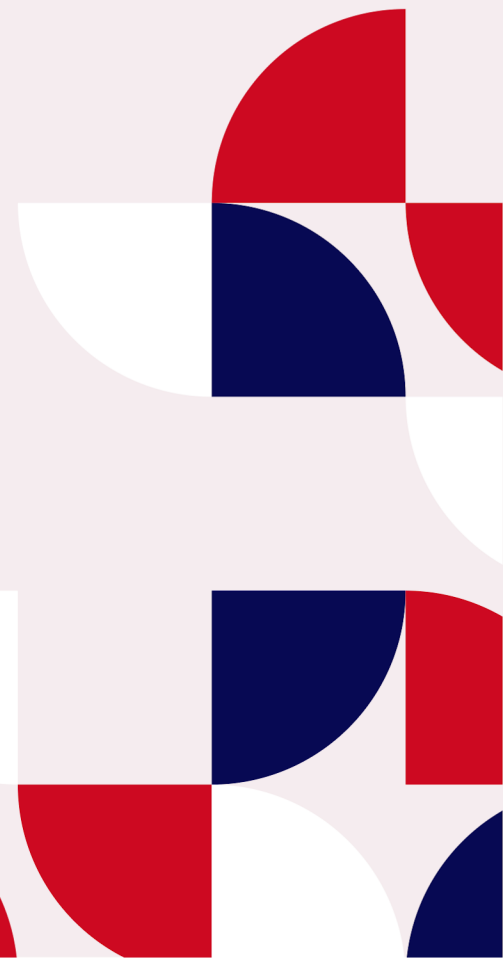




PREVENTING A LOST DECADE IN EDUCATION IN THE LAO PDR

Public Expenditure &
Institutional Review
and Financial Management
in Education Analysis

November 2023



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Foreword

Education is a fundamental driver of the well-being of people and the long-term economic prospects of a country. The Government of the Lao PDR has been committed to education, with the National Socio-Economic Development Plan (2021-2025) emphasizing the need to improve education outcomes. In October 2019, Laos renewed its commitment to advance child rights through alignment to the *Convention on Rights of the Child@30* global pledge.

Even though the commitment to education has been high, this has not translated into high learning levels. A 2019 Grade 5 learning outcomes assessment conducted as part of the South-East Asia Primary Learning Metrics study showed Lao children lagging behind those in neighboring East Asian countries, with the majority of Grade 5 Lao students performing well below the level expected to be achieved for math, reading and writing. Having learned little, many children either fail to enroll in secondary school or drop out early. As a result, Laos does not have the skills it needs to drive its economy or reduce poverty. Laos has also been experiencing macro-economic challenges in the past 4-5 years, which have been made worse by the COVID-19 pandemic. Alongside, there has been a worrying trend of declining government education financing over the last decade.

Against this background, the World Bank's Public Expenditure and Institutional Review (PEIR) in education is very timely. The PEIR provides guidance on mechanisms to increase the domestic resource envelope for education as well as improve resource allocation within the education sector. It does this based on a thorough assessment of the adequacy, efficiency, equity, effectiveness and sustainability of public expenditure in education in Laos. A de-bottlenecking analysis identifies the key challenges and opportunities in the public financial management system for education. Lastly, the PEIR includes an education sector financial management reform roadmap blueprint. In line with the PEIR's findings and recommendations, the Lao government will continue pursuing efforts to ensure better educational outcomes for its children.

Dara Pakonekham
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Abbreviations

AIMS	Asset Information Management System
ASC	Annual School Census
ASLO	Assessment of Student Learning Outcome
APO	Accounting for Public Organizations
BEQUAL	Basic Education Quality and Access in Lao
CoA	Chart of Accounts
COFOG	Classification of the Functions of Government
DESB	District Education and Sports Bureau
DFAT	Australian Department of Foreign Affairs and Trade
DHE	Department of Higher Education (MoES)
DoF	Department of Finance (MoES)
DoOP	Department of Organization and Personnel (MoES)
DoP	Department of Planning (MoES)
DTVE	Department of Technical and Vocational Education (MoES)
ECE	early childhood education
EGRA	Early Grade Reading Assessment
EMIS	Education Management Information System
ESSDP	Education and Sports Sector Development Plan
ESWG	Education Sector Working Group
FinEd	Financial Management in Education
FMIS	financial management information system
FY	fiscal year
GDP	gross domestic product
GER	gross enrolment ratio
GFIS	Government Financial Information System
ICT	information and communication technology
IMF	International Monetary Fund
JICA	Japan International Cooperation Agency
LECS	Lao Expenditure and Consumption Survey
LESMIS	Lao Education and Sports Management Information System
LSB	Lao Statistics Bureau
LUMS	Lao University Management System
MIS	management information system
MoES	Ministry of Education and Sports
MoF	Ministry of Finance
MoHA	Ministry of Home Affairs
MPI	Ministry of Planning and Investment
MTBP	medium-term budget plan
NSEDP	National Socio-Economic Development Plan
NER	net enrolment ratio
NUOL	National University of Laos
ODA	official development assistance
PDR	People's Democratic Republic
PEFA	Public Expenditure and Financial Accountability
PEIR	Public Expenditure and Institutional Review
PESS	Provincial Education and Sports Services
PFM	public financial management
PMIS	Personnel Management Information System

SBGs	school block grants
SBL	State Budget Law
SBPS	state budget policy statement
SEA-PLM	Southeast Asia Primary Learning Metrics
TEMIS	Teacher Education Management Information System
TIMS	Textbook Information Management System
TLM	teaching and learning materials
TTC	teacher training college
TVET	technical and vocational education and training
TVETMIS	Technical and Vocational Education and Training Management Information System
VEDCs	Village Education Development Committees
WOG	whole-of-government
WMIS	Wage Management Information System

Abstract

The education sector in the Lao PDR (Laos) faces significant challenges. Access to education improved over much of the past decade but substantial gaps remain, and previous progress is being undermined by the impacts of COVID-19 and ongoing economic difficulties. The quality of education was already poor before these shocks. The sector is severely underfunded due to a steep decline in public resources allocated to education. In addition, limited job prospects for graduates reduce demand for quality education. To prevent these challenges from causing a lost decade for education in Laos, urgent attention is needed in three areas. First, the government should implement comprehensive economic and fiscal reforms to increase available resources for education and facilitate private sector development to create income earning opportunities for graduates. Second, resource allocation within the sector should be improved for equity and balance. Lastly, the education sector needs to better translate available resources into the learning outcomes of children and youth by reducing inefficiencies and rigidities that constrain the key drivers of learning: teachers, school financing, teaching and learning materials, and school infrastructure. Addressing constraints in these three areas will help reverse the decline in education financing, close access gaps, and enhance service quality.

Synopsis

The education sector in Laos is under threat. While access to education has improved over the past decade, substantial gaps remain, and previous gains are starting to erode. The quality of education provision was poor even before the COVID-19 pandemic and the evolving economic and fiscal crises. Public resources for education have halved as a share of gross domestic product (GDP) over the past decade, and the sector is now severely underfunded. Job prospects for graduates are limited, undermining demand for quality education. However, the situation is not hopeless. High-level commitment to education is enshrined in the country's legal and planning frameworks, and education systems are mostly well established. Foundational public administration and financial management systems are also in place both for the government as a whole and the education sector. Several major reforms are ongoing to strengthen these further. That said, urgent attention is needed in three areas to prevent a lost decade in education in Laos:

- First, the government must implement far-reaching reforms in economic and fiscal management, with particular attention to domestic resource mobilization and debt and public investment management to generate adequate resources for the education sector, create job opportunities that incentivize school attendance, and promote household demand for quality education services. The government needs to prioritize available resources for education (and health) in the state budget, in line with legal and political commitments. These steps could reverse the decline in public education financing relative to GDP, provide the financial basis for closing gaps in education access, and improve service quality going forward.
- Second, resource allocation within the sector must be improved to ensure equity and balance. Available data indicates that spending patterns do not yet adequately address inequities – for example, through poverty targeting. Meanwhile, the wage bill crowds out non-salary recurrent spending. Across education subsectors, increases in administration and secondary education resourcing should be moderated as the resource envelope grows. Together with the continued prioritization of early childhood education (ECE) and the reversal of relatively larger cuts to primary and higher education, this would support improved balance in the distribution of resources across education levels.
- Third, the education sector needs to better translate available resources into learning outcomes of children and youth. This should be done by reducing existing inefficiencies and rigidities that constrain the key drivers of learning. These include addressing the uneven deployment of teachers across schools and districts; improving the timeliness of disbursements of block grants to schools; reducing the fragmentation of procurement and distribution of teaching and learning materials; and addressing the imbalance in spending between new school infrastructure and operations and maintenance.

Table ES.1 provides an overview of reform recommendations, with implementation responsibilities spread across the government’s political leadership; central agencies responsible for finance, planning, and civil service management; and different departments within the Ministry of Education and Sports (MoES) and other entities in the education sector. Annex 1 provides an initial sequencing of reform recommendations in the form of an Education Sector Financial Management Reform Roadmap blueprint. Further prioritization of reforms – many of which are ongoing and receive technical assistance from development partners, including the World Bank – will be done through stakeholder consultations. Identified priority activities could be integrated into the existing sector planning and reform coordination processes. Alternatively, the roadmap could constitute a standalone but complementary tool for systematic reform planning, coordination, and progress monitoring in education financing and public financial management (PFM).

Table ES.1 Overview of Recommendations and Responsibilities

REFORM SET 1 Higher spending	Government-wide reforms to address the current inadequate levels of financing for the education sector and strengthen demand-side incentives for education	
1.1	Advance economic policy, domestic resource mobilization, debt, and public investment management reforms in line with the Reform Roadmap to Support the Implementation of the National Agenda	Leadership , MPI, MoF
1.2	Prioritize education in the political resource allocation approach by increasing its share in total public spending to at least 15 percent by 2027 and 18 percent by 2033	Leadership , MPI, MoF
1.3	Revisit the civil service downsizing policy by expanding its coverage to the entire public sector and considering functional needs of sectors, and implement the policy through medium-term workforce planning	Leadership , MoHA, MoF
1.4	Fast-track and expand ongoing macro-fiscal planning and medium-term budgeting reforms	MoF , MPI
1.5	Prioritize implementation of ongoing reforms of the Chart of Accounts and the financial management information system (GFIS+ and FMIS)	MoF , MPI
REFORM SET 2 Balanced allocations	Education sector reforms to improve equity and balance in resource allocation	
2.1	Based on regular budget and expenditure reports by subsector and geographic area, gradually shift resource allocation patterns within the education sector to increase equity, achieve a better balance across different inputs and education levels, and limit overheads.	MoES (DoP & DoF) , MoF
2.2	Carry out an in-depth assessment of financing for post-secondary and tertiary education	MoES (DHE, DTVE & DoF) , NUOL, PESSs, institutes
2.3	Develop an education sector financial and human resource data management and information system strategy	MoES (DoF, DoOP & ICT Center) , MoF, MoHA
2.4	Continue reforms to improve the quality and usage of data and education sector information systems	MoES , LSB, PESSs, DESBs, NUOL
2.5	Develop the foundations for a pragmatic program budgeting system for the education sector and align with organizational structures of public education institutions	MoES (DoP & DoF) , MoF, PESSs, DESBs



REFORM SET 3 Education sector reforms to improve the efficient and effective management of key inputs
Efficient management

Input 1 Teacher management

3.1.1	Develop a medium-term national school staffing strategy with adjusted pupil-teacher ratio standards	MoES (DoOP) , LSB, MoHA
3.1.2	Design and introduce teacher rotation policies to enable greater flexibility in teacher deployment outcomes	MoES (DoOP) , MoHA
3.1.3	Introduce a contract teacher modality to address short-term imbalances in teacher deployment	MoES (DoOP) , MoHA
3.1.4	Adapt school management protocols to enable the improved monitoring of teacher absenteeism	MoES (DoOP) , PESSs, DESBs, VEDCs
3.1.5	Pilot a blended learning model using innovative technology to support learning in the classroom	MoES , PESSs, DESBs
3.1.6	Design and implement a redundancy program for schools with excess teachers to address teacher imbalances	MoES (DoOP) , MoHA

Input 2 School financing

3.2.1	Review and adjust the school block grant (SBG) formula to improve the equity of resource allocation to schools	MoES (DoF)
3.2.2	Engage with the MoF to discuss strategies for improving timeliness of SBG fund releases	MoES (DoF) , MoF
3.2.3	Explore mobile money solutions to enable direct SBG transfers to schools (with appropriate safeguards)	MoES (DoF)
3.2.4	Simplify the rules and procedures governing the use of SBG funds and align with school quality standards	MoES (DoF)

Input 3 Teaching and learning materials (TLM)

3.3.1	Expand the roll-out of digital learning platforms with appropriate ICT provision in the classroom	MoES
3.3.2	Undertake a rapid review of TLM information systems and streamline reporting processes	MoES (DoF) , MoES (Printing)
3.3.3	Review and improve procurement planning processes and modalities for TLM provision	MoES (Printing)
3.3.4	Strengthen school distribution planning based on improved data on actual school needs	MoES (DoF) , DESBs

Input 4 School infrastructure

3.4.1	Reorientate capital budget towards maintenance and renovation of existing facilities	MoES (DoP) , MPI
3.4.2	Develop a medium-term capital investment strategy for the education sector	MoES (DoP) , MPI

Note: Lead responsibilities highlighted in **bold**. Main entities comprise the leadership of the government of Laos, the Ministry of Education and Sports (MoES), the Ministry of Finance (MoF), the Ministry of Home Affairs (MoHA), the Ministry of Planning and Investment (MPI), and the Lao Statistics Bureau (LSB). Key departments within MoES include the Department of Planning (DoP), the Department of Finance (DoF), the Department of Organization and Personnel (DoOP), the Department of Higher Education (DHE), the Department of Technical and Vocational Education (DTVE), and the Education and Sports Publishing House (Printing). Supporting entities within the education sector are Provincial Education and Sports Services (PESSs), District Education and Sports Bureaus (DESBs), and the National University of Laos (NUOL) and other higher education and technical and vocational education and training (TVET) institutes.

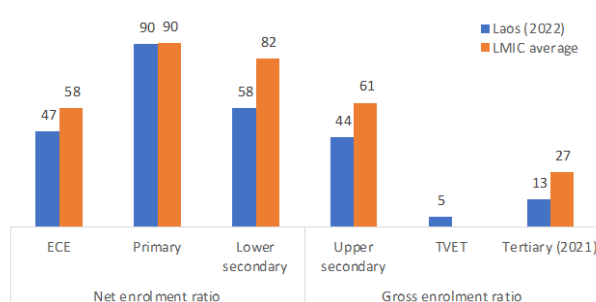
Source: World Bank.

Summary for Policymakers

Education’s critical role for growth and development is recognized by the authorities but the sector faces severe challenges. Education is key to poverty reduction and growth in Laos, and the country’s legal, policy, and cascading planning frameworks provide an enabling environment for the sector’s development. Equally, the authorities’ public statements regularly emphasize the importance of education. Despite this, Laos’ education sector is currently under threat from three major, interrelated challenges, which are discussed in section 1:

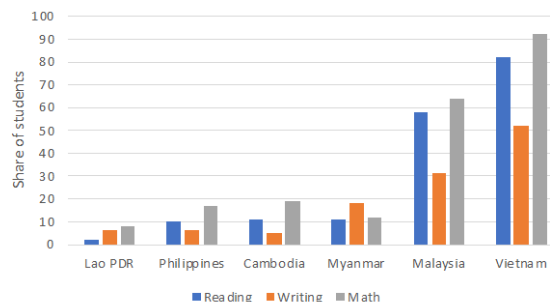
- Key Issue 1: Shortcomings in access to and quality of education services.** Despite growing enrolment in most education levels over the past decade, access to education remains a significant issue, particularly from lower secondary education upwards (Figure ES.1). Learning outcomes are among the lowest in the region (Figure ES.2), pointing to persistent challenges in education quality. This situation is further exacerbated by three issues: (1) Access gaps are likely larger than officially reported, with differences in school-age population estimates across data sources; (2) inequities persist in access and learning outcomes, particularly for children from poorer, rural, and ethnic minority households; and (3) the COVID-19 pandemic and economic crisis have affected education service delivery and households’ financial situation, with further negative impacts on enrolment and learning outcomes not yet fully captured.

Figure ES.1 Benchmarking of Enrolment Ratios



Source: MoES Annual School Census, UNESCO UIS.

Figure ES.2 Primary Students with Subject Proficiency

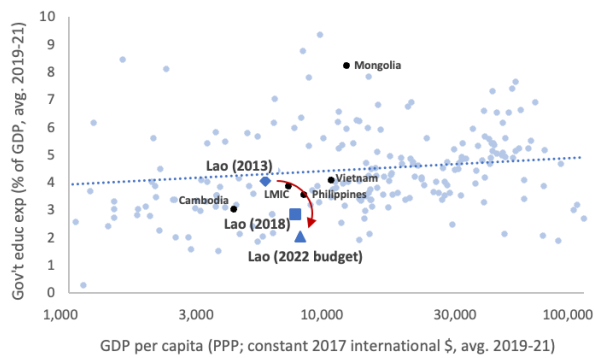


Note: Grade 5 students categorized into Band 6 and higher.
Source: SEA-PLM 2019.

- Key Issue 2: Low financing for education, particularly from public domestic sources.** Laos faces funding constraints in three critical areas: government resources, development partner commitments, and household financing for education. Public financing for education has halved as a share of GDP from its peak in 2013 to around 2 percent of GDP in 2022 (Figure ES.3). Official development assistance (ODA), an important part of public financing for education, has been falling at least since 2018. Private financing has also likely fallen during the COVID-19 pandemic and ongoing economic crisis. Together, these have resulted in a dramatic reduction in resources for education over the past decade, which, at their current level, are insufficient to deliver quality education services for all. This is particularly the case for government financing, which should make up the bulk of total education financing.

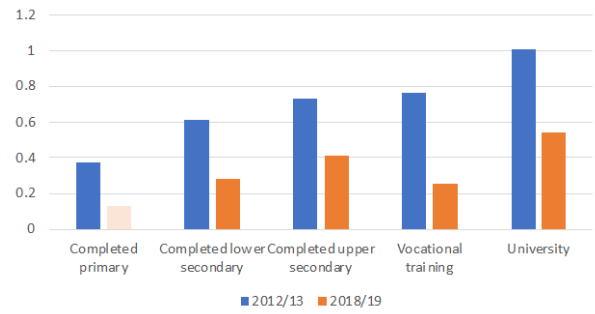


Figure ES.3 Public Education Financing in Laos and Global Benchmarking



Sources: MoES Revised Budget 2022, State Budget Implementation Reports 2013 and 2018, World Bank WDI.

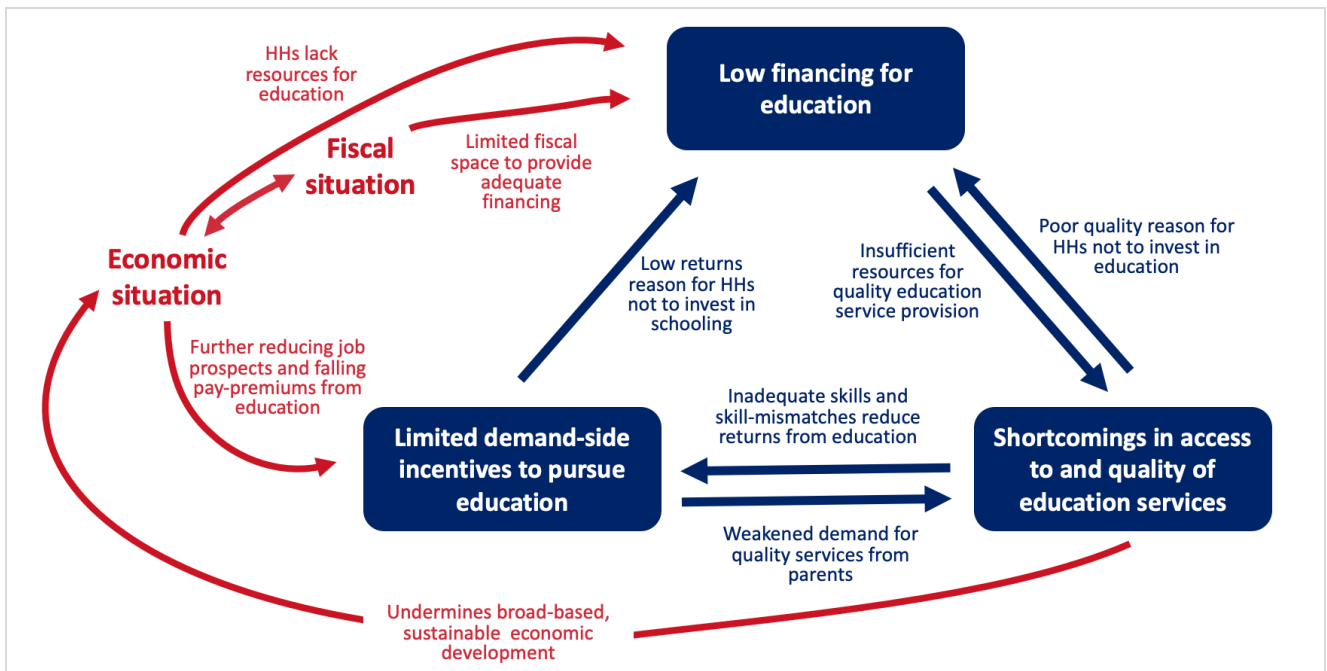
Figure ES.4 Education Premiums Relative to Workers with Less than Primary Education (Percent of Wages)



Source: World Bank 2019a.

- Key Issue 3: Limited demand-side incentives to pursue education.** Unemployment in Laos increased measurably in the years prior to the pandemic, regardless of educational background and particularly among youth. The public sector drove job creation while falling competitiveness led to a shedding of jobs and a shift towards low-skilled workers in the private sector up to 2019. Since then, public sector downsizing, together with the impact of the pandemic and economic crises, has led to a worsening of the employment situation. This has likely resulted in a further decline of already low private returns to education (Figure ES.4), reducing incentives for households to pursue and demand a quality education for their children. As a result, household investment in children’s education is likely below the optimal level – starting with ECE – while lower demand for education quality risks weakening school-level accountability and performance, in turn further undermining entrepreneurship and job prospects.

Figure ES.5 Illustration of Issues Undermining Education Sector Performance in Laos and their Interlinkages



Source: World Bank.

In response to these challenges, three sets of reforms are needed to ensure higher spending, balanced allocations, and efficient management of resources. First, there is a need to address the current inadequate levels of financing for the sector and the low private returns from education that limit incentives for households to pursue quality education. This is analyzed in section 2. Second, to increase equity and balance of resources across education levels and inputs, allocations within the sector should be improved in an evidence-based manner. This is discussed in section 3. Third, to improve efficiency, effectiveness, and equity in service delivery, bottlenecks in the management of key education inputs should be resolved. This is examined in section 4. The three reform sets need to be implemented through collective efforts by the Ministry of Education and Sports (MoES), its subnational Provincial Education and Sports Services (PESSs) and District Education and Sports Bureaus (DESBs), and the central agencies comprising the ministries for planning and investment (MPI), finance (MoF), and home affairs (MoHA). Selected reforms are political in nature, requiring government and MoES leadership and decision-making, while technical reforms should be accompanied by adequate capacity development and change management support.

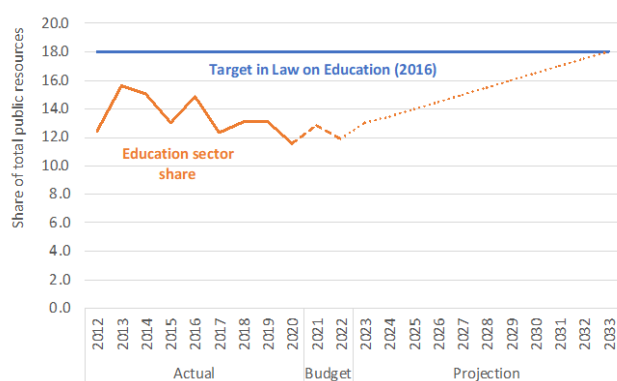
The Education Sector Financial Management Reform Roadmap blueprint suggests an initial sequencing of the report’s recommendations (annex 1), which should be refined through a consultative process. This report provides a comprehensive analysis of the education sector in Laos, resulting in a substantial list of recommendations. Building on the initial sequencing of activities in the education sector financial management reform roadmap blueprint in annex 1, consultations involving government stakeholders and development partners should identify priority activities to be taken forward by MoES and other concerned agencies as well as suitable institutional arrangements. Ongoing and planned reform activities should be adequately reflected and development partner support mapped. Identified activities could be integrated into existing planning and reform coordination processes under the Education and Sports Sector Development Plan (ESSDP), including the ESSDP annual operating plans, the ESSDP mid-term review, and the plans of the Education Sector Working Group (ESWG) and its Focal Groups. Alternatively, a prioritized version of the reform roadmap blueprint could constitute a standalone but complementary tool for systematic reform planning, coordination, and progress monitoring.

REFORM SET 1 (“Higher Spending”) should address the inadequate resourcing of the education sector at the whole-of-government level while fostering private sector job creation. The causes of low financing are twofold: First, a combination of weak domestic resource mobilization, unsustainable levels of public investment, and ‘jobless’ and slowing growth, aggravated by the COVID-19 pandemic, have undermined the country’s macro-fiscal position. On the fiscal side, this has forced an expenditure-driven consolidation that, coupled with growing debt interest payments, has severely constrained public spending on human capital. At the household level, limited income earning opportunities and high inflation, exacerbated by a sharp currency depreciation in 2022, have constrained discretionary resources for education and undermined incentives for households to invest in education. Second, education has been deprioritized in the government’s annual budget process. This trend began prior to the fiscal crisis and has been exacerbated by the impact of overall spending cuts and increases in debt interest payments. Underlying these two causes are weaknesses in the country’s economic model and a lack of strategic management of public resources both on the revenue and expenditure sides.

These problems require far-reaching reforms to improve economic management, fiscal policy, and public financial management. Economic and revenue reforms – including curbing tax incentives and exemptions, restoring the value-added tax rate, and promoting export industries – are critical for increasing the overall resource envelope. Improved debt and public investment management are needed to stabilize and eventually reduce debt service obligations and avoid crowding out education and other priority spending. Without these measures, financing of human capital investments will remain unsustainable. In parallel, the authorities must strengthen strategic resource allocation to (i) avoid future fiscal imbalances, such as the current rise in debt interest payments caused by unsustainable levels of debt-financed capital spending, and (ii) reverse the deprioritization of the education sector.

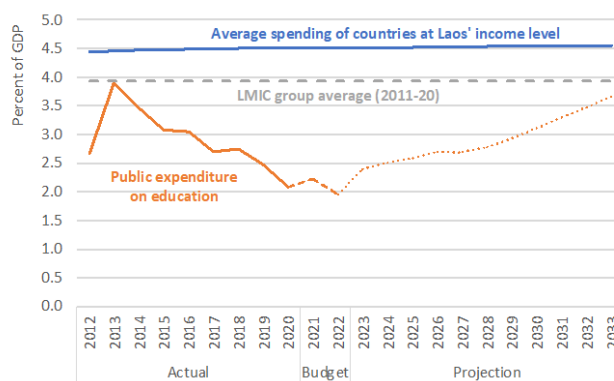
The authorities should prioritize education in the setting of sectoral budget ceilings that culminate in the annual budget. This should result in stepwise increases in annual allocations for education and other development priorities, such as health, countering the trend of growing budget shares of ‘other organizations’, which has contributed to falling social sector spending relative to GDP. The report sets out a proposed path that foresees a gradual increase in education spending to 15 percent of total public expenditure by 2027 (Figure ES.6), reflecting a higher prioritization of education compared to the range of 12-14 percent of the past five years and the minimum of the 15-20 percent range set out in the Incheon Declaration and Framework for Action for the implementation of Sustainable Development Goal 4 (World Education Forum 2015). By 2033, allocations in the range of 18 percent of total public spending would meet the minimum target set in the Law on Education 2016 and provide a long-term basis for education sector financing. This would put Laos on a gradual upward trajectory towards the lower-middle income group average over the next decade – a level only once reached in 2012/13 and far from the current public financing of ± 2 percent of GDP (Figure ES.7). In this context, financing of around 3.5 percent of GDP constitutes a realistic intermediate target by 2033.¹

Figure ES.6 Targeted Increase in Public Education Budget Share over the Next Decade



Sources: Law on Education 2016, MoES Revised Budget 2022, State Budget 2021, State Budget Implementation Reports 2012-2020, World Bank staff estimates.

Figure ES.7 Resulting Public Education Financing Relative to GDP over the Next Decade vis-à-vis Benchmarks



Sources: IMF World Economic Outlook April 2023, MoES Revised Budget 2022, State Budget 2021, State Budget Implementation Reports 2012-2020, World Bank WDI, World Bank staff estimates.

The political resource allocation process should be supported by technical reforms that facilitate informed decision making. Led by MoHA, the civil service downsizing policy should be revisited, factoring in service delivery modalities and corresponding sector staffing needs; its coverage should be expanded to the entire public sector, including non-civilian and other organizations currently not captured. This more strategic approach to public administration should be implemented through medium-term workforce planning, providing planning certainty to MoES and other sectors. Further, MPI and MoF should (i) fast-track ongoing macro-fiscal planning and medium-term budgeting reforms to support prioritization of social sectors, improve planning certainty, and reduce delays in annual budgeting; and (ii) integrate planning and budgeting processes for the entire public sector, including the group of ‘other organizations’ that have benefitted from an increasing share of domestic resources, as well as for recurrent and capital budgets. This would facilitate more transparent prioritization and efficient allocation of resources. Lastly, ongoing reforms of the Chart of Accounts (CoA) and the government financial management information system (FMIS) via an upgrade of the current Government Financial Information System (GFIS+) – and subsequently a new FMIS – are needed to provide a timely evidence-base for strategic planning and resource allocation across the public sector, including education.

¹ Reaching education financing of around 4.5 percent of GDP (a level expected for a country at Laos’ income) appears infeasible until economic and fiscal reforms put the country on a more sustainable macro-fiscal footing. Similarly, increased private financing will depend on improved incomes and demand-side incentives for households to invest in education. This requires a gradual transition towards a broad-based, private sector-driven, more sustainable economic model that creates jobs for graduates as well as wider access and better-quality education services. The latter requires an increased focus on efficient and effective use of available resources, supported by the education sector reforms discussed below.

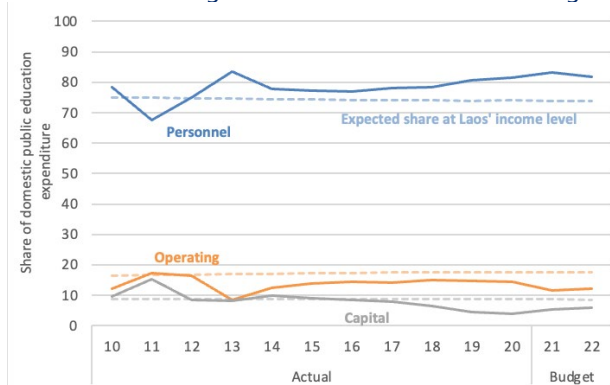
**REFORM SET 1
Higher spending**

Government-wide reforms to address the current inadequate levels of financing for the education sector and strengthen demand-side incentives for education

- 2.1 **Advance economic policy, domestic resource mobilization, debt, and public investment management reforms** in line with the *Reform Roadmap to Support the Implementation of the National Agenda* to increase the overall government resource envelope and strengthen demand-side incentives to pursue education. **Leadership, MPI, MoF**
- 2.2 **Prioritize education in the political resource allocation approach** by increasing its share in total public spending to at least 15 percent by 2027 and 18 percent by 2033 to adequately resource the sector.
- 2.3 **Revisit the civil service downsizing policy by expanding its coverage to the entire public sector while considering functional needs of sectors and implement the policy through medium-term workforce planning** to ensure sustainable staffing levels for the education (and other) sector(s). **Leadership, MoHA, MoF**
- 2.4 **Fast-track and expand ongoing macro-fiscal planning and medium-term budgeting reforms** to enable evidence-based strategic resource allocation across the entire public sector. **MoF, MPI**
- 2.5 **Prioritize implementation of ongoing reforms of the Chart of Accounts and the financial management information system (GFIS+ and FMIS)** to generate timely data for strategic resource allocation and provide the education sector with needed system capabilities for managing services. **MoF, MPI**

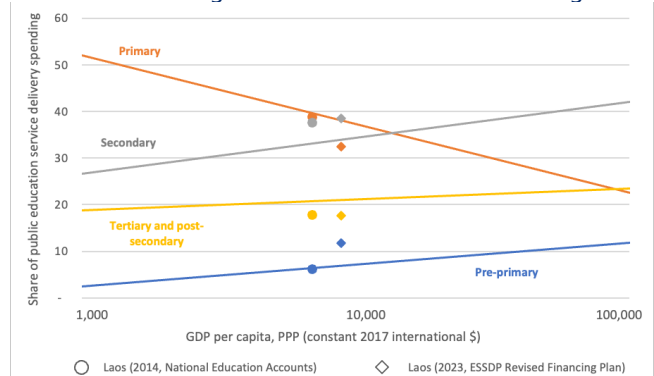
REFORM SET 2 (“Balanced Allocations”) should address spending inequities across subsectors and input factors and aim to limit administrative overheads. As far as limited resource envelopes allow, MoES should consider four shifts in aggregate resource allocation: (i) further increase equity across the country by considering differing needs of population groups across provinces and districts (e.g. through poverty targeting); (ii) increase the share of non-salary recurrent spending, which is being crowded out by salary spending (Figure ES.8), to fund key activities for improving education quality, such as school block grants (SBGs), teacher training, teaching and learning materials, and school monitoring visits; (iii) where possible, reallocate resources from administration and management to service delivery to reduce the relative share of administration spending; and (iv) rebalance allocations across education levels that currently appear to particularly benefit secondary education (Figure ES.9). These shifts could be implemented gradually as additional resources, including new staff quotas, become available to the education sector. In parallel, prioritization of investments in ECE and a continued focus on primary education would help tackle the root causes of poor learning outcomes, while an in-depth assessment of technical and vocational education and training (TVET) and higher education could inform the design of fit-for-purpose institutional and student financing arrangements.

Figure ES.8 Economic Composition of Public Domestic Education Financing in Laos and Global Benchmarking



Sources: MoES Revised Budget 2022, State Budget 2021, State Budget Implementation Reports 2010-2020, UNESCO UIS, World Development Indicators, World Bank staff estimates.

Figure ES.9 Education Subsector Composition of Public Education Financing in Laos and Global Benchmarking



Sources: Lao National Education Accounts, MoES ESSDP Revised Financing Plan, UNESCO UIS, World Development Indicators, World Bank staff estimates.

Education resource allocation and management should be supported by improved data management.

Strategic planning (including active development partner coordination) and medium-term and annual budgeting processes are strong in the education sector, but information systems and data management processes are poorly calibrated and do not facilitate strategic resource allocation and management. A two-fold response is needed: An education sector financial and human resource data management and information system strategy should complement the Lao Education and Sports Management Information System (LES MIS) strategy and guide prioritized data quality improvements, data integration, and rationalization of MoES systems, taking into consideration central agency reform plans and future migration to, or integration with, new government-wide systems. In parallel, improvements in data consistency, quality, and coverage within information systems for budgeting, accounting, payroll, and human resource management should be implemented. These should focus on basic data needed for evidence-based decision-making. These reforms can build on substantial ongoing support from development partners. Looking forward, the development of a pragmatic program budgeting approach for the education sector (World Bank 2022e), consistent with the new whole-of-government CoA and organizational structures aligned with budget programs and activities, could lay the foundation for good service planning and management information for decades to come.

REFORM SET 2		Education sector reforms to improve equity and balance in resource allocation
Balanced allocations		
2.1	Based on regular budget and expenditure reports by subsector and geographic area, gradually shift resource allocation patterns within the education sector to increase equity, achieve a better balance across different inputs and education levels, and limit overheads.	MoES (DoP & DoF) , MoF
2.2	Carry out an in-depth assessment of financing for post-secondary and tertiary education to inform the design of fit-for-purpose institutional and student financing arrangements.	MoES (DHE, DTVE & DoF) , NUOL, PESSs
2.3	Develop an education sector financial and human resource data management and information system strategy to guide education sector data and system improvements and facilitate the migration to (or integration with) the respective government-wide systems.	MoES (DoF, DoOP & ICT Center) , MoF, MoHA
2.4	In parallel, continue reforms to improve the quality and usage of data and education sector information systems to provide the evidence base for strategic resource allocation and management.	MoES , LSB, PESSs, DESBs, NUOL
2.5	Develop the foundations for a pragmatic program budgeting system for the education sector and align organizational structures of public education institutions to facilitate strategic and accountable resource allocation and management. ²	MoES (DoP & DoF) , MoF, PESSs, DESBs

REFORM SET 3 (“Efficient Management”) should address challenges in the allocation and management of key inputs for education. These inputs include teachers and their management, school finance, teaching and learning materials, and school infrastructure.

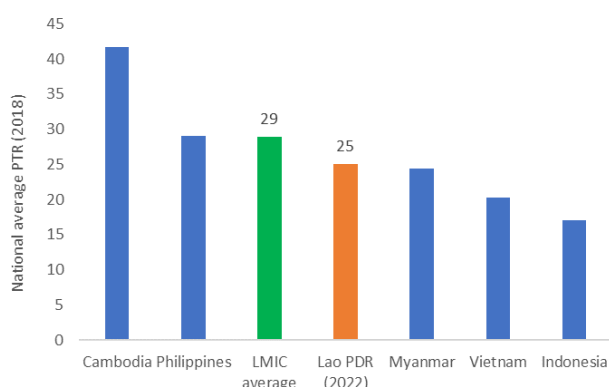
Input 1 Teacher Management

The government’s ongoing civil service downsizing program is significantly impacting teacher numbers, but there is substantial scope to improve the efficiency of spending on the teacher workforce through medium-term planning, flexible teacher deployment policies, and teacher training. Sustained budget cuts have resulted in a steady decline in teacher numbers over the past five years, although the pupil-teacher ratio (PTR) at both primary and secondary level remains relatively favorable compared to that of previous decades

² The pragmatic program budgeting approach is set out in World Bank (2022e), aiming to help reap the benefits of program budgeting, without having to deal with the associated implementation pitfalls.

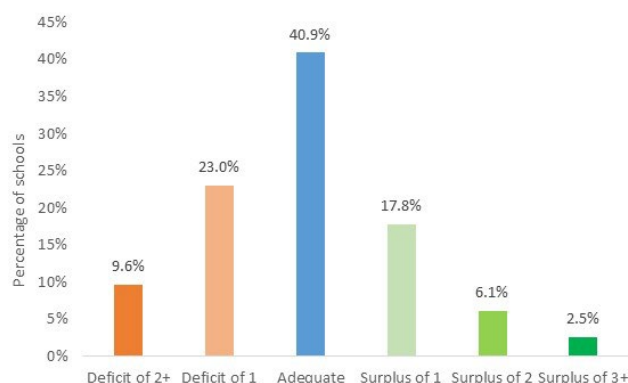
and in other countries in the region (Figure ES.10). However, the aggregate picture hides a significant imbalance in distribution, with a large proportion of primary and secondary schools having either too many or too few teachers when applying MoES teacher deployment guidelines (Figure ES.11). These imbalances are difficult to address, as Laos has too few policy tools for adjusting teacher deployment. At the same time, teachers' very low skill levels translate into poor student achievement. Assuming further reductions in teacher numbers for the foreseeable future, the MoES should adopt a medium-term approach to teacher demand forecasting and allocation planning to improve equity in annual deployment decisions. The MoES should also consider adjusting PTR standards and transitioning towards a more cost-effective and equitable service delivery model. Concurrently, the government should prioritize investment in teacher training programs and develop teacher rotation policies and systems to address the current imbalance in teacher distribution.

Figure ES.10 Pupil-Teacher Ratios at Primary Level in Laos and across Southeast Asia (2018)



Source: UNESCO UIS.

Figure ES.11 Percentage of Primary Schools with a Deficit or Surplus in Teacher Numbers



Sources: LESMIS 2021-22; Annual School Census 2021-22.

REFORM SET 3
Efficient management

Education sector reforms to improve the efficient and effective management of key inputs

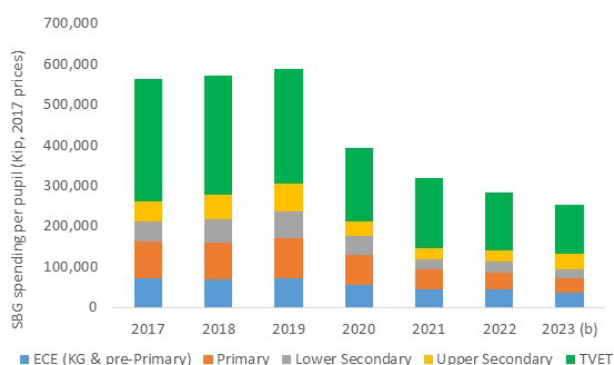
Input 1: Reforms to improve teacher management

- | | | |
|-------|--|---|
| 3.1.1 | Develop a medium-term national school staffing strategy with adjusted pupil-teacher ratio (PTR) standards that specifies teacher needs beyond the immediate year to establish greater predictability in staffing levels and improve equity in teacher allocation. | MoES (DoOP),
LSB, MoHA |
| 3.1.2 | Introduce teacher rotation policies that include nonmonetary incentives to enable greater flexibility for addressing the imbalances in teacher deployment. | MoES (DoOP),
MoHA |
| 3.1.3 | Establish a new category of “contract” teachers to be appointed on a short-term basis to specific schools to manage teacher imbalances in the short term. | |
| 3.1.4 | Improve the monitoring of teacher absenteeism by adapting school management protocols and providing additional support to school principals and Village Education Development Committees (VEDCs) using appropriate technology. | MoES (DoOP),
PESSs, DESBs,
VEDCs |
| 3.1.5 | Introduce innovative technological solutions to support learning in the classroom, such as the ‘blended’ learning model which can be delivered with relatively fewer human resources and customized to accommodate student needs, such as local language instruction. | MoES, PESSs,
DESBs |
| 3.1.6 | Consider a redundancy program for schools with excess teachers to free up resources for the deployment of new teachers at schools with a deficit. | MoES (DoOP),
MoHA |

Input 2 School Financing

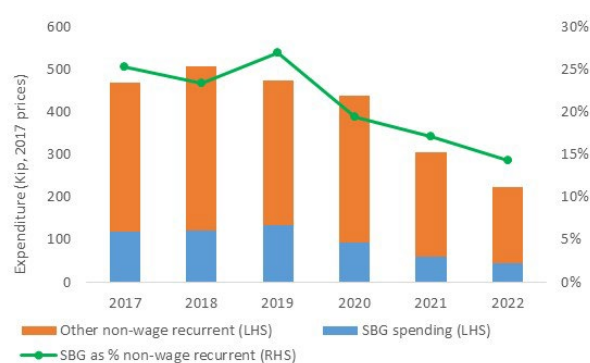
The systems and governance arrangements for school financing are robust and provide a strong foundation for funding increases once fiscal space is generated. The combination of cuts to the nonwage recurrent budget and high inflation resulted in a 50 percent decline in spending on the School Block Grant (SBG) in real terms between 2019 and 2022 (Figure ES.12). SBG spending has declined at a faster rate than total nonwage recurrent spending (Figure ES.13). At the primary level, spending declined from \$12 per pupil in 2019 to just \$4 by 2022. In addition, the timeliness of SBG transfers has deteriorated significantly since 2021, with many schools receiving funds several months late. These delays are strongly linked to cash rationing practices in the National Treasury in response to the increased uncertainty over revenue collections. On the positive side, governance arrangements for the SBG have improved significantly over the past five years, supported by the Village Education Development Committee (VEDC) structure that is tasked with holding schools to account. Looking forward, MoES should review and simplify rules and procedures governing the use of SBG funds to ensure maximum impact on the classroom environment, as well as exploring technological solutions (such as mobile payments) to improve schools' ease-of-access to SBG funding. This will facilitate an improvement in the efficiency and impact of the SBG as spending gradually recovers to more adequate levels.

Figure ES.12 SBG Real Spending per Pupil (2017 prices)



Sources: Department of Finance, MoES.

Figure ES.13 Nonwage Recurrent Spending (2017 prices)



Sources: Department of Finance, MoES.

REFORM SET 3 Efficient management

Education sector reforms to improve the efficient and effective management of key inputs

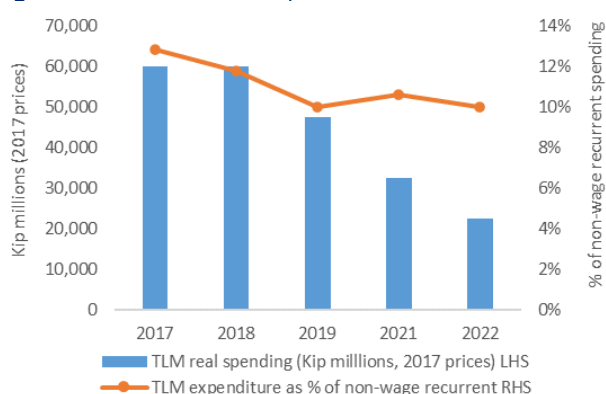
Input 2: Reforms to improve school financing

- | | | |
|-------|---|--------------------|
| 3.2.1 | Develop alternative options for the SBG fund allocation formula as additional funding becomes available, to improve equity by accounting for variations across districts and schools. | MoES (DoF) |
| 3.2.2 | Engage with the MoF to discuss strategies for improving the timeliness of SBG fund releases to ensure maximum cost-efficiency of whatever funds are ultimately released (governed by clear criteria and guidelines). | MoES (DoF),
MoF |
| 3.2.3 | Explore mobile money solutions for SBG transfers with appropriate safeguards and controls to overcome the problem of transferring funds to schools in rural locations. | |
| 3.2.4 | Simplify the rules and procedures governing the use of SBG funds to ensure that school quality assessment criteria aim to improve the classroom environment. | MoES (DoF) |

Input 3 Teaching and Learning Materials

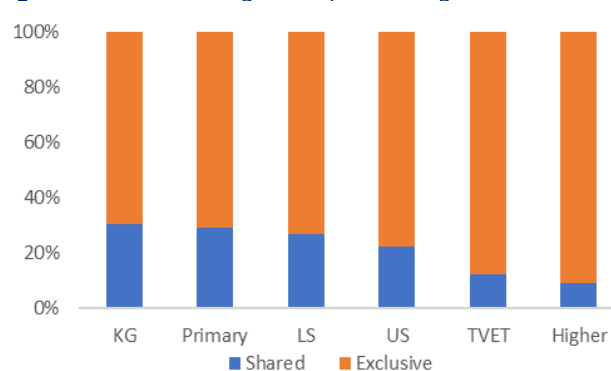
Shortages of textbooks and other materials are widely reported by district education offices, and deliveries often arrive several weeks or even months after the school year has begun. There is a need for better quality data to inform planning and budget allocations, as well as improved procurement modalities and distribution models to reduce delays and disparities across schools. Real spending by MoES on textbooks and other teaching and learning materials (TLM) more than halved between 2017 and 2022 (Figure ES.14) and is now well below the costing set out in the ESSDP (2021-25). This has contributed towards a decline in the supply of TLMs to schools and a reliance on textbook sharing amongst students (Figure ES.15). Recent survey evidence points towards a possible link between higher student-textbook ratios and lower student achievement outcomes, highlighting the urgent need to restore budget allocations to pre-crisis levels. Meanwhile, significant bottlenecks exist throughout the textbook production and supply-chain cycle, including a lack of reliable information on existing stock levels from the Textbook Management Information Management System (TMIS) to help inform budget allocations and school level distribution plans. The procurement process is fragmented, with textbooks, teacher guides and other types of TLM all arriving at DESB offices at different times, making it difficult for schools to collect them efficiently. This is particularly problematic for remote schools whose staff must travel long distances to reach their DESB office. MoES should focus efforts on streamlining TLM information systems to improve data quality for planning purposes (initially on a pilot basis to ensure proof-of-concept), as well as addressing procurement and distribution weaknesses to ensure more timely distribution to schools. In the meantime, MoES should promote and facilitate student access to the *Khang Panya Lao* platform to enable digital access to online versions of textbooks and other learning materials.

Figure ES.14 MoES Real Expenditure on TLM (2017-22)



Source: Department of Finance, MoES.

Figure ES.15 Percentage of Pupils Sharing Textbooks



Source: LECS6 survey 2019.

REFORM SET 3 Efficient Management

Education sector reforms to improve the efficient and effective management of key inputs

Input 3: Reforms to improve teaching and learning materials

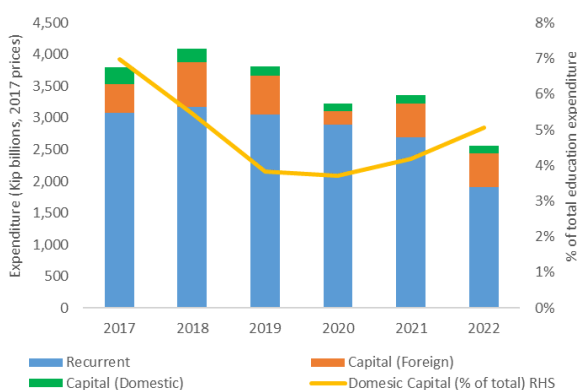
3.3.1	Expand the use of digital platforms and increase ICT provision to classrooms to enable access to online learning resources such as the <i>Khang Panya Lao</i> platform.	MoES
3.3.2	Undertake a rapid review of TLM information systems with a view to streamlining processes for generating reliable data for planning purposes.	MoES (DoF), MoES (Printing)
3.3.3	Review and improve procurement modalities for the production and distribution of TLM to improve the efficient use of scarce funds and ensure timely and reliable delivery to DESBs.	MoES (Printing)
3.3.4	Strengthen school distribution planning and move towards provision based on actual school needs , using improved data to reduce disparities in the availability of TLM across schools	MoES (DoF), DESBs

Input 4 School Infrastructure

Despite a recent decline in capital expenditure for education, school infrastructure has improved over the past five years and there does not appear to be a critical shortage of facilities. The decline in average school size may require consolidation of the school network and repurposing of existing facilities.

Domestic public financing for school infrastructure declined from 8 percent of total MoES spending in 2015 to just 4 percent in 2021 (Figure ES.16). Survey data indicates that most schools benefit from permanent structures and most students report manageable journey times to schools. Construction of new schools should therefore not be a major priority for MoES. However, only 2 percent of the total domestic capital spending is typically spent on renovation and maintenance, which is too low to prevent degradation of school buildings over time. The recent (and rapid) decline in average school size represents a significant inefficiency given the high recurrent cost implications of maintaining a large network of small schools (Figure ES.17). Given the severe resourcing constraints, further school consolidation will be necessary, as will efforts to integrate school facilities across levels and repurpose closed facilities. MoES should analyze these factors in more detail and develop a medium-term capital investment strategy based on school-age population projections and other relevant data to guide more efficient capital budget allocations over the next decade.

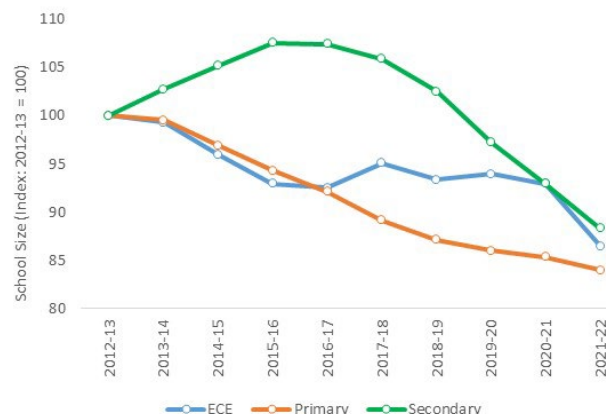
Figure ES.16 MoES Real Capital Expenditure (2015-21)



Note: Foreign capital includes all ODA funding.

Source: Department of Finance, MoES.

Figure ES.17 Change in Average School Size (2013-22)



Source: Annual School Census 2013 – 2021.

REFORM SET 3 Efficient Management

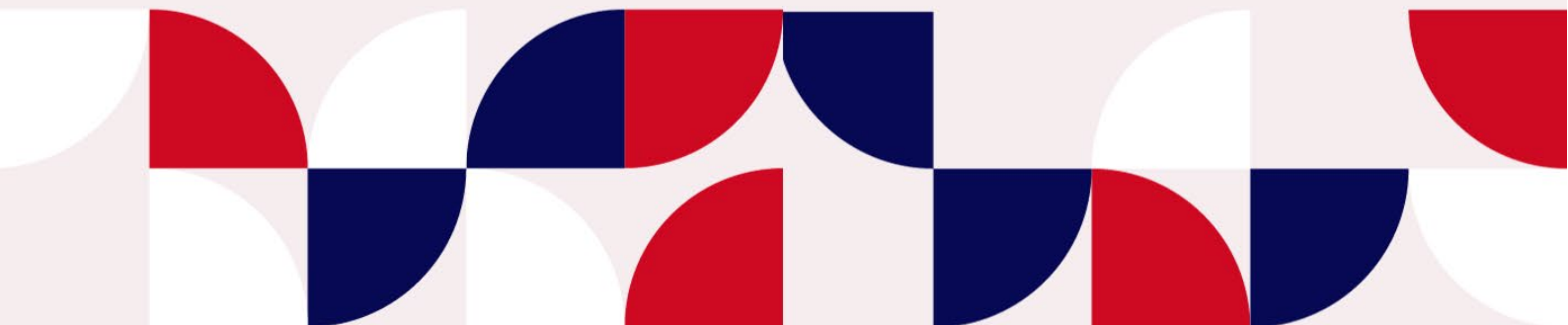
Education sector reforms to improve the efficient and effective management of key inputs

Input 4: Reforms to improve school infrastructure

- 3.4.1 **Reorientate the capital budget towards maintenance and renovation** to improve the quality of existing infrastructure and avoid further expansion of the school network.
- 3.4.2 **Develop a medium-term capital investment strategy for the education sector** to guide the allocation of the capital budget and set out plans for school consolidation and integration.

MoES (DoP), MPI

Background and Methodology



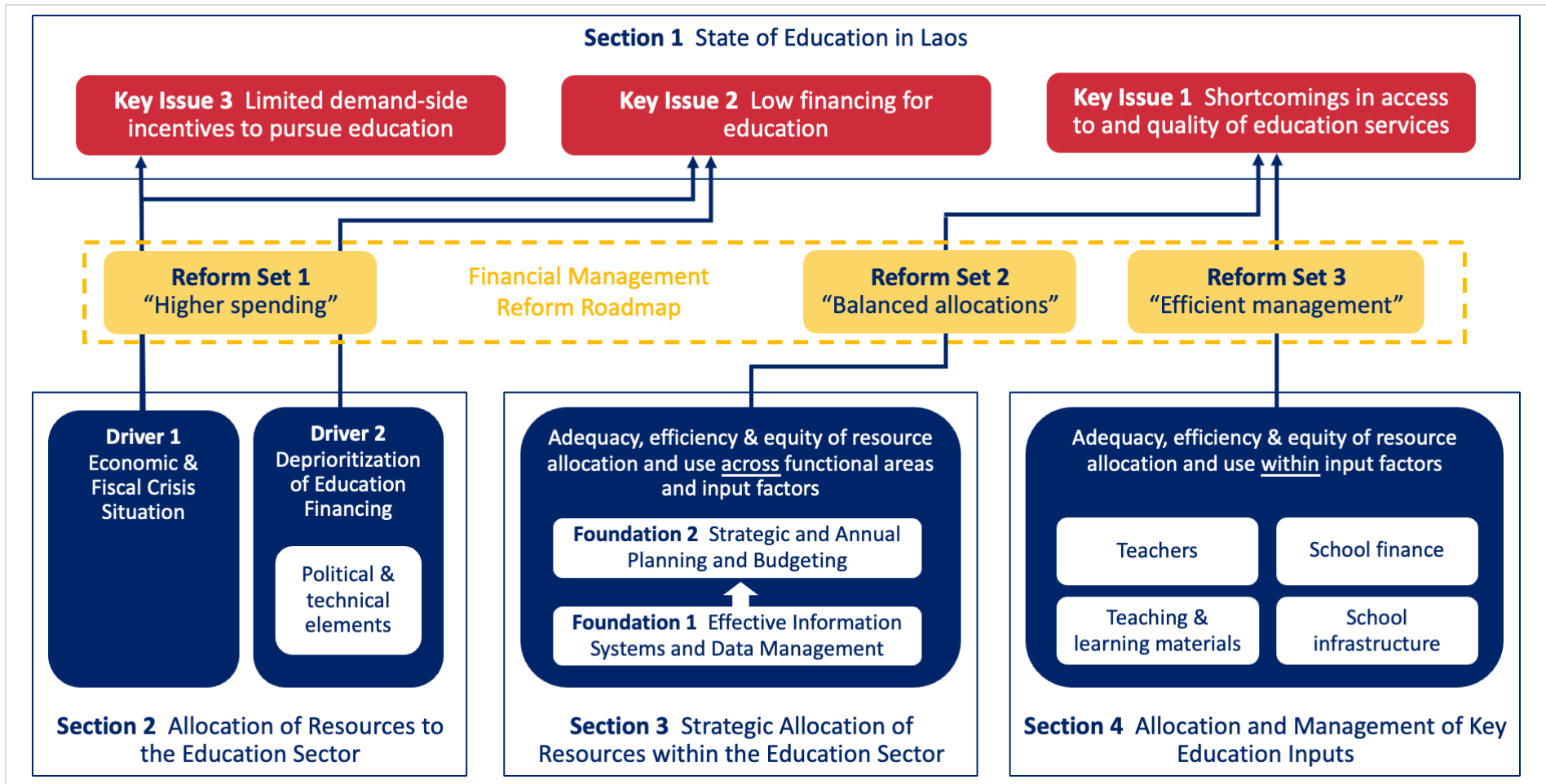
This report aims to support the government in identifying reforms that support the adequate resourcing of the education sector in Laos and translate those resources into increased education access, better learning outcomes, and improved equity. It is the result of a collaboration between MoES and the World Bank, with financial support from the Australian Department of Foreign Affairs and Trade (DFAT). The report builds on extensive analytical work undertaken by MoES, the World Bank, and other development partners in the education sector in Laos in past years. The desk review was complemented by comprehensive data collection and analysis as well as stakeholder consultations within the education sector (MoES and selected PESSs and DESBs), with central agencies (MPI, MoF, MoHA), and with development partners (ADB, DFAT, European Union (EU), Japan International Cooperation Agency (JICA), United Nations Children's Fund (UNICEF) and their technical assistance project teams.

The report uses a comprehensive framework for analyzing education sector spending and public financial management (PFM) bottlenecks in Laos. It applies the Public Expenditure and Institutional Review (PEIR) and Financial Management in Education (FinEducation or "FinEd") methodologies.

- The PEIR methodology guides the assessment of education expenditure and institutional arrangements, with the purpose of identifying potential improvements in resource allocation and utilization that can promote greater efficiency, effectiveness, and equity in education financing across provinces and districts. The PEIR draws on the World Bank's Education Public Expenditure Review guidelines (World Bank 2017).
- The FinEd methodology aims to identify and understand the specific PFM bottlenecks that cause service delivery challenges at the local level. This informs practical and realistic reform actions that can improve the quality of education delivery over time. The assessment uses the FinEd Toolkit, which applies a bottom-up problem driven approach to identify school-level challenges (World Bank 2022g).

The structure of the report is illustrated in Figure B.1 below. Section 1 describes the key issues facing the education sector in Laos. Section 2 analyzes underlying drivers and presents reform recommendations to address inadequate financing and weak demand-side incentives for education. Section 3 discusses shortcomings in adequacy, efficiency, and equity *across* functional areas and input factors in the education sector. Findings inform a second set of reform recommendations. Section 4 explores issues of adequacy, efficiency, and equity *within* input factors and presents a third set of reform suggestions. The report's analysis and recommendations are sequenced in an Education Sector Financial Management Roadmap blueprint in annex 1. Following stakeholder consultations that validate government priorities and map reform efforts and development partner support, priority reforms can be integrated into reform plans of existing sector planning and reform coordination processes. Alternatively, the reform roadmap blueprint in annex 1 could be a standalone but complementary tool for systematic reform planning, coordination, and progress monitoring.

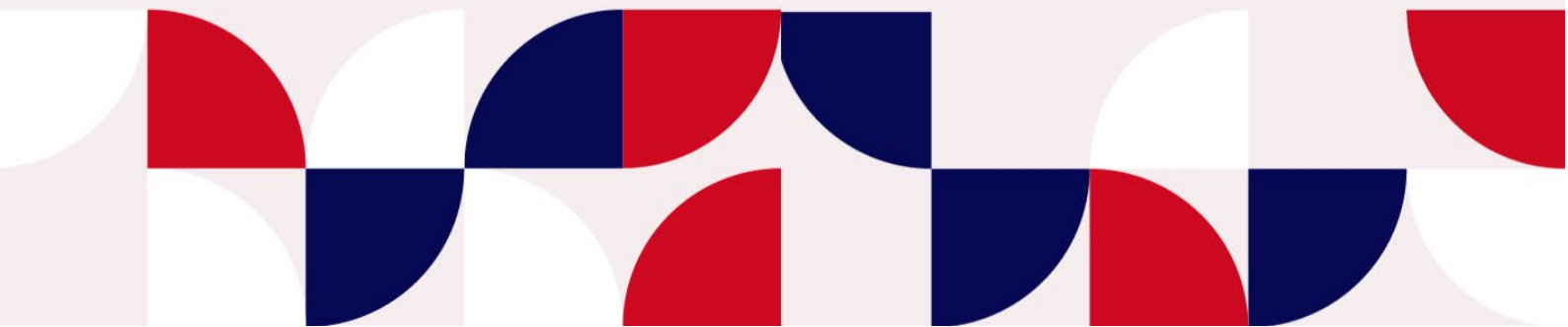
Figure B.1 Report Structure with Linkages between Key Issues, Analysis, and Reform Sets



Note: Illustrative overview excluding interlinkages between key issues, such as the impact of low education financing on quality and of low quality on low returns (see Figure ES.5 for examples).
Source: World Bank.

Section 1

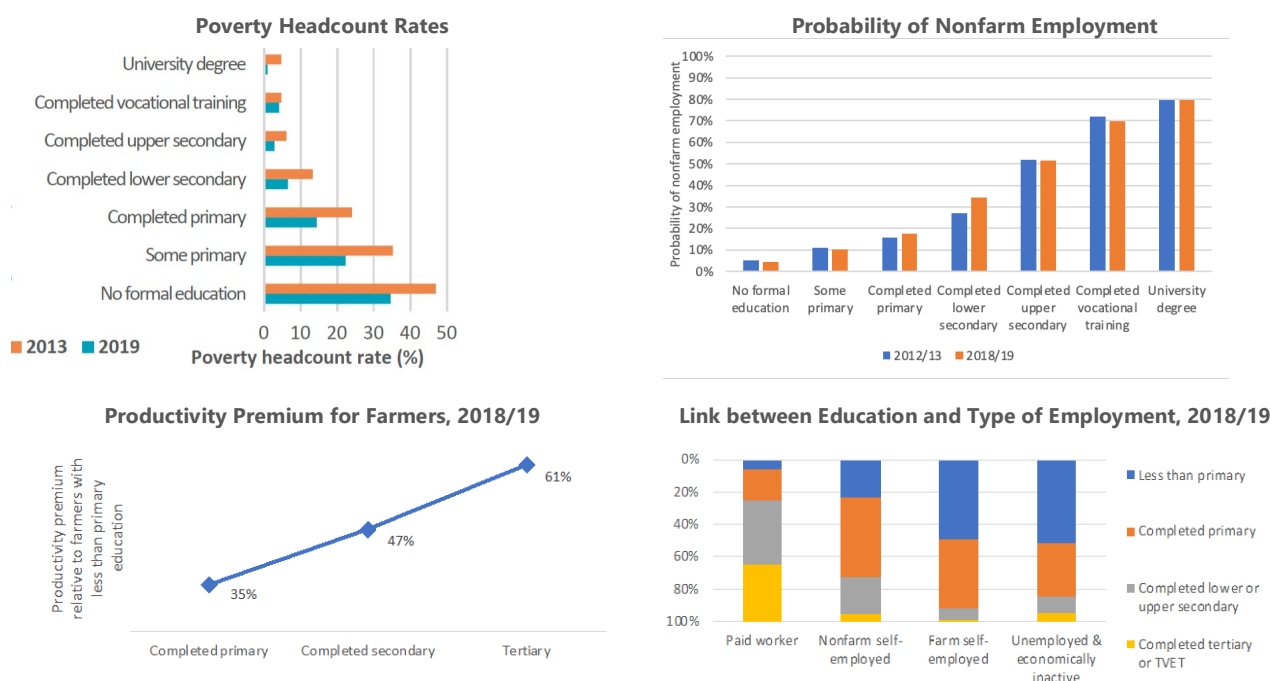
The State of Education in Laos



Investments in education have high private and social returns, playing a critical role in countries' development. Generally, education has high social and private returns while a lack of education is highly correlated with poverty. Globally, average private returns to schooling are estimated to be around 10 percent, ranging from around 7 percent for secondary education to over 10 and 15 percent for primary and tertiary education, respectively (Montenegro and Patrinos 2014). Average returns for developing economies in the East Asia and the Pacific region are third highest after Sub-Saharan Africa and high-income economies, with primary education returns of 13.6 percent higher than the global average. For middle-income countries such as Laos, Patrinos and Psacharopoulos (2018) estimate that average private returns to primary (24.5 percent), secondary (17.7), and tertiary education (20.2) are even higher. Social rates of return tend to be higher in lower income countries and/or where there is less schooling. Middle-income countries still achieve high average returns for primary (17.1 percent), secondary (12.8), and tertiary education (11.4), making a strong case for countries to invest in education across levels.

In Laos, education is critical for both poverty reduction and economic development. Poverty is concentrated among the poorly educated (Figure 1.1). Among households whose head lacks formal education, the poverty rate was around 35 percent according to the last household survey in 2018/19. This is 10 times higher than the poverty rate in households headed by those who completed secondary education. In contrast, poverty is virtually nonexistent among households headed by an adult with a university degree. Similarly, education plays a critical role for productivity in farming as well as entry into, and earnings in, the nonfarm labor market, with regularly paid jobs that mostly pay above the minimum wage concentrated among individuals with higher degrees. This supports the case for public investment in education across all subsectors in Laos.

Figure 1.1 Relationships between Household Education and Poverty and Employment Indicators

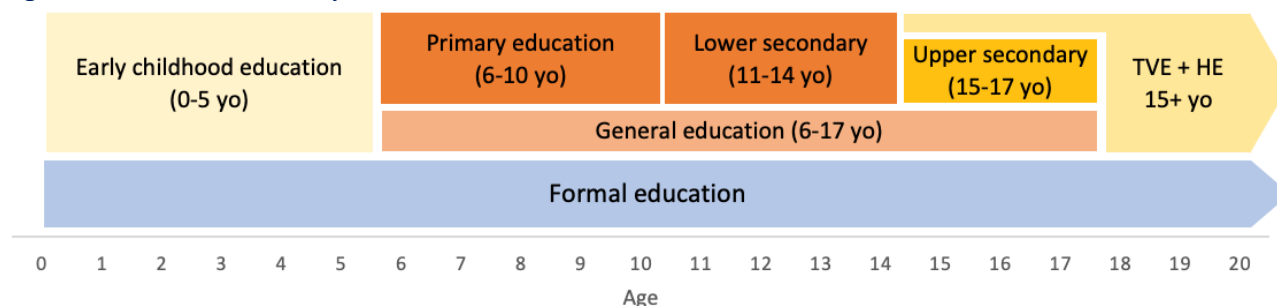


Source: World Bank (2020) based on Lao Expenditure and Consumption Survey 5 and 6 data.

Laos' legal framework recognizes the importance of education and sets out the institutional arrangements and prioritization of public spending for education. The revised Constitution of 2015 and the amended Law on Education 2016 establish an equitable right to quality education. The Constitution specifies the goal of developing high quality national education for all people throughout the country, especially people in remote areas, ethnic groups, women, and disadvantaged children. This is echoed in Article 6 of the amended Law on Education. Article 22 of the Constitution provides for compulsory primary education, and Article 28 of the Law on Education extends this requirement to the completion of lower secondary education (Figure 1.2).

Article 60 in the Law on Education also sets a target for at least 18 percent of total public expenditure to go towards education. Box 1 provides an overview of the institutional arrangements and functional assignments in Laos' education sector as a basis for the subsequent analysis.

Figure 1.2 Formal Education System in Laos



HE = higher education, TVE = technical and vocational education, yo = year-olds.

Source: Law on Education (Amended Version), Unofficial Translation, April 2016.

The government's cascading planning framework provides an enabling environment for education and the authorities emphasize the importance of education. Building on the Education for All National Plan of Action 2003-2015, Laos's 8th Five-Year National Socio-Economic Development Plan (NSED) (2016-2020) supported universal access to quality education (Outcome 2, Output 3). The current 9th NSED (2021-2025) continues the focus on creating conditions for access to education and improving its quality across all levels (Outcome 2, Output 2). The 8th and 9th Education and Sports Sector Development Plans (ESSDPs) translate the respective NSEDs' high-level priorities and targets into detailed plans that include a comprehensive results chain with strategies, activities, targets, and resourcing requirements for all education subsectors. In line with its plans and policies, the government recurrently affirms the importance of education through public communications. A recent example of this is the endorsement of the *National Statement of Commitment to Transforming Education in the Lao PDR* in 2022, which aims to strengthen national efforts to improve education quality, especially in the context of the COVID-19 pandemic.

Despite this enabling environment, Laos' education sector faces three major, interrelated challenges. The challenges are discussed in the following subsections and undermine the positive impact of education on households and private and public sector productivity, weakening economic growth and development outcomes.

- ❶ **Shortcomings in access to and quality of education services**
- ❷ **Low financing for education, particularly from public sources**
- ❸ **Limited demand-side incentives to pursue education**

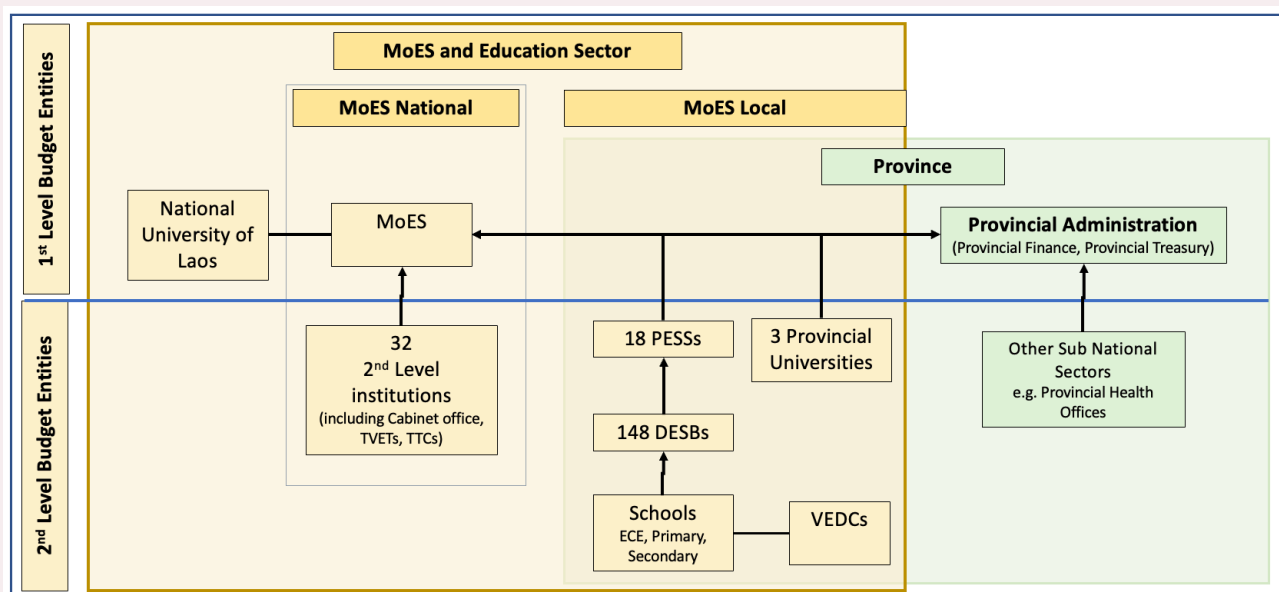
Box 1 Institutional Arrangements and Functional Assignments in the Education Sector

Institutional arrangements for the education sector in Laos are set out in various laws, including the State Budget Law 2015 (as amended in 2021), the Education Law 2016, and the Law on Local Administration 2015. At the national level, the education sector comprises the Ministry of Education and Sports (MoES) and the National University of Laos (NUOL). MoES oversees 32 education entities directly, comprising teacher training (TTCs) and TVET colleges that are located in various provinces, selected special schools, and the MoES Cabinet Office that manages the budget on behalf of all the central departments of MoES (such as the Departments of Finance, Planning, and General Education).^a At the subnational level, Provincial Education and Sports Services (PESSs) are part of the 18 provincial administrations (including the capital city) and oversee District Education and Sports Bureaus (DESBs) in the 148 districts. At village level, schools are managed by Principals/Head Teachers and some teachers with technical responsibilities, in cooperation with the Village Education Development Committees (VEDCs). The latter comprises village chiefs; representatives of the Village Front for Safeguarding and Construction, village Lao Women’s Union, and village Lao People’s Revolutionary Youth Union; school principals (as secretaries); teacher representatives; and members of parents’ associations.

The State Budget Law translates this administrative structure into first and second tier budget entities. MoES as a national level line ministry, NUOL, and the subnational provincial administrations are first tier budget units for which the National Assembly approves an annual budget by chapter.^b These first tier budget units are responsible for allocating their budget to the second level units under their control: MoES for its 32 entities and provinces to their PESSs.^c Each PESS in turn allocates budgets to their various DESBs and other subordinate units.

In practice, each PESS prepares its budget in close cooperation with the Department of Planning (DoP) and Department of Finance (DoF) of MoES, ensuring that subsector allocations to each of the education levels are consistent with the ESSDP and agreed to by the relevant provincial government. Under the Law on Local Administration (2015), PESSs have a dual reporting responsibility to the relevant provincial government administration through provincial financial services, as well as to MoES. Similarly, DESBs report to the central MoES, usually through the PESS, and to the local district administration. These arrangements are summarized in Figure 1.3.

Figure 1.3 Education Sector Institutional Arrangements in Laos



Source: World Bank.

The central level ministries of government constitute the policy tier. MoES is responsible for leading and coordinating the strategic planning and budget preparation and execution functions for the broader education sector.^d DoP and DoF have macrolevel responsibilities across the entire education sector for both central and local entities. DoP is responsible for sector-wide planning, monitoring, and evaluation through the ESSDP. DoF develops and maintains policies and procedures for overall financial management, financial controls, budget planning, asset management, procurement, and the consolidation of budgets and financial reports covering revenue and expenditure for the whole education sector, including PESSs and DESBs. The Department of Organization and Personnel (DoOP) is responsible for sector-wide human resource planning, policy development, and oversight. MoES also develops, communicates, and monitors service delivery standards for education at national and subnational levels.

The provinces and districts are responsible for service delivery and the implementation of central government programs and projects. In practice, this means PESSs and DESBs are deconcentrated service delivery units of MoES with management responsibilities for schools within their geographic jurisdiction. While PESSs and DESBs select and deploy teachers to schools within their quota, formal ex-post approval of appointment of teachers is made by DoOP of central MoES. Principals for all schools are appointed and deployed at the provincial level. Table 1.1 summarizes main responsibilities by education authority.

Table 1.1 Overview of Education Sector Functional Assignments

Education authority	Main responsibilities
Ministry of Education and sports (MOES)	<ul style="list-style-type: none"> • policy development, sector planning and budgeting, and financial management procedures • formal approval of teacher appointments • teacher training • curriculum development • textbook provision • development of secondary school examination (Grade 11)
Provincial Education & Sports Services (PESSs)	<ul style="list-style-type: none"> • teacher recruitment and assignment • allocation of secondary school teacher salaries • personnel management and payroll for teachers • development of secondary school inspection
District Education & Sports Bureaus (DESBs)	<ul style="list-style-type: none"> • preparation of transition examinations (Grade 6-10) • personnel management and payroll for teachers • development of primary school inspection • preschool and primary school management
Community	<ul style="list-style-type: none"> • contributions to school maintenance • subsidization of teachers, including volunteers • special contributions as requested • promoting of literacy

Source: World Bank.

^a A full list of the 32 institutions is in annex 2.1.

^b Chapter is the highest level of the natural account code (economic item codes) in the current Chart of Accounts (CoA). Chapters 60-61 cover salaries and allowances, Chapters 62-63 and 65-66 operating expenditure, and Chapter 67 capital (Chapter 64 comprises interest expenditure).

^c The State Budget Plan includes the national education sector allocations for each province, which one could argue makes PESSs first level budget entities. Anecdotally, provincial governments and Provincial People's Assemblies see PESSs as first level organizations; from a national perspective, the 18 provinces remain part of the central government as first level budgetary units, while 148 districts are considered second level (World Bank 2019b).

^d This report uses the term 'education sector' to include MoES, its 32 controlled institutions, PESSs, DESBs, schools (including ECE centers and TVET institutions), the three provincial universities and the National University of Laos. The International Monetary Fund's Classification of Functions of Government (COFOG) uses a broader definition for the education sector, which would include training or education bodies whose main function is educational but that are managed within other functional sectors, such as the Ministry of Health's University of Health Sciences and the Ministry of Justice's National Institute of Justice in Laos. Data for these institutions has not been available for the analysis.

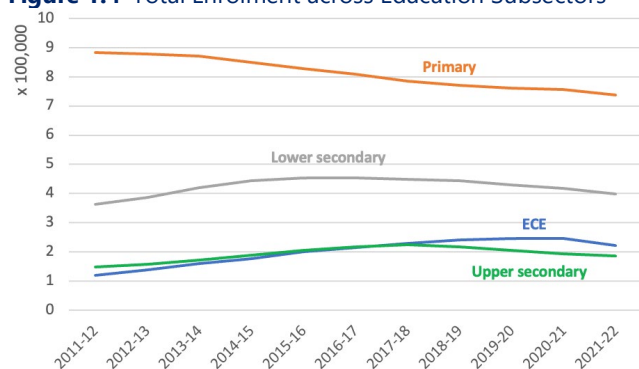
Key Issue 1 Shortcomings in Access to and Quality of Education Services

Summary: Despite growing enrolment in most education levels over the past decade, access to education services is a significant challenge in Laos, particularly from lower secondary education upwards. Learning outcomes are among the lowest in the region, pointing to persistent challenges in education quality. This situation is exacerbated by three issues that underscore the need for action to improve the quality of education: (1) gaps in access to education are likely larger than officially reported, driven by differences in school-age population estimates across data sources; (2) inequities persist in access and learning outcomes, particularly for children from poorer, rural, and ethnic minority households; and (3) the COVID-19 pandemic and economic crises have negatively impacted education service delivery and households' financial situations, causing declines in enrolment and learning outcomes.

Education stakeholders in Laos demonstrate detailed understanding of the constraints affecting access to and quality of education in the country. Stakeholders regularly analyze various aspects of the education sector, for example via roundtable meetings and preparation of sector plans, midterm reviews, and evaluations.³ This is complemented by assessments on specific issues, such as reasons for dropouts and out-of-school children. As a result, stakeholders have a good understanding of access and quality issues that continue to persist in Laos. This subsection therefore provides an overview of key trends and highlights selected observations and issues that appear less widely discussed.

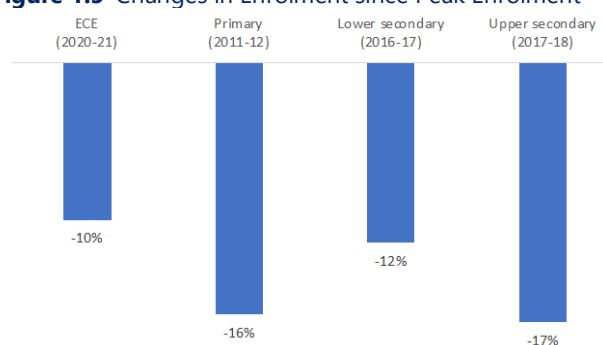
Following an increase in enrolment over most of the past decade, levels have fallen across all subsectors in recent years. Enrolment in primary education has steadily declined in the past decade, while ECE admission only declined in 2021-22 following a decade of gradual increases (Figure 1.4). Lower and upper secondary enrolments started to decline between 2016 and 2018, with the trend continuing throughout the COVID-19 pandemic. Reductions from peak enrolment are substantial, ranging from 10 percent in ECE to 17 percent in upper secondary over the past decade (Figure 1.5).⁴ Anecdotal evidence suggests that the negative trend in enrolment across levels is continuing in school year 2022-23. The reasons for these changes vary across education levels and are multifold, including changes in internal efficiency (e.g., changes in repetition rates), demographic trends, and recent COVID-19 and economic crisis impacts. These are discussed below.

Figure 1.4 Total Enrolment across Education Subsectors



Source: MoES Annual School Census.

Figure 1.5 Changes in Enrolment since Peak Enrolment



Note: Brackets denote school years of peak enrolment within the past decade.

Source: MoES Annual School Census.

³ See, for example, the *Education Report for Roundtable Implementation Meeting 2022* prepared by the Department of Planning of MoES in November 2022 and the midterm review process for the 9th ESSDP in the first quarter of 2023.

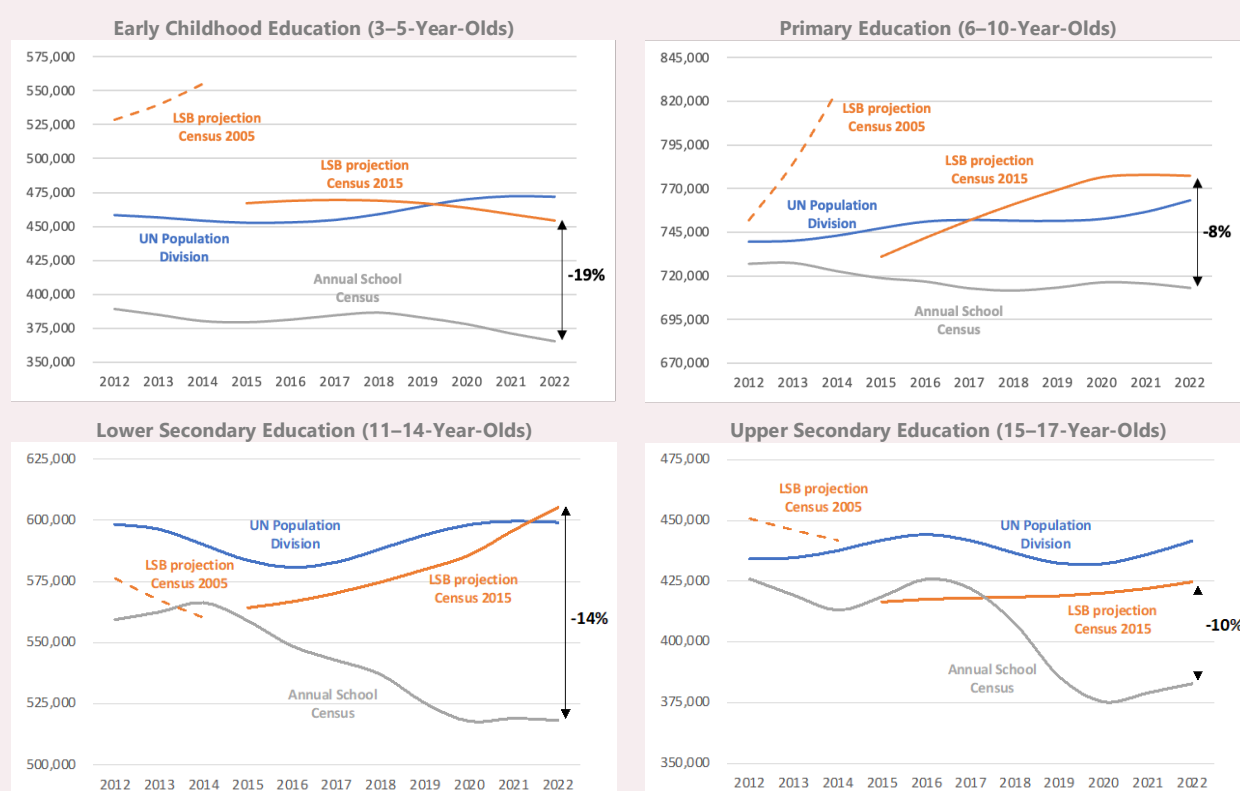
⁴ Data issues limit some of the analysis. This is particularly the case for TVET, higher education, and teacher education, for which the Annual School Census stopped publishing data from school year 2020-21 onwards.

Gaps in enrolment are substantial but vary depending on the source of data for school-age population, with the Annual School Census (ASC) likely overestimating access levels. As discussed in Box 2 below, school-age population data plays an important role in understanding access levels but varies considerably across sources for all education levels in Laos.

Box 2 Discrepancies in Population Statistics and Projections in Laos

School-age population numbers are important to understand access to education and provide the basis for service planning. However, data for Laos varies considerably across sources. The ASC shows consistently and increasingly lower population age numbers than the LSB's population projections based on the 2015 Census (Figure 1.6).^a As a result, GERs and NERs reported in the ASC and any reports derived from it are higher compared to ratios based on LSB data. In comparison, population estimates from the United Nations Population Division vary to a lesser extent from LSB projections.

Figure 1.6 School-Age Population Estimates



Notes: LSB estimate calculated based on equal distribution within five-year age groups (0-4, 5-9, 10-14, and 15-19-year-olds). Annual School Census data is the average of the school-age population numbers for two consecutive school years (e.g., 2012 data is the average of 2011-12 and 2012-13 school years).

Sources: LSB Population Projections; MoES Annual School Census; United Nations Population Division Data Portal (accessed March 23, 2023).

Methodological differences can explain variation between sources. The LSB projects annual figures for the years between two population censuses, which the government has carried out every 10 years since 1985. The most recent one was conducted in March 2015. In comparison, the ASC questionnaire includes a school-level data entry form for total and enrolled population numbers (Figure 1.7), which provides the basis for calculating GERs and NERs in the ASC. This approach appears to have a significant scope for error, which is most starkly illustrated by collected data for the 0-2-year-olds age group that is almost 30 percent lower than the estimate using LSB projections (not shown in Figure 1.6).

School staff likely (and understandably) do not have a comprehensive picture of births in the school area and gradually gain a better overview as children are enrolled in school. The larger gap between lower secondary education could be attributable to secondary schools having a larger catchment area, which is more difficult to comprehensively capture. That said, LSB projections from the previous census undertaken in 2005 were also measurably different from data collected through the 2015 Census (Figure 1.6) or erroneously published. Going forward, the LSB and MoES (Statistics Center) should verify and harmonize population data given its importance in education (and health) service planning and monitoring. Additional data sources could be used to validate projections – for example, from the civil registration and vital statistics system being developed under MoHA through which birth certificates will be gradually issued to all citizens of Laos.

Figure 1.7 School-Level Data Entry Form for Total and Enrolled School-age Population

Source: Annual School Census questionnaire for primary education, 2022-2023.

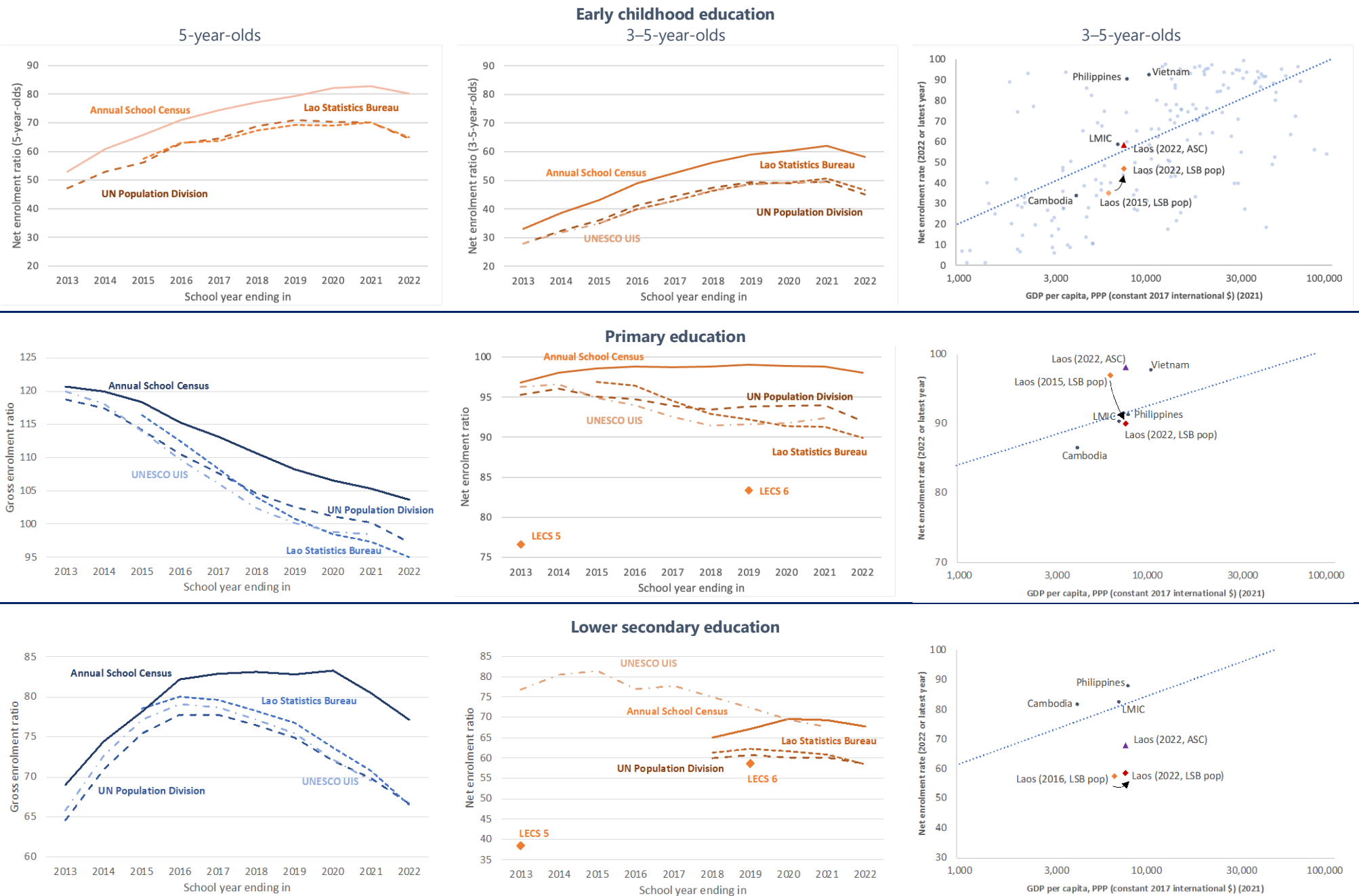
^a The LSB data used here is based on district level population projections. For 2015 and 2016, it is measurably different from the LSB data published as part of the annual statistical yearbooks and the LAOSIS on the LSB website (data update from June 16, 2022, accessed on March 27, 2023), which shows the exact same numbers for 2015 and 2016 and a significant increase in the 0-4 and 5-9-year-old age groups between 2016 and 2017 (from 682,000 to 802,000 and 679,000 to 751,000, respectively). Further, the considerable differences between the pre-2015 projections based on the 2005 Census from the LSB website and the 2015 Census series, particularly for ECE and primary school-age population groups, suggest weaknesses in the forecasting methodology. The data should be revisited and corrected on the LSB website to provide a consistent and dependable series for analysis.

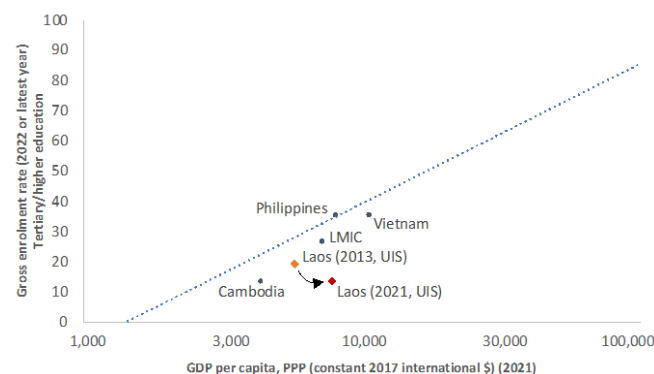
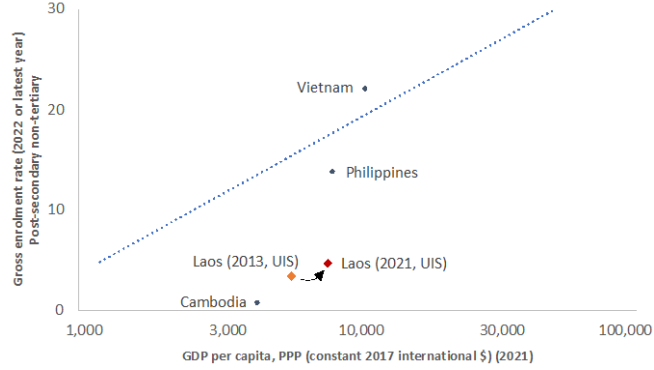
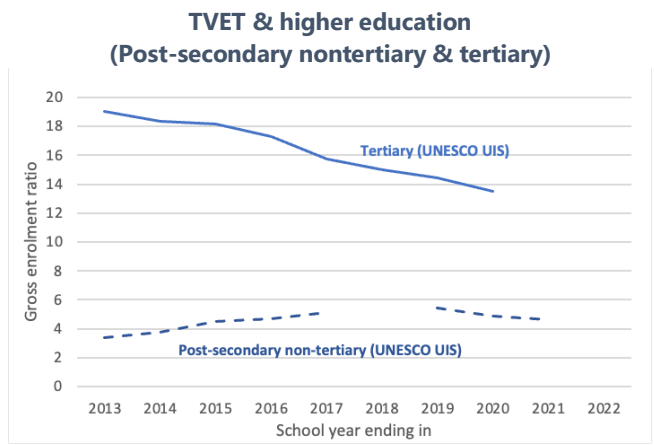
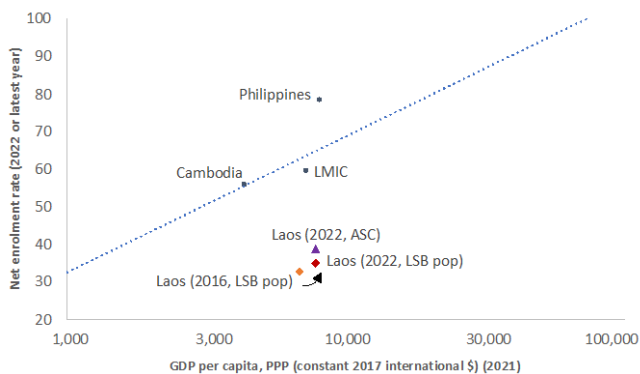
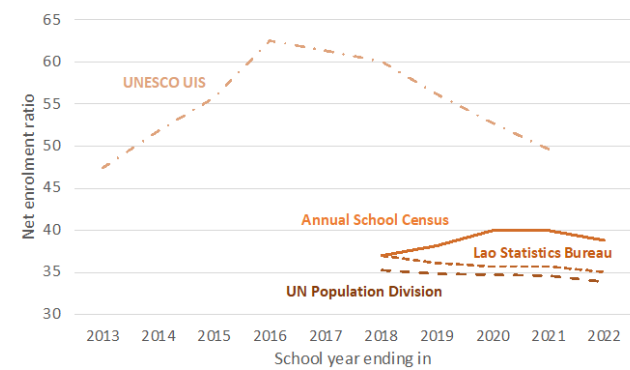
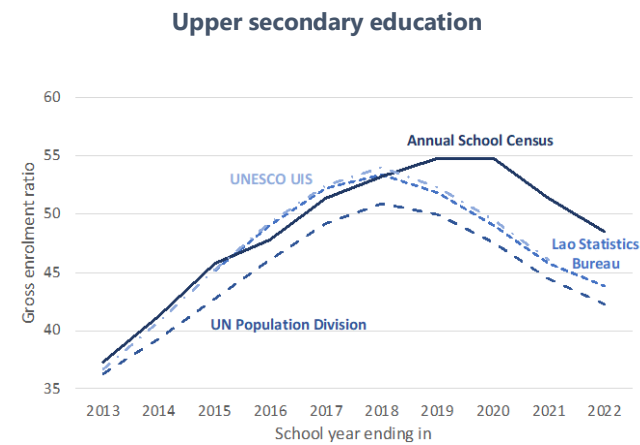
Figure 1.8 illustrates the resulting differences in gross enrolment ratios (GER) and net enrolment ratios (NER), which are consistently higher in the ASC, with the gap increasing over time. The NER in ECE had been increasing until school year 2021-22 and is likely between 45 and 50, still below the level expected for a country at Laos' income level. For primary education, it is likely closer to 90 percent rather than the universal enrolment reported by the ASC. This is still broadly in line with global comparators, though lower than countries like Vietnam. In contrast, lower and upper secondary education NERs, at around 60 and 35 percent, respectively, are much lower than regional and global peers despite small gains over the past decade. (These gains may have been fully undone because of the combined COVID-19 and economic crisis). The same is the case for the TVET subsector, which previously experienced a slight upward trend in enrolments. Enrolment in higher education has been falling continuously over the past decade to a GER below 15. Data from the LECS provides additional measures for primary and lower secondary education for 2012/13 and 2018/19, suggesting even lower NERs in both levels than estimates based on Lao Statistics Bureau (LSB) data. Access gaps are a concern regardless of the data source used, though the likely larger-than-officially-communicated gaps indicate that urgent action is needed.

Additional survey data supports the conclusion that the problem of out-of-school children is likely larger than ASC data suggests. For the primary school-age population, the 2015 Population Census highlighted that 9.4 percent of children aged 6-10 years never attended school and an additional 2.8 percent attended before but were currently not attending (in addition, 4.9 percent of respondents did not state the attendance status of their children). Similarly, the Lao Social Indicator Survey II from 2017 found that 10.4 percent of children in the age group were not attending primary education, with 8.2 percent not attending any education. The important issue of inconsistent data for enrolment and out-of-school children has been raised previously by the World Bank (2016), which highlighted a widening gap between the EMIS vis-à-vis the Lao Labor Force and Child Labor Survey for 2010-11 and LECS 5 for 2012-13.⁵

⁵ Labor Force Survey data for 2010-11 showed almost 89,000 out-of-school children compared to around 42,000 in the EMIS. The latter fell to below 30,000 in 2012-13 while the LECS 5 only showed a small reduction to slightly below 86,000.

Figure 1.8 GERs (Blue) and NERs (Orange) in Laos and Global Benchmarking across Education Levels

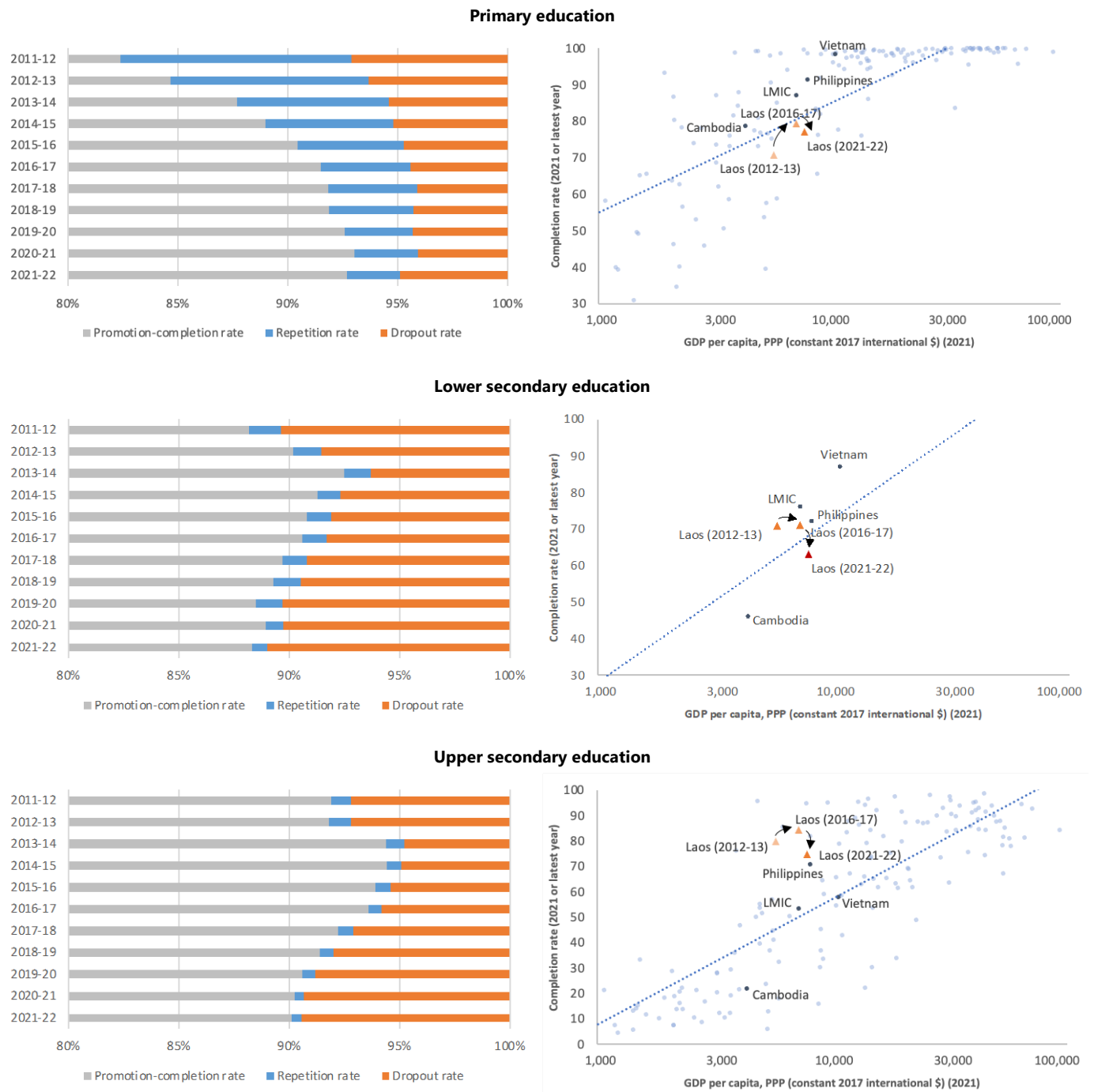




Sources: MoES Annual School Census; UNESCO UIS (accessed 27 March 2023); World Bank staff estimates, World Bank WDI.

While declining repetition rates improved internal efficiency across primary and secondary education, high dropout rates remain a significant concern. Repetition rates in primary education have fallen rapidly from over 10 percent to below 3 percent over the past decade (Figure 1.9); they have also fallen in secondary education. However, dropout rates remain high, at about 5 percent in primary and around 10 percent in lower and upper secondary education. In 2021-22, they increased across all levels. As a result, completion rates are below those of comparator countries at Laos' income level, except for upper secondary education, which the few students entering frequently complete. In addition to out-of-school children and in-year dropouts, anecdotal evidence from interviews with MoES officials indicates that regular school attendance is a problem affecting learning outcomes.

Figure 1.9 Promotion, Repetition, and Dropout Rates in Laos (Left) and Completion Rates in International Comparison (Right)

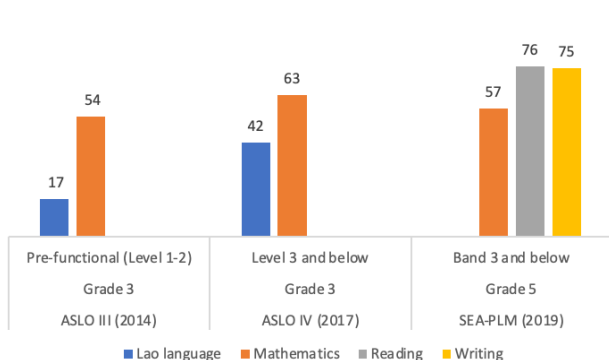


Sources: MoES Annual School Census; UNESCO UIS (accessed 27 March 2023); World Bank staff estimates, World Bank WDI.

Low learning outcomes in primary education are severe and persistent in Laos. An Early Grade Reading Assessment (EGRA) from 2012 showed that around one-third of third graders were not able to read a single word (World Bank 2016). This finding is particularly concerning as the assessment sample did not include remote, small, or ethnic schools (defined as those with more than 50 percent of the population being non-Lao-Tai) in which average learning outcomes have been shown to be measurably lower. In 2014, the National Assessment of Student Learning Outcome (ASLO III) found that 17 percent and 54 percent of pupils in Grade 3 had not reached a functional level in Lao language and mathematics, respectively (Figure 1.10). The ASLO IV in 2017 found that 42 percent of Grade 3 students had not yet mastered the Lao

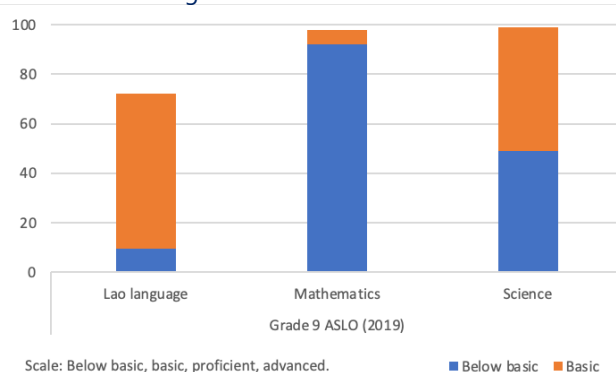
language skills taught in Grades 1 or 2 and 38 percent had mathematical skills well below Grade 3, with an additional 25 percent working mainly below the Grade 3 skill range. Most recently, the 2019 Southeast Asia Primary Learning Metrics (SEA-PLM) learning assessment measuring achievement levels of Grade 5 students in six countries (Cambodia, Laos, Malaysia, Myanmar, the Philippines, and Vietnam) confirmed the low learning outcomes of primary students, with Laos scoring poorly in comparison to peers. Box 3 discusses the previously presented low and falling repetition rates in the context of these poor learning outcomes.

Figure 1.10 Share of Primary Students with Very Low Assessment Scores



Sources: ASLO III (2014), ASLO IV (2017), SEA-PLM (2019).

Figure 1.11 Share of Secondary Students with Less than Proficient Learning Levels

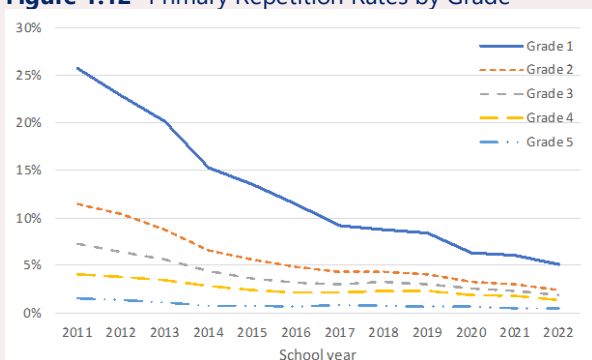


Source: Grade 9 ASLO (2019).

Box 3 The Discrepancy between Low Repetition Rates and Poor Learning Outcomes

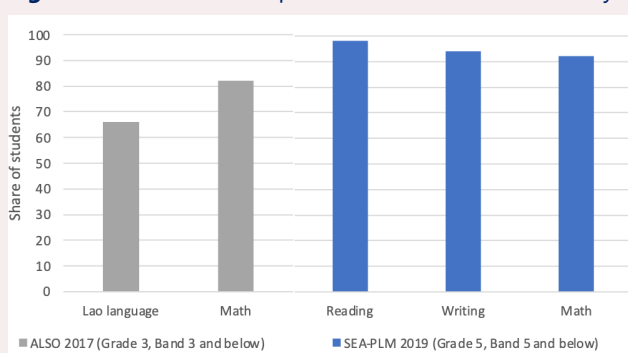
Repetition rates in primary education have declined rapidly and significantly across grades over the past decade (Figure 1.12). However, the very low learning outcomes shown in multiple assessments over the past decade (Figure 1.13) suggests that children advance and complete primary education despite substantial knowledge gaps. This is confirmed by the 2017 Grade 3 ASLO that states that "there is a huge difference between the grade promotion rate from grade 3 to grade 4 (90%) and the assessment results."

Figure 1.12 Primary Repetition Rates by Grade



Sources: Annual School Census, ASLO IV 2017, SEA-PLM 2019.

Figure 1.13 Share of Pupils below Minimum Proficiency



An explanation for this discrepancy is the 'progressive promotion' policy that allows students to proceed to higher grades automatically, which Laos put in place in 2009 to counter high dropout rates. The Philippines has been facing a comparable issue of promotion despite low learning outcomes. While the country does not have an automatic promotion policy in place, a study by the Philippine Institute for Development Studies suggests that it happens in practice (Orbeta and Paqueo 2022) and refers to a second study that identifies possible school and teacher-level

incentives for student promotion linked to performance-based bonuses (Monje 2019). The former study recommends verifying that automatic promotion does not happen. Similarly, Itthida (2015) notes that in Laos, *"progressive promotion has damaged the interaction of students in education and the school system credibility"*, and found that students returning to school because of automatic promotion fail to catch up and ultimately dropout for good. Conversely, Okurut (2015) found that an automatic promotion policy in Uganda had resulted in statistically significant increases in learning outcomes in reading and mathematics in Grades 3 and 6.

Globally, policies and experiences are mixed. The Progress in International Reading Literacy Study 2006 compiled promotion policies in primary education across 40 countries, of which approximately half had automatic promotion policies in place. Results from international learning assessments show that low learning outcomes are found in systems with and without automatic promotion policies. UNESCO (2012) concludes that *"the distinction may be found in how repetition is applied— when used selectively in more developed education systems, it can help support learning; but when used indiscriminately, it can lead to high dropout rates and poorly performing education systems."* The report further highlights automatic promotion as a possible cost-effective policy and different approaches to introducing and designing such a policy. For example, a subcycle implementation policy consisting of dividing the average six-year primary school cycle into two-year subcycles with no repetition allowed within each subcycle has been found to increase quality when practiced together with a system that identifies and supports weaker children (Ndaruhutse 2008). UNESCO (2012) further identifies *"policies that focus on prevention or prioritize interventions before learning gaps accumulate can be the most cost-effective. Specifically, policies aiming at building readiness to learn at an early preschool stage or providing individual remediation as first symptoms of learning difficulties emerge or when absenteeism is observed would efficiently reduce repetition and early school leaving."*

In summary, the question of whether automatic promotion or grade repetition leads to better learning outcomes is context-specific, with available financial and teaching resources playing an important role in how any policy can be successfully put into practice. For Laos, investments in school readiness at ECE level and support for teachers to sustain weaker performing students while maintaining the 'progressive promotion' policy may be the most straightforward approach at this point considering the high risk of student dropouts. This is in line with 2019 SEA-PLM recommendations on expanding access to quality ECE and strengthening of *"remedial support for students by providing clear guidelines and orientation for teachers (...) to provide differentiated learning support,"* among others. The ASLO IV Grade 3 report equally recommends to *"strengthen teachers to be able to identify students who are falling behind and providing strategies to effectively help students to gain the skills they need so they can meet each grade expectations."* Teacher training is discussed further in section 4, and ECE is assessed as a special topic between sections 4 and 5. In the medium term, a review of the data and policy could help to determine a context-appropriate approach to promotion and repetition for Laos.

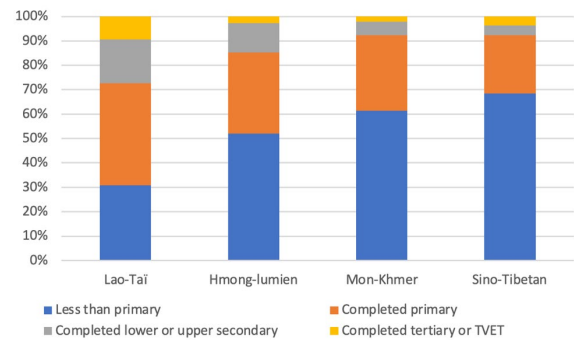
Low early grade learning outcomes have follow-on effects in secondary education and beyond. In 2019, a Grade 9 ASLO found that student knowledge is below the expected levels across subjects, with mathematics and science test results particularly low (Figure 1.11). Students generally more easily mastered cognitive skills related to knowledge and understanding better than complex capabilities like analyzing and evaluating. The assessment concludes that the curriculum is not being effectively implemented and that the very low student achievement levels may be the result of a cumulative process, with students falling behind the official curriculum in earlier grades. In turn, this contributes to high dropout rates and low net enrolment and a continuing low achievement cycle for students progressing to upper secondary, TVET, and tertiary education institutions. Employers often report that they are not able to find the required skills domestically (World Bank 2021b). For example, 22 percent of Lao exporters cited an inadequately educated workforce as the most significant constraint on their business operations in 2018 (World Bank 2022a). Further, over 70 percent of employers found foreign language skills of graduates insufficient and about half thought knowledge and skills of graduates who studied abroad were superior, according to a 2015-2019 Graduate Tracer and Employer Survey covering the four universities in Laos (Phetsiriseng and Phommasone 2020). In response, most employers organized additional training to fill knowledge and skill gaps. The Grade 9 ASLO aptly remarked that *"[its] results, as well*

as those of previous ASLOs and other sources, paint a worrying picture that calls for urgent policy action, starting by prioritizing investments in the quality of (pre) primary education."

Historically, measurable inequities in education access and learning outcomes have existed in Laos.

As a result, the highest education levels among male and female adults, poor and nonpoor, urban and rural, and ethnic groups show substantial variation. For example, not completing primary education is about twice as common among adult Mon-Khmer and Sino-Tibetan population groups than among Lao-Tai (Figure 1.14). This has follow-on effects on poverty, which remains high among minority ethnic groups and fell less among poorly educated households between 2012/13 and 2018/19 (LECS data). Even among equally educated adults, LECS 6 data shows that the probability of nonfarm employment is higher among Lao-Tai.

Figure 1.14 Household Head's Education by Ethnicity



Source: LSB and World Bank 2020.

Equity in access continues to be a challenge, particularly in secondary education and for children from less well-off and ethnic minority households.

While the expansion of education access has improved literacy, average years of schooling, and highest completed education levels across the population, measurable inequalities remain. ECE enrolment is three times higher among households in the highest consumption quintile compared to the lowest (Figure 1.15).

Figure 1.15 Inequities in Education Access



Source: Annual School Census, LECS6, UNESCO UIS, World Bank staff estimates.

According to LECS data, NERs among poor and nonpoor children increased for both primary and lower secondary, with the gap between both groups narrowing in primary but widening in lower secondary. Regional inequalities persist and are particularly pronounced in secondary education, though they are rising again in primary education and likely higher than the ASC data suggests. In contrast, Laos likely reached gender parity, defined as having a gender parity index value between 0.97 and 1.03, in primary and lower secondary education. However, boys dropping out is a bigger problem and variation across data sources does not allow a conclusion for upper secondary, hindering assessment of trends across levels.

Equity in learning outcomes is a significant challenge in primary and secondary education, with children from poorer, rural, and non-Lao-Tai households disadvantaged. Across learning outcome assessments from the past decade, households' socio-economic characteristics, including income and parents' highest education level, play an important role in determining student performance (Table 1.2). The same is the case for location, with rural schools generally performing worse and Southern provinces lagging, and for ethnicity, with pupils from Lao-Tai households overall outperforming other children (with some exceptions like Sino-Tibetan for math). Instead, gender differences in primary education appear less pronounced in Laos, but girls outperform boys across subjects in the only available secondary level assessment, the 2019 Grade 9 ASLO, which notes that *"the female advantage in language is not unusual in student testing, but internationally it is unusual for girls to score higher than boys in all of the test subjects (see PISA, TIMSS)."* With these broad patterns, Laos is regionally in a middle position among the six countries that participated in the SEA-PLM assessment. For example, 19 percent of the mathematics score variation can be explained by gender, school location, and socioeconomic status in Laos, compared to only 12 percent in Myanmar but 28 percent in the Philippines.

Table 1.2 Highlights of Survey and Assessment Findings on Inequalities in Education

	Socio-economic level	Gender	Regional	Ethnic
Primary				
LECS 5 (2012/13) and 6 (2018/19)	Higher NER among nonpoor, but gap narrowing; share of children who attended preschool highly correlated with income	Overall minor, but slightly higher NER among girls and variation across provinces	Significant differences in NER, highest in Vientiane Capital and lowest in Southern Provinces	Lao-Tai household heads significantly more likely to have completed at least primary education
EGRA (2012)				Non-Lao speaking at home lower reading skills
ASLO III Grade 3 (2014)	Significant correlation of scores with socio-economic level of household	Across Laos, girls scored marginally higher in Lao but lower in Math, but pattern varies by province	Significant provincial variation and urban schools generally outperform rural and remote schools	Lao-Tai outperform other ethnicities, particularly in Lao language
ASLO IV Grade 3 (2017)	Student proficiency in both Lao and Math increased as level of parents' education level increased	Across Laos, girls performed better than boys in Lao but there was no difference in Math	Urban schools outperform rural schools, and significant provincial variation	Lao-Tai performed better than all other groups for Lao, and Lao-Tai and Sino-Tibetan for Math
SEA-PLM Grade 5 (2019) – Reading	Wealthier children significantly outperform poorer children	Girls perform marginally better than boys	Urban schools outperform rural schools	Lao-Tai outperform children from other ethnicities
Lower secondary				
LECS 5 (2012/13) and 6 (2018/19)	Significantly higher NER (and average years of schooling) among nonpoor, with the gap increasing	Higher NER among girls, but gap reducing over time	Significant differences in NER, highest in Vientiane Capital and lowest in Southern Provinces	Lao-Tai household heads significantly more likely to have completed secondary education
ASLO Grade 9 (2019)	Children from wealthiest quintile outperform poorest quintile on all three test subjects	Girls outperform boys on all three test subjects	Data not representative	Lao-Tai consistently outperform Mon-Khmer and 'other'; low scores in Lao but high scores in Math and Science among Hmong

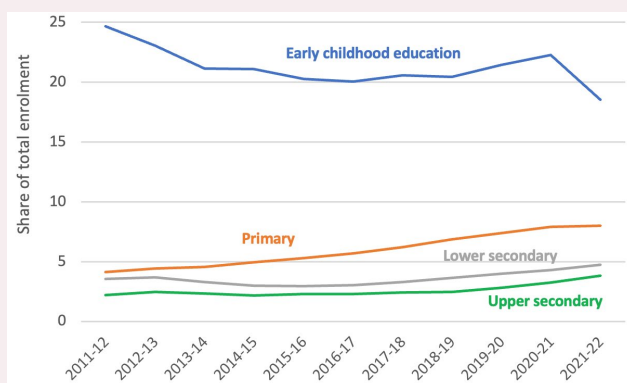
Sources: Annual School Census, ASLO III Grade 3 (2014), ASLO IV Grade 3 (2017), ASLO Grade 9 (2019), EGRA (2012), LECS 5 (2012/13), LECS 6 (2018/19), SEA-PLM Grade 5 (2019).

Student assessments provide detailed insights into other factors influencing learning outcomes, including school authority, classrooms, attendance, and teacher characteristics. Private schools generally outperform public schools (Box 4), and schools with only single-grade classrooms generally score higher than schools with both single and multi-grade classrooms. The impact of larger classes on learning outcomes is mixed, with the Grade 3 ASLO IV (2017) finding that student numbers did not make any impact on learning outcomes while the Grade 9 ASLO (2019) found that larger classes are negatively associated with student performance. The former assessment further found that primary schools that were attached to secondary schools performed better in both mathematics and Lao language (a finding that supports the school clustering across levels). However, it also found that teacher age, a matching ethnolinguistic background of teachers and students, and years of teaching experience made no or little difference to learning outcomes. The latter assessment found that overage students and student absenteeism are correlated with scores, which primary level assessments generally confirm, and teacher education improves scores in science and math but not significantly in Lao.

Box 4 Private Schools and their Performance in Laos

Private provision of education services is playing an important role in ECE, with the share of total enrolment ranging between 20-25 percent over most of the past decade (Figure 1.16). Its role in primary and secondary education is less important, though it has been increasing alongside rising household incomes. Still, most districts have none or few private schools and enrolment, except for urban areas where most private schools are clustered. For example, private primary schools play an important role in the districts of Vientiane Capital (100 code) and the provincial capitals (codes ending in 01) of Champasack (1601), Xiengkhouang (901), Savannakhet (1301), and Luangprabang (601) (Table 1.3).

Figure 1.16 Share of Enrolment in Private Education Institutions



Source: MoES Annual School Census.

Table 1.3 Top 10 Districts with Highest Private Provision in Primary Education, 2020-2021

Code	District	Enrolment	Schools
101	Chanthabouli	6,057 (76%)	21 (58%)
104	Sisattanak	3,905 (65%)	22 (56%)
103	Xaisettha	5,814 (58%)	39 (51%)
102	Sikhottabong	6,606 (57%)	33 (46%)
107	Hatxayfong	3,336 (41%)	15 (26%)
1601	Pakxe	2,683 (33%)	11 (24%)
106	Xaithani	6,778 (32%)	35 (28%)
901	Pek	3,348 (31%)	10 (14%)
1301	Kaysone Phomvihane	2,896 (28%)	16 (21%)
601	Louangphrabang	2,410 (23%)	18 (19%)

Source: MoES Annual School Census 2020-2021.

According to learning outcome assessments, private schools generally outperform public schools. The 2017 Grade 3 ASLO IV found that students from private primary schools performed better than public schools in both Lao language and mathematics. The Grade 5 SEA-PLM found in 2019 that private school students have statistically significant higher reading, writing, and math scores. For example, 38 percent of private school students performed at the lowest proficiency band in reading, compared with 51 percent of public school students. Likely reflective of private school attendance in general, private school students in the sample are more often living in urban areas and speak Lao-Taï at home, come from the richest quintile, have preschool experience, and have higher educated parents than public school students. Private schools also have more likely lower pupil-teacher ratios and above-average facilities, and students are more likely to have access to student resources, including textbooks, computers/tablets, and Internet, though the picture in other areas like student work activities, teacher-student interaction, and school support and evaluation processes is more mixed.

Overall, private provision of education services is a positive development, as noted in the (draft) financing strategy for the 9th NSEDP (2023-2025), which further highlights that *"not unlike privatization dynamics in the health sector, [it] requires careful regulation to ensure equitable access to education and learning opportunities."* The Constitution (Article 22) and the Law on Education (Articles 62 and 63), together with the Prime Minister's Decree on Private Education (No. 64/1995), encourage private sector engagement and set out the regulatory framework within which private providers must operate. Available assessments that cover private education provision do not point to any pressing regulatory issues. In terms of school operations, private service delivery approaches may provide insights into good practices for replication across the education sector (considering differences in school location and environment as well as the socio-economic situation of students and teachers, which explain part of better private school performance). For example, World Bank and MoES (2018) highlights that *"teacher school absence rates are significantly lower at private schools than public schools"* and that *"examination of teacher management practices at private schools may reveal best practices that could be applied in public schools."* Such practices could be explored and a review of the regulatory framework for private education provision undertaken in the medium term. An assessment of the enabling environment to attract private financing in education should form part of such a study.

Key Issue 2 Low Financing for Education, Particularly from Public Domestic Sources

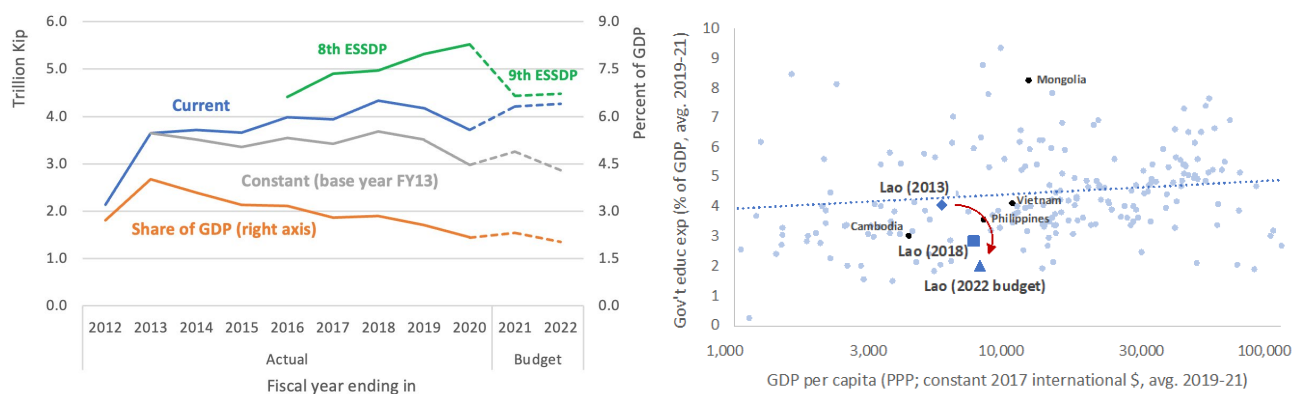
Summary: Laos lacks sufficient financing for education from three critical sources: government, development partners, and households.⁶ Public financing has halved as a share of GDP from its peak in 2013. Official development assistance (ODA), an important part of public financing for education, has been falling at least since 2018. Private (household) financing has likely fallen measurably during the COVID-19 pandemic and in the ongoing economic crisis. Current resources are insufficient to provide the necessary financing for the delivery of quality education services for all. This is particularly the case for government financing that should make up the bulk of total education financing.

From its peak in 2013, public education financing has fallen in real terms since 2018 and halved relative to GDP over the past decade, resulting in very low funding in global comparison. The government has long been communicating its intentions to adequately resource the education and other social sectors. MPI highlighted in March 2009 to increase the social sector share to 30 percent of total expenditures (World Bank 2011). In response to pressures to increase teacher salaries (including a cost-of-living allowance), education saw a measurable increase in budget resources in FY13, increasing from below 3 to 4 percent of GDP (Figure 1.17).⁷ This lifted government spending close to the level expected for a country at Laos per capita income. However, this improvement has since been more than undone, with sector allocations falling to around 2 percent of GDP in the revised state budget for 2022. While decreasing financing for education has been a global phenomenon since the onset of the COVID-19 pandemic (World Bank and UNESCO 2022), reductions in Laos started much earlier and were more severe relative to GDP than in other countries. As a result, public education spending is now among the lowest globally.

⁶ Box 5 provides an overview of the different financing sources for education in Laos, which the discussion in this subsection follows (to the extent data is available, with gaps noted throughout the report).

⁷ Estimates include social security contributions but exclude spending on the University of Health Sciences and disaster relief and recovery funding under the Disaster Fund. Methodological details are in annex 3.

Figure 1.17 Trends in Public Education Financing (Left) and International Benchmarking (Right)

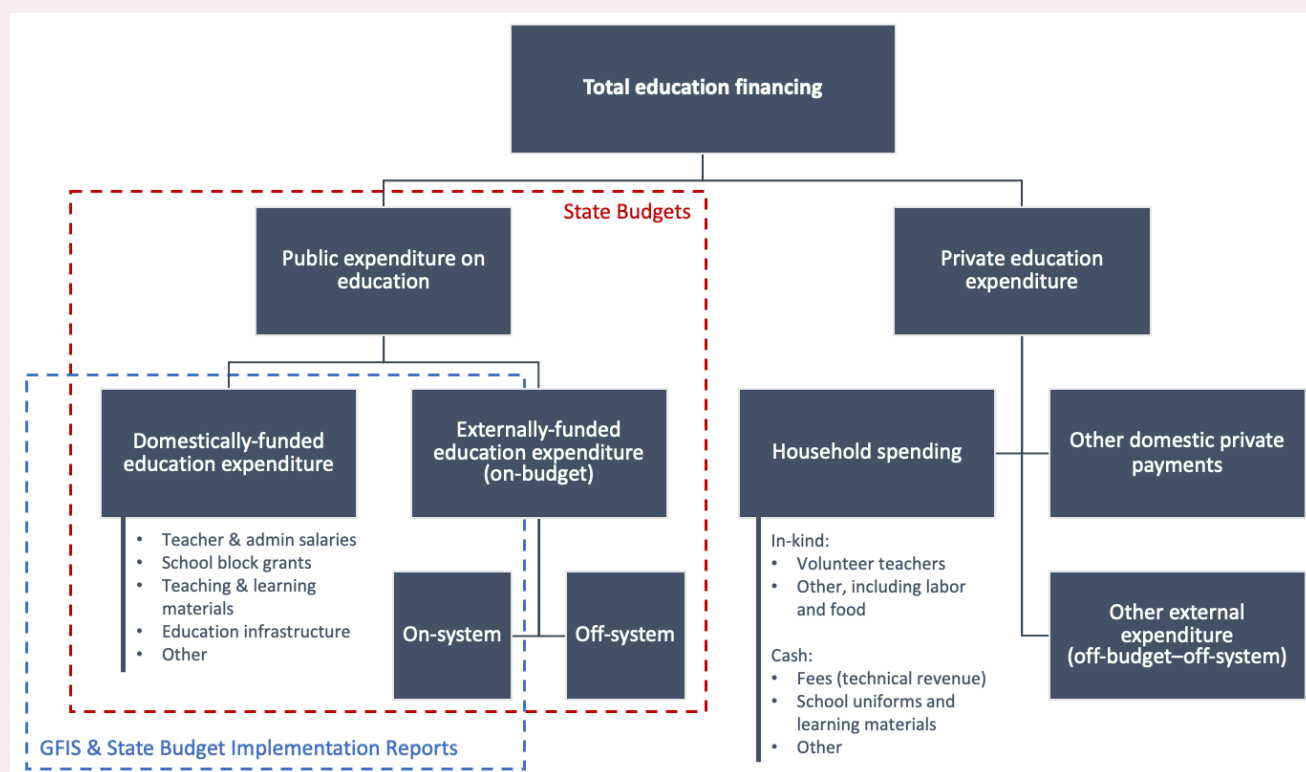


Sources: ESSDP, MoES Revised Budget 2022, State Budget 2021, State Budget Implementation Reports 2012-2020, World Bank WDI.

Box 5 Financing Sources for Education in Laos

Education services in Laos and elsewhere are financed from a combination of public and private resources (Figure 1.18). Public financing comprises domestic resources funded through domestic resource mobilization and loan financing, and external resources from development partners in the form of ODA. Both are generally captured in the State Budget (on-budget) and recorded in the GFIS and State Budget Implementation Reports, with a share of ODA also channeled through the government system (on-system). Public financing normally makes up the larger share of education financing, paying, e.g., for teachers and administrative staff, teaching and learning materials, and school infrastructure and its operation and maintenance, while private resources play an important complementary role.

Figure 1.18 Overview of Education Financing



CSO = civil society organization, GFIS = government financial (management) information system, NGO = nongovernmental organization.
Source: World Bank.

Households mobilize the bulk of private financing. This includes both payments in cash for things like tuition fees,^a school uniforms, learning materials, or transport, and in-kind support provided, e.g., in the form of labor (including by volunteer teachers), food, or materials. Other domestic private payments also contribute to education financing, e.g., through company-funded kindergartens. Lastly, a share of externally funded resources bypasses the public sector, e.g., donations channeled through nongovernment, civil society, or faith-based organizations.

Annexes 2.2 and 2.3 provide a detailed illustration of cash and in-kind resources by education sector institution, the source entity controlling these resources, whether the resources are allocated through the national budget and/or the provincial budget, and treasury/disbursement responsibilities in Laos. Due to the fragmentation of funding sources and treasury disbursement channels, the ability of MoES and other stakeholders to monitor overall education resource allocation and spending patterns and trends is weakened (World Bank 2018a). This can become a pressing issue where major activities and resource flows outside government systems need to be coordinated to avoid duplication or gaps. An example of this can be in-kind development assistance, such as textbooks or investments in school infrastructure. In other areas, data collection is often costly and/or resource flows small, e.g., non-household domestic private payments and other external resources outside the public sector, for which data is not available for Laos, while household spending is only estimated every five years as part of the LSB's LECS exercises. In these cases, (temporary) gaps are common across countries and, while more complete information is useful for planning and coordination purposes and may justify periodic data collection exercises, such as the LECS, often not a pressing issue.

^a School fees have been eliminated in public ECE centers and public primary schools in Laos through Instructions 1293/2012 (ECE) and 4847/2011 (primary education). In contrast, public TVET and higher education institutions rely to some extent on fees, referred to as technical revenue and (at least partially) included in the State Budget for the largest institutions. There is an ongoing push to increase financial self-sufficiency of these institutions through the Instructions on Revenue and Expenditure Management of Financially Self-Sufficient Administrative/Technical Units (see also Special Topic on Higher Education between sections 4 and 5).

Current spending is below estimated needs and international financing commitments and is considered insufficient to deliver quality education services for all.⁸ The 8th ESSDP estimated annual financing needs in the range of 3.2 and 3.5 percent of GDP over its duration from 2016–2020, which is still below the minimum of the education finance benchmark for governments of 4–6 percent of GDP set out in the Incheon Declaration and Framework for Action for the implementation of Sustainable Development Goal 4 (World Education Forum 2015). In practice, public financing was even lower than plan costings by an average of 30 percent over the five-year period. The 9th ESSDP adjusted to the falling trend in public financing for education and reduced targeted financing levels to below 2.5 percent of GDP.⁹ While it is commendable that the ESSDPs have been designed (and revised during implementation) considering public financing realities and related low and potentially decreasing resource envelopes, resulting resourcing is insufficient to provide adequate financing for delivering quality education services for all.¹⁰

Development assistance plays an important supportive role in the education sector in Laos, though its importance has (likely) fallen at least since 2018. ODA contributed a measurable share of the total public expenditure on education discussed above, though volume and significance vary depending on the data source. The government's State Budgets and State Budget Implementation Reports include ODA under foreign capital resources (Chapter 67-2), which anecdotally also cover development partner assistance for recurrent budget activities like textbook and training provision in the education sector.¹¹ Expenditures reported by the

⁸ A forthcoming distributional analysis of the fiscal system and reforms in Laos by the World Bank finds that the decreasing public spending on education (and health) has a significant impact on inequality, highlighting that greater spending on human capital would help reduce inequality today and boost future growth.

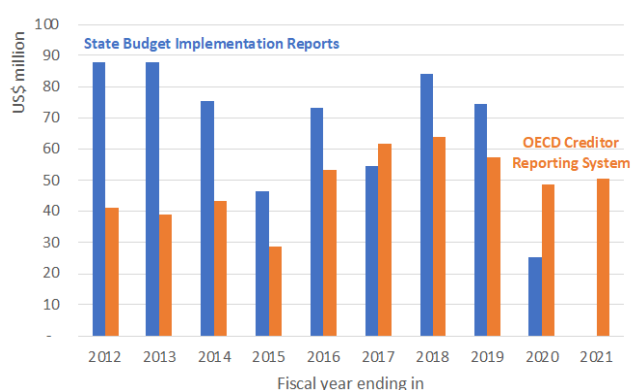
⁹ Actual numbers vary measurably due to differences in GDP projections from actual GDP numbers affected by COVID-19 and the wider macro-fiscal crisis in Laos.

¹⁰ Financing is necessary but not sufficient for quality education services for all. How available financing is being used in Laos is the focus of Sections 3 and 4.

¹¹ No disaggregated data on ODA for the education sector was received from MPI or MoES, though a sample of a quarterly report and plan received from MoES DoP suggests that development partner financing is being tracked and activities are coordinated at the sector level.

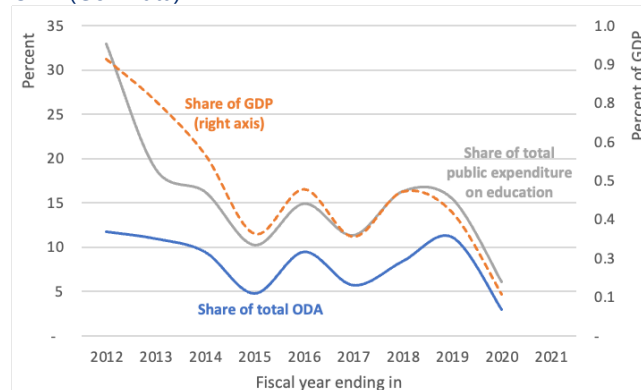
government are for most years higher than donor reporting through the OECD Creditor Reporting System, often significantly (Figure 1.19). Based on government data, education sector ODA has fallen substantially (Figure 1.20), both as a share of GDP – from 0.9 percent of GDP in 2012 to around 0.4 over 2015-2019 – and as a share of total public expenditure on education – from around a third in 2012 (prior to the significant increase in domestic public spending) to around 15 percent over 2015-2019. In 2020, education sector ODA as a share of total public expenditure was even less, though this is likely underreported given the higher OECD data. Going forward, ODA budgets in donor countries will likely remain constrained due to high debt levels, spending pressures to cushion inflation impacts on households and the private sector, and the need to invest in a green transition, among other reasons.

Figure 1.19 Education Sector ODA (GoL and OECD Data)



Sources: OECD Creditor Reporting System (accessed on 2 March 2023), State Budget Implementation Reports 2012-2020.

Figure 1.20 Relative Significance of Education Sector ODA (GoL Data)

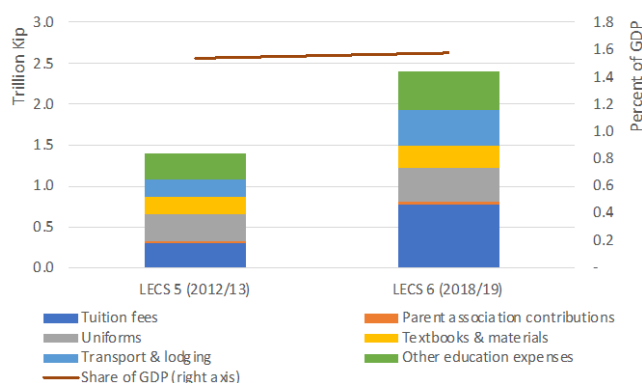


Sources: State Budget Implementation Reports 2012-2020, IMF WEO April 2023, World Bank Staff estimates.

Private financing in Laos has been significant over the past decade but has likely been severely affected by COVID-19 impacts and the broader economic crisis.¹² LECS data suggests that household spending on education remained broadly stable between 2012/13 and 2018/19, amounting to between 1.5 and 1.6 percent of GDP in (Figure 1.21). The largest spending category was tuition and other education fees, with the higher relative share in 2018/19 potentially related to the gradually increasing private provision of education services (Box 4). Household consumption of education services rose slightly from 4.5 percent of total consumption in 2012/13 to 4.7 percent in 2018/19. The relative spending share has been higher in urban areas but decreased from 6.0 percent to 5.6 percent, while relative consumption in rural areas increased from 3.8 to 4.2 percent over the same period. In 2018/19, nonpoor households spent a larger share on education than poor households, with the differences in urban areas more significant (5.7 vs. 4.5 percent vis-à-vis 4.4 vs. 3.7 percent). As expected, absolute spending increases measurably with overall household consumption, with richer households increasingly spending on higher education levels (Figure 1.22). Box 6 provides insights into emerging trends in household spending impacted by the COVID-19 pandemic and the broader economic and fiscal crisis, including high inflation experienced in 2022. In response, more than half of all surveyed households have cut spending on education, with a further increase in the share observed in the latest data from December 2022, particularly among less well-off households.

¹² There is no data for the education sector in the OECD's Private Philanthropy for Development system and for other domestic private spending (e.g., by companies). The (draft) financing strategy for the 9th NSEDP (2023-2025) notes that "currently, FDI in the education sector are almost zero."

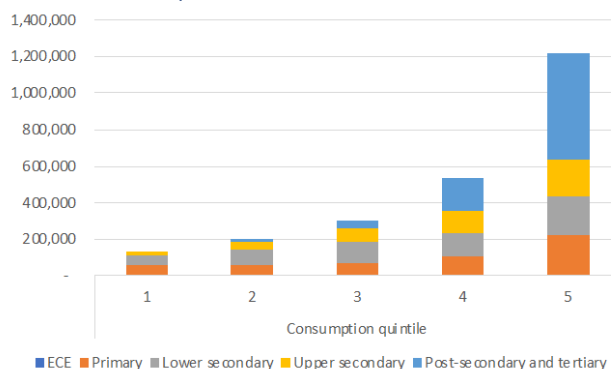
Figure 1.21 Household Education Spending Composition



Note: LECS 6 spending includes non-household member spending separately (included in 'other education expenses').

Sources: LECS 5, LECS 6, World Bank Staff estimates.

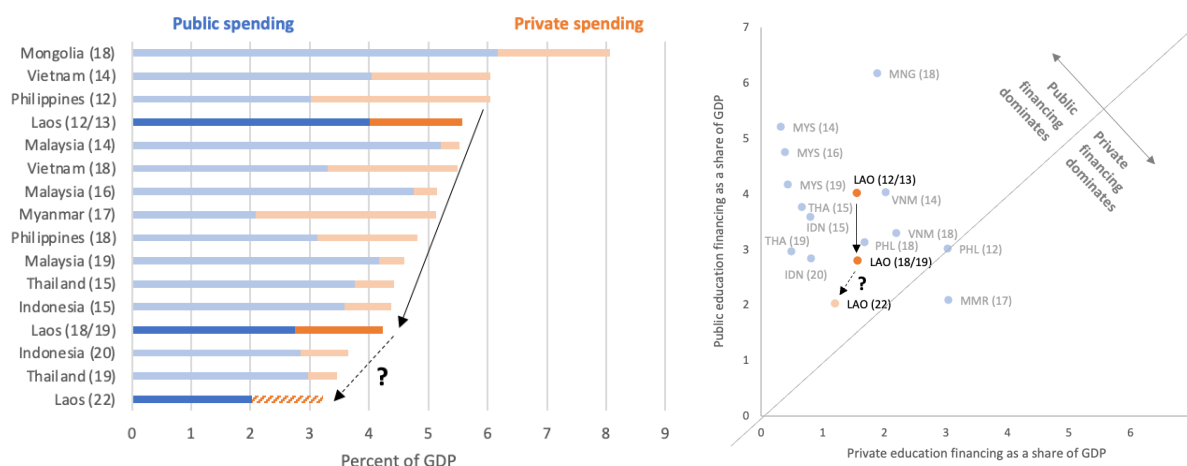
Figure 1.22 Household Spending by Education Level across Consumption Deciles in 2018/19



Sources: LECS 6, World Bank Staff estimates

As a result of these trends, total education financing in Laos has reduced significantly from the peak in 2013 to among the lowest levels among comparators. Figure 1.23 illustrates that education financing has been on a downward trend across regional comparators, which is in line with global findings of the Education Finance Watch 2022 (World Bank and UNESCO 2022). However, in none of the comparator countries have cuts been as dramatic as in Laos. Laos ranked among the highest spenders during peak spending in 2013, which was appropriate to support human capital development, to the lower end of the comparator range. With the onset of the COVID-19 pandemic, survey data suggests that household spending started to also be affected, further reducing total education financing.

Figure 1.23 Regional Benchmarking of Total Education Financing

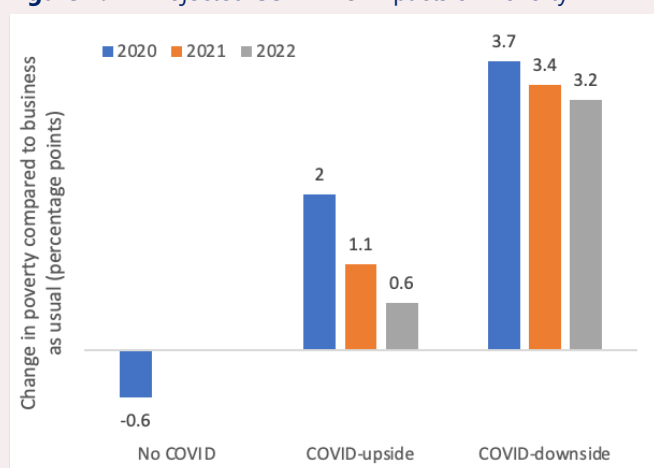


Sources: MoES Revised Budget 2022; State Budget 2021; State Budget Implementation Reports 2012, 2013, 2018, and 2019; WDI; World Bank staff estimates.

Box 6 COVID-19 and Economic Crisis Impacts on Household Education Spending

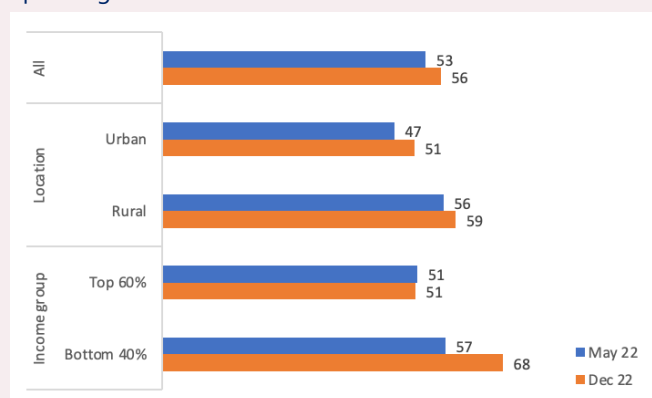
COVID-19 impacts on poverty levels are likely significant. Poverty rates in Laos declined more slowly in Laos in the years prior to COVID-19 than in other fast-growing economies in the region. In addition to domestic pandemic impacts, remittances from migrant workers that had risen sharply from 2015 onward and that had become a source of income for nearly 15 percent of households fell substantially when many returned due to the pandemic. As a result, initial macro-micro simulation results projected a poverty increase by 2.6 to 4.3 percentage points in 2020 (Figure 1.24). More recent estimates suggest an increase of at least 1.5 percentage points in 2020 and 2.4 percentage points in 2021, compared to a non-COVID-19 scenario (World Bank 2022c). In parallel, high inflation, driven in parts by the sharp currency depreciation that started in mid-2021 and gained traction in 2022, is affecting households, many of whom are still recovering from COVID-19 related income losses. Despite improvements in labor market indicators in the course of 2022 and increased nominal wages and remittances for poorer households, the steep rise in domestic prices – 37 percent in consumer and 39 percent in food prices in the year to October 2022 – has eroded purchasing power and affected living standards, especially for the poor who spend a larger proportion of their income on food and fuel. At the same time, limited fiscal space has constrained social assistance from the government. In turn, two-thirds of households have cut spending on health and education, which risks undermining long-term human capital development and reversing progress achieved to date (World Bank 2022a). Latest phone survey data from December 2022 highlights that the share of households that has reduced education spending is still growing, particularly among households in the bottom 40 percent income group (Figure 1.25).

Figure 1.24 Projected COVID-19 Impacts on Poverty



Source: World Bank 2020.

Figure 1.25 Share of Households Reducing Education Spending



Source: World Bank Rapid Monitoring Phone Survey of Households, 2022.

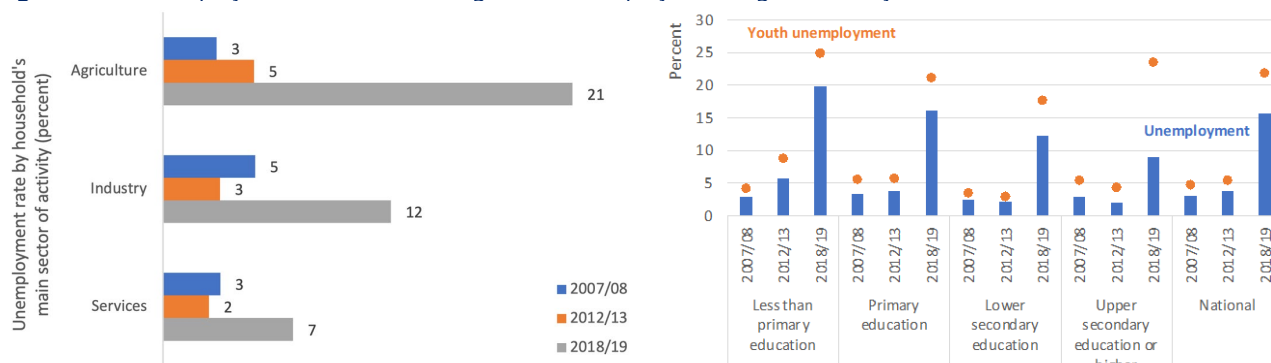
While COVID-19 impacts are likely largely temporary, factors including labor market issues, low education quality that contributes to skills shortages, limited fiscal space, and inflation appear harder to overcome and are expected to continue affect household incomes in the foreseeable future. This will have follow-on effects on private education financing, as households prioritize food and other essential items. Addressing the underlying causes of these long-term drivers in line with government's National Agenda on Addressing Economic and Financial Difficulties and the supporting reform roadmap (ADB and World Bank 2023) discussed below will be critical to increase disposable income that households can spend on education services.

Key Issue 3 Limited Demand-side Incentives to Pursue Education

Summary: Unemployment in Laos increased measurably in the years prior to the pandemic regardless of educational background and particularly among youth. The public sector drove job creation while falling competitiveness in the private sector led to a shedding of jobs and a shift towards low-skilled workers up to 2019. This resulted in falling of already low private returns to education, reducing incentives for households to pursue and demand quality education for their children. As a result, household investment in education is likely below optimal levels, beginning with skipping children’s enrolment in ECE and extending to lower demand for quality. Low household demand for education services risks weakening school-level accountability and performance, in turn further undermining entrepreneurship and job prospects.

Job opportunities for youth have decreased over the past decade regardless of completed education level. Despite years of high economic growth, unemployment was on the rise in the years prior to the COVID-19 pandemic, increasing from 4.1 to 15.7 percent from 2012-13 to 2018-19. This trend applied across economic sectors (Figure 1.26, left). Youth unemployment, which had always been slightly higher, increased significantly over the same period, quadrupling to nearly 22 percent. Noticeably, this trend affected youth regardless of highest completed education and was pronounced in the group that completed upper secondary and higher education levels, which saw higher unemployment levels than youth with completed primary or lower secondary education (Figure 1.26, right). In 2020, pandemic impacts led to an estimated increase in the overall unemployment rate to 23.4 percent. This situation worsened during the second lock-down in April-May 2021 when 51 percent of respondents from a rapid monitoring survey reportedly were without work or had to stop working temporarily (World Bank 2021a).

Figure 1.26 Unemployment Trends, including Youth Unemployment (Age 15-24), by Education and Sector



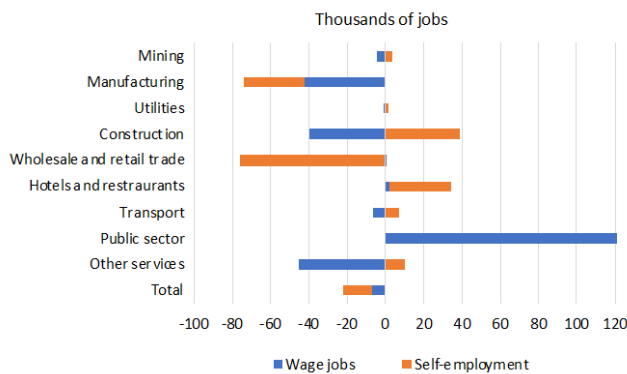
Source: World Bank 2019a.

The public sector became the most important employer in the years up to 2018/19 but has since been affected by a large civil service downsizing program. The public sector added about 120,000 wage jobs between 2012/13 and 2018/19 while job losses in the private sector drove overall net losses for both wage jobs and self-employment (Figure 1.27). This pattern is reflected in job opportunities for youth. A university graduate tracer survey found that 56 percent were employed by state organizations and another 7 percent by semi-state organizations, compared to only 28 percent in the private sector (Phetsiriseng and Phommasone 2020). Since 2019, the government started implementing a civil service downsizing program announced in 2018 that targets an over 20 percent reduction in (civilian) civil servant numbers up to 2023/24.¹³ This has led to a drastic fall in annual quotas for new civil servant hires. A staggering 47 percent of youth graduating in 2018/19 and 2019/20 reported to be still unemployed in 2021 (MoES 2021). This is slightly up from 43 percent reported in an earlier survey covering graduates from 2017/18 when 23 percent of employed respondents found a job in the public sector (MoES 2020). (The picture is expectedly different for graduates from TVET institutions, with 59 percent

¹³ The Prime Minister’s Executive Order No. 3 of 2018 targets a reduction in civil servants as a share of Laos’ population from 2.3 to 1.8 percent by 2023/24. The implications of this for the education sector are discussed in sections 2-4.

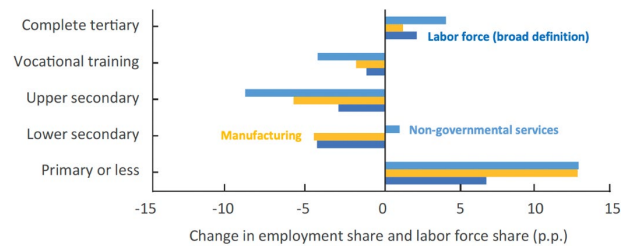
reporting private sector employment vis-à-vis about 20 percent in government and state enterprises.) From 2012/13 to 2018/19, Laos' labor market further saw a substantial shift towards lower educated population groups of the labor force (Figure 1.28), including due to an eroding competitiveness of the Lao manufacturing sector (World Bank 2022c). Migration to job markets in neighboring countries has become an important avenue for graduates, rising sharply since 2015, but this was temporarily affected by pandemic-related lockdowns and travel restrictions. Longer-term impacts remain to be seen.

Figure 1.27 Job Creation by Sector between 2012/13 and 2018/19



Source: World Bank 2019a.

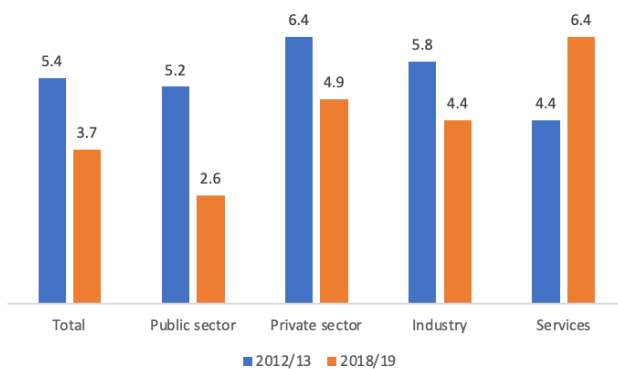
Figure 1.28 Shifts in Employment and Labor Force, 2012/13 and 2018/19



Note: The broad definition of the labor force is defined as working age individuals excluding students and retired or disabled persons, so it includes potential discouraged workers. Service sector employment excludes public employees. Source: World Bank 2022c, based on LECS5 and LECS6.

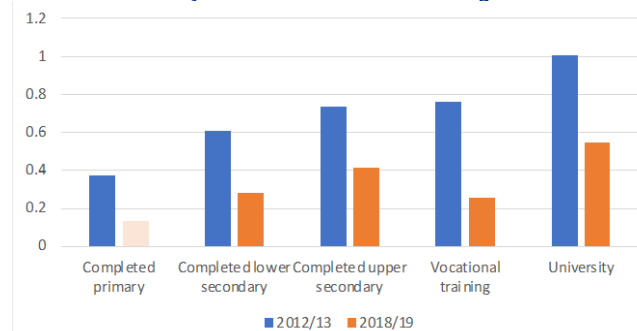
These trends resulted in the decline of already low private returns to education in Laos. Linear returns to education reduced from 5.4 to 3.7 percent of wages between 2012/13 and 2018/19 across public and private sectors, except for the services sector (Figure 1.29). This is the case across education levels, with premiums relative to workers with less than primary education having seen significant reductions across completed education levels over the period (Figure 1.30). The fall in returns from TVET was particularly pronounced. The impacts of the COVID-19 pandemic and the civil service downsizing have highly likely exacerbated these trends.

Figure 1.29 Linear Returns to Education (Percent of Wages)



Source: World Bank 2019a.

Figure 1.30 Education Premiums Relative to Workers with Less Than Primary Education (Percent of Wages)



Note: The Mincer regression assumes nonlinear returns on education. The dependent variable is the log hourly wage. Regressions control for experience, gender, and regional and urban dummies. Sample includes individuals between ages 18 and 65. Observations weighted by population. All values statistically significant at $p < 0.01$, except for completed primary in 2018/19 (not statistically significant). Source: World Bank 2019a.

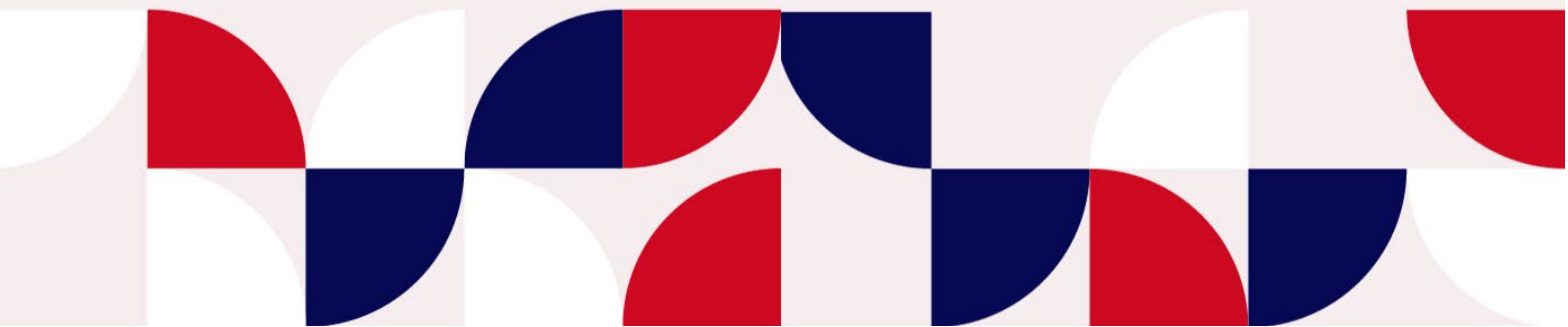
In turn, this reduces incentives for households to pursue education for their children and demand quality education services. Among households, 38 percent cite 'lack of interest' as the reason their children (6-24 years of age) do not pursue further education, according to LECS6 data from 2018/19. This is almost twice as often as households indicate 'completed studies' (20 percent of households) and 'work' (15 percent) or school-related

reasons.¹⁴ It is particularly common among the bottom 40 percent of households where 45 percent cite a 'lack of interest'. For 12–24-year-olds with only primary school education, almost half of all households (49 percent) across all consumption quintiles indicate 'lack of interest' as the reason for not pursuing further education. These trends are supported by more recent anecdotal evidence that children, particularly in the higher grades, have not returned to school following the pandemic-related school closures. Officials commonly cite limited job prospects and the lack of higher income earning potential from additional years of schooling as underlying causes. While labor market indicators had somewhat recovered again by mid-2022 (World Bank 2022a) and returns from education are still positive, these labor market issues have reduced demand-side incentives to pursue education. At the same time, lack of interest could undermine demand for quality education services, potentially weakening accountability at the school level and risking creating a vicious cycle of low education quality and limited entrepreneurship and job prospects.

¹⁴ Schools being too far (10 percent of households) or too expensive (5 percent), a lack of teachers/supplies (1 percent), and language issues (0.2 percent) were far less important reasons to discontinue education.

Section 2

The Allocation of Resources to the Education Sector



Resources for education depend on overall resources in the economy and their distribution. This section discusses macro-fiscal developments and their impact on resources available in the public and private sectors. It examines two main drivers determining resources available to the education sector: (1) economic and fiscal issues and (2) the de-prioritization of public resources for education. In practice, both drivers are interrelated, and both reflect inadequate prioritization of human capital investments that undermine growth prospects.

Driver 1 Economic and Fiscal Developments Impacting Resources for Education

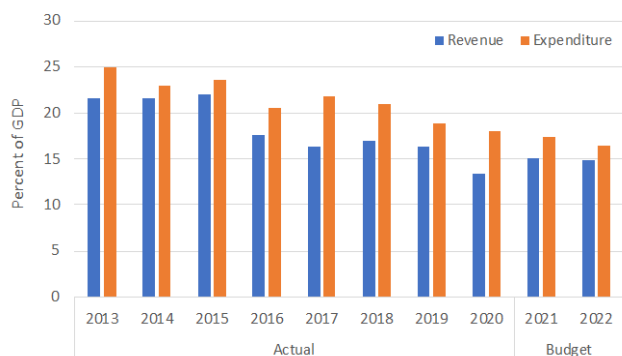
Slowing growth, high inflation, and sharp currency depreciation aggravated by the COVID-19 shock are undermining macroeconomic stability in Laos.¹⁵ Following almost two decades of growth averaging around 7 percent annually between 2003 and 2019, growth in economic output had begun slowing prior to the COVID-19 pandemic, to 5.5 percent in 2019. Factors for the deceleration include limitations in the country's growth model based on (often debt-financed) infrastructure development and capital-intensive resource sector investment (mining and hydropower), and an inability to support employment creation. As a result of the jobless economic growth, unemployment rose from 4.1 to 15.7 percent during 2012–2018 while inequality increased. Impacts of the COVID-19 pandemic resulted in the lowest GDP growth in three decades in 2020. In parallel, sharp currency depreciation and high inflation are adversely affecting the public and private sectors, with the latter impeded by an unfavorable business environment and limited credit flow from a financial sector dominated by state-owned banks. The gradual recovery in international tourism and exports is challenged by slow domestic reforms and a deteriorating global economic environment amid the protracted war in Ukraine, rising geopolitical tensions, tighter macroeconomic policies, and fears of a recession in developed countries. These pose challenges to sustaining financing of education and other essential services.

On the fiscal side, declining revenue forced an expenditure-driven fiscal consolidation that, coupled with growing interest payments, squeezed public spending on human capital. Shortcomings in revenue policy and administration, including substantial tax exemptions, caused domestic resource mobilization to decline from close to 22 percent of GDP in 2013 to less than 15 percent in 2020–2022. In response, the government cut spending, which was 8.5 percentage points of GDP lower in the revised state budget for 2022 from its peak of around 25 percent of GDP in 2013 (Figure 2.1). Still, expenditure levels remained substantially above revenue collections, driving up debt levels. This reduced space for further borrowing and increased interest payments (Figure 2.2), a situation exacerbated by the sharp currency depreciation. The combination of lower revenues, higher debt interest, and limited scope to run fiscal deficits has squeezed the fiscal space available for the delivery of essential goods and services, including health and education.¹⁶ At the household level, the pandemic and economic crises have severely constrained household resources, particularly among less well-off household, and rising unemployment has further reduced incentives for households to invest in education (see discussion in section 1). These factors have started to reverse progress in education outcomes. Going forward, if domestic resource mobilization remains (far) below 20 percent of GDP, adequate domestic public education financing will be difficult, if not infeasible. Meanwhile, limited job creation constrained by the current economic model will continue to undermine demand-side incentives for education.

¹⁵ The summary here is based on World Bank's 2021 Update of the Systematic Country Diagnostic (2022a), the 2022 Country Economic Memorandum (2022c), and the October 2022 Economic Monitor (2022b), which provide detailed analysis of the country's macro-fiscal situation and outline reform and spending priorities.

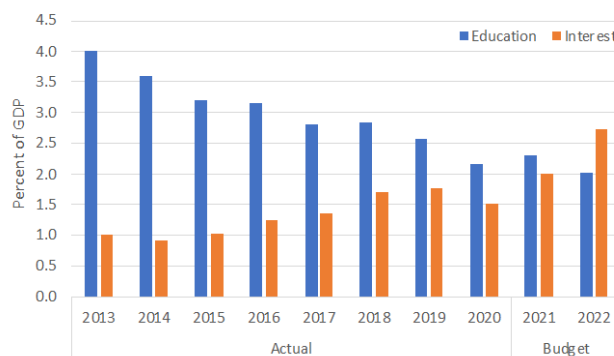
¹⁶ At the same time, development aid (at least partially captured in the Laos government's expenditure data) fell from 2.9 to 1.8 percent of GDP between 2012 to 2021 (World Bank staff estimates based on OECD Creditor Reporting System and WDI data). As discussed in section 1, education sector aid fell by around 25 percent from 0.36 to 0.27 percent of GDP between 2017 and 2021, though it had been volatile ranging between 0.2–0.4 percent over the past decade (low in 2015 and high in 2012). Going forward, increased debt levels, higher interest rates, and domestic spending pressures in response to inflation will likely limit the ability of development partners to offset any domestic spending cuts.

Figure 2.1 Weak Domestic Resource Mobilization Has Been Requiring Cuts in Overall Spending



Sources: MoES Revised Budget 2022 (includes total revised budget), State Budget 2021, State Budget Implementation Reports 2012-2020, World Bank staff estimates.

Figure 2.2 Increasing Interest Payments Have Started to Crowd Out Other Spending



Sources: MoES Revised Budget 2022, State Budgets 2021-2022, State Budget Implementation Reports 2012-2020, World Bank staff estimates.

The government has developed the National Agenda on Addressing Economic and Financial Difficulties, but implementation is slow. The agenda, endorsed by the National Assembly in August 2021, assesses the root causes of the country’s difficult economic situation and sets out five priority themes to tackle macroeconomic vulnerabilities: (i) export promotion, (ii) revenue mobilization, (iii) expenditure efficiency and debt management, (iv) financial sector stability; and (v) rule of law. In support of this agenda, the World Bank and the Asian Development Bank (ADB) have prepared a reform roadmap that identifies prioritized reform steps for the government and the Bank of the Laos (ADB and World Bank 2023). However, to date implementation has been slower than required to put the macro-fiscal position on a more sustainable footing. Going forward, fast-tracking the implementation of these reforms will be critical to provide the basis for adequate public domestic education financing and achieve a more inclusive, private sector-driven growth pattern that incentivizes households to pursue education for their children.

Recommendation 1.1 Advance economic policy, domestic resource mobilization, and debt and public investment management reforms in line with the *Reform Roadmap to Support the Implementation of the National Agenda* to increase the overall government resource envelope and strengthen demand-side incentives to pursue education.

Further details

The *Reform Roadmap to Support the Implementation of the National Agenda* (ADB and World Bank 2023) outlines critical reforms, including (i) revising the Law on Investment Promotion to curb tax incentives and exemptions, (ii) restoring the value-added tax rate to 10 percent and reducing exemptions, (iii) restructuring of public debt, and (iv) improving public investment management, among others. These are complemented by multiple other reforms to strengthen domestic resource mobilization, export promotion, and debt management.

These reforms are critical to put Laos’ macro-fiscal position on a more sustainable footing, which is required to free up fiscal space for adequate public education financing. In parallel, a gradual transition towards a broad-based, private sector-driven, more sustainable economic model that creates income earning opportunities for graduates would incentivize households to invest in and demand quality education.

Responsibility

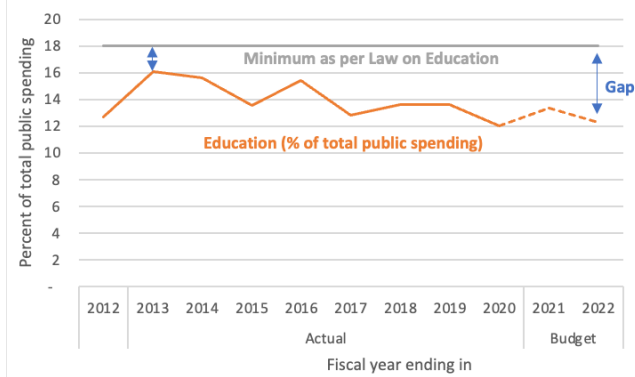
Lead: GoL Leadership

Support: MPI, MoF

Driver 2 De-prioritization of Public Resources for Education in Laos

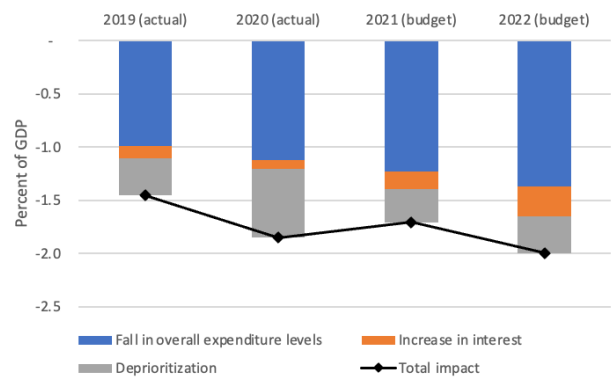
In addition to the fiscal squeeze from low revenue and rising interest, data suggests a gradual de-prioritization of education in the budget process that started prior to the recent fiscal crisis. Since its peak in 2013 – when education spending reached a level expected for a country with Laos’s per capita income – the education sector’s share in total public spending declined from around 16 percent to close to 12 percent in 2020 (Figure 2.3). While the 2021 State Budget saw a slight increase in relative allocations, this was largely reversed in the revised state budget for 2022. As a result of the decline, the gap to the minimum spending target of 18 percent of total public spending (Article 60, amended Law on Education 2016) has grown substantially and allocative improvements achieved through the increase in 2013 have more than reversed.¹⁷

Figure 2.3 Education Share in Public Spending vis-à-vis Legal Target



Sources: Amended Law on Education 2016, MoES Revised Budget 2022, State Budget 2021, State Budget Implementation Reports 2012-2020, World Bank staff estimates.

Figure 2.4 Drivers of Changes in Education Spending Compared to 2013 Expenditure Peak



Sources: MoES Revised Budget 2022, State Budget 2021, State Budget Implementation Reports 2019-2020, World Bank staff estimates.

This de-prioritization has exacerbated impacts from overall spending cuts and increases in interest payments. If the education sector were proportionally affected by these two drivers, education expenditure would have been 0.3 and 0.6 percentage points of GDP higher in 2019 and 2020, respectively.¹⁸ This is equivalent to 1.8 and 3.6 percent of total public spending, respectively. However, the pattern continued in the state budgets for 2021 and 2022, with annual education allocations 0.3 percentage points of GDP (around 2 percent of total public spending) below levels expected in the absence of any sectoral reprioritization. In Figure 2.4, the grey-shaded portion of the bars illustrates this shift of resources away from education compared to the benchmark year of 2013 that saw peak education spending relative to total public spending and GDP.

While the numbers appear small, this is a significant issue. First, the absence of any reprioritization would have substantially increased education spending: by 13 percent in 2019 and 30 percent in 2020. This would have allowed three- and sixfold increases in total spending on SBGs from Kindergarten to TVET, respectively.¹⁹ Second, one would expect a safeguarding of education resources in times of fiscal consolidation (and of other basic services like health). In other words, the grey-shaded portion of the bars in Figure 2.4 should have been above the x-axis. This would have indicated a prioritization of resources for education, compensating for a share of the negative impacts of the other two drivers (i.e., the fall in overall expenditure and the increase in interest payments).

¹⁷ There are downsides to relative sectoral expenditure targets, as they do not shield a sector from impacts of cuts to total public spending. They are also delinked from the cost of delivering a package of essential services. Still, adhering to Laos’s 18 percent target would have translated into public spending in the range of 3–4.5 per cent of GDP between 2013 (peak of 4.5 per cent) and 2022 (low of 3 per cent), preferable over the actual range of 2–4 per cent of GDP (low of 2 per cent in 2022).

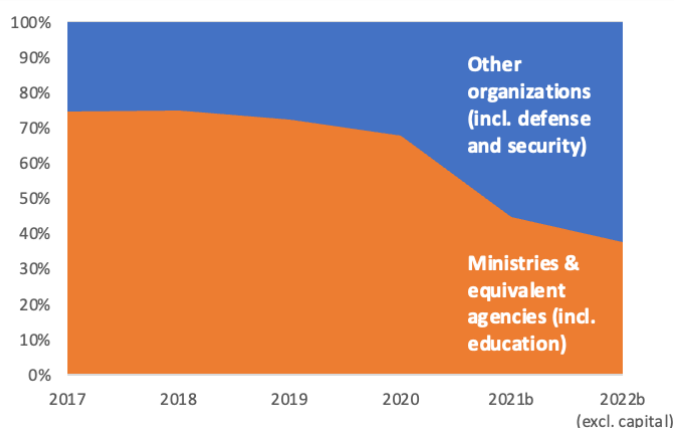
¹⁸ Annex 3 presents the decomposition methodology, with the contribution from de-prioritization being the residual from the impacts of falling expenditure levels that affect the whole public sector and parallel increases in interest payments that crowd out primary spending.

¹⁹ Total SBG spending was only 0.1 percentage points of GDP in those years (and SBG spending reached a peak in 2019).

In turn, ‘other organizations’ have been prioritized over ministries and equivalent agencies, including education.

The main beneficiary of the reprioritization was the part of the public sector referred to as ‘other organizations’ in the state budgets or simply ‘other’ in state budget implementation reports. The ‘other organizations’ include defense and security spending, but no details are provided in fiscal documentation. While gradual until 2020, the reprioritization gained momentum in the 2021 and 2022 State Budgets. ‘Other organizations’ now receive over half of primary (i.e., excluding interest) resources (Figure 2.5), without any obvious concurrent shift in service delivery responsibilities.

Figure 2.5 Primary Expenditure and Budget Allocations across the Two Parts of the Public Sector



Note: Primary expenditure excludes interest. Centrally allocated and accounted for social security contributions are apportioned.
Sources: State Budgets 2021-2022, State Budget Implementation Reports 2017-2020, World Bank staff estimates.

Political factors may explain this uncommon prioritization pattern that disadvantages the education sector. Planning and resource allocation are inherently political processes to identify and fund a country’s priorities. Such processes can intentionally lead to lower prioritization of education as part of political decisions about the ranking of priorities. However, as set out in section 1, the legislative and planning frameworks in Laos, particularly the 18 percent public spending target and the reference to recurrent budget allocations to be based on real unit cost in Article 60 of the (amended) Law on Education, as well as the authorities’ public communication highlighting the importance of education, indicate a large discrepancy between stated priorities and practice. One explanation could be that education is a priority among many, with other state functions even higher priorities.²⁰ Another explanation could be that government plans, policies, and communications only signal priorities but de facto priorities are different.²¹ Both are political in nature and should be analyzed by the authorities.²²

Going forward, the government needs to prioritize education in the budget process, with the goal of reaching the legislated minimum target of 18 percent of total expenditure within a decade. This should result in stepwise increases in annual allocations for education and other development priorities, such as health. At a minimum, the authorities should implement gradual increases in relative spending to 15 percent of total public expenditure by 2027 (Figure 2.6). This would reflect a higher prioritization of education compared to the range of 12-14 percent of the past five years and the minimum of the 15-20 percent range set out in the Incheon Declaration and Framework for Action for the implementation of Sustainable Development Goal 4 (World Education Forum 2015) to which Laos has committed. Subsequently, the relative spending share should be increased by (at least) a further 0.5 percentage points per year until it reaches 18 percent of total expenditure, latest by 2033, to meet the minimum target set in the Law on Education 2016. These gradual increases represent a realistic path that can be implemented through political prioritization of education in the budget process, reversing the de-prioritization implemented over the past decade. This would constitute the first part of the equation for adequate education sector financing.

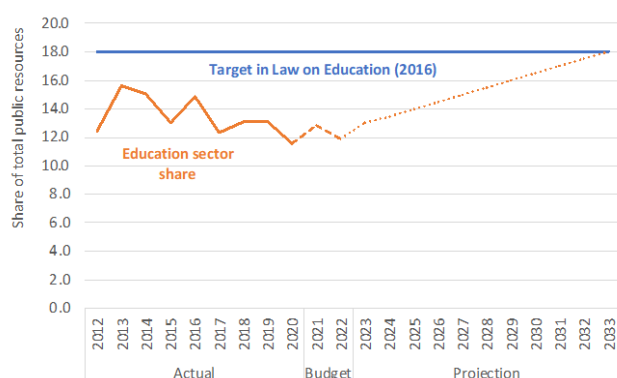
²⁰ The Lao government declared prevention and control of drug use a national agenda (see, e.g., [article](#) in the Laotian Times from May 2021), which could explain part of the increased allocations to ‘other organizations’ (including the security sector).

²¹ The concept of isomorphic mimicry could apply here, which in the PFM literature describes situations where governments model institutions or, as in this case, frameworks like development plans and the Law on Education on international good practices, without intending to establish the actual institutional capability or framework implementation.

²² In the first case, a hierarchy of priorities may be exiting transparently or not; in the second case, priorities are not transparent but may be inferred by analyzing resource allocation patterns. In both cases, prioritization could be driven by legitimate factors such as citizen demand or analysis/research. For example, food security and water and sanitation could legitimately be higher priorities than education, as could security, particularly in fragile and conflict situations. It could, however, also be driven by clientelism or political corruption.

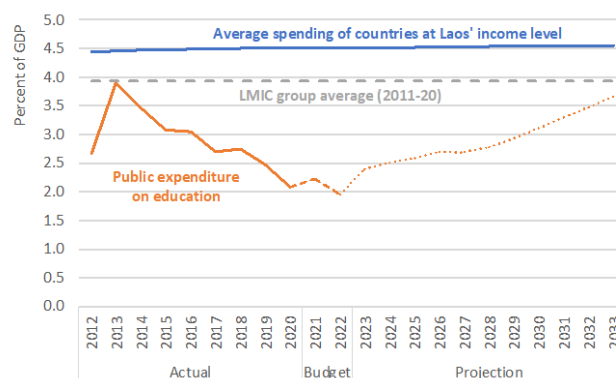
As Laos' macro-fiscal position improves, public financing for education relative to GDP could nearly double, although spending benchmarks would likely remain out of reach until the mid-2030s. Combined with economic, fiscal, and PFM reforms that slowly free up fiscal space by increasing revenue and containing and eventually bringing down interest spending relative to GDP, the increasing prioritization of education would put public education financing in Laos on a gradual upward trajectory towards the lower-middle income group average over the next decade. This is a level only once reached in 2012/13 and far from the current public financing of ± 2 percent of GDP (Figure 2.7). In this context, financing of around 3.5 percent of GDP constitutes a realistic intermediate target by 2033.²³ Reaching education financing of around 4.5 percent of GDP, a level expected for a country at Laos' income, appears infeasible until far-reaching economic and fiscal reforms take hold and put the country on a sustainable macro-fiscal footing.²⁴

Figure 2.6 Targeted Increase in Public Education Budget Share over the Next Decade



Sources: Law on Education 2016, MoES Revised Budget 2022, State Budget 2021, State Budget Implementation Reports 2012-2020, World Bank staff estimates.

Figure 2.7 Resulting Public Education Financing Relative to GDP over the Next Decade vis-à-vis Global Benchmarks



Sources: IMF World Economic Outlook April 2023, MoES Revised Budget 2022, State Budget 2021, State Budget Implementation Reports 2012-2020, World Development Indicators, World Bank staff estimates.

Recommendation 1.2 Prioritize education in the political resource allocation approach by increasing its share in total public spending to at least 15 percent by 2027 and 18 percent by 2033 to adequately resource the sector.

Further details

Reaching these targets would only require annual increases by around 0.5 percentage points of the education sector's share in total public resources (i.e., budget allocations and actual expenditure) over the next decade. As illustrated by recent shifts in prioritization that disadvantage the education sector and other ministries, such a change is feasible if politically desired.

Combined with the economic, fiscal, and PFM reforms outlined in Recommendation 1.1 above, the recommended action could almost double resources for education relative to GDP and bring Laos in the reach of the lower-middle income country group benchmark, providing a long-term sustainable financial basis for education service delivery.

Responsibility

Lead: GoL Leadership

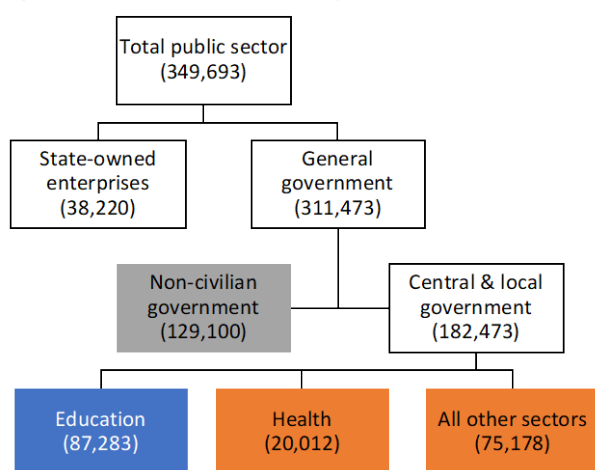
Support: MoF, MPI

²³ The latter requires an increased focus on efficient and effective use of available resources, supported by education sector reforms discussed below.

²⁴ Similarly, measurable increases in private financing from households will depend on improved incomes and demand-side incentives for households to invest in education. This requires a gradual transition towards a broad-based, private sector-driven, more sustainable economic model that creates jobs for graduates, as well as wider access and better-quality education services.

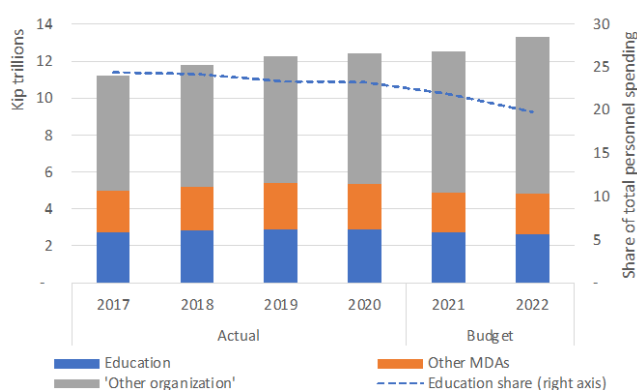
The prioritization trends across the two parts of the public sector discussed above are especially visible in wage bill spending, which is a particularly important input in education service delivery. As briefly referenced in Section 1 (Key Issue 3), the government publicly announced its intention to ‘right size’ the civil service to a more affordable level. The Prime Minister’s Executive Order No. 3 of 2018 set a target of 1.8 percent civil servants as a share of the country’s population by 2023/24. Anecdotal evidence suggests this ratio is based on a regional benchmarking exercise, but no further details are available, including whether this ratio accounts for differences in service delivery modalities across countries.²⁵ The downsizing is implemented through reducing annual quotas which allocate new civil service positions across ministries and equivalent agencies to levels significantly below annual attrition levels. Despite the medium-term downsizing target, medium-term workforce planning based on sectoral service delivery needs does not appear to be in place. A further major concern with the approach is that it only covers line ministries and equivalent agencies but not the ‘other organizations.’ The latest available estimate dating back to 2016 suggests that the non-civilian government and armed forces employed about 129,100 people compared to about 182,500 in ministries and ministry-equivalent organizations (Figure 2.8).²⁶ Judging by their increasing personnel spending (Figure 2.9), employment in ‘other organizations’ has likely further increased since.

Figure 2.8 Public Sector Employment, 2016



Source: World Bank 2018b. Laos Public Expenditure Analysis (P158831).

Figure 2.9 Personnel Spending by Sector



Note: Education spending in 2021 is based on provisional actual spending data from MoES. Data for 2022 is the revised budget.

Sources: MoES Revised Budget 2022, State Budget 2021, State Budget Implementation Reports 2017-2020, World Bank staff estimates.

As a result of the problematic civil service downsizing approach, education’s share of total personnel spending gradually declined from 24.5 percent in 2017 to 19.8 percent in the 2022 State Budget. The education sector saw a smaller average annual (nominal) increase in personnel spending from 2017-18 to 2019-20 compared to the ‘other organizations’ and several other ministries and equivalent agencies (Figure 2.9). In the 2021 and 2022 State Budgets, personnel spending of the other ministries and equivalent agencies was also noticeably affected by the downsizing. The reduced spending is mirrored in LSB’s civil service employment data, with the education sector staffing cut slightly more between 2017 and 2021 (-4.7 percent) than the (civilian) public service on average (-4.6 percent) (i.e., education is not prioritized in the quota allocation, contrary to central agency communication).²⁷ In contrast, resources for personnel in the ‘other organizations’ steadily increased, though employment details are not included in the civil service statistics of the LSB. The lack of a strategic, service delivery needs-based approach and only partial public sector coverage of the downsizing policy

²⁵ In a socialist republic with a state capitalist economic model like Laos, the public sector plays a different role than in countries with other political and economic forms of organization. For example, services may be delivered to a larger extent through the civil service directly rather than being contracted out. Responsibilities may also vary, with the state playing a stronger role in areas otherwise covered by the private sector. For example, over 10,000 civil servants are employed by the Ministry of Agriculture and Forestry in Laos. Regardless of whether such public sector roles and delivery models are suitable, differences need to be considered when comparing civil service-population ratios across countries and determining appropriate overarching targets.

²⁶ International Labour Organization (1999) referenced in Thompson (2002). An earlier estimate for 1997, prior to the rapid growth in the civil service, suggested a central and local government sector of 70,000 employees and a military and police sector of 80,000.

²⁷ No data on the breakdown of quotas across the whole-of-government could be obtained from MoHA.

will have repercussions for service delivery (including education) and risks failing to achieve fiscal consolidation targets, as the part of the public sector that is not covered by the policy appears to be more than compensating for cuts implemented across ministries and equivalent agencies.

Recommendation 1.3 Revisit the civil service downsizing policy by expanding its coverage to the entire public sector while considering functional needs of sectors, and implement the policy through medium-term workforce planning to ensure sustainable staffing levels for the education (and other) sector(s).

Further details The downsizing policy should consider sector needs based on assigned service delivery responsibilities, factoring in the service delivery model in Laos. This is in line with the legal provision in the amended Law on Education to base recurrent budgets for public education facilities on real unit cost (Article 60).

Expanding the coverage to the budget's 'other organizations' is important to enable strategic resource allocation across the entire public sector and ensure that fiscal consolidation targets are met.

Lastly, medium-term workforce planning provides sectors with planning certainty, which is needed as civil servants have long-term contracts and the ability to reallocate them across sectors and provinces is often limited.

Responsibility Lead: GoL Leadership, MoHA Support: MoF

On the technical side, weaknesses in strategic fiscal planning and budgeting and their underpinning systems undermine the evidence base for informed political prioritization. In practice, a combination of political aspects and technical factors contributes to the mismatch between a perceived prioritization of education and the de facto prioritization of other parts of the public sector. Decision-makers in Laos likely lack the ability to make informed resourcing decisions due to weaknesses in the systems and processes for collecting, analyzing, and utilizing relevant information. Different elements of fiscal planning and budgeting are discussed below and provide entry points for technical reforms (Figure 2.10).

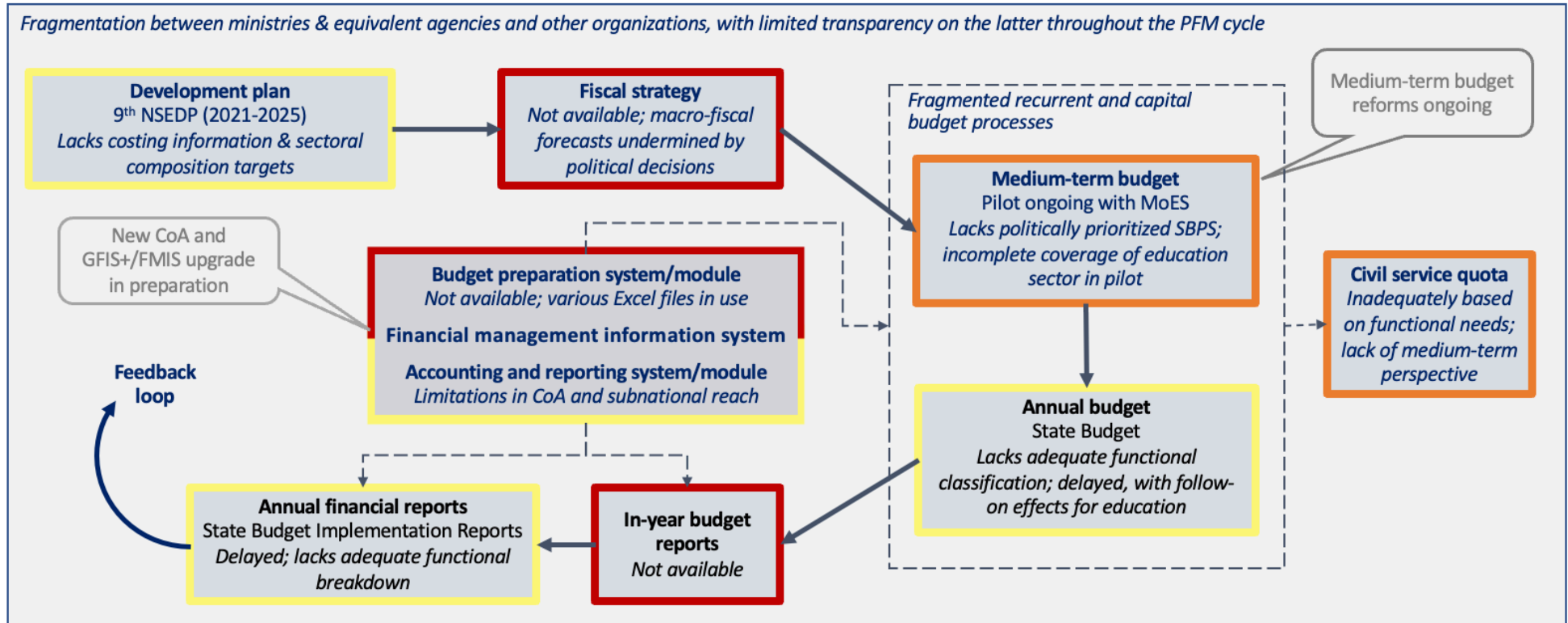
- **Development plans do not include information on targeted financing composition, which would support transparent sectoral prioritization.**²⁸ The NSEDP, currently in its 9th edition for 2021-2025, lacks resourcing information, which should be based on costing information from sectoral plans (e.g., based on standardized service delivery norms and unit costs) and could be expressed as sectoral expenditure targets.²⁹ Despite downsides of high-level sectoral budget share targets (footnote 17), they could have merit as a transparent and practical approach to gradually move to more strategic allocations.³⁰
- **A macro-fiscal framework, a fiscal strategy, and a comprehensive medium-term budget (or expenditure) framework to transparently prioritize resources are missing.** As noted in the 2019 PEFA, "the government currently does not have a solid macro-fiscal framework and the definition of strict fiscal rules is limited in the absence of a consistent and sustainable fiscal strategy." Medium-term budget plan (MTBP) reforms are ongoing, but progress is slow and coverage is not comprehensive (details below).

²⁸ In addition, the dichotomy between the two parts of the public sector, i.e., the ministries and equivalent agencies vis-à-vis the 'other organizations,' appears to start with development planning. The NSEDP focuses almost exclusively on functions provided by ministries and equivalent agencies and inadequately covers functions by 'other organizations,' despite their significant and increasing budget share (Figure 2.5).

²⁹ The Lao PDR government, supported by United Nations technical assistance, is developing a Financing Strategy for the 9th National Socio-Economic Development Plan, 2023-2025, but the available draft dated September 2022 does not contain a sectoral costing breakdown.

³⁰ A strategic perspective linked to the NSEDP (and translated into a fiscal strategy) is important as key spending drivers like personnel and capital infrastructure are difficult to change in the short- to medium-terms. It could help with gradually moving towards an allocation of at least 18 percent of total public expenditure to education (Article 60, amended Law on Education).

Figure 2.10 Limitations in PFM Undermining Prioritization and Budget Management in Education



= basic functionality in place but important elements missing
 = nascent functionality
 = functionality effectively not in place

Note: Issues are summarized in *italic* font.

Source: World Bank.

- **Fragmented planning and budgeting processes across recurrent and capital spending as well as across the two parts of the public sector hinder transparent prioritization of resources.** The 2019 PEFA assessment notes that the “dual budget formulation process (...) between the MPI and the MoF generate[s] a constraint” and “it is not clear whether this secures the adequate financing under the recurrent budget prepared by the MoF.” This fragmentation can lead to an imbalance between capital and recurrent spending, with education at risk of being crowded out (including through interest payments for capital projects as seen in recent years). Anecdotal evidence suggests that sectoral planning as well as capital budgeting processes are also separate for the ‘other organizations,’ with MPI compiling totals. Within the State Budget Department of the Ministry of Finance, a separate division is responsible for security and national defense budget management.³¹
- **In-year budget reports are not prepared and annual financial reporting is significantly delayed.** This hinders tracking of resource use throughout and across fiscal years.

MoF and MPI are pursuing a set of medium-term budget reforms to bring greater certainty for sectoral and provincial funding based on clearly documented political priorities. Based on credible medium-term fiscal forecasts of revenue receipts and debt servicing, the intention is that an annual ‘state budget policy statement’ (SBPS) will draw on each ministry’s/province’s strategic plans and MTBPs to clearly document what the government leadership’s affordable spending priorities are over the medium term, and what the resulting medium-term spending ceilings are for each ministry/province. The reform framework is reflected in the 2021 revision of the State Budget Law (SBL) and in a Prime Ministerial Decree adopted in April 2023. The reform is being supported through World Bank assistance for PFM reforms in Laos, with complementary support from the Asian Development Bank. MoES was initially selected as one of two pilot ministries for the MTBP reforms, providing (at least in theory) an opportunity to make allocations more strategic going forward. The reforms further include revisions to the budget calendar,³² aiming to facilitate timely budget preparation at sectoral and provincial levels. From 2020, aggregate and ministerial recurrent budget ceilings for the coming budget year (i.e., 2021), together with the forward estimates for the next two fiscal years, are to be announced at the time of issue of the recurrent budget circular at the end of April. Prior to this, recurrent and capital investment ceilings for each ministry and province were only revealed when the final state budget plan was submitted to the National Assembly in November of each year. This has regularly caused delays in education sector budgeting, with follow-on effects on implementation.³³

However, the implementation of these reforms is delayed and their coverage is not comprehensive. The critical SBPS has not yet been implemented, limiting opportunities for the transparent allocation of fiscal resources across sectors. Its absence further undermines the piloting of MTBPs – the medium-term ceilings issued for MoES in 2022 covering fiscal years 2023-2025 are not based on politically endorsed policy priorities but are incremental to the previous budget year.³⁴ These incremental ceilings provide little, if any, guidance or predictability of funding to MoES over the medium term. Furthermore, they only cover the MoES budget, constituting a small share of the overall education sector budget that is mostly allocated at the subnational level (see section 3). No ceilings were announced by MPI for the capital investment budget, and the state budget

³¹ The specific functions could not be determined but it would be particularly problematic if these were to include upstream PFM functions (including a separate setting of ceilings). Only the social security scheme for civil servants appears to cover both main parts of the public sector.

³² The budget cycle for central ministries and provincial administrations is broadly set out in the SBL, built around a January to December fiscal year. A detailed description of the budget cycle before the SBPS/MTBP reforms is included in the 2019 PEFA (table 3-17.1) and in sections 6.1 and 6.2 of the Public Expenditure Assessment for Health and Education (World Bank 2018).

³³ Delays in annual budgeting processes have been long-standing (see, e.g., FinHealth report) and have become even more pronounced in recent years. This results in delayed finalization of sectoral spending plans and subsequent delays in cash releases in the first quarter.

³⁴ Resource and capacity constraints in MoF require a simplification of the MTBP templates that will apply to all ministries and equivalent agencies in the future – but not to the ‘other organizations,’ including defense and public security, which risks undermining transparent resource prioritization. In addition, in May 2022, MoF issued ministry-level ceilings to eight pilot ministries that use the new detailed annual budget planning template.

plans for 2022 and 2023 were submitted to the National Assembly for approval without any capital investment budget plan. Instead, the capital budgets were only finalized well into the actual budget year.

Prioritizing the implementation of the SBPS and MTBP is critical, particularly in the current macro-fiscal situation. The strategic approach supported by the SBPS and the MTBP reforms is critical to facilitate a transparently prioritized implementation of necessary expenditure cuts to safeguard the delivery of essential services. In its absence, the link between communicated priorities and budget ceilings continues to be weak, likely contributing to the observed de-prioritization of the education sector.³⁵ Going forward, the political leadership and central agencies should therefore prioritize the full implementation of the reforms described above and expand their coverage through (i) expansion to the 'other organizations' and (ii) integration of, or at least strengthening of coordination between, recurrent and capital budget planning. Otherwise, a lack of comprehensive coverage could undermine the reform efforts.

Recommendation 1.4 Fast-track and expand ongoing macro-fiscal planning and medium-term budgeting reforms to enable evidence-based strategic resource allocation across the entire public sector.

Further details

Accelerating the ongoing reforms is critical to (i) support the prioritization of social sectors in a time of fiscal consolidation, including through SBPS; (ii) improve planning certainty for, and enable more strategic resource allocation within, sectors; and (iii) reduce delays in annual budgeting that feed through to in-year service delivery.

Further, the reforms should be expanded to the entire public sector to avoid imbalances in resource allocation vis-à-vis service delivery responsibilities of the ministries and equivalent agencies and the 'other organizations.'

Lastly, recurrent and capital budgeting processes should be integrated, or at least closely coordinated, to avoid imbalances in spending across economic categories (e.g., as experienced with capital-skewed spending patterns in the past).

Responsibility

MoF, MPI

Shortcomings in budget and account classifications and documentation hinder the generation of useful data to inform government-wide resource prioritization and education sector budgeting. The major gap in the budget classification and documentation is the lack of an adequate functional breakdown. This is driven by the extensive use of 'other organizations'³⁶ and, to a lesser extent, the lack of a program classification in the budget and the Chart of Accounts (CoA), which requires the use of the inadequately detailed administrative/organizational classification for mapping to functional sectors.³⁷ The 2019 PEFA assessment notes in this regard that "it is not compliant with COFOG standards (and not even the 10 main functions)." This issue feeds through to State Budget and State Budget Implementation Report formats. In addition to its importance for informing resource prioritization across the whole-of-government (WOG), the lack of a program classification is a significant issue for the education sector. The sector should be using information by education level/subsector and various support functions for strategic resource allocation and budget management (see discussion in section 3). In response, the government is currently developing a new CoA (with World Bank support) that will include a program classification segment. However, the use of the program/subprogram/activity field is a low priority in the sequenced CoA reform action plan and not envisaged in the medium term. While a phasing of the field's mandatory use across all spending agencies could make sense, service delivery sectors, such as

³⁵ This also has implications on the civil service quotas for new staff positions, which are discussed below.

³⁶ This is a long-standing issue. Prior to the use of 'other organization,' substantial spending had been subsumed under the administration sector (World Bank 2011). The report highlights further issues and makes recommendations for budget classification reform.

³⁷ The current CoA has fields for fund type/source, organization/department, project, and economic item (i.e., chapter, subchapter, etc.). There are no segments for program/subprogram/activity and geographic location (province, district).

education, should be allowed to make use of the functionality on a voluntary basis when the new CoA is implemented. This is foreseen in the current reform plans.

Inadequate information systems further undermine the effective use of financial information for budgeting, management, and accountability, negatively affecting the education sector. There is no dedicated budget preparation software used by MoF or the first level budget entities (including ministries and provinces) that submit budget proposals to MoF. These have been preparing budgets using their own Excel templates, submitting them to MoF in hard copy format, at two-digit chapter level. MoF has been reentering the data into its own set of Excel spreadsheets used to prepare the State Budget Plan for submission to government leadership and then to the National Assembly. This has inherently been a time consuming and inefficient process that provides MoF budget officials little time for policy analysis or dialogue. As a result, the focus of MoF has traditionally been on use of budget norms (unit costs for travel, per diems, fuel, etc.) and not on program/policy priorities when screening budget proposals. Recent reform efforts have led to a standardization of annual budget templates as an interim solution (footnote 34).³⁸ Ministries that pilot the upgraded version of the GFIS (“GFIS+”) will begin having access to a budget preparation function. Similarly, the GFIS, which MoF’s National Treasury at central level and its offices in the provinces (Provincial Treasuries) use to record approved budgets, cash releases and payment transactions, is limited in functionality and reach. The GFIS is not available at the subnational level outside of Provincial Treasuries. A linked delay in annual financial reporting and complete absence of (at least publicly available) in-year budget reporting results in a lack of timely available financial data and hinders transparent tracking of actual spending, including for education.³⁹ In response, MoF is in the process of upgrading to GFIS+ as a transitional measure while procuring a new FMIS in the medium-term. These reforms are critical to support education sector PFM.

Recommendation 1.5 Prioritize implementation of ongoing reforms of the Chart of Accounts and the financial management information system (GFIS+ and FMIS) to generate timely data for strategic resource allocation and provide the education sector with needed system capabilities for managing services.

Further details

The technical reforms comprising a new CoA, the GFIS+ upgrade, and the new FMIS will provide the education sector with much needed functionalities to manage education services. They also will replace duplicate education sector budgeting and accounting systems in the medium term (see discussion in section 3).

As part of the reforms, the government should further (i) improve budget and reporting classifications and documentation to provide useful and sufficiently detailed functional breakdowns of resources; (ii) timely publish key fiscal information, including complete State Budgets, in-year budget execution reports, and State Budget Implementation Reports; and (iii) allow the (voluntary) use of a program classification segment for service delivery sectors like education.

Responsibility

Lead: MoF

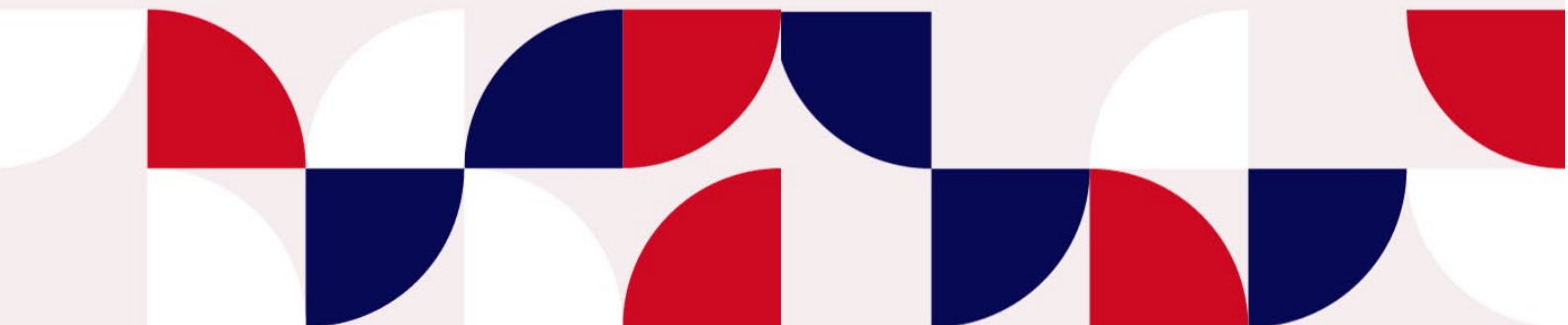
Support: MPI

³⁸ In 2022, MoF worked with a local IT company to prepare a new set of Excel templates that will allow first tier entities to submit their budget proposals to MoF on the same templates that MoF will use to consolidate and analyze budget proposals. This will provide a medium-term solution until the functionality is either rolled out through the GFIS+ or a budget module becomes available in the new FMIS.

³⁹ The 2018 State Budget Implementation Report was published on the MoF website on October 9, 2020, and the budget execution report for FY2019 was published on June 22, 2021. The budget execution reports for 2020, 2021, and 2022 have not been published yet. The 2020 State Budget was published in December 2020 (one year late), while the 2021 State Budget was published in October 2021 (10 months delay). The 2022 State Budget (recurrent part only) was approved by the NA in November 2021 but posted on MoF website in April 2022 (four months delay). The 2023 State Budget has not been published as of May 2023. Furthermore, available data is often limited to print versions and scanned PDFs, which does not facilitate analysis.

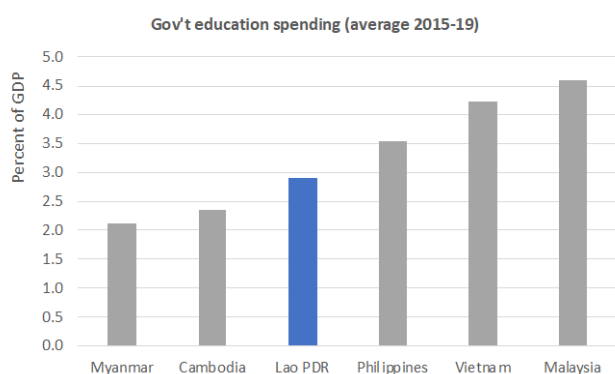
Section 3

The Strategic Allocation of Resources within the Education Sector



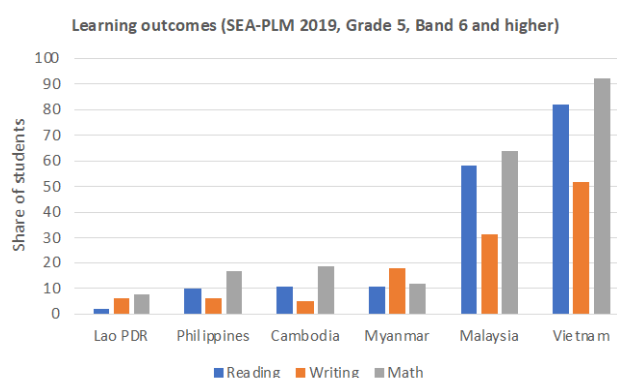
While financing is a necessary condition, it is not sufficient to achieve universal access to education services and high learning outcomes. For example, in the five years prior to the 2019 SEA-PLM assessment, average annual public expenditure on education in Laos stood at 3.0 percent of GDP (Figure 3.1), higher than in Cambodia (2.4 percent of GDP) and Myanmar (2.1).⁴⁰ When comparing the share of pupils that achieve proficiency in reading, writing, and mathematics, however, these two countries performed slightly better (Figure 3.2). Similarly, Vietnam outperforms Malaysia while spending less on education, whereas in the Philippines relatively high education sector resourcing does not translate into primary learning outcomes. This example illustrates two things: first, a certain level of resources appears to be required for achieving high learning outcomes.⁴¹ Both Malaysia and Vietnam spend over 4 percent of GDP annually, supporting the point discussed under Key Issue 2 and section 2 above; second, it matters greatly how available resources are translated into learning outcomes. This section first looks at the adequacy, efficiency, and equity of resource allocation and use across functional areas and main input factors. Two subsections look at key foundational capabilities: (i) effective information systems and data management and (ii) strong strategic and annual planning and budgeting that enable the strategic allocation and use of resources for education.

Figure 3.1 Average Public Education Spending Over 2015-2019



Sources: State Budget Implementation Reports 2015-2019, WDI, World Bank staff estimates.

Figure 3.2 Share of Primary Students with Subject Proficiency



Source: SEA-PLM 2019.

Outcome Allocation and Spending Patterns in the Education Sector

This subsection presents an overview of education sector resource allocation and spending patterns. This comprises analysis by administrative, economic, and functional classifications as well as budget execution performance. ECE, TVET, and higher education are discussed in more detail as special topics at the end of this subsection. The analysis is constrained by substantial data limitations, which is discussed.

Administrative Classification

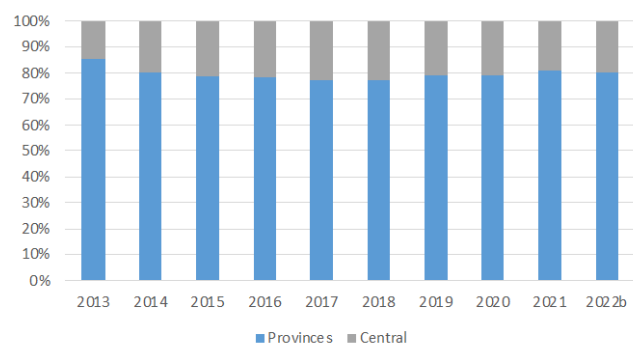
Most education spending occurs at the subnational level and is adequate but inequitable across provinces. The subnational prioritization of resources appears to be adequate given the major service delivery responsibilities assigned to provinces and districts (Figure 3.3). Mindful of data limitations, geographic patterns of spending by school-age and enrolled population show substantial variation across provinces which have not

⁴⁰ A lack of expenditure data by education subsector/level in Laos does not allow a comparison of primary education spending across countries.

⁴¹ At the school level, the Grade 9 ASLO from 2019 found that higher scores are associated with schools with better resources in Laos.

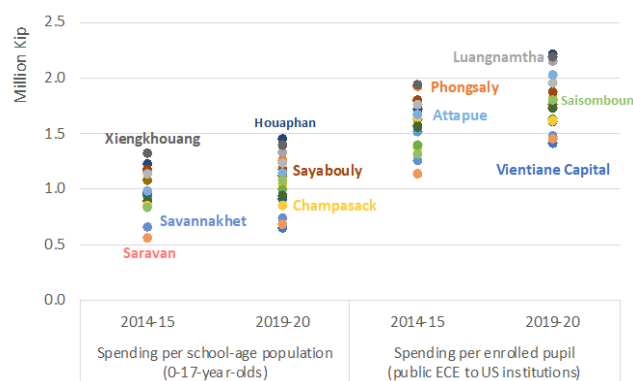
measurably lessened over time (Figure 3.4).⁴² Poverty targeting of provincial allocations appears to have improved slightly, but still exhibits major variation across the country (Figure 3.5). While data gaps hinder more in-depth analysis of administrative spending (e.g., at district and school level and vis-à-vis learning outcomes), existing data suggests the need to continue improving targeting efforts to reduce persistent inequities in education access and outcomes.

Figure 3.3 Government Education Spending by Administrative Level



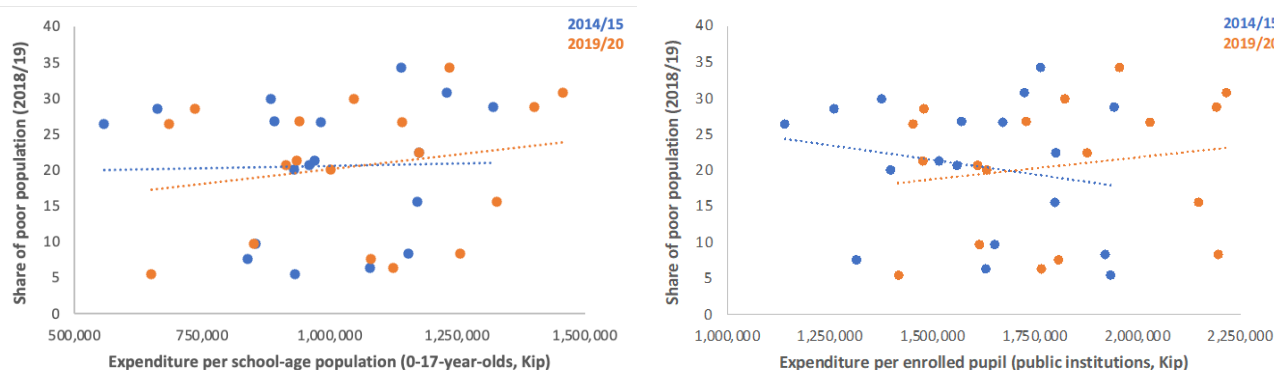
Note: Excludes foreign capital (Ch. 67-2).
Sources: MoES Financial Reports 2013-2021, MoES Revised Budget 2022.

Figure 3.4 Average Provincial Spending per Population



Note: Includes provincial TVET spending but not enrolment.
Sources: Annual School Census; LSB Population Projections; MoES Financial Reports 2014, 2015, 2019, and 2020.

Figure 3.5 Poverty Targeting of Average Provincial Spending per Capita



Sources: LECS 6; LSB district population projections; MoES Annual School Census; MoES Financial Reports 2014, 2015, 2019, and 2020; World Bank staff estimates.

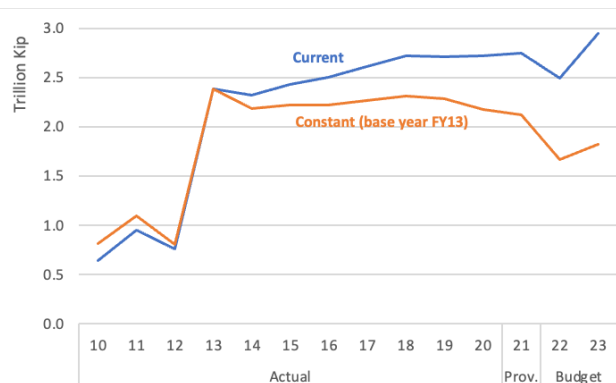
Economic Classification

Despite a slight fall in real terms since 2018, aggregate personnel allocations have been broadly adequate for current enrolment and staffing numbers. The wage bill saw a step increase in nominal terms in 2013 to accommodate cost-of-living increases and, after a slight fall in 2014, further gradual increases up to 2018 (Figure 3.6). The wage bill remained stable up to 2021, translating into slight reductions in real terms. The 2022 budget included a nominal cut, with high inflation further undermining the wage bill's real value. This is likely only partially compensated by a substantial nominal increase in the 2023 budget. Similarly, average pay per civil servant largely maintained its real value since 2014 – at least until 2022 when high inflation likely led to a fall in

⁴² Analysis by education subsector is not possible given the lack of functional fiscal data discussed further below. Further caveats are: (i) selected schools are under MoES while their enrolment is included under provinces, and (ii) provincial TVET spending is included but enrolment is not due to a lack of province level student data. Since both limitations only affect a small share of the budget and enrolment, these likely do not change the broad conclusion that substantial variation exist across provinces.

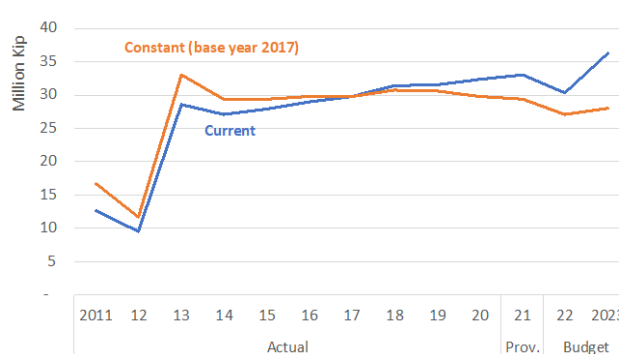
real terms (Figure 3.7).⁴³ However, this snapshot is not a reflection of a sustainable resourcing pattern but is rather the result of (i) decreasing teacher numbers that balanced real declines in the personnel budget and (ii) falling enrolment through which pupil-teacher ratios (PTRs) remained broadly adequate (see discussion in section 4). Going forward, gaps in personnel budgets could result from a lack of teachers if the (unbalanced) downsizing policy with low education sector quotas continues while enrolment increases, and/or from a fall in the real value of pay driven by ongoing inflation.

Figure 3.6 Education Wage Bill



Sources: MoES Financial Report 2021, MoES Revised Budgets 2022-2023, State Budget Implementation Reports 2010-2020, World Bank staff estimates.

Figure 3.7 Average Pay per Civil Servant



Sources: MoES DoOP civil service data, MoES Financial Report 2021, MoES Revised Budgets 2022-2023, State Budget Implementation Reports 2010-2020, World Bank staff estimates.

While average salaries are low in global comparison, allowances and other civil service benefits result in a broadly adequate compensation package in the education sector. The education sector constitutes a measurable share of the overall public sector wage bill, with around 20 percent in total personnel spending and 55 percent of ministry and equivalent agency employment (see discussion in section 2). The overall public sector wage bill is at risk of unsustainability, driven by low revenue rather than excessive spending. Average salaries in the overall public sector are low in global comparison, driven by high employment numbers, including the large share of party and non-civilian staff subsumed in the budget under ‘other organizations.’ However, the overall compensation package in the education sector appears broadly adequate, boosted by multiple allowances, including for different education levels and locations, and civil service benefits, including stability, social security, and prestige. That said, World Bank analysis suggests that, while compensation at the senior level is competitive, this is less the case at mid-technical level, which could be insufficient to attract talent. High numbers of volunteers, at least until civil service downsizing policy implementation commenced, often wait years to obtain a civil service position, with limited alternative private sector employment opportunities likely contributing to the situation. Given the total compensation package in the education sector, generally low levels of teacher qualification (see discussion in section 4), absence of effective performance management, and reports of nepotism in public sector recruitment processes,⁴⁴ increasing salaries beyond maintaining their real value may help attract talent in selected cases but would not constitute a good value-for-money investment at this time, though it should be revisited in the medium-term. This is supported by global experiences pointing to a lack of evidence that paying higher salaries will result in better learning outcomes.⁴⁵ Furthermore, the structure of pay should be reviewed in a separate analysis, as data gaps prevented this in the report (see section 4).

In contrast to personnel spending, non-salary spending has not been protected and has been gradually crowded out by the wage bill (Figure 3.8 and Figure 3.9). Non-salary spending (Chapters 62-67) has been absorbing the nominal cuts in public education spending since 2018. As discussed in detail in section 4, SBG

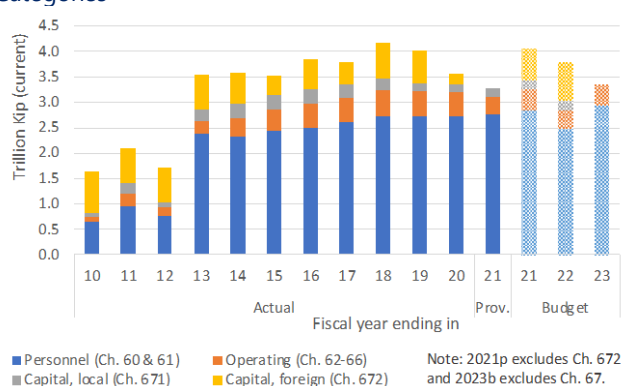
⁴³ As of May 2023, outturn data for 2021 and 2022 is not yet available, apart from provisional MoES figures for 2021.

⁴⁴ See, e.g., article “[Senior Lao official admits that many government entrance exams are staged](#)” by RFA Lao (December 16, 2022).

⁴⁵ See, e.g., “[Contract teachers: effective policy solution or inadequate response to deeper problems?](#)” by UNESCO’s International Institute for Educational Planning (September 20, 2017). The article illustrates this by citing the doubling of teacher salaries in Indonesia in 2005 that had no impact on learning outcomes.

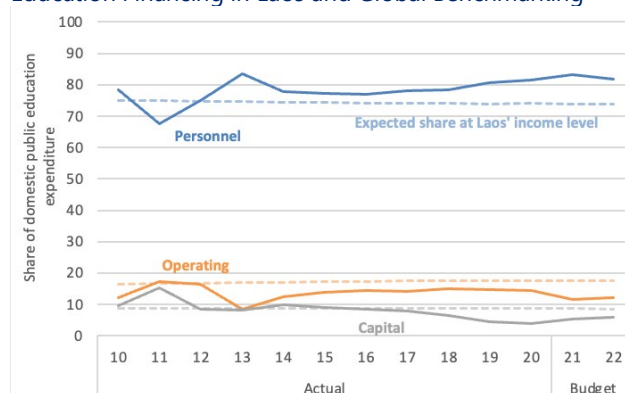
financing has been affected and, after initially increasing, has been reducing and is now negligible, with external financing from donors supplementing the low domestic financing. The crowding out of non-salary recurrent spending would also negatively affect resources for teacher training, teaching and learning materials, and school monitoring visits, which are discussed in section 4 and for which detailed spending data is not reliably available due to the CoA shortcomings discussed in section 2 and in subsequent subsections. It should be noted that Figure 3.9 does not contain information on ODA, for which an economic breakdown is not available. Generally, this comprises a combination of capital and non-salary recurrent spending (often skewed towards physical capital investments), which could be the case for Laos in view of development partner funded investments in school infrastructure (e.g., by JICA) and on operations, such as learning materials (e.g., by DFAT and JICA), school feeding (e.g., World Food Program), SBGs (e.g., World Bank), and PFM (e.g., EU). This could bring the economic composition of total public education financing close to the levels expected for a country at Laos' income level for much of the past decade. Still, the more recent crowding out of operating spending is likely not compensated by external financing and requires government attention.

Figure 3.8 Education Spending by Main Economic Categories



Sources: MoES Financial Report 2021, MoES Revised Budgets 2022-2023, State Budget 2021, State Budget Implementation Reports 2010-2020. Note: 2021p excludes Ch. 672 and 2023b excludes Ch. 67.

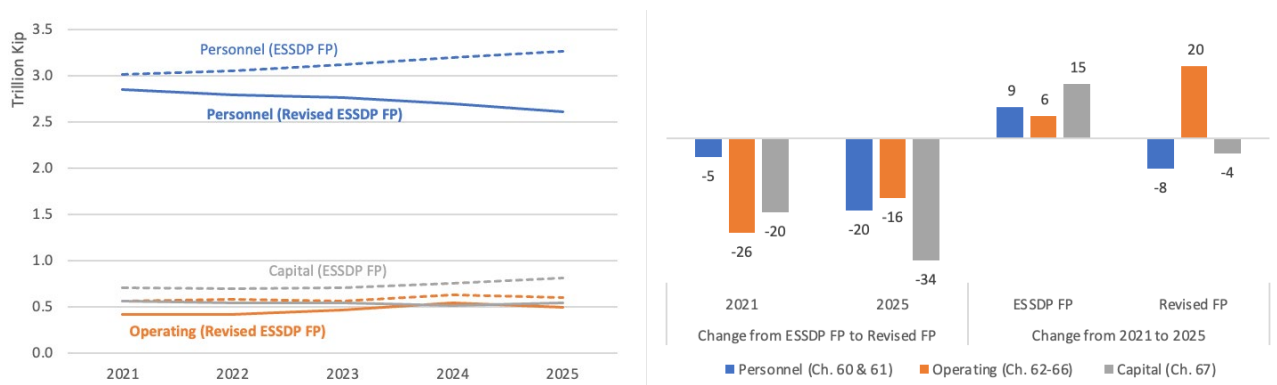
Figure 3.9 Economic Composition of Public Domestic Education Financing in Laos and Global Benchmarking



Sources: MoES Revised Budget 2022, State Budget 2021, State Budget Implementation Reports 2010-2020, UNESCO UIS, World Development Indicators, World Bank staff estimates.

Problematic non-salary budget cuts driven by low sector resourcing are expected to continue over the medium-term. The education sector revised its financing projections downward in response to the COVID-19 shock and the fiscal crisis, using two scenarios. The reduced staff scenario shown in Figure 3.10 applies the 2021 quota of 535 staff per year through to 2025 which in practice has been even lower (350 in 2022 and 290 in 2023). It assumed 1 percent annual salary increases from 2022 to 2025 which will be higher in practice, as a cost-of-living adjustment is being implemented for the whole civil service in 2023 in response to high inflation that started in 2022. The plan further includes substantial cuts to operating spending, reducing in-service teacher training from 20 percent of teachers per year to 5 percent, operating costs in TVET and higher education, and scholarships for poor students in primary and lower secondary education. While the revised financing plan aims to protect SBGs, textbook, and school feeding allocations, resulting in a planned increase in operating spending between the severely cut level of 2021 and 2025, this illustrates the impact of sector cuts on important service delivery activities like teacher training. In practice, SBGs could not be protected in 2022 and 2023 (see discussion in section 4). Compared to the precrisis ESSDP financing plan, planned capital allocations are most severely affected by cuts up to 2025 (Figure 3.10), which appears appropriate given the section 4 finding that school infrastructure is likely not a binding constraint for education access and learning outcomes in most cases (although the cuts will lead to reduced construction of schools, dorms, and labs). A recent policy announcement by the government, which comprised the provision of a salary to volunteer teachers on the same basis as civil servant teacher, could further increase pressures on the non-salary budget if not fully funded from additional resources (see discussion in section 4).

Figure 3.10 ESSDP Financing Plan (FP) and Revised FP Spending by Economic Category (Left) and Changes (Right)

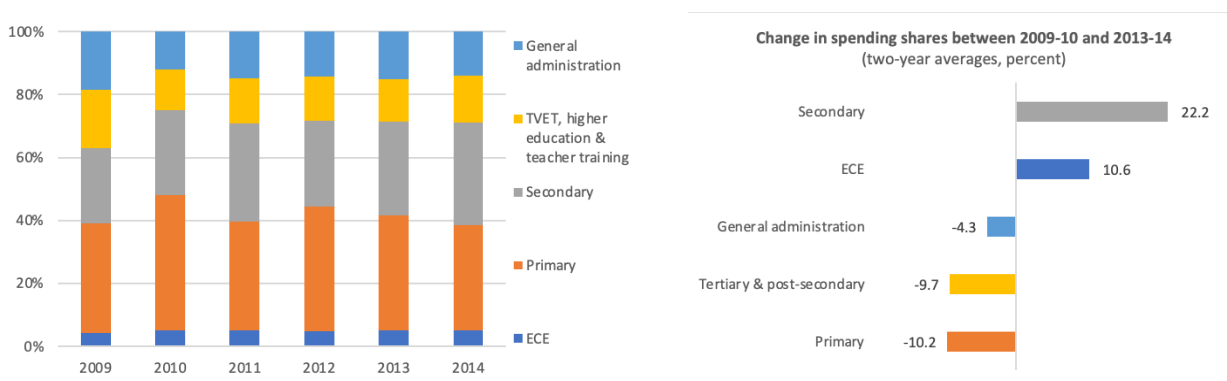


Sources: ESSDP, ESSDP Revised Financing Plan (August 2021), World Bank staff estimates.

Functional Classification

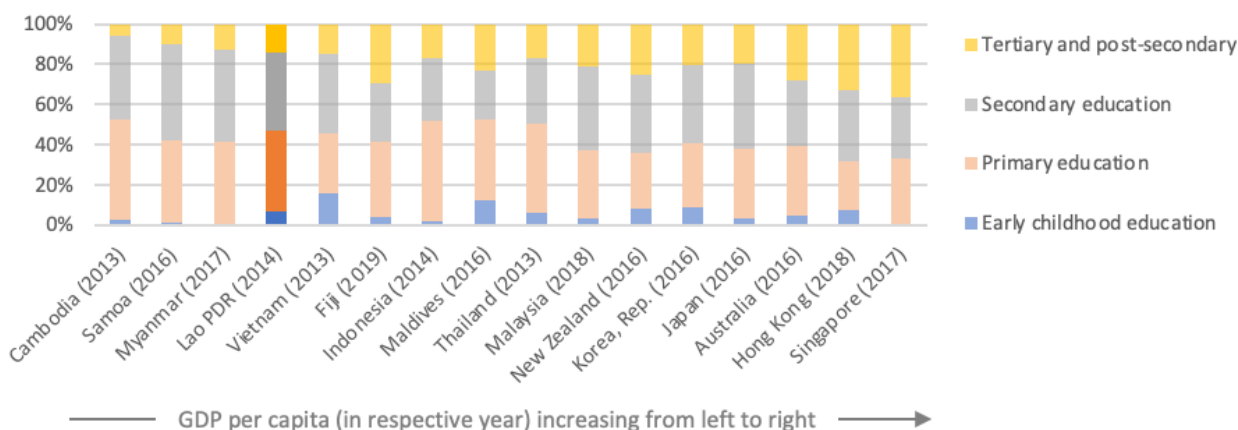
The latest available functional spending data highlights an appropriate functional composition of spending up to 2014, which compares well to other countries at Laos' income level. The National Education Accounts for 2009-2014, which collected subnational functional spending data through survey questionnaires, show that two-thirds of service delivery spending (excluding general administration) was being spent up to lower secondary education (Figure 3.11). This sets the foundation for advanced education levels and particularly benefits children from less well-off households. The remainder was broadly balanced between upper secondary and post-secondary and tertiary education. This pattern compares well to other countries at Laos' income level (Figure 3.12). Laos started relatively early to invest government resources in ECE, which has shown to be a high-return investment with benefits to subsequent education levels and lifetime earnings. As a result, its share increased relative to other education levels, as did the share of secondary education. Investing a share of resources in TVET and higher education, even as a lower-middle income country, is also adequate and in line with World Bank research that tertiary education is vital for the development of human capital and innovation (Arnhold, N. and Bassett, R. 2022).

Figure 3.11 Functional Spending Composition of Total Public Spending (Domestic and External), 2009-14



Sources: National Education Accounts 2009-2014 (UNESCO and IIEP 2016), World Bank staff estimates.

Figure 3.12 Benchmarking of Public Education Spending Composition by Level, Asia and Pacific Region

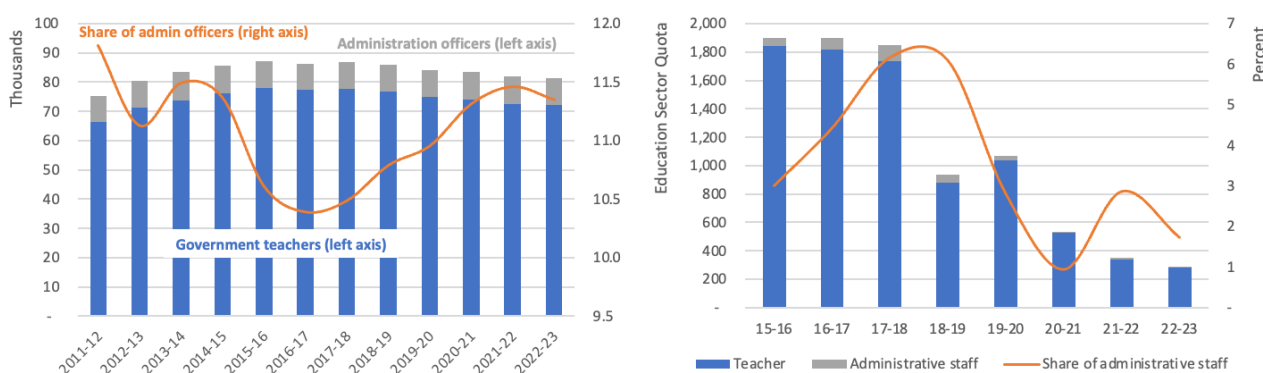


Sources: World Bank WDI, World Bank staff estimates.

In the absence of more recent expenditure data by function, proxy indicators suggest that functional spending patterns continued to be broadly appropriate since 2014. The PEIR attempted to estimate functional spending combining expenditure and civil service data from various sources; however, too many assumptions would have been necessary and would have undermined the value of results. Instead, staffing data (despite its limitations) and spending data for SBGs, which together cover most spending, can provide insights into more recent spending composition trends.

An increasing share of administrative staff in the education workforce suggests the need to continue prioritizing teachers in the annual quota and more strictly scrutinizing administrative overheads. Administration officers have made up around 11 percent of the civil service workforce in education over the past decade, increasing from below 10.5 percent in 2016-17 to close to 11.5 percent in 2021-22 (Figure 3.13). This happened despite the appropriate prioritization of teachers in the annual quota, which led to a visible decline in the administration share among new staff positions, suggesting that relatively more teachers have left the civil service compared to administration officers. While human resource data should be interpreted with care,⁴⁶ a possible reduction of administrative officers from 11.3 percent in 2022-23 to 10 percent (slightly lower than the share in 2016-17) could free up around 1,100 staff for teaching.

Figure 3.13 Education Workforce Composition (Left) and Education Sector Quota Allocation (Right)



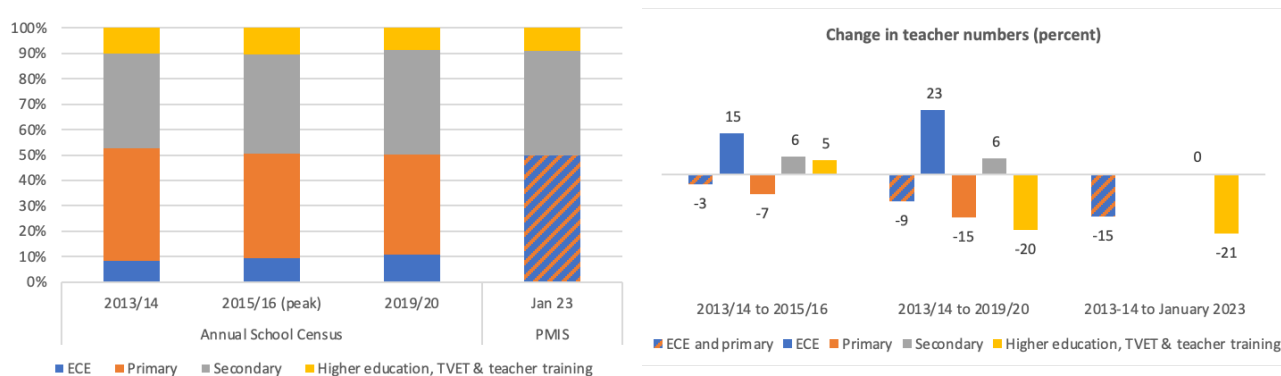
Note: Data includes sport sector that cannot be disaggregated, for which PMIS data indicates 129 administration officers in January 2023 (0.2 percent of total civil servants).

Source: MoES DoOP civil service data.

⁴⁶ A share of the administration officers may carry out administrative functions within service delivery units like schools and universities and may even be part-time teaching. This is discussed in the context of civil service data issues below.

Primary and tertiary and post-secondary education have seen teacher losses over the past decade, contrary to stable secondary education and increasing ECE numbers. Up to 2015/16 – the historic peak in total teacher numbers – additional teachers were distributed across ECE, secondary, and post-secondary and higher education, with a share of primary teacher positions reallocated across these three levels (Figure 3.14). This pattern is understandable when considering the (assumed) almost universal enrolment, reductions in repetition rates that had started to decrease rapidly, and a comparably low average PTR (see section 4). Up to 2019/20, the last year for which ASC data included TVET, teacher training, and higher education staff data, ECE teacher numbers further increased while primary education and post-secondary and tertiary education were affected by losses. In the PMIS data from January 2023, separate ECE and primary data is not dependable (as discussed under data issues below), but the trend of falling teacher numbers in TVET and higher education continued. Secondary education remained least affected by cuts, only losing additional teachers gained since 2013/14.

Figure 3.14 Changes in Teacher Numbers by Subsector, 2013-14 to January 2023



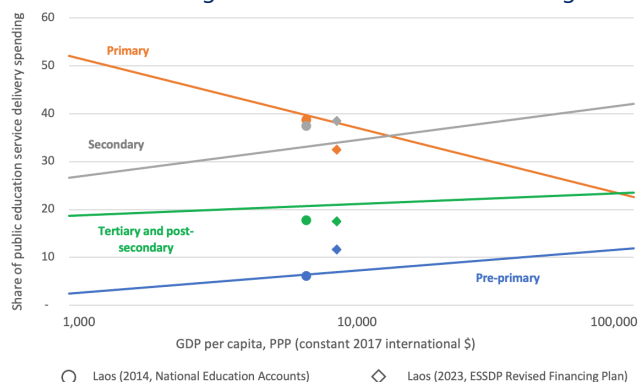
Note: For PMIS data from January 2023, nonformal education (113 staff) is split between primary and secondary.

Sources: Annual School Census, MoES PMIS, World Bank staff estimates.

Mindful of data limitations, benchmarking suggests high investment in ECE and secondary for a country at Laos’ income level, at the expense of primary and tertiary and post-secondary education (Figure 3.15).

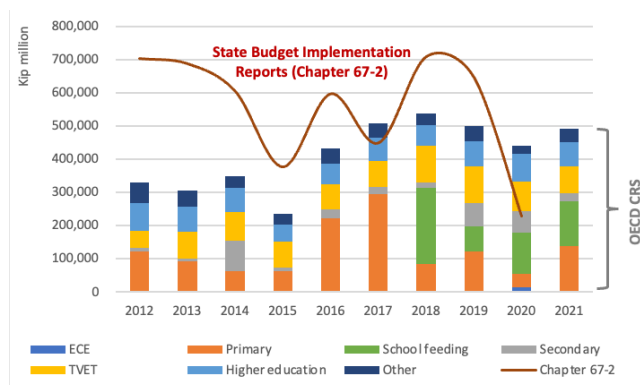
Using 2014 National Education Accounts project and 2023 revised ESSDP financing plan data in absence of functional expenditure data, a comparison with global spending patterns across education levels vis-à-vis country income suggests: (i) relative spending on ECE has increased above global averages, which is positive in view of low levels of school readiness and resulting poor learning outcomes in subsequent education levels in Laos; (ii) relative spending on primary education is low after falling much faster than expected as Laos’ income grew; (iii) relative spending on secondary education has increased faster over the past decade than expected at its income level; and (iv) relative spending on tertiary and post-secondary education (including TVET and teacher education) combined has been slightly low and has not grown with increasing country income, as would be expected. Available data on ODA by education level suggests that development partners have been focusing their attention on primary education (including school feeding separately reported from 2018) and tertiary and post-secondary education, with TVET attracting a substantial share of that financing (Figure 3.16). Noticeable, financial support to ECE and secondary education appears to be limited. Overall, this appears complementary to the discussed government resourcing pattern which shows higher than expected allocations for ECE and secondary education (Figure 3.15).

Figure 3.15 Education Subsector Composition of Public Education Financing in Laos and Global Benchmarking



Sources: 9th ESDDP Revised Financing Plan, National Education Accounts 2014, UNESCO UIS, World Development Indicators, World Bank staff estimates.

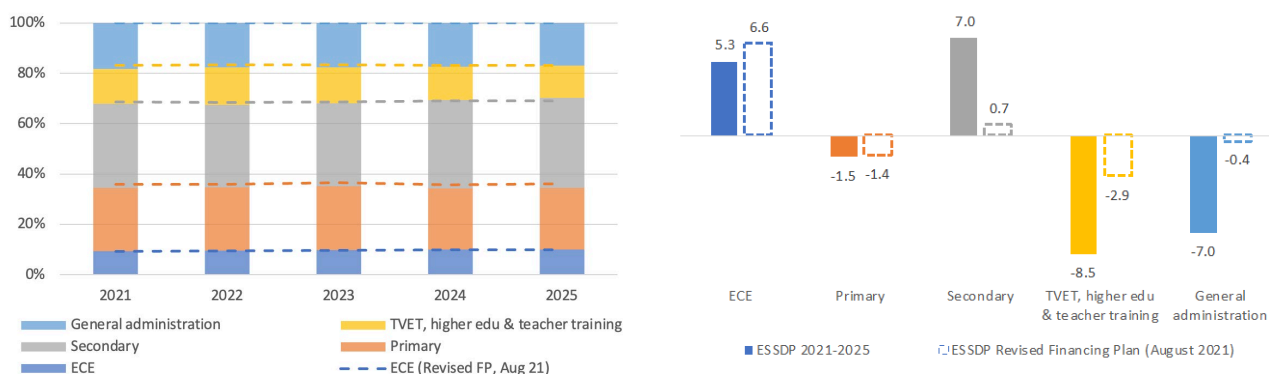
Figure 3.16 ODA Composition by Education Subsector



Sources: OECD Creditor Reporting System, State Budget Implementation Reports 2012-2020.

Going forward, skewed subsector spending patterns could be rebalanced and relative cuts to administration – planned in the ESDDP but reversed in the revised financing plan – reinstated. Prior to the fiscal crisis, the ESDDP financing plan indicated an intention to continue relatively higher investments in ECE and secondary education at the expense of tertiary and post-secondary and general administration, and to a lesser extent primary education (Figure 3.17). While the relative cuts to administration spending and continued investment in ECE appear warranted, continued relative increases in secondary, combined with significant relative reductions in tertiary and post-secondary education and a further cut to primary education, would risk exacerbating imbalances suggested by the available staffing data discussed above. The revised financing plan from August 2021 maintains increases in the relative spending share of ECE, reduces cuts to tertiary and post-secondary education, and reverses originally envisaged further relative increases to secondary education; all these changes to relative spending patterns appear appropriate compared to the original ESDDP plans. However, tertiary and post-secondary still see relative cuts, as does primary education, which would exacerbate imbalances across education levels. The revised financing plan also reverses planned relative reductions in general administration spending, which should be revisited in view of (likely more urgent) service delivery spending needs.

Figure 3.17 ESDDP Financing Plans by Subsector (Left) and Percent Changes between 2021 and 2025 (Right)



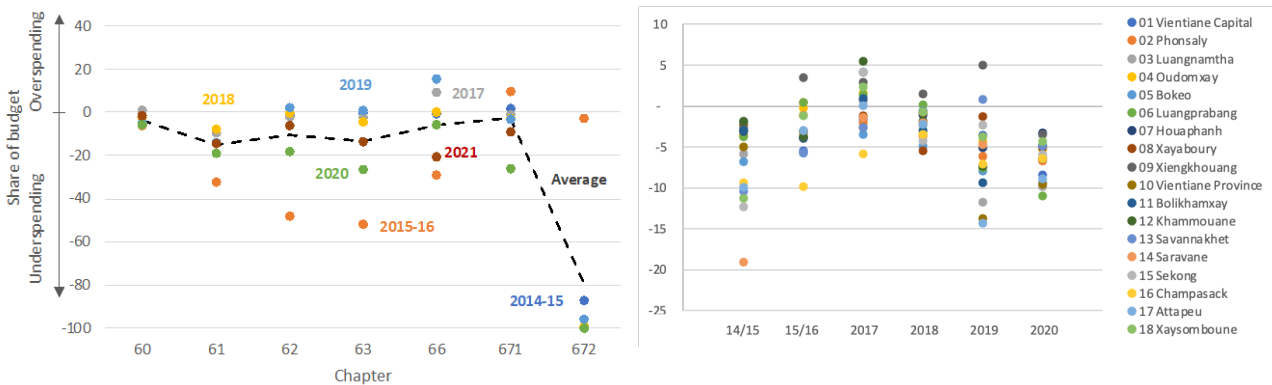
Notes: Dashed lines reflect the reduced staff scenario of the ESDDP Revised Financing Plan from August 2021. General administration subsector excludes allocations for school feeding and scholarships (see discussion Section 3, Foundation 1).

Sources: 9th ESDDP and ESDDP Revised Financing Plan, World Bank staff estimates.

Budget Execution Performance

Budget execution performance is generally positive, with a slight tendency of underspending (Figure 3.18). The analysis is based on financial reports from MoES due to its digitally available budget and expenditure data disaggregated by administrative (first tier budget agency level) and economic classifications (chapter level). The slight trend of underspending does not appear to be concerning, though increasing underspending of non-salary recurrent and local capital allocations in 2020 and to a lesser extent in 2021 could support the point made above that these spending categories are being crowded out, including through in-year cashflow prioritization for salaries, with limited funds left for non-salary spending. This is a pattern common across countries in difficult fiscal situations. In addition to selected outliers, such as Saravane in 2014-15, there are two notable exceptions from the generally positive performance: First, expenditure data is incomplete for externally financed capital spending under Chapter 672, for which reporting to MPI largely bypasses MoES. This is a common issue across countries and not overly concerning given established and active development partner coordination mechanisms in Laos, which should provide adequate information for service and investment planning purposes. Second, fiscal year 2015-16 shows substantially higher underspending of recurrent allocations, which also does not appear to be a significant issue as it did not continue in subsequent years and may be related to incomplete MoES data; the change in fiscal year from to calendar year in 2016 may also have played a role. Apart from data reliability issues discussed below, there do not appear to be significant expenditure control issues that require special attention.

Figure 3.18 Budget Execution Performance by Chapter (Left) and Province (Right), 2014/15 – 2020



Source: MoES Financial Reports 2014-2021.

Recommendation 2.1 Based on regular budget and expenditure reports by subsector and geographic area, **gradually shift resource allocation patterns within the education sector** to increase equity, achieve a better balance across different inputs and education levels, and limit overheads.

Further details

Mindful of data challenges constraining the analysis of education allocations and spending, high-level resource allocation patterns appear broadly appropriate across functional areas and input factors. That said, four shifts should be considered:

- Increasing equity in resource allocation across the country, considering needs of different provinces (and districts), including their poverty levels.
- Increasing non-salary recurrent spending (currently being crowded out by personnel spending) to increase its relative share and fund priority activities like SBGs, teacher training, teaching and learning materials, and school monitoring visits.
- Reallocating some resources from administration and management to service delivery to reduce the relative share of administration.

- Balancing resources across education subsectors, as resources currently appear to particularly benefit secondary education. The prioritization of investments in ECE and a continued focus on primary education is important to help tackle the root causes of poor learning outcomes.

It is recognized that the rapidly shrinking resource envelope in recent years, if not actively contributes to, has at least limited the room to address these imbalances. As this will likely continue to be the case in the medium term, the recommendations will need to be implemented gradually as education personnel retires and/or additional resources become available to the education sector. Critical foundations for this are effective information systems and data management that allow the preparation of regular budget and financial reports by subsector and geographic area to provide a timely evidence base for strategic resource allocation. This is discussed in the following two subsections.

Responsibility

Lead: MoES (DoP, DoF)

Support: MoF

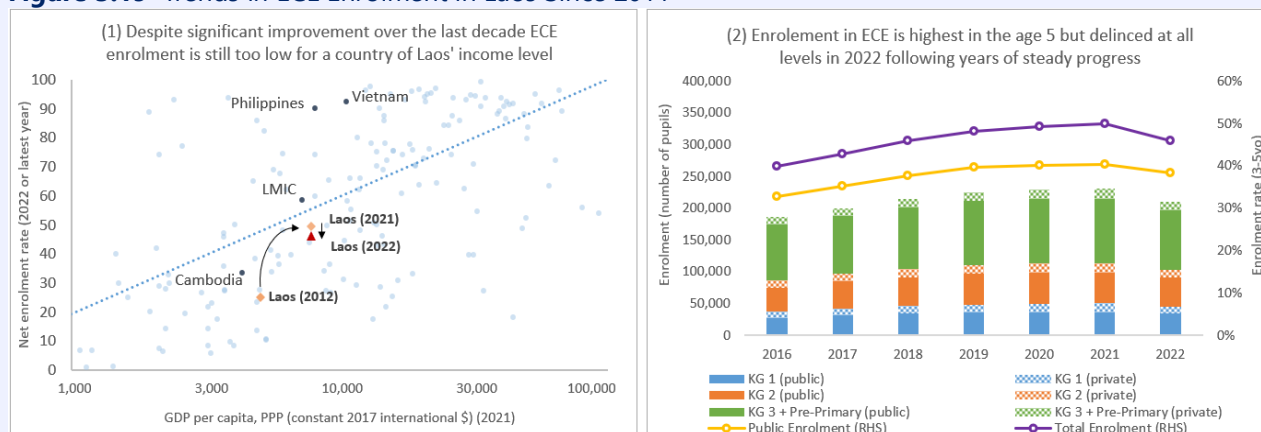
Special Topic 1 The Case for Continued Investment in Early Childhood Education

Early childhood education (ECE) is crucial for promoting student achievement at primary level and beyond and generates the highest return on investment of all the education subsectors in Laos. Recent analysis illustrates a clear link between ECE attendance and student achievement at primary level in Laos. The 2017 Lao Social Indicator Survey (LSIS-II) found that only 12 percent of children *not* attending ECE are on track to meet basic literacy and numeracy skills, a figure that rises to 53 percent for children that *do* attend. It also found that among children of less educated mothers, attending ECE more than triples their chances of being on track in literacy and numeracy when controlling for socioeconomic background. Evidence from the 2019 SEA-PLM assessment suggests that students who attend two or more years of preschool have significantly higher average test scores in reading, writing and mathematics than students who do not (MoES and UNICEF Laos 2022). This finding is consistent with global evidence that shows enrolment in ECE is vital for promoting the physical, mental, intellectual, and social development of children in preparation for formal entry into primary school (e.g., see Bendini 2022). As such, the current gaps in ECE provision in Laos (discussed below) have significant repercussions, as children who lack foundational learning typically fall behind at primary and secondary levels, significantly reducing the cost-effectiveness of spending across the education system.

Financing for ECE has been prioritized over the last decade resulting in significant improvements in enrolment, but this positive trend started to reverse in 2022. The share of MoES spending on ECE has risen over the past decade and compares favorably with countries in the region. This has resulted in a significant improvement in ECE enrolment for children aged 3-5 years, doubling from 25 percent in 2012 to almost 50 percent by 2021 (Figure 3.19, panel 1). MoES policy emphasis has been placed on increasing access and participation of 5-year-olds to ensure at least one year of preparation prior to entry into Grade 1. Enrolment of 5-year-olds reached 76 percent in 2021, whereas for children aged 3-4 it remains considerably lower (29 and 38 percent respectively). However, very wide disparities in enrolment exist across provinces and districts.^a In particular, ECE attendance is considerably lower amongst children residing in remote and less prosperous districts and whose parents are less educated, belong to non-Lao-Tai ethnic groups, and are poor (Government of Laos and UNICEF, 2020). In 2022, enrolment across all ECE levels declined by 10 percent, with preprimary (age 5) enrolment falling more significantly than kindergartens (Figure 3.19, panel 2). The negative impact of COVID-

19 on household incomes likely explains the relatively higher reduction in private enrolment (22 percent) than public enrolment (6 percent). In addition, anecdotal evidence suggests that the perceived poor quality of ECE services also may have reduced the incentive for parents to return their children to preschools after the COVID-19 hiatus. Further clarifying the causes of this decline in enrolment should be a key priority for MoES.

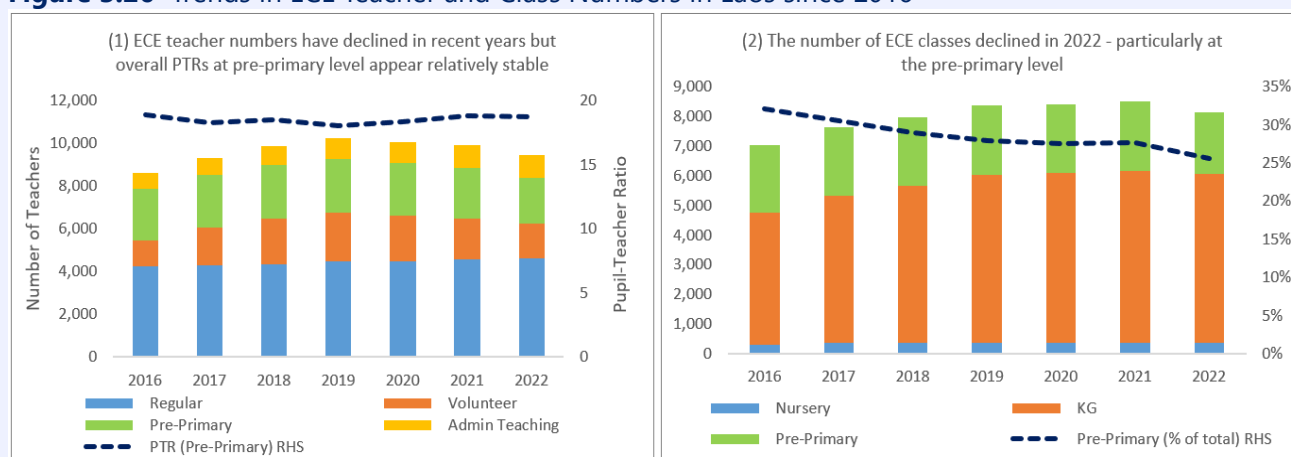
Figure 3.19 Trends in ECE Enrolment in Laos Since 2011



Sources: UNESCO UIS; World Bank World Development Indicators; LSB (population projections); MoES ASC (2016-22).

The reduction in teacher quotas has caused a decline in the number of ECE teachers since 2019 and is a contributing factor to the falling provision of preprimary classes. The total number of teachers working in the ECE subsector fell by almost 8 percent between 2019 and 2022, with the subcategories of preprimary teachers (14 percent decline) and volunteers (29 percent decline) suffering the highest attrition (Figure 3.20, panel 1). This decline is likely linked to the concurrent fall in the total number of ECE classes (down by 4 percent in 2022) with some being forced to close due to lack of staff (Figure 3.20, panel 2). Nevertheless, the overall pupil-teacher ratio for preprimary classes has remained relatively stable at under 20:1 (below the maximum level of 25:1 as stipulated in the draft 2022 Revised Decree on Teachers) as the decline in teacher numbers has been offset by a corresponding decline in enrolment. More detailed school-level data on teacher distribution is needed to determine the extent of teacher imbalances within the ECE subsector.^b

Figure 3.20 Trends in ECE Teacher and Class Numbers in Laos since 2016



Source: MoES ASC (2016-22).

A swift reversal of the recent decline in ECE enrolment and a subsequent expansion of provision to a level consistent with Laos' income level will require a larger teacher workforce. Even after fully accounting for the *potential* efficiencies gained from addressing teacher deployment imbalances, an increase in the net enrolment rate of the 3–5-year-old age group from the current level of 46 percent (2022) to 60 percent by 2030

will require at least a 20 percent increase in the number of ECE teachers (in addition to more facilities and teaching materials). This will require additional funding relative to primary, secondary, and post-secondary education (where additional staffing needs are lower), but this cost could be reduced by exploring various models of lower-cost provision which are discussed below.

Assuming limited scope for higher financing and more civil servant teachers, the expansion of ECE via the introduction of lower-cost delivery models is recommended. Declining budgets and lower teacher quotas limit the scope for expanding traditional ECE services. However, there are opportunities to expand the provision of lower-cost modalities, such as the preprimary model (which utilizes existing primary school infrastructure) and community-based initiatives. A recent impact assessment of a World Bank-supported ECE program which introduced Community Child Development Groups in selected disadvantaged communities in Northern Laos found that the initiative resulted in a significant increase in ECE uptake and better learning outcomes at relatively lower costs, due to the recruitment of local caregivers who received lower salaries than formally trained teachers (World Bank 2022d). Such innovative models should be considered and incorporated into the upcoming National Decree for Early Childhood Education as well as the rollout of the new preprimary curriculum and fundamental quality standards (FQS) in 2023-24.

^a For instance, while Chanthabuly district in Vientiane Capital province reported universal ECE enrolment at age 5 years in 2022, enrolment in Kaleum district in Sekong province was just 13 percent.

^b The annual school census sorts ECE teachers into four categories: (i) regular teachers; (ii) volunteers; (iii) preprimary; and (iv) admin-teaching. It is therefore not possible to accurately analyze PTRs at KG level and in creches across districts.



Special Topic 2 Financing TVET and Higher Education in a Low Resource Environment

The analysis of post-secondary and tertiary education is severely constrained by the lack and consistency of data. As discussed in further detail in the next subsection, education sector financial and human resource data is incomplete and inconsistent across sources. This particularly applies to the TVET, teacher education, and tertiary education subsectors for which budget and spending data by institution is largely unavailable, except for budget transfers to the National University of Laos (NUOL) and the three provincial universities. Time series of enrolment and human resource data are not consistently available, with data categories and the level of detail in published data changing over time. Since 2020-21, the three subsectors have not been included in the ASC report. As a result, the analysis in this report is limited and conclusions remain broad.

Tertiary and post-secondary education is an important catalyst for growth, jobs, and competitiveness while generating high private returns for households. Global evidence points to a substantial positive impact of tertiary education on macro-level economic benefits and growth (Oketch et al. 2014). Among others, the number and quality of higher education institutions are positively associated with future growth of GDP per capita.⁹ Global evidence suggests that there are high private returns from investment in tertiary education. Montenegro and Patrinos (2014) find that tertiary education has the highest private return on investment across education levels and that the East Asia and Pacific region exhibit particularly high rates of return close to 15 percent. Globally, adults with a tertiary degree are more likely to be employed and have measurably higher incomes, benefitting significantly from their own and government investment. The same is the case in Laos, as discussed in section 1 and illustrated by Figure 1.1.

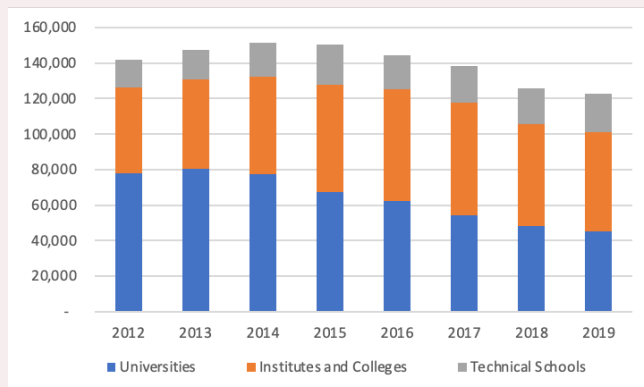
Tertiary and post-secondary enrolment has been on a downward path since 2014. Contrary to many other low- and middle-income countries that see rapidly growing enrolment in tertiary education (Schendel and McCowan 2016), university enrolment in Laos has almost halved in less than a decade. While TVET enrolments in institutes, colleges, and technical schools could offset a small share of the reduction, overall enrolment across the two levels fell markedly between 2012 and 2019 (Figure 3.21). Anecdotal evidence suggests that the negative trend in higher education accelerated over 2020-2022; MoES's Department of Higher Education highlighted that preliminary entry exam enrolment data for 2022-23 showed a decrease by 36 percent, on top of a 10 percent fall in academic year 2021-22, citing lack of funds for households, limited job prospects, and the high cost of living in urban areas where universities are located. Gains in TVET have been eroded by lower enrolment since the onset of the pandemic and economic crises, with preliminary figures from the Department of Technical and Vocational Education showing that (i) public enrolment decreased from about 26,000 in 2021-22 to 21,000 in 2022-23; (ii) private enrolment fell from around 5,000 to 3,000; and (iii) the share of graduates that have found a job decreased by 40 percent from 57 percent in 2017-18 to 34 percent in 2021-22. As a result of these trends, enrolment rates at both levels are much lower than expected for a country at Laos' income level, as illustrated by Figure 1.8 in section 1, while the limited job prospects highly likely undermine household demand for, and therefore investment in, these education levels.

Inequity in access to public tertiary education is high in Laos. LECS 6 data shows that around 40 percent of students in public tertiary institutions are from households in the highest consumption decile, with a further 35 percent from the following two richest deciles and less than 15 percent from households in the bottom half of the consumption distribution (Figure 3.22).

Public financing for tertiary and post-secondary education is slightly below the level expected for the country's income, while household financing was increasing prior to the recent crises. In the past decade, Laos has allocated close to 18 percent of public education service delivery spending (excluding management and administration) to tertiary and post-secondary education, which is only slightly below the global average at the country's income level (Figure 3.23). Like other education levels, available financial and human resource data points to 70-80 percent of tertiary and post-secondary education resources being spent on civil servant teachers/lecturers and administrative officers. The remainder includes scholarship support and SBGs for TVET

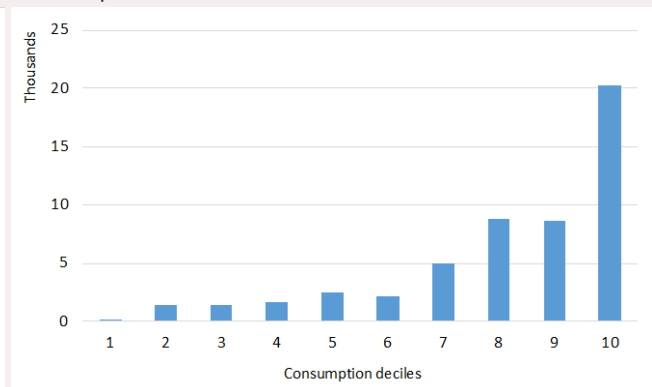
colleges (next to other operating and capital spending), but detailed data is not available. LECS 5 and 6 data suggests that households have been shifting a share of resources from lower education levels to higher education and TVET, with their combined share in total education spending increasing from slightly above 20 percent in 2012/13 to almost 35 percent in 2018/19 (Figure 3.24). The vast majority is being spent on education delivered by universities and institutes, while vocational training has seen a slight relative increase over the period. Both levels have likely seen a significant fall in spending, driven by crises impacts on household income (Box 6) and the limited job prospects (see key issue 3 in section 1).

Figure 3.21 Enrolment in Tertiary and Post-secondary Education



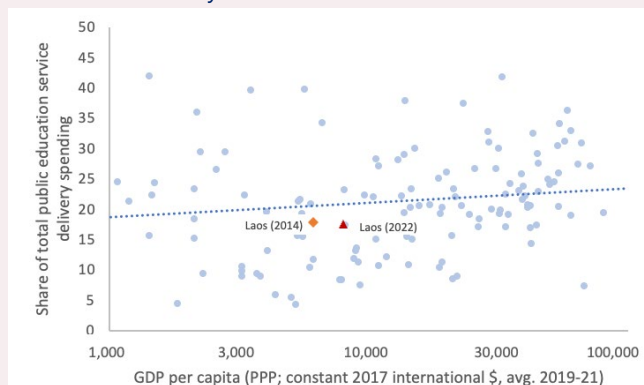
Source: LSB Statistical Yearbooks.

Figure 3.22 Public Tertiary Enrolment by Household Consumption Decile, 2018/19



Source: World Bank staff estimates based on LECS 6 data.

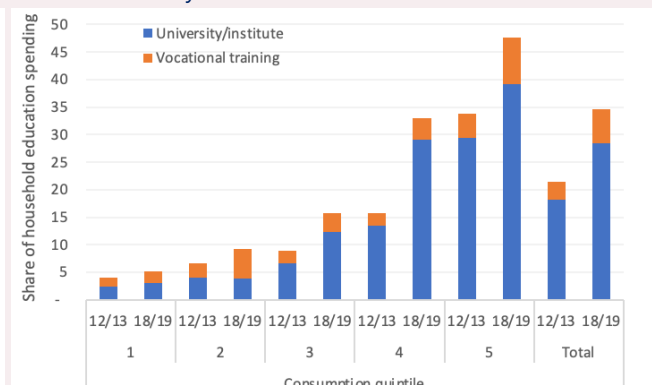
Figure 3.23 Benchmarking of Public Financing for Tertiary and Post-secondary Education



Note: Data for 2014 is from National Education Accounts and for 2022 from the ESSDP revised financing plan.

Sources: ESSDP Revised Financing Plan, National Education Accounts 2014, UNESCO UIS, World Bank WDI and staff estimates.

Figure 3.24 Share of Household Education Expenditure on TVET and Tertiary Education



Note: Household expenditure on education excludes spending on meals.

Sources: LECS 5 and LECS 6, World Bank staff estimates.

The authorities' attempt to crowd in private financing is positive, but initial reform steps appear insufficient for sustainable financing.

Through the issuance of Instructions on Revenue and Expenditure Management of Financially Self-Sufficient Administrative/Technical Units (No. 2258/2021), MoF is promoting the partial or full financial independence of first or second tier budget entities that "generate technical service charges and bear technical expenses." NUOL and Pakpassak Technical College are part of the three-year pilot phase during which technical units are encouraged to become (partially) self-sufficient (in the case of the education institutions, salaries will continue to be covered through the state budget). However, both institutions are facing issues with low enrolment while fee increases are discouraged, according to the Department of Technical and Vocational Education (but likely also not feasible in the current economic environment). Further, a study carried out by Enterprise and Development Consultants (2021) under ADB's Second Strengthening Higher Education Project highlighted the need for greater financial autonomy of higher education institutions. However, the specific recommendation to increase universities' revenue by renting out under-utilized real estate

and providing consulting and other technical services appears insufficient as a financing strategy vis-à-vis the cost of delivering quality tertiary education services.

More in-depth analysis of institutional and student financing could inform a longer-term strategy for tertiary and TVET financing. Overall, while the intention to crowd in household investment in tertiary and post-secondary education is positive, particularly given the high benefit incidence among richer household implied by their significantly higher share in costly university enrolment (Figure 3.22), a strategic approach to TVET and higher education financing appears warranted. As part of that, public financing will need to play a significant role, which is justified by social returns (including economic growth impacts) of higher education levels. In line with the ESSDP's Intermediate Outcome 5.12, a share of public funding should be allocated using performance-based funding arrangements, building on available lessons from such arrangements in lower-middle income countries. Beyond well-targeted scholarships for students from disadvantaged households, student financing, such as income-contingent loan schemes, is likely limited in the short- to medium-term, as limited job opportunities, shortcoming in tax administration, and substantial migration reduce the potential for cost-sharing. However, research should explore this option for the future and develop a long-term strategic approach.^b

Recommendation 2.2 Carry out an in-depth assessment of financing for post-secondary and tertiary education to inform the design of fit-for-purpose institutional and student financing arrangements.

Responsibility

Lead: MoES (DHE, DTVE & DoF)

Support: NUOL, PESSs, Provincial Universities, TVET Institutions

^a Estimates suggest that a 10 percent increase in number of universities per capita is associated with 0.4 percent higher future GDP per capita (Valero and van Reenen 2019).

^b The high share of graduates finding work in the public sector – up to two-thirds of university graduates in some surveys (see key issue 3 in section 1 for further data) – may provide an entry point to recover a share of the costs, though civil service pay is on the lower side for many entry and mid-level civil servants (see brief discussion for education above and World Bank (2018b)).



Foundation 1 Effective Information Systems and Data Management

Data is critical for evidence-based strategic and annual resource allocation and in-year management decision-making. Without useful, reliable, and timely data, risks that resources are used inefficiently and ineffectively increase, resulting in lower quantities and quality of education services. Unintended spending patterns, including those influenced by political economy factors, can emerge and intensify. Whole-of-government (WOG) and sectoral management information systems (MISs) and their underlying system configurations (such as the CoA for an FMIS) play important support roles by reducing errors in data entry and management and facilitating data access, analysis, and reporting.

Limitations of WOG MISs have follow-on effects in the education sector, which has been developing its own parallel systems. The regulatory and policy frameworks for statistics at national level, comprising the Statistics Law 2017 and the National Information and Communication Technology (ICT) Policy 2015-2025, among others, appear comprehensive and target integration and harmonization of systems. However, a recent Digital Maturity Assessment Report (UNDP 2022) found Laos to be at a digitally nascent maturity level in practice. This is reflected in low scores in the GovTech Maturity Index and the E-Government Readiness Index (World Bank 2021d). To advance digital maturity, the government developed a 10-year Digital Economy Strategy (2021-2030) and the 5-year Digital Economy Development Plan (2021-2025), which includes a Digital Government Development Plan. Meanwhile, historically evolved shortcomings in the GFIS and its underlying CoA discussed in section 2 directly affect the budgeting and financial reporting in the education sector. While these are currently being addressed by MoF with support from key partners, MoES, PESSs, and DESBs will only see the benefits of these reforms in the medium- to long-term as progress has been slow due to less-than-required reform prioritization, capacity limitations at all levels, limited connectivity at subnational level, and more recently, delays caused by COVID-19. For human resource management, MoHA has developed a WOG Personnel Information Management System (PIMS) that covers civil servants but excludes teachers.⁴⁷ Despite significant limitations, a decision to replace the WOG PIMS remains pending. In response to these WOG MIS shortcomings, the education sector has developed their own parallel systems, initially Excel-based and increasingly fully-fledged, customized information systems.

The parallel systems employed by MoES cover all main elements of the sector PFM cycle and appear justified in the short- to medium-term to fill critical functionality gaps. The main systems are summarized below. In addition, MoES has Asset and Textbook Information Management Systems (AIMS and TIMS) and is developing the Lao Education and Sports Management Information System (LES MIS) to integrate information from the Education Management Information System (EMIS) and education statistical systems for teacher education (TEMIS), TVET (TVETMIS), and higher education (LUMS). Table 3.1 provides an overview of MISs, with further details on MoES MISs in annex 4.

- Planning and Budgeting Management Information System (PB MIS), which has three modules: (a) the Annual Cost Sector Education Plan (ACSEP), (b) the Recurrent Budget Management Information System (RB MIS), and (c) a proposed Investment Budget management Information System (IB MIS). In comparison to MoF's GFIS, the system facilitates preparation and tracking of budgets at second tier entity level and below (i.e., 32 institutions under MoES, 18 PESSs, and 148 DESBs) and will include subsector information in the future; it links MoES entity budgets to the ESSDP and recognizes other sources of finance from development partners.

⁴⁷ The WOG PIMS further does not cover police, armed forces, contract workers, or casuals. As a result, it is estimated that PIMS covers less than 25% of the total public sector workforce. World Bank review of the WOG PIMS in 2022 found that PIMS has limited or nonexistent functionalities in key human resource management areas such as recruitment, performance appraisal, training, employee self-service, among others (World Bank 2022f). PIMS architecture cannot be extended to become a modern human resource MIS solution which goes beyond a recording system, to one of engagement, analytics, and innovation.

- Personnel Management Information System (PMIS) that has standardized and replaced error-prone Excel-based human resource databases and does so down to PESS and DESB level. For teachers, it records and reports at subsector level.
- Wage Management Information System (WMIS), which compensates for the lack of payroll functionality in the GFIS and replaces a previous Excel-based system, covering both administration and teaching employees. The system has largely been rolled out to the PESS and DESB level. For teachers, it records payroll at subsector level.
- Accounting for Public Organizations (APO), a double-entry accounting system with online access currently under development. Following user acceptance testing in February 2023, the system is being rolled out to all PESSs and DESBs, in addition to the 32 institutions under MoES. Compared to the GFIS, the APO will record spending (and technical revenue) by second level budget entity, DESB, and subsector, and can be reconciled to bank balance or Treasury Balance (and later budget balance).

Table 3.1 Whole-of-Government and Education Sector Management Information Systems

Area	Whole-of-government		Education sector
	Actual	Reform plan	
Budgeting	Excel-based	FMIS	PB MIS, with its ACSEP, RB MIS & proposed IB MIS modules Excel-based, transition to double-entry accounting system ("APO") AIMS (Education) AMIS Excel-based, transition to WMIS (largely complete) PMIS (Education)
Accounting	GFIS	GFIS+/FMIS	
Asset management	AMIS	FMIS & AMIS	
Aid	ODA MIS & DMFAS	FMIS	
Payroll	PIMS & GFIS	FMIS	
Human resource management	PIMS, PIMS (Pensions) & Performance Appraisal System (PAS)	Short- to medium-term: Integration of PIMS, PAS, PMIS (Pension) & PMIS (Education) Medium-term: HRMIS?	
Specific systems			<ul style="list-style-type: none"> • Education statistics: LESMIS, integrating EMIS, TEMIS, TVETMIS & LUMS • Textbooks: TMIS

Source: World Bank.

A strategic approach is needed to minimize duplication; such an approach is in place for the integration of education data MISs under the LESMIS but missing for education sector financial and human resource MISs. As MoES (and MoH and other ministries) moved forward with the development of parallel systems funded by different partners, it necessarily resulted in increased fragmentation of systems and information. Much of the data on parallel WOG and MoES MISs, and even among different MoES MISs, is the same and is entered multiple times into different systems by users in the same department or by users in different departments or at different levels. In response, MoES and UNICEF commissioned a review of MoES MISs and existing information and communication technology (ICT) infrastructure by Beyond Essential Systems (2020) that found substantial issues. In line with the report's findings, MoES is assessed (with a score of 1.6) as being at the intersection between nascent and emerging maturity levels in the recent Digital Maturity Assessment Report (UNDP, 2022); this is below the average score in the ministerial ranking (1.8) that MPI is leading (3.1). To address issues and fulfill the provisions of the Statistical Law 2017, the LESMIS Strategic Development Plan 2018-2022 provides guidance on the integration of education data across the EMIS, TEMIS, TVETMIS, and LUMS, and the interconnectedness with the education sector PMIS. However, it otherwise does not cover sectoral financial and human resource MISs. Instead, it highlights the need for a separate report for these that could be translated into an MoES-owned strategy for this currently missing part of MoES' MIS landscape.⁴⁸

⁴⁸ MoES ownership is critical for the success of such a strategy. Beyond Essential Systems (2020) noted varying levels of commitment across MoES departments to the LESMIS Strategic Development Plan. This finding highlights the importance of buy-in for further integration of

Such a strategy should also guide transition to new WOG MISs. The strategy should consider WOG MIS reform plans and how these can be reflected in MoES MIS specifications for a future migration or integration with the new WOG systems (including Ministry of Technology and Communications' data center). This would help limit duplication of efforts and increase the education sector's readiness for the new WOG systems. On the financial side, this concerns the budgeting, accounting, payroll, aid, and asset MISs, which are to be migrated to the new FMIS. On the human resource side, the future of the education sector PMIS will be subject to WOG HRMIS reform plans, including its capabilities needed for education personnel management (e.g., data on teacher subject specialization needed for workforce planning). In some areas, parallel systems may continue to be required to address needs outside WOG MIS functionalities (e.g., for textbooks), but this should be minimized and coordinated.

In parallel, many data and technical MIS issues under the responsibility of the education sector need to be resolved as a matter of priority, including through improved quality assurance.⁴⁹ The problem in Laos' education sector is not a lack of data. Extensive datasets are available in most areas but have significant quality, completeness, and access issues. Often, it is unclear whether encountered issues are exceptions or point to more fundamental challenges.⁵⁰ This undermines the level of confidence in the conclusions of this and any other assessment and, most importantly, the reliability and use of data in decision-making. Some issues may be caused by a fragmentation of responsibilities related to data quality assurance, which seems to be organizationally in a separate department from data collection, management, and publishing. This increases the risk that low quality data is retained and shared.⁵¹ Overall, there do not appear to be clear quality assurance procedures in place. This should be resolved, and data quality assurance processes implemented in line with the ESSDP and the LESMIS strategy. Specific key challenges identified by this and other assessments, including the report from Beyond Essential Systems (2020), comprise:

- **Financial data is inconsistent across WOG and education sector systems and could not be reconciled for the purposes of this analysis.** In absence of in-year budget reporting and significantly delayed annual financial reporting by MoF (see discussion in section 2), MoES uses parallel financial reporting processes to generate expenditure data for service delivery management and budgeting. This approach results in data discrepancies between WOG and education sector data (Figure 3.25). Actual expenditure at the central level (MoES and NUOL) has been systematically lower in the data received from MoES compared to MoF reports. This is largely caused by missing data on foreign capital (Chapter 67-2). In FY15/16, MoES figures also show substantially lower recurrent spending. At the provincial level, no systematic patterns emerge.

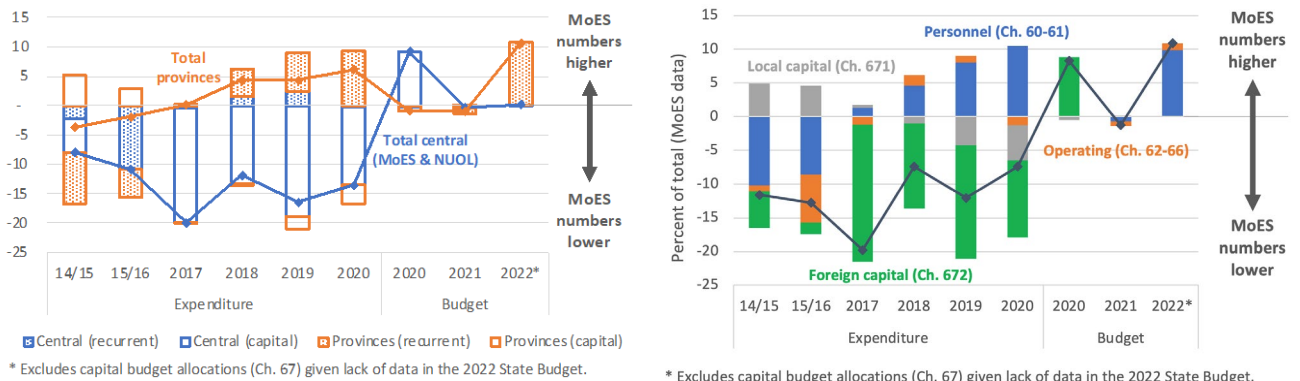
MISs through the LESMIS platform. The same applies to financial and human resource MIS reforms. In addition, sufficient training and change management in affected institutions is important to ensure use of new or reformed MISs and eliminate duplication with previous systems and processes.

⁴⁹ Several of the challenges discussed below constitute long-term challenges for the education sector. For example, the Public and External Financing Report 2009-2014 of the National Education Account Project (UNESCO and IIEP 2016) recommending that *"it is necessary to improve the databases – both public and external – by using the online system for better up-to-date data"* and that there is a need to *"continue improving the data collection questionnaires."*

⁵⁰ Several examples illustrate this. Work-age field values in the data received from the PIMS range from zero to 55, neither matching physical age nor service years. In an extreme case, school level data from the ASC indicated that a single secondary school had 23 management and admin-teaching staff. The initially received annual quota dataset shows lower quota numbers for 2016-17 and 2017-18 (39 administrative staff instead of 84 in 2016-17 and 1,602 teachers instead of 1,736 in 2017-18), while the WMIS download included only 16 provinces.

⁵¹ This point is valid for non-data related functions as well and should be resolved through organizational streamlining in the context of the development of a program-activity structure (see discussion in the next subsection and recommendation 2.5).

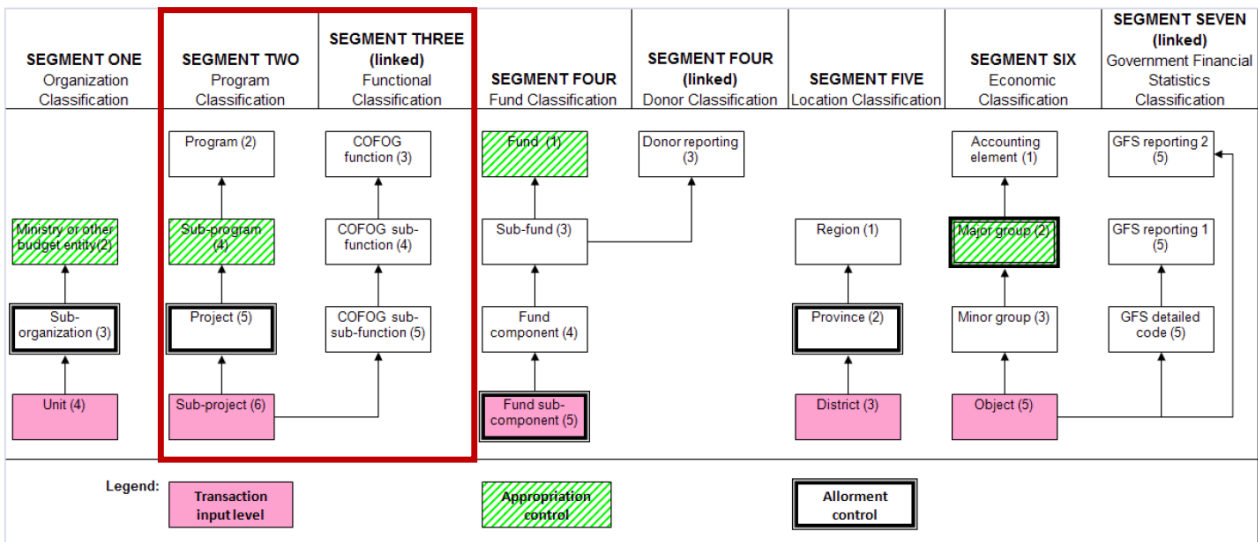
Figure 3.25 Differences in Fiscal Data between MoES and State Budget and Implementation Reports



Sources: MoES Financial Reports 2014/15-2020, MoES Revised Budget 2022, State Budgets 2020-2021, State Budget Implementation Reports 2014-2020, World Bank staff estimates.

- Fiscal data by functional classification, which is essential for monitoring spending trends across education levels and administrative functions, is not available.⁵² However, the new APO MIS may fill this gap.** The underlying cause for this gap is that there is neither a program classification in the current national CoA nor the administrative classification is used in sufficient detail to allow a functional mapping.⁵³ The latest available functional data is from the National Education Accounts project that collected disaggregated data for 2009-2014 through a survey (UNESCO and IIEP 2016). The APO, developed by MoES with development partner support and currently being rolled out, may fill this gap.⁵⁴ The CoA for the APO could not be obtained, so system capabilities and specifications are still to be confirmed. Positively, the Committee deciding on the CoA specifications includes MoF representatives, which is important for alignment with MoF’s FMIS reform plans. The CoA should, at the minimum, comprise a sufficiently detailed administrative/organizational classification that allows a functional mapping; ideally, it should also include a program segment with linked functional mapping (Figure 3.26). In the medium term, the new WOG CoA will provide this capability for the education sector.

Figure 3.26 Generic Linked Hierarchical Data Structure for a Chart of Accounts

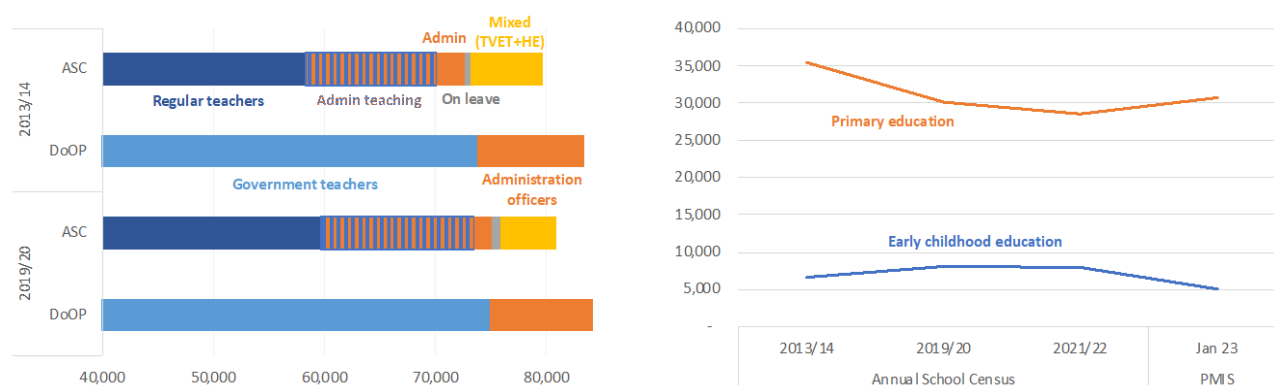


Source: IMF (2011).

⁵² Such data is also essential for benefit incidence analysis, e.g., using the Commitment to Equity (CEQ) methodology.
⁵³ Education sector financial data in the administrative classification is only available for the first-tier agencies (MoES, NUOL, and provinces) and the three provincial universities. As MoES and provincial spending cover a combination of administrative and service delivery functions across education levels (see Box 1 in section 1), this cannot be mapped to a useful functional classification.
⁵⁴ The WMIS also allows recording of transactions by subsector; however, data received for selected quarters of 2022 and 2023 is incomplete, lacking data for several provinces and resulting in unrealistic average salaries by education level when combining WMIS and PMIS data.

- Civil service data is inconsistent across sources and could not be reconciled, hindering analysis of detailed staffing trend analysis.** Personnel data from PMIS and the ASC is divided into different subcategories and shows substantial variation across functional categories and education levels (Figure 3.27).⁵⁵ MoES should standardize categories and definitions to enable dependable staffing analysis, such as to monitor the share of different types of administrative staff. The practice of collecting and maintaining human resource data in both the central education sector PMIS and through the bottom-up ASC in the EMIS should be reviewed to verify the need for such duplication. Any differences resulting from justified parallel processes should be reconciled – for example, if school-level data is collected to cover gaps like volunteers or selectively for verification purposes of central databases. Subsequently, harmonized datasets with consistent breakdowns should be published, ideally in time series that correct any errors identified in earlier years.

Figure 3.27 Differences in Civil Service Data by Functional Category (Left) and Education Subsector (Right)



Sources: Annual School Census, MoES civil service data, MoES PMIS.

- The main gap in education statistics is school-level learning outcome data.** The ASC generates comprehensive education statistics, with annual reports providing largely consistent series of district and province level statistics (except for TVET and higher education data no longer included since school year 2020-21). Instead, learning outcome data is not available, apart from selected assessment reports, which are often delayed or not officially published. Going forward, MoES should more actively track and publish learning outcome data, including at school level.
- In addition, multiple technical issues hinder data access and sharing as well as integration or interfacing of MISs.** Identified challenges include (i) multiple owners or administrators of various MISs and databases, including local private ICT companies; (ii) some of the MISs were developed outside of industry standards with proprietary development frameworks that are not open source; (iii) some of the MISs run on old servers with no backup arrangements; and (iv) data extraction from MISs is time-consuming, with some systems requiring the help of the developer and resulting in data either not available or in formats hindering analysis (e.g., scanned PDF files rather than MIS downloads).

A common driver of data challenges appears to be data collection beyond what can be quality assured.

Data collection efforts and the corresponding MISs often seem to be designed with the aim of generating as much data as possible while considerations on how such data will be quality assured and used being secondary. This results in detailed data in many different formats but limited availability of basic data useful for policymaking. The TIMS may illustrate this best. It is the system where data extraction probably works best, with reports extracted rapidly, but data is incomplete, deemed unreliable for planning purposes, and is ultimately not used in decision-making. The ASC questionnaire is also an example of a complex, time-consuming process that

⁵⁵ The LSB also publishes civil service statistics for 2016/17 to 2020/21. For 2017-18 to 2020-21, the total number of civil servants are broadly consistent with the data provided by MoES DoOP (only lower by 3 in 2020-21) while for 2016-17 the LSB number of 87,575 is higher by 1,265 persons (or 1.5 percent of the total workforce).

generates vast amounts of data beyond what is used in practice or could be quality assured (see, e.g., school-age population discussion in Box 2). As a result, it appears to take a long time for systems to become fully operational, during which they generally cannot readily produce common data in a quality and format that facilitates analysis. This is also the case for systems for which data entry has been ongoing for several years (e.g., PMIS and TIMS).

A focus on basic data needed in decision-making could free up scarce resources and facilitate quality assurance. The starting point would be a particular decision-making process (e.g., number of textbooks to be printed). One would then identify data needed and how such data would be used to inform decision-making. Subsequently, system design and collection and quality assurance processes should be tailored to this. This should start with essential data before gradually advancing to more detailed data after basic functionalities have been established. The decision-making process for textbook printing in the case of the TIMS example mentioned above can illustrate this. As the bottom-up data entry ('pull system') does not yield reliable data, MoES is in practice using a top-down approach to determine printing quantities based on enrolment and replacement rate assumptions ('push system'), which may render the TIMS obsolete. An alternative could be to use data from the TIMS in provinces that reliably enter data and for which quality assurance can be carried out, in combination with a top-down 'push system' in other provinces. Such a 'decision-making process focused' approach could be used to revisit MIS strategies and design as well as data coverage, entry processes, and quality assurance of individual MISs; in its absence, there is a high risk that data collection and management wastes limited staff time. This should be taken into consideration when developing an education sector financial and human resource data management and information system strategy and resolving the identified data challenges.

Recommendation 2.3 Develop an education sector financial and human resource data management and information system strategy to guide education sector data and system improvements and facilitate the migration to (or integration with) the respective government-wide systems.

Further details

The next two to three years will be critical for integrating, consolidating, and advancing WOG system migration readiness of financial and human resource MISs in the education sector, for which the strategy should set out a clear path. This will provide the basis for quality financial and human resource data that is consistent, reliable, and timely.

The activity is envisioned in the LESMIS Strategic Development Plan 2018-2022 and can build upon findings from the assessment undertaken by Beyond Essential Systems (2020). It should consider (i) MIS and data rationalization and integration or exchanges through interfaces to avoid duplication, inconsistencies, and wastage of resources from unnecessarily expansive data collection exercises; (ii) WOG MIS reform plans and future migration to or integration with new WOG systems (including Ministry of Technology & Communications data center); (iii) education sector needs beyond envisioned WOG system functionality (e.g., data on teacher subject specialization and textbooks) and how best to address these; and (iv) LESMIS interlinkages, building on the PMIS-LESMIS relationship strengthening in the LESMIS strategy, and a potential future integration.

The strategy should further provide for adequate training and change management in affected institutions, including to ensure that data generated through the MISs is used in decision-making and that MISs replace existing Excel-based systems rather than being in addition to them. In addition, MoES leadership commitment across departments will be crucial.

Responsibility

Lead: MoES (DoF, DoOP & ICT Center)

Support: MoF, MoHA

Recommendation 2.4 In parallel, continue reforms to improve the quality and usage of data and education sector information systems to provide the evidence base for strategic resource allocation and management.

Further details

While a strategy for financial and human resource MISs is being developed to complement the LESMIS Strategic Development Plan, reforms of individual MISs and their integration should continue. This includes efforts to:

- integrate or interface systems to reduce data entry and inconsistencies across MoES MISs and duplication in data entry at all levels (MoES, PESSs, DESBs)
- explore aligning the CoA of the new MoES APO with the new WOG CoA for the GFIS+/FMIS, including, at a minimum, a sufficiently detailed administrative classification to enable functional mapping and ideally, a program segment
- revisit data needs, collection processes, and entry responsibilities
- harmonize data categories and reporting, including with WOG data
- revisit quality assurance processes and improve data quality
- resolve population data issues discussed in Box 2 in section 1
- move towards open source, common programming languages, and full ownership of systems
- enable download of datasets in database formats, in addition to preconfigured reports, to facilitate analysis
- implement change management and user training as part of reforms

Responsibility

Lead: MoES

Support: LSB, PESSs, DESBs, NUOL

Foundation 2 Strategic and Annual Planning and Budgeting

Strategic planning and budgeting, translated into annual budgets for implementation, are the foundation for efficient, effective, and equitable education service delivery. The lack of strategic planning and budgeting leads to imbalances across education levels, input factors, or locations that are subsequently hard to overcome. This is at least the case in the short- to medium-term and particularly for education infrastructure (schools) that is a key driver for the allocation of recurrent spending (such as teachers and SBGs); but also for teachers, which are difficult to relocate once settled with their families and embedded in a community (Table 3.2). Still, some flexibility even for school facilities exists in the short-term, such as where expanding ECE services can utilize vacated primary schools or classrooms. It is therefore critical to strategically address existing imbalances across education levels, input factors, and locations as well as try to avoid new imbalances from emerging in the first place.

Table 3.2 Stylized Overview of the Scope for Reallocation of Main Education Inputs Over Time

Input factor		Scope for reallocation		
		Short-term	Medium-term	Long-term
Teacher positions	Geographically	Limited	Moderate	High
	Across levels	Limited	Moderate	High
Operations and maintenance	Geographically	Moderate	High	High
	Across levels	Moderate	High	High
School facilities	Geographically	None	Limited	Moderate
	Across levels	Moderate	High	High

Source: World Bank.

In comparison to the nascent strategic resource allocation processes at national level, costed planning and medium-term budgeting in the education sector is advanced. The ESSDP includes a financing plan with breakdowns of main economic (chapters) and functional (education levels and sector management) categories.⁵⁶ The ESSDP financing plan clearly identifies financing gaps and implications for ESSDP targets and education outcomes. Its subsector plans, with results chains down to the activity level, provide a solid foundation for program-based budgeting in the future.⁵⁷ The ESSDP monitoring and evaluation framework provides for annual sector performance reviews and reports, joint sector review missions with key partners, and an ESSDP mid-term review led by MoES DoP, with complementary EU technical support. Coordination mechanisms within the education sector are generally established (see Box 7), with the ESSDP targeting the strengthening of committees for planning and budgeting and teacher allocation. Development partner coordination is managed through the Education Sector Working Group (ESWG).

Box 7 Education Sector Coordination Arrangements in Laos

MoES DoP leads sector coordination through its strategic planning, monitoring, and evaluation functions, reporting to the Vice Minister and Minister. DoP also works closely with DoF Budget Division to coordinate budget preparation by MoES, PESSs, and DESBs, and ensure budget allocations support agreed ESSDP strategies. This is complemented by several coordination bodies, each led or supported by a different MoES department. These include (i) the Planning and Budget Committee (PBC) led by DoP; (ii) the Teacher Allocation Committee (TAC) led by DoOP; (iii) the MTBP Sector Working Group led by DoF; (iv) the Education Sector Plan Coordination Unit (ECU) led by DoP; and (v) the Education Sector Working Group (ESWG) and its five education focal groups (plus one for sports), supported by DoP and the EU.

Each of these committees and groups plays a valuable role in bringing together key stakeholders to coordinate their activities and inputs. However, individually none of them has sufficient remit to deal with the legacy problem of misallocation of teacher positions to urban centers discussed in section 4 or the mandate and influence to negotiate adequate annual resource ceilings and staff quotas with central agencies discussed in section 2, which constitute major resourcing challenges for the sector. Despite its name, the PBC's role is limited to negotiating budget allocations for Chapters 62 and 63 only, and then only for a single budget year. The TAC looks at the allocation of centrally determined annual quotas for new staff; only in the last two years has the allocation within the education sector been based on individual school needs rather than where vacancies arise. The MoES MTBP Working Group will support the pilot implementation of the MoF led SBPS and MTBP reforms. The Working Group has a medium-term focus, but it has only recently been formed and needs a government approved SBPS to provide medium-term ceilings to become fully effective. The ESWG and its focus groups provide a valuable forum for MoES-partner dialogue, and to agree on priority needs for research and technical support. There is no single governance or coordination function either for MoES or the broader education sector that brings together MoES department and PESS heads.

However, the lack of transparent national medium-term macro-fiscal planning undermines medium-term budgeting for education. There has been no government budget policy strategy that an education sector financing plan can feed into or leverage, as the sector attempts to secure greater predictability in its medium-

⁵⁶ A minor issue is that scholarships are budgeted under Administration and Management, which overstates the general administration spending. School feeding is also added under Administration in the revised financing plan from August 2021. This should be adjusted and instead either budgeted as an activity under each education subsector or within a separate program covering subsidiary services to education (COFOG code 7096) as a subprogram for school feeding, with separate activities for each education subsector to facilitate subsector mapping.

⁵⁷ See ESSDP 2021-2025 Chapter 3 on Context, and annex 1: Result Chain.

term government funding and strives to balance payroll and non-salary spending. While the education sector pilot of the MTBP reforms provides a platform for deeper dialogue between MoES and central agencies, the medium-term ceilings communicated in 2022 only cover the central MoES budget and are incremental in nature. MoES is left to react to central agency resourcing directions on short notice; these directions have become even shorter-term and are regularly delayed well into the new fiscal year in the ongoing fiscal crisis. This particularly affects civil service quotas and capital budget ceilings – neither had been confirmed by the end of January 2023 for FY23. Such uncertainty and frequent adjustments occupy scarce education sector capacities, which negatively affects service delivery and highlights the importance of advancing national-level reforms for service delivery. The approval of the Prime Minister’s Decree on Budget Formulation in April 2023 may provide new impetus to advance reforms to strengthen MTBP and the SBPS.

The education sector revised its financing plan to account for COVID-19 impacts and the emerging economic and fiscal crisis. An EU assessment on budget support eligibility concluded in May 2021 that the ESSDP was both credible and fully relevant to the challenges of the sector, but that its ambitious targets may need to be adjusted given emerging budget constraints. Subsequently, MoES developed two alternative ESSDP financing scenarios and presented them to the ESWG in August 2021, incorporating impacts of budget cuts and the downsizing policy to date and expected future impacts.⁵⁸ The practice of adjusting plans and budgets based on new information is commendable, and facilitates a strategic prioritization of (at least the discretionary share of) resources. However, limited information sharing from central agencies hinders this process.

MoES has done a better job than most other ministries in linking its strategic plan with annual operating plans and budgets, including at subnational level. A strength of MoES in its approach to planning and budgeting is that DoP and DoF Budget Division jointly consult with PESSs and DESBs early in the annual budget cycle. This helps to ensure that central MoES, PESSs, and DESBs annual work plans and budget proposals are credible and consistent with the ESSDP strategies and targets, even where those targets have been revised down because of the fiscal challenges, limiting available payroll and nonpayroll budget. Annual budget proposals of PESSs incorporate lower level DESBs and are submitted to both the Province and MoES.⁵⁹ These processes are supported by the PBMS and its ACSEP, RBMS, and planned IBMS modules discussed above, which are gradually being interfaced with the PMIS, WMIS, and the APO that is under development. The efforts to strengthen links between plans and budgets are being supported by the EU through its education sector reform contract with the government.

Budget rigidities around personnel allocations shift the focus of education entities’ budget preparation to operational funding that accounts for a small share of the budget. Payroll and allowance budgets (Chapters 60 and 61) are determined by legacy staffing levels and any new annual quota allocated from MoHA through DoOP to MoES controlled institutions or PESSs. In the ongoing fiscal crisis, this leaves limited fiscal space for operational funding that is mostly budgeted under Chapters 62 and 63, with minor allocations in Chapters 65 and 66. The highly centralized and segregated WOG personnel and operational budget decision-making currently constitutes a budget rigidity, hindering reprioritization across both at the sectoral level. In the medium term, as economic and domestic resource mobilization reforms take hold and increase the available resource envelope, the SBPS and MTBP reforms, linked to a more strategic civil-service right-sizing approach,

⁵⁸ The scenarios vary in their assumptions regarding annual quotas, with the pessimistic scenario assuming the annual quota frozen at the 2021 level of 535 new staff per year through to 2025. Additionally, both scenarios include cuts to non-salary recurrent and capital spending, including reduced in-service teacher training and scholarships.

⁵⁹ MoES starts the budget process around March in the year preceding the budget, in consultation with the PESSs and without knowing MoF ceilings. When the ceilings are announced by MoF, MoES works with PESSs to adjust their proposals. The second level PESS budget proposal officially forms part of the first level Province budget proposal to MoF SBD (see annex 2). In practice, each PESS negotiates and confirms their budget proposal with MoES DoP/DoF, and then submits it officially to the Province, with a copy to MoES DoF. Provincial budget proposals are submitted to MoF SBD by the relevant provincial administration. After approval by the Government and the National Assembly, the State Budget Plan will show a separate budget for each province broken down by sector, including for education in the province. The same amounts are included in the Provincial Budget Plan that is subsequently submitted to each of the Provincial People’s Assembly for approval (December).

would help to reduce this budget rigidity and could facilitate a progressive shift in budget shares from payroll to operating (see discussion and recommendations in section 2).

Capital investment budgeting is undermined by limited financing that is largely used to pay off arrears.

Capital investment budgeting for WOG and the education sector follows a parallel process through MPI and equivalent Provincial Departments of Planning and Investment (PDPI) at the subnational level. Overall management of the capital investment budget (Chapter 67) lies with MPI, as regulated by the Public Investment Law (2015) and the Public Investment Plan Manual. In 2021 and 2022, the fiscal crisis significantly reduced new funding available for capital investment; as a result, the 2022 and 2023 State Budget Plans approved by the National Assembly did not include a capital investment budget. Even prior to the fiscal crisis, most of the capital investment budget was committed to paying off arrears owing to contractors for work completed in earlier years, or to ongoing projects commenced in earlier years. Some of these arrears are for off-budget projects, i.e., unsolicited proposals to provinces from private construction companies who prefinance the projects on the understanding that reimbursement will be made by the province later. This means that there has been little funding available to allow new projects to commence, at least through the State Budget Plan. Strengthening government-wide public investment management, procurement, and debt management will be important to resolve capital investment planning and budgeting issues that also affect the education sector (recommendation 1.1 in section 2). Challenges with education infrastructure are discussed in section 4 below.

Given the strong, established practices in the education sector, pragmatic program budgeting could bolster strategic planning, budgeting, and management of resources going forward.

Pragmatic program budgeting is a simplified and more robust approach proposed by the World Bank to help countries “*reap the benefits of program budgeting, without having to deal with the associated implementation pitfalls*” (World Bank 2022e). Such an approach could facilitate the translation of subsector costings from the ESSDP’s financing plan into annual budgets. It could also provide budget and expenditure data by functional classification to help monitor spending trends and manage service delivery. The approach also foresees the alignment of programs (and subprograms and activities) and organizational structures to ensure responsibilities are clearly assigned to support accountability. This could help education sector entities to revisit ongoing organizational restructuring efforts to eliminate remaining institutional fragmentation within programs and activities.⁶⁰ An example of such possible fragmentation is the data quality assurance function discussed in the previous subsection. A further example is potential fragmentation in functions around teaching and learning materials discussed in section 4. These foundational steps – a program-activity structure for budgeting as well as accounting and financial reporting that is aligned with organizational structures – form the basis for more far-reaching elements of pragmatic program budgeting, which comprise budget approval at program level and greater flexibility in the management of inputs.⁶¹ This needs to be developed strategically at the whole-of-government level (even if sectoral solutions can vary) and is a longer-term endeavor.

Technically, a program-activity structure needs to be developed that would also form the basis for future functional mapping in the new FMIS (and possibly first in the APO).

COFOG’s education classification in the IMF’s Governance Finance Statistics Manual (Table 3.3), which provides a high-level functional breakdown, could form the basis of a program structure. In practice, a further disaggregation of different support services that fall under subsidiary services (COGOF 70960) and education not elsewhere classified (70980) is helpful to monitor spending trends and avoid “administrative creep” where nondirectly service-related functions start crowding

⁶⁰ Ongoing organizational restructuring of MoES, PESSs, and DESBs has already led to some streamlining, including a reduction in MoES departments. Further, selected education institutions under MoES have been reassigned to PESSs, reducing the list of institutions under MoES from 36 to 32. In addition to realizing efficiencies by restructuring, such as freeing up administrative staff positions for reallocation to service delivery, aligning organizational structures to functions can help reduce fragmentation (silos) of closely related functions across departments.

⁶¹ Greater flexibility between salary and non-salary components of the budget could be beneficial for the education sector in Laos, but benefits and risks from such increased management flexibility of inputs need to be carefully weighed and safeguards put in place (e.g., through the establishment of clear virement rules and processes). For example, there could be incentives at the institutional, unit, or individual level to hire additional staff, which could further crowd out limited non-salary operational budgets, or to use available operational budgets for travel rather than an appropriate mix of input factors.

out service delivery. Such a breakdown could include subprograms or activities covering, for example, (i) leadership, policy development, and coordination; (ii) finance, and human resource management; (iii) standards and quality assurance, including curriculum development; (iv) examination; and (v) professional development, including teacher training. The specifics need to be defined based on sector needs and subsequently integrated into the program segment of the education sector APO (if configured) and the new WOG CoA. As briefly discussed in section 2, the latter includes a program segment, enabling a useful functional mapping in the future. However, according to MoF's current reform plans, rolling out this specific functionality is a low priority and currently scheduled towards the end of their CoA reform program. However, MoF is expected to allow sectors to make use of this functionality earlier on a voluntary basis.

Table 3.3 COFOG Education Sector Breakdown

Level 1	Level 2	Level 3
709 Education	7091 Preprimary and primary education	70911 Preprimary education 70912 Primary education
	7092 Secondary education	70921 Lower-secondary education 70922 Upper-secondary education
	7093 Post-secondary nontertiary education	70930 Post-secondary, nontertiary education
	7094 Tertiary education	70941 First stage of tertiary education 70942 Second stage of tertiary education
	7095 Education not definable by level	70950 Education not definable by level
	7096 Subsidiary services to education	70960 Subsidiary services to education
	7097 Research and development (R&D) in education	70970 R&D Education
	7098 Education not elsewhere classified (n.e.c.)	70980 Education n.e.c.

Source: IMF 2014. Government Finance Statistics Manual 2014. Washington, DC.

Complementary to the program classification, the new WOG economic classification code list should cater for education sector needs. The current economic code list in the GFIS is detailed but does not facilitate analysis. For example, personnel allowances are spread across Chapters 60 and 61, with fuel allowances in the education sector even in Chapter 62 (under code 62-10-01-00). Similarly, SBGs cannot be identified in budget and spending reports but are instead spread across several codes, reducing transparency and potentially also hinder communication of the impact of budget cuts affecting SBGs. New economic item (sub-)codes are generally technically easy to add to a classification but would require the MoES to raise this with MoF.

Information relevant for service delivery can often be transmitted through the economic or the program classification. For example, SBGs could be included as an economic item code, but also through an "SBG activity" under each subsector as part of the program classification. The same can be done for school feeding or teaching and learning materials. Using the program-activity structure for these allows the budgeting and recording of the economic (sub-)item composition of each of these activities. For example, SBGs may comprise spending on textbooks, fuel, and building materials, with such information lost if recorded against a single economic item code. That said, collecting detailed data can be more time-consuming and error-prone, so it should first be determined how the additional information would improve decision-making (see discussion on data for decision-making in foundation 1 of section 3). In conclusion, both classifications need to make sense together.

Recommendation 2.5 Develop the foundations for a pragmatic program budgeting system for the education sector and align organizational structures of public education institutions to facilitate strategic and accountable resource allocation and management.

Further details

The recommendation refers to a simplified, more robust approach to program budgeting proposed by World Bank (2022e) that could facilitate the translation of subsector costings from the ESSDP’s financing plan into annual budgets and provide budget and expenditure data by functional classification to help monitor spending trends and manage service delivery. Such a reform can build on advanced medium-term and annual planning and budgeting capabilities in the education sector. It would need to be tailored to education sector needs in Laos and be aligned to WOG requirements and reform plans of the CoA and the GFIS+/FMIS, which will include a program classification.

Two foundational steps towards pragmatic program budgeting are initially recommended: (i) the development of a program-activity structure for budgeting and accounting and financial reporting, which should consider the existing and new CoA economic code lists and missing items important for education service management added as necessary; and (ii) organizational structures should be aligned with programs (and subprograms and activities) to ensure responsibilities are clearly assigned and support accountability.

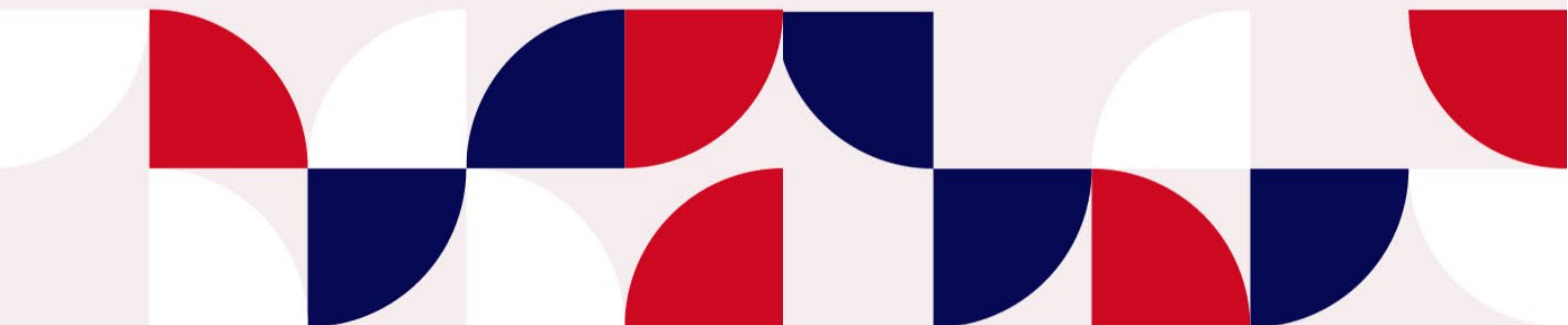
Responsibility

Lead: MoES (DoP and DoF)

Support: MoF, PESSs, DESBs

Section 4

The Allocation and Management of Specific Education Inputs



This section presents an analysis of four education inputs that collectively constitute the main elements of service delivery in Laos: (1) Teachers; (2) School Financing (SBG); (3) Teaching and Learning Materials; and (4) School Infrastructure. The adequacy of resources, efficiency of resource use, and effectiveness of management systems are analyzed for each input. The section also describes the underlying governance bottlenecks that constrain better outcomes (summarized using ‘fishbone’ diagrams) and offers recommendations for addressing them. This section follows the methodology set out in the FinEd: PFM in Education Toolkit (World Bank 2022g).

Input 1 Teachers

Budget cuts to the education sector are causing a gradual depletion of the teacher workforce, but the impact on service delivery is tempered by a corresponding decline in enrolment. Lower public financing and the government’s civil service downsizing strategy have contributed to a net outflow of teachers from the sector over the past five years, as retirements and resignations outstrip the number of newly recruited teachers (Figure 4.1). This is exacerbated by a decline in the number of volunteer teachers, whose incentive to serve is eroded by the decline in quota and so diminished prospects for graduation onto a permanent contract. Concurrently, enrolment at both primary (Figure 4.2 panel 1) and secondary level (Figure 4.3 panel 1) has significantly declined. This has meant the average PTR has remained stable at 25:1 at primary level (Figure 4.2 panel 2) and even improve to 19:1 at secondary level (Figure 4.3 panel 2). While the decline in enrolment is concerning, the size of the teacher workforce in 2021-22 in relation to pupil numbers was not especially low at the aggregate level. The average PTR in Laos at both primary and secondary levels is favorable in comparison to neighboring countries and the LMIC average (Figure 4.2 panel 8 and Figure 4.3 panel 7) and when considering historic PTR levels in Laos over the past two decades, which have invariably been significantly higher than they are today (Figure 4.3 panel 8).

Assessing the adequacy of teacher numbers is sensitive to the choice and interpretation of regulations that determine teacher deployment targets, but available data suggests that overall headcount is not yet at crisis levels. Various decrees and guidelines have been adopted in recent years (Table 4.1) which establish alternative PTR standards.⁶² At primary level, analysis suggests a modest overall net deficit of civil servant teachers in 2021-22 against the 2018 standard. This gap was covered by volunteer teachers (Figure 4.2 panel 3). The existence of many small schools contributes significantly to the problem of teacher deficits.⁶³ At secondary level, there was a more significant net deficit in civil service teachers, which was only just bridged by volunteers in 2021-22 (Figure 4.3 panel 3). The large net deficit at secondary level – despite a low national average PTR of 19:1 – can be explained to a large extent by the generous criteria of the 2018 standard (Figure 4.3 panel 4).⁶⁴ When applying the more moderate standard of the (draft) Revised Decree, this deficit turns into a large net surplus with far fewer schools experiencing a shortage (Figure 4.3 panel 6), indicating a substantially more well-resourced teacher workforce in comparison to the primary subsector (as discussed in section 3). This serves to illustrate the sensitivity of analysis to different policy standards and the growing need to reconsider the 2018 PTR targets in response to the severe resource constraints facing the sector.

⁶² The analysis in this report primarily uses the *Annual Teacher Requirement Planning Guideline* (2018) as it provides the most detailed explanation of targeted teacher standards and governs the bottom-up annual teacher requirement planning at school level. However, we also refer to the 2012 Decree and the (draft) Revised Decree on Teachers for comparative analytical purposes.

⁶³ At primary level, 52 percent of schools have 65 or fewer pupils across all five grades, with 78 percent of schools having 110 or less. The required PTR standard is lower for small schools (e.g., the target PTR for schools <31 pupils is 15:1) which explains how an overall teacher deficit can exist despite a relatively good national average PTR.

⁶⁴ At secondary level, the 2018 standard requires the deployment of two teachers per class at each grade, with one class defined as 36 pupils. This equates to a target PTR of 18:1 which is significantly lower than the 2012 decree. The 2018 standard reflects the policy of the MoES to have a high degree of subject specialization among teachers, which is less cost-efficient considering the large number of small secondary schools across the country.

Table 4.1 Decrees and Regulations Concerning Teacher Resourcing Standards

	Primary Level	Secondary Level
Decree No. 177 on Teachers (2012)	PTR of 34:1	PTR of 30:1 (Lower); PTR of 25:1 (Upper)
Annual Teacher Requirement Planning Guideline (2018)	PTR of 15:1 (< 31 pupils) PTR of 20:1 (31-65 pupils) PTR of 25:1 (66-110 pupils) PTR of 30:1 (111-160 pupils)* PTR of 35:1 (> 160 students)* <i>*excluding the headteacher</i>	Two teachers per class. Number of classes (per grade) equals the total number of pupils (per grade) divided by 36.
Revised Decree on Teachers (draft)	Same as 2018 Guideline	PTR of 30:1 (Lower); PTR of 25:1 (Upper)

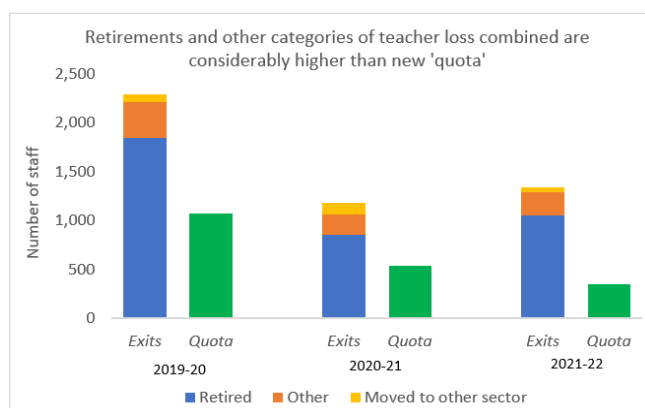
Irrespective of the standard adopted, there is a significant imbalance in teacher deployment across schools, indicating that significant efficiency gains are feasible within the existing resource envelope.

Analysis of 2021-22 data reveals significant disparities in teacher distribution across schools. At primary level, the majority (59 percent) of schools have either a surplus or a deficit of civil servant teachers (Figure 4.2 panel 4). Redeployment of surplus teachers to schools with vacancies could theoretically have addressed up to 85 percent of the total deficit in 2021-22 (Figure 4.2 panel 3). A large proportion (68 percent) of deficit schools are small- or medium-sized (110 students or less) and tend to be situated in rural areas with higher levels of poverty, indicating a challenge in attracting teachers to serve in these locations (Figure 4.2 panel 6). This corresponds to the results of the 2021 SABER endline survey, which reported the lack of teachers as a far more significant constraint in rural areas than for urban schools (World Bank 2021b). At secondary level, the imbalance is even higher, with almost a quarter (24 percent) of schools having either a surplus or deficit in civil servant teachers of greater than 40 percent of the required number (Figure 4.3 panel 5). Against the (draft) 2022 standard, the proportion of secondary schools with surplus teachers is higher and deficit schools are fewer, providing significant scope for reallocation and efficiency gains.

Concerns regarding an accelerating number of retirements and teachers transferring to other sectors do not appear to be supported by available data.

Despite a limited available timeseries, data provided on the categories of annual loss of teachers does not appear to indicate any imbalance in the age structure of the teacher workforce (Figure 4.1). Indeed, the annual number of retirements in recent years is lower than would be expected under plausible assumptions.⁶⁵ Neither does there appear to be any major problem of teachers using the education sector as a gateway into public sector employment in other sectors. The dominant cause of the depleted workforce is the decline in quota.

Figure 4.1 Net Outflow of Teachers from Education Sector



Source: MoES Department of Organization & Personnel

Three important factors are likely to put increasing pressure on teacher numbers in the near term, further emphasizing the need to optimize existing resources by addressing imbalances in deployment. First, the ongoing fiscal crisis in Laos will take time to resolve and the civil service downsizing program is yet to be completed. This indicates that a continuation of low quota allocation for the education sector should be expected over the short- to medium-term with obvious implications for teacher numbers.⁶⁶ Second, in the (desirable) scenario of a return to higher enrolment, a larger cohort of teachers will be needed to balance the rise in pupil numbers. Analysis suggests that under full primary enrolment the number of teachers (including →

⁶⁵ Assuming a total workforce of approximately 80,000 teachers across all levels with a balanced age distribution and a 40-year working career, one would expect on average around 2,000 retirements per year – higher than actual in each of the last three school years.

⁶⁶ It is important to note that the analysis presented in this section is based on data from the 2021-22 school year (the latest available) which is already a year out-of-date; the situation is already likely worse than indicated.



volunteers) is already inadequate (Figure 4.2 panel 7). Although universal lower secondary education as stipulated by the 2014 Education Law remains an aspiration, any increases in participation will put further pressure on teacher capacity. Third, any changes made to the 'progressive promotion' policy in which students proceed through to the next grade despite not meeting attainment standards (discussed in section 1) would imply further increases in enrolment rates and consequently higher teacher demand.

A more cost-effective and sustainable approach to teacher deployment is needed in the context of limited resources, especially given the need to avoid further cuts to operational spending. Teacher deployment imbalances are already resulting in a reliance on multi-grade classrooms and school clustering (where teachers are shared across schools) in districts that have teacher shortages. Further declines in teacher numbers (as well as potential increases in enrolment) will eventually force a reconsideration of current deployment standards. These pressures will require a relaxation of target PTRs, particularly at secondary level, to ensure that available human resources are deployed in the most efficient way possible, especially if further declines in nonwage spending are to be avoided.⁶⁷

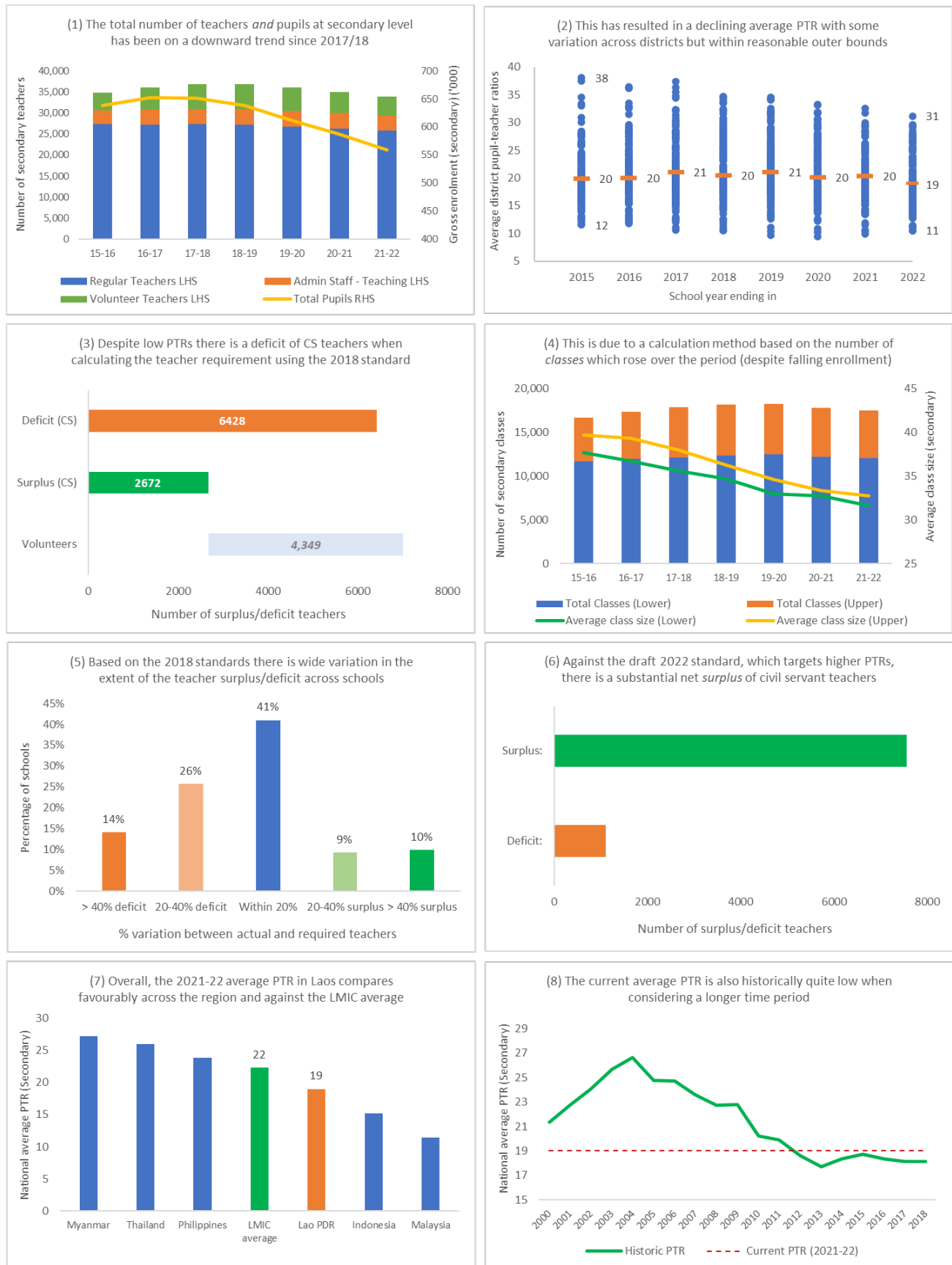
⁶⁷ The (draft) 2022 Revised Decree on Teachers has already proposed a revised standard at secondary level, returning to the standard previously adopted in the 2012 Decree (PTR of 30:1 for lower secondary and 25:1 for upper secondary).

Figure 4.2 Analysis of the Adequacy and Efficiency of the Teacher Workforce (Primary Level)



Sources: LESMIS 2021-22; Annual School Census 2015-22; Population and Housing Census 2015; World Bank WDIs 2022.

Figure 4.3 Analysis of the Adequacy and Efficiency of the Teacher Workforce (Secondary Level)



Sources: LESMIS 2021-22; Annual School Census 2015-22; World Bank WDIs 2022.

Higher investment in teacher training is urgently needed given the very low skill level of existing teachers, which significantly contributes to poor learning outcomes and highlights the need to protect nonwage spending. Learning outcomes in Laos have remained persistently very low over the last two decades (see section 1, key issue 1) despite significantly improved PTRs over the period. Enhancing the skill level of teachers will likely generate a greater impact on learning than simply recruiting more teachers.⁶⁸ Teacher content knowledge is currently extremely low, with a recent study indicating that approximately half of all teachers scored less than 50 percent in teacher assessments for Lao language and mathematics (Comba 2021).⁶⁹ This is supported by the findings of several learning assessments, which identify major deficiencies in teacher skill levels and training. For instance, the recent ASLO report noted that “nearly half of Grade 9 teachers reported they had not received training in the curriculum they are teaching” (MoES 2019). Given the close link between teacher capacity and student achievement, MoES should prioritize up-skilling the existing teacher workforce over the recruitment of large numbers of additional teachers and avoid further cuts to the nonwage recurrent budget (which includes allocations for teacher training and pedagogical support, but which also appears closer to reaching critical levels (see below)).

The PFM and HRM systems required for the most basic elements of teacher management are largely in place and appear to be working reasonably well. The critical objective of ensuring that teacher salaries and benefits are paid on time appears to be being achieved. No school reported salary payments as a significant problem in the 2021 SABER survey (a finding that was confirmed during fieldwork at PESS and DESB level for this report). In the absence of any government-wide payroll system, the MoES has developed and rolled-out its own *Wage Management Information System* (WMIS) to standardize the monthly payroll process and replace the previous, error-prone Excel-based system. The system is functional in most PESS and DESB offices, the latter of which handles the monthly payroll for school-level staff. However, WMIS is not yet functional in at least three PESS offices (and the DESBs under their supervision) which continue to maintain separate Excel-based systems. This complicates the compilation of payroll information and spending data and reduces confidence in data quality and assurance processes.⁷⁰ Separate personnel records are maintained on the *Personnel Management Information System* (PMIS). Currently, the PMIS system lacks the ability to track subject-specific teachers at the school level; however, the DoOP is currently working to develop this functionality which will provide more granular data to help inform teacher deployment decisions (especially at secondary level). Further efforts will be made during 2023 to create an interface between the two systems, thus promoting consistency in the use of personnel data for HR and payroll processes.⁷¹

However, the lack of medium-term planning for teacher demand and allocation, combined with the mechanics of the current quota system, undermines strategic management and is resulting in an unsystematic downsizing. Currently, teacher demand is determined by the annual process of teacher requirement planning, which involves individual schools drawing up detailed recruitment plans that are subsequently compiled and aggregated at DESB, PESS and MoES levels. This process creates a very large amount of data, which cannot be verified for accuracy and results in a recruitment target that far exceeds available resources.⁷² Decisions regarding the allocation of new quota currently reside with the Teacher Allocation Committee within MoES. This is carried out on an annual basis and is not grounded in any medium-term human resource plan (for instance, which targets improvements in PTR imbalances across districts). In part, this is because the budgeting process in Laos is such that medium-term budget allocations for payroll are unavailable.

⁶⁸ The 2019 SEA-PLM assessment report observes that at primary level “there is no consistent pattern (or correlation) between student-teacher ratio and student test scores,” suggesting that teacher numbers are not the dominant factor in determining learning outcomes.

⁶⁹ This finding is consistent with an earlier study (World Bank 2018) which found that only 2.4 percent of teachers achieved a score of 80 percent or better on the teacher assessment covering Lao language and mathematics, with an average score of 52 percent.

⁷⁰ The PEIR/FinEd team did not receive a (complete) dataset on national payroll expenditure broken down by Province, indicative of broader challenges of data accuracy, compilation, and quality assurance.

⁷¹ Although working reasonably well on their own terms, both the WMIS and the PMIS are bespoke MoES systems and are therefore not recognized as “official” systems by central agencies. This means that the previous manual system often must be maintained in parallel. For instance, some Provincial Treasury departments requires an Excel version of the payroll to enable approval through its own process. Although this does not necessarily impact the integrity of the system, it does represent an inefficiency caused by a lack of streamlining.

⁷² For instance, in 2021-22 MoES requested a quota of 5,630 for new teacher hires but received authorization for only 350 positions.

Furthermore, the concept of “quota” relates to the individual *teacher* rather than each *school*. This means that once a teacher retires or resigns, the position is lost and the school does not have the automatic right to request a replacement (instead, it must hope for an allocation of new quota in the next budget round). Given that the size of the annual quota is now well below replacement levels, downsizing is happening in an unsystematic manner, based on the location of retirees, significantly limiting the predictability of staffing and hindering a more coherent and gradual rebalancing. While there have been some positive developments in response to the downsizing policy (e.g., DoOP allocating quota based on shortages rather than where vacancies arise), this is far from sufficient for ensuring that teacher allocation outcomes significantly improve over time. More focus is needed on complementing the bottom-up planning process with stronger top-down processes that generate greater realism and more accountability for improving teacher allocation outcomes.

Recommendation 3.1. Develop a medium-term national school staffing strategy with adjusted PTR standards that clearly defines teacher needs beyond the immediate next year to establish more predictability in staffing levels and improve equity in teacher allocation.

Further Details

There is a need to develop basic medium-term teacher demand forecasting capabilities within the MoES to guide annual allocation decisions. This requires development of a centralized analytic function looking at teacher allocation trends and projections at a more ‘macro’ level to complement the bottom-up planning process. For instance, by monitoring the variation in District level PTRs, incentivizing remedial action by PESS and allocating quota accordingly. Such an approach would also enable analysis of the impact of different policy options, such as differing PTR standards. This should be jointly developed with MoHA and draw on the ongoing analytical and technical assistance supported by development partners (such as the technical support provided by the EU on assessing and improving the equity of teacher allocation across districts).

Responsibility

Lead: MoES Support: MoHA

The lack of an effective teacher rotation policy and system hinders improved balance in teacher deployment across schools and blocks efforts to promote a better distribution of scarce resources.

Significant monetary incentives to compensate teachers who are appointed to hardship locations have been introduced but are apparently insufficient in offsetting the downsides of working in such places. The lack of any other significant nonmonetary incentives (e.g., linking professional development and promotion to the willingness to serve even on a temporary basis in hardship locations) is notable. Teacher transfer policies are significantly under-developed, to the extent that redeployment from one district to another is rarely undertaken in practice and usually only happens on request by the teacher.⁷³ As a result, there is effectively no teacher rotation system currently in place; once a teacher is deployed to a school it is *de facto* permanent and the MoES appears to have very limited scope to make subsequent adjustments.⁷⁴ These rigidities seriously inhibit efforts to redeploy surplus teachers to deficit locations and allow distributional inefficiencies to persist. While the transfer of teachers across districts and provinces are understandably difficult, analysis suggests that a significant improvement in teacher allocation could be achieved through the rotation of teachers *within* districts.⁷⁵

⁷³ Consultations with DESB officials revealed that even transfers across schools within the same district were unusual and required approval from the MoES – a process that was reported to take considerable time.

⁷⁴ The *de facto* permanent nature of teaching positions likely reinforces the disincentive to serve in a hardship location, as once deployed to such as school, it will likely be difficult for the individual to get redeployed to their preferred location.

⁷⁵ Analysis of school level data suggests that 38 percent of unfilled positions nationwide could be filled by redistributing surplus teachers to deficit schools *within the same district*.

Recommendation 3.1.2 Introduce teacher rotation policies that include nonmonetary incentives to enable greater flexibility for addressing the current imbalances in teacher deployment.

Further Details

There is a critical need to introduce greater flexibility in the teacher management system for addressing imbalances in teacher deployment across districts in Laos. Options include: (1) deploying newly recruited teachers to hardship locations for a limited period (three to five years) after which they can apply for a vacant position in an urban area⁷⁶ and (2) linking promotion to the requirement to serve in a hardship location for an initial period. In addition, performance-based funding linked to the achievement of predetermined targets could offer additional incentives to DESBs to address existing teacher imbalances (as planned under the GPE-III cluster-based pilots).

Responsibility

Lead: MoES Support: MoHA

The inability to employ teachers on a contract basis further limits flexibility in teacher management and blocks a potentially useful complementary measure for addressing teacher imbalances.

The policy framework does not currently allow MoES to recruit teachers on a time-limited basis, as only permanent civil servant positions are authorized by MoHA at primary and secondary level. This severely limits the ability of the MoES to manage evolving teacher demand using limited-duration contracts, which allow for periodic reassignment of teachers across locations according to changing staffing needs (including temporary cover for teachers on maternity leave). Experience elsewhere in the region (e.g., Muralidharan et. al 2013) suggests that the introduction of contract-teachers could yield significant benefits in teacher distribution outcomes, as well as potentially improve overall service delivery via stronger performance incentives and greater cost-effectiveness.

Recommendation 3.1.3 Establish a new category of “contract” teachers that enables MoES to appoint staff for a limited time to fill urgent gaps at specific schools, thus providing an additional lever for managing teacher imbalances in the short term.

Further Details

Contract teachers could be drawn from the existing pool of volunteers as well as newly qualified teachers from TTCs, and be appointed on a short-term basis (i.e., three to five years) to a specific school. At the end of the contract term, MoES could choose to renew the contract, offer the individual a position at a different school where needs are greater, promote the teacher to civil servant status, or end the employment. This approach would allow for more flexibility and potentially support the rebalancing of teacher deployment across the country. Decisions on the deployment of contract teachers should be made by the Teacher Allocation Committee in the MoES to ensure coherence in meeting policy standards.

Responsibility

Lead: MoES Support: MoHA

⁷⁶ This is currently envisioned within the draft National Teacher Policy being developed by MoES with support from UNESCO.

There is mixed evidence on the extent of unauthorized teacher absenteeism across schools in Laos, but where it does exist, it has a major impact on learning. Available information on the magnitude of teacher absenteeism is inconsistent, with some sources suggesting it is a bigger problem than other sources. For instance, the 2018 SABER survey reported that on average teachers are absent from school 16 percent of the time and absent in the classroom 25 percent of the time, which is lower than comparator countries (World Bank 2018c). A somewhat different picture is presented by the SEA-PLM survey which found that 60 percent of Grade 5 students reported that teachers were “sometimes” or “often” late or absent from the classroom (MoES and UNICEF 2022).⁷⁷ Data show a broad range of reasons for teacher absence, with nonapproved absences being seemingly negligible.⁷⁸ Regardless of the extent of teacher absenteeism, its impact is clear: according to the SEA-PLM survey, student test scores were significantly lower when they reported that the teacher was often late or absent. This points towards a need for improved teacher monitoring to address the issue and prevent it from becoming a bigger problem.

Recommendation 3.1.4 Improve the monitoring of teacher absenteeism by providing additional support to school principals and Village Education Development Committees (VEDCs) – including the use of appropriate technology.

Further Details

Additional research is needed to better understand the reasons behind teacher absenteeism. Measures that enable collective monitoring and strict action by school principals, parents and VEDCs should be introduced to school management reforms, including the introduction of innovative technological solutions such as real-time mobile monitoring. Learning from the practices used in private schools may be instructive.

Responsibility

Lead: MoES Support: DESBs and VEDCs

Cuts to operational budgets limit the capacity of districts to support teacher professional development functions as well as to carry out general oversight functions. With fewer resources available, DESBs are increasingly unable to provide pedagogical support to teachers via the established system of regular school visits from teacher development staff (formerly known as pedagogical advisers). At secondary level, the ASLO survey reports that approximately half of Grade 9 teachers had not been visited by a pedagogical adviser in the last year, meaning that they did not have the opportunity to benefit from feedback on how to improve their teaching practices (MoES 2019). Dwindling resources have now forced the Department of Teacher Education to adjust to a lower-cost model in which DESBs will train school-level “internal pedagogical support staff” (whose costs are already accounted for) to perform a similar function as pedagogical advisors. While this will reduce the number of school visits required and thus provide savings to DESB budgets, it is unclear whether the new arrangement will be sufficient for ensuring effective continuous professional development (CPD) for teachers over the longer term. Continued cuts to operational spending may also reduce the capacity of DESBs to provide more general oversight of schools, which may lead to further problems such as increasing teacher absenteeism.

⁷⁷ SEA-PLM also found that 40 percent of students report having fewer than two lessons per week in the subjects of Lao language and mathematics despite the curriculum requiring eight and four lessons respectively, an outcome possibly linked to teacher absenteeism

⁷⁸ The most reported reasons for teacher absenteeism include ‘maternity leave’ (24 percent), ‘sick leave’ (15 percent) and ‘field trip’ (13 percent) with only 2 percent of cases reported to be unapproved (World Bank 2018).

Recommendation 3.1.5 Introduce innovative technological solutions to support learning in the classroom, such as the ‘blended’ learning model which can be delivered with relatively fewer human resources and customized to accommodate student needs.

Further Details

In remote locations that are likely to continue experiencing teacher shortages for the foreseeable future, technological solutions such as application-based learning via tablets or laptops should be considered as a second-best alternative. A ‘blended’ learning model may be feasible to deliver with relatively lower human resources. Such technologies have the additional advantage of being able to be customized to support instruction using a variety of local languages, thus improving the learning experience for all children. The MoES, with support from UNICEF and the EU, established a digital teaching and learning platform ([Khang Panya Lao](#)) following school closures during the COVID-19 pandemic. The platform already has over 300,000 users. The platform houses all national curriculum content and additional learning resources and appears to be a good foundation on which to develop further learning applications. An evaluation of the existing platform could be usefully carried out to inform the strategy of how best to build on and improve the first phase of development.

Responsibility

Lead: MoES Support: DESBs and VEDCs

Recommendation 3.1.6 Consider a redundancy program for schools with excess teachers to free up resources for the recruitment and deployment of new teachers at schools with shortages.

Further Details

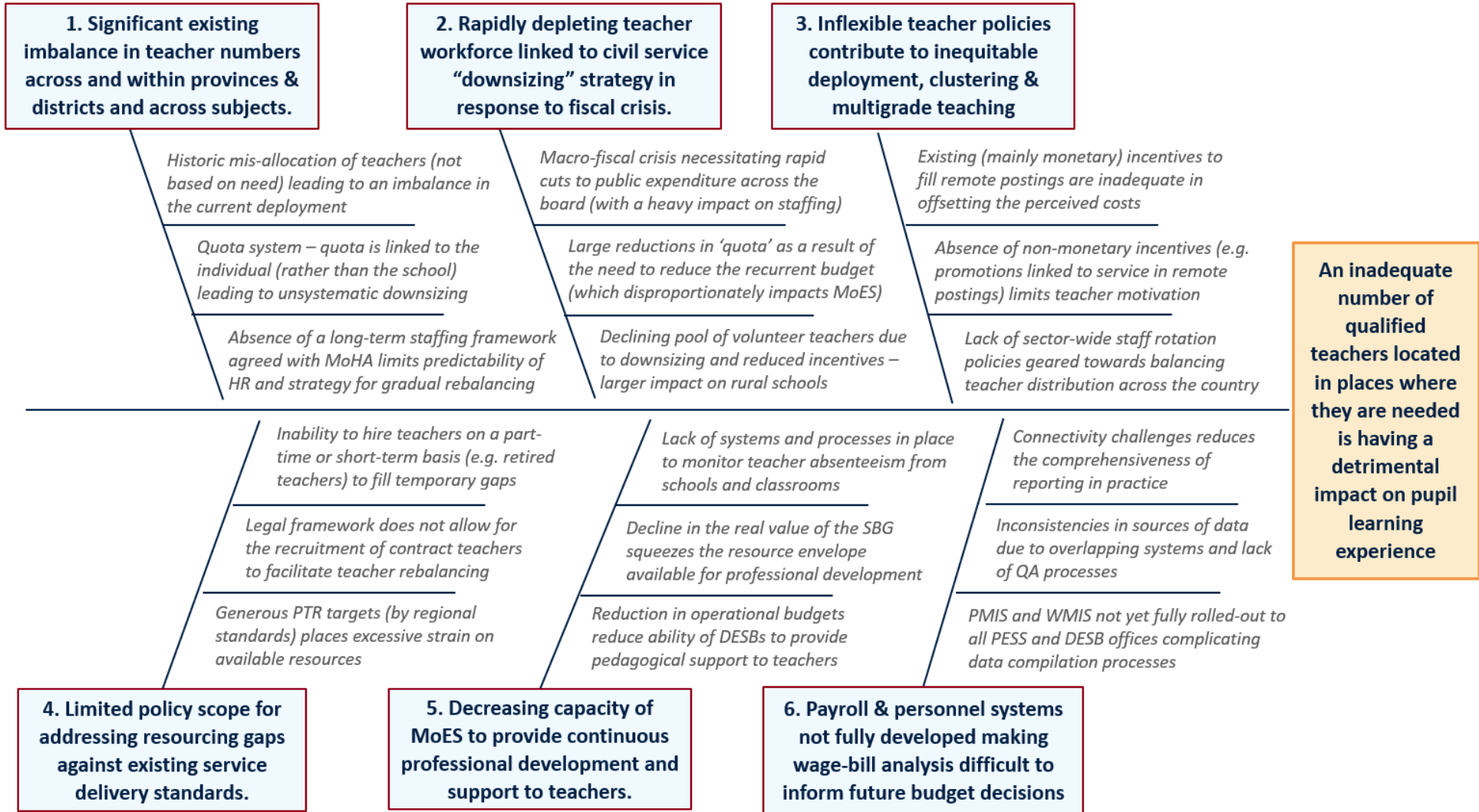
As a last resort, MoES should discuss with MoHA the option of paid redundancies for schools with a large surplus of teachers to free up resources for deployment at schools with a deficit. However, this should be carefully designed to avoid exploitation (e.g., preventing staff from receiving a redundancy payment and then filling a vacant position without returning the payment). Crucially, this should only be done on the condition that redundant positions can be transferred to different schools (via new recruitment) rather than being lost (as per the current arrangement under the quota system).

Responsibility

Lead: MoES Support: MoHA

Recent government policy announcements on teacher management suggest that there are emerging opportunities to pursue several of the recommendations proposed here. At the time of finalizing this report, the Laos government issued a resolution setting out new policies aimed at solving the ‘problem of teacher shortage.’ These include measures such as (i) providing a salary to volunteer teachers on the same basis as civil servant teachers; (ii) extending the term of teachers due to retire if they wish to continue working; and (iii) enabling the recruitment of contract teachers (Government of Laos 2023). This announcement provides a useful segue into discussions on the above recommendations, which align with ongoing planning processes (e.g., via the update to the National Teacher Policy) and the further development of the MoES financial management roadmap that will follow this report.

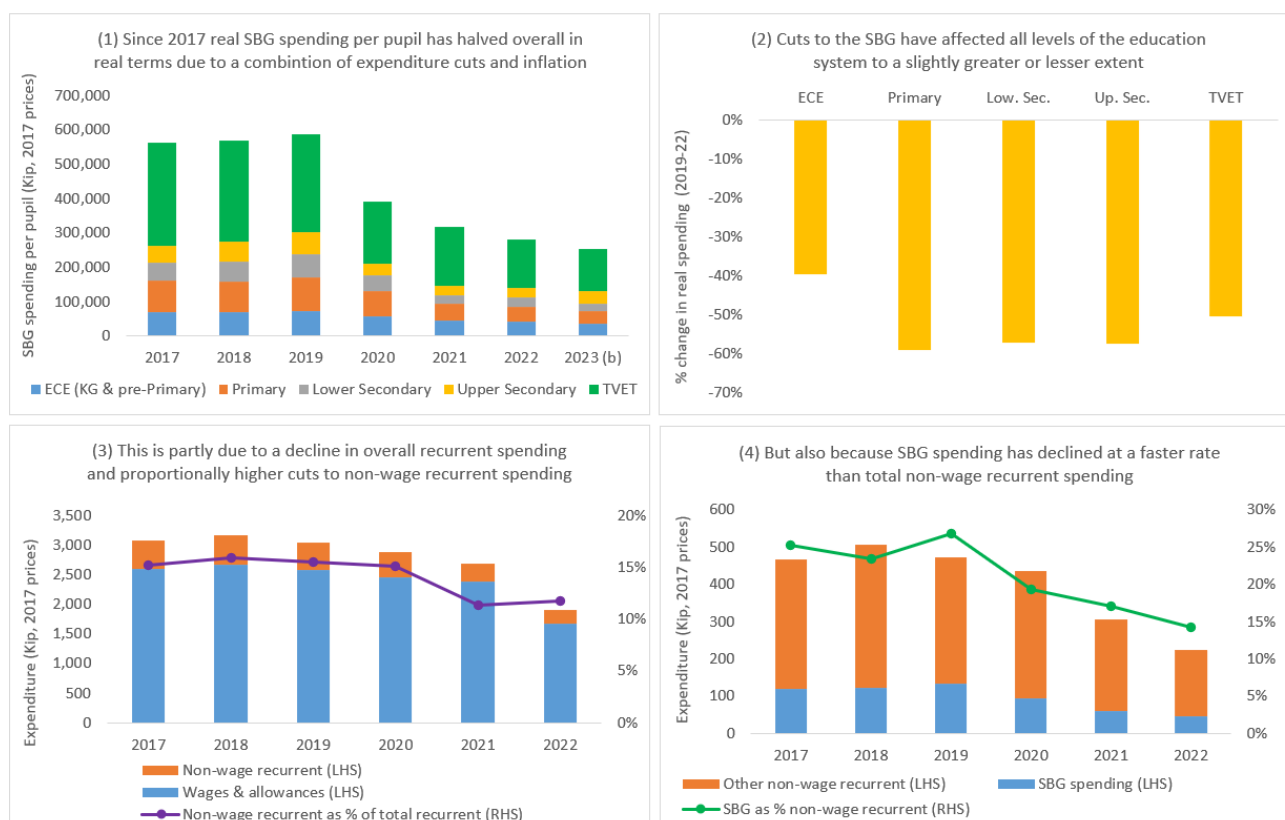
Fishbone Diagram: Key Bottlenecks in Teacher Management



Input 2 School Financing (SBG)

The macroeconomic pressures affecting Laos in recent years have had a significant negative impact on the volume of direct school financing, limiting the potential benefits of greater school autonomy. The combination of budget cuts to the education sector and high levels of inflation has dramatically impacted the real value of the school block grant (SBG) disbursed to schools (Figure 4.4 panel 1). This is true for all levels of education, although some effort appears to have been made to protect ECE funding (Figure 4.4 panel 2). The main driver of the cuts to SBG has been the decline in overall nonwage recurrent spending, which has fallen at a faster rate than spending on personnel (Figure 4.4 panel 3), thereby squeezing the resource envelope for operational spending. However, the SBG budget has also declined as a proportion of nonwage recurrent spending (from 27 percent of the total in 2019 to 14 percent in 2022), demonstrating the difficult choices MoES has been forced to make on discretionary spending (Figure 4.4 panel 4). The impact has been that the value of the SBG at primary level has declined from \$12 per pupil per year in 2019 to just \$4 in 2022.

Figure 4.4 The Decline in Spending on SBG (2017-2022)



Source: MoES Department of Finance

Recent improvements to the SBG allocation formula to improve equity are well founded, but given the small amounts involved, further changes will likely yield limited results. Various concerns have been raised in the past by stakeholders regarding the formula used to calculate SBG allocations, which has historically been computed on a simple per-student basis. Weaknesses to this approach include the lack of compensatory measures for schools that suffer from higher input costs or use a disproportionate amount on transport costs due their remoteness (e.g., to collect textbooks). Development partner support to revise the formula for SY 2023-24 (EU budget support TA) and the provision of top-ups to priority districts (World Bank GPE III program) are welcome in this regard. However, given the now very small amounts involved, further marginal changes in allocation are unlikely to address the significant development needs of schools. Efforts are needed in the short term to limit further decreases to the SBG, and to prioritize a return to more adequate levels, after which improvements in allocation to address equity concerns will have a more significant impact.

Recommendation 3.2.1 Develop alternative options for the SBG allocation formula as additional funding becomes available, to improve equity by accounting for variations in school characteristics across provinces and districts.

Further Details

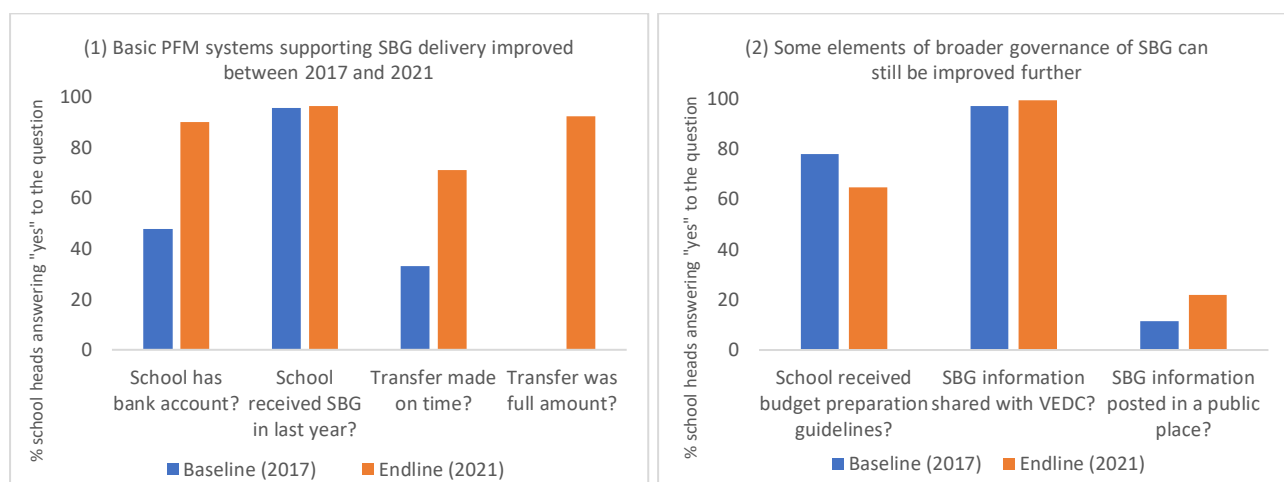
Over the medium term and as additional funding becomes available, the formula used to calculate the value of the SBG for each school should be enhanced to account for additional factors over and above the number of students in each school. Differences in school needs (e.g., overall development level, number of poor students, number of ethnic minority students, etc.) could be incorporated. In the shorter term, adherence to the new formula (which introduces a lump sum to all schools as well as a per student amount to account for variations in input costs across districts) should be monitored, evaluated, and if necessary adjusted to meet emerging objectives.

Responsibility

Lead: MoES Support: MoHA

The financial management systems that underpin SBG delivery are working relatively well, but there has been some backsliding over the last two years due the fiscal crisis. Prior to the onset of the crisis, most key performance indicators related to SBG implementation had steadily improved. The number of schools without a dedicated bank account significantly narrowed, which is likely linked to the improved reliability and timeliness of transfers (Figure 4.5 panel 1). In 2021, 96 percent of schools reported that they had received the SBG in the previous school year, with a similar proportion (92 percent) reporting that they had received the funds in full without any deductions (World Bank 2021b). However, there has been a significant deterioration in the timeliness of SBG transfers since 2021, with many PESS and DESB officials noting that delays in the transfer of funds from National Treasury had resulted in schools typically receiving funds several months late and sometimes after the school semester had ended. These delays appear strongly linked to the economic crisis, with authorities resorting to cash rationing in response to the increased uncertainty over revenue collections.⁷⁹ Since 2021-22, the MoES has attempted to alleviate the problem by consolidating the two annual SBG transfers into one tranche; however, this has not achieved its intended objective and delays are still pervasive.⁸⁰

Figure 4.5 Results from the SABER Surveys of 2017 and 2021 on SBG Implementation



Source: World Bank 2021.

⁷⁹ Additional contributing causes to transfer delays include the delay in approving the annual budget at national level and reported delays in generating EMIS updates on which pupil numbers per school are needed for computing individual school transfers.

⁸⁰ Despite formally consolidating SBG transfers into one tranche, it appears that the actual disbursement from National Treasury to the provincial level are still split into separate payments, thus generating even more uncertainty.

Recommendation 3.2.2 Engage with the MoF to discuss strategies for improving the timeliness of SBG fund releases to ensure maximum cost-efficiency.

Further Details While it may be difficult to persuade the MoF to prioritize fund transfers for the SBG over other government expenditures, there may be avenues for improving the efficiency with which funds are utilized. One approach is to prioritize transfers to specific schools (e.g., to those located in MoES priority districts) to ensure maximum cost-efficiency of whatever funds are ultimately released. This could be governed by a clear policy outlining priority districts.

Responsibility Lead: MoES Support: MoHA

Recommendation 3.2.3 Explore mobile money solutions for SBG transfers with appropriate safeguards to facilitate more efficient transfer of funds to schools

Further Details MoES should explore technological solutions to overcome the problem of transferring funds to schools in rural locations. Mobile money solutions should be considered, with appropriate safeguards and controls to prevent misuse and fraud. The emergence of mobile money providers in Laos (e.g., U Money) offers the potential for MoES to directly transfer SBG funds to schools and thus avoid lengthy and expensive travel (see World Bank 2022f).

Responsibility Lead: MoES Support: MoHA

Broader governance arrangements for the SBG could be improved in certain areas, but there is a strong foundation on which to increase school financing once the fiscal situation allows. A solid basic system underpinning the management of the SBG program is already in place, including the roll-out of school improvement plans, budget preparation guidelines, financial rules and regulations, reporting requirements and so on. This is supported and facilitated by the VEDC structure that is established in all schools and which provides an important mechanism for local communities to hold school management to account.⁸¹ However, various improvements to the governance arrangements and specific elements of school-based management would be desirable. For instance, less than a quarter of schools currently publicize how the SBG is spent, thus limiting accountability at the community level (Figure 4.5 panel 2). Similarly, certain elements of school development planning guidance would benefit from simplification and revision to maximize the impact of scarce financing.⁸²

Recommendation 3.2.4 Simplify the rules and procedures governing the use of SBG funds to ensure that spending is geared towards improving the classroom environment.

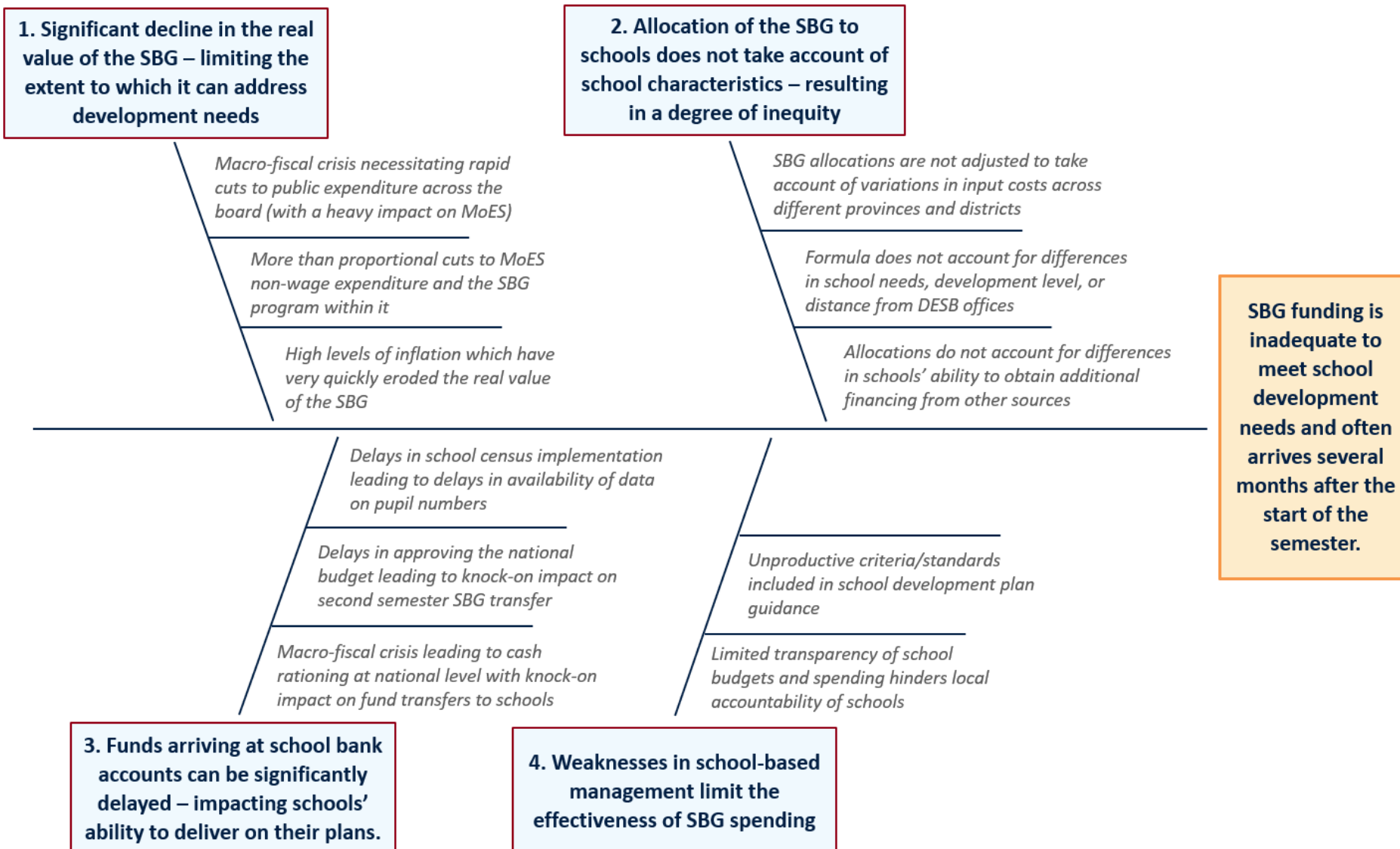
Further Details MoES should review the planning and budgeting guidelines for the SBG with a view to simplifying them and ensuring that school quality assessment criteria are geared towards improving classroom environment. Reconsideration of the 60:40 rule concerning “priority” and “other” spending categories could also be explored.

Responsibility Lead: MoES Support: MoHA

⁸¹ VEDCs are typically heavily involved in SBG implementation, participating in the annual planning process, providing authorization for bank withdrawals, monitoring student and teacher attendance, and validating annual reports and financial audits.

⁸² For instance, some assessment criteria in the school development planning framework are counterproductive (e.g. the need for schools to have flagpoles and fences, which incentivizes expenditures on items that have no impact on the classroom environment).

Fishbone Diagram: Key Bottlenecks in School Finance



Input 3 Teaching and Learning Materials

Expenditure on classroom materials and equipment has declined rapidly in recent years as the fiscal crisis places a hard constraint on the MoES budget. According to available data, real spending by MoES on textbooks and other teaching and learning materials (TLMs) more than halved between 2017 and 2022 (Figure 4.6 panel 1) and is now well below the costing set out in the ESSDP.⁸³ Unless reversed quickly, this will likely significantly impact available stocks of textbooks and other learning materials at school level and result in a deteriorating pupil-textbook ratio. Reliable administrative data on TLM stocks was unavailable for this review, making it impossible to provide an overall assessment of the adequacy of current provision.⁸⁴ Available survey data presents a mixed picture. The 2021 SABER school survey (which covers the primary level only) presents a relatively positive picture (Figure 4.6 panel 2) reporting most pupils having a full set of textbooks for their own use. However, the earlier 2019 LECS6 survey indicates a more serious deficit in TLMs, particularly at the lower education levels (Figure 4.6 panels 3 and 4). Similarly, the 2019 SEA-PLM survey found that nearly 40 percent of primary school students share textbooks (a finding significantly correlated with lower student achievement levels). While the rollout of the new primary level curriculum – supported by the Basic Education Quality and Access in Lao PDR (BEQUAL) program – likely improved the situation at primary level since the 2019 survey results, the decline in MoES spending levels means that there is a risk that any such improvement will not last.

Figure 4.6 Decline in TLM Expenditure and Coverage between 2017 and 2022



Source: MoES Printing Department; World Bank 2021 SABER survey; LECS6 survey 2019.

⁸³ The ESSDP estimates an annual budget of 65bn Kip per year for printing only. In 2023 the Printing Department budget is 33bn Kip for both printing and distribution. It is important to note that the DFAT-funded BEQUAL program is financing and procuring the initial batch of textbooks for the revised primary school curriculum (Grades 1 to 5) on behalf of the MoES. The Ministry is responsible for subsequent replenishment of supplies. The DFAT spending is not captured in the figures presented here.

⁸⁴ As noted in the next subsection, the Textbook Management Information System (TMIS) does not currently provide a reliable overview of existing TLM provision. Similarly, while the LESMIS does have the capability to provide information on stock levels, the data does not appear reliable nor sufficiently detailed, and it is unclear whether it has been sufficiently verified and quality assured.

DESBs report that TLMs are inadequate in supply and often arrive at schools several weeks or even months after the school year has begun. Discussions with PESS and DESB officials undertaken for this review indicated that there are shortages of textbooks at all levels of the education system and especially at secondary level. It was reported that textbooks provided by the BEQUAL program (for the roll-out of the new primary curriculum) usually arrive on time and are sufficient, but that subsequent MoES-supplied replenishments are usually delayed and do not arrive until after the semester has begun.⁸⁵ The situation at secondary level was reported to be significantly worse, as the annual replenishment is lower and the student-book ratio higher.⁸⁶ Despite the reported linkage between student achievement levels and the availability of TLMs, the ASLO survey revealed that only 40 percent teachers actually used them in the classroom (as reported by Grade 9 students) indicating that simply increasing the supply of materials will not guarantee better learning outcomes unless there is accompanying training to ensure teachers learn how to effectively use them.

Recommendation 3.3.1 Maximize the use of existing digital platforms and expand ICT provision to enable online access to learning resources such as further facilitating student access to the Khang Panya Lao platform.

Further Details

Achieving and maintaining a 1:1 student-textbook ratio in all schools is unlikely to be achieved in the short term given current fiscal constraints. Therefore, MoES at all levels should promote and facilitate student access to the Khang Panya Lao platform to enable digital access to online versions of textbooks and other learning materials. Over time, the MoES should provide increasing volumes of appropriate ICT equipment to facilitate greater digital access for students. An evaluation of the existing platform could be carried out to inform the strategy of how best to build on and improve the first phase of development.

Responsibility

Lead: MoES Support: MoHA

The budgeting process for TLMs is constrained by a lack of relevant data on overall needs. This information gap is exacerbated by fragmented responsibilities across multiple departments. While a costing for the production and replenishment of TLMs was developed for the ESSDP, the annual budget allocation for TLMs was reported to be based on the availability of financial resources rather than on data.⁸⁷ This is at least partly due to the limited availability of reliable data on existing TLM stocks to inform an analysis of overall needs at school level for the purposes of allocating available financial resources. Although the Textbook Management Information System (TMIS) has been operational for several years, it is not currently embedded within the planning and budgeting system. In addition, many schools and DESBs reportedly do not regularly submit data updates.⁸⁸ The disconnect between overall needs and budget allocation is exacerbated by the fragmentation of responsibilities for TLMs across multiple departments and divisions in the MoES, with the Asset Management Division (within the Department of Finance) responsible for the TMIS, the Research Institute for Educational Sciences (RIES) responsible for content drafting, and the Printing Department responsible for procurement and delivery.

⁸⁵ For instance, one DESB official reported that in 2022 the new G4 books supplied by BEQUAL arrive before the start of the first semester in September, but books for G1-G3 arrived in January (four months late).

⁸⁶ One possible reason for the inconsistency between the data (presented in figure 4.6) and reports of relatively higher shortages at secondary level is that since the 2019 surveys were conducted the new primary curriculum has been rolled out with financial support from the BEQUAL program.

⁸⁷ Allocations for TLMs are done on a residual basis (based on whatever funds remain after higher priority expenditures within the recurrent budget are accounted for).

⁸⁸ This was confirmed by MoES officials, who shared reports of TLM stock levels across districts with many blank data fields, which prevented a comprehensive analysis of varying needs across provinces and districts.

Recommendation 3.3.2 Undertake a rapid review of TLM information systems to streamline processes for generating reliable data used for planning purposes.

Further Details

A large amount of data related to TLM is being collected annually via the TMIS and the AMIS, as well as through the ASC, but the data is incomplete and/or unreliable and not suitable for planning purposes. A review should be undertaken to establish how data systems are used, how data is generated (or not), and the major constraints therein. Given the connectivity problems associated with TMIS, it may be more practical to design a smartphone application that enables school principals and DESBs to enter data directly into templates on their phone, which can then be verified by DESBs. More reliable data can inform estimates of actual replenishment needs. To reduce the potential costs of failure of any new initiative, the improvement/replacement of TMIS could initially be piloted in one or two Provinces and, if successful, subsequently rolled out nationally.

Responsibility

Lead: MoES Support: MoHA

Various bottlenecks in the procurement process have caused delays in the production and delivery of TLMs, with a knock-on impact to schools. While there have been some positive recent developments in procurement methods used by the MoES Printing Department, such as opening bidding to the private sector, multiple problems continue to hinder TLM provision. For instance, the use of separate contracts for printing and delivery has been problematic in the context of recent macroeconomic instability, with high inflation resulting in printing companies being unable to fulfil their obligations due to higher input costs, which then disrupts the schedules of transportation companies contracted to deliver TLMs to DESBs. The continued reliance on local printers over foreign companies has also resulted in higher unit costs of production, which is ill-advised in a context of extremely scarce resource availability.

The delivery of TLMs to DESBs across the country is fragmented and constrained by communication challenges. The recent adoption of digital tracking systems to verify that transport companies deliver TLMs to DESBs on time and as per the contract is a welcome development in the effort to improve TLM distribution systems. However, DESBs do not always receive information on upcoming delivery schedules, making it difficult for them to plan accordingly and cross-check with received stocks. The limited role of PESS in the process reduces the extent of oversight and support that DESBs receive. Furthermore, textbooks and other types of TLMs are procured and delivered to DESBs separately, resulting in high transactions costs.

Recommendation 3.3.3 Improve procurement modalities for production and distribution of TLMs to improve the efficient use of scarce funds and ensure timely delivery to DESBs.

Further Details

The procurement process for TLM provision should begin as soon as possible after the start of the financial year – ideally in January – so materials are delivered to DESBs by the middle of the year. Given the scarcity of funds, MoES should consider opening competitive procurement to foreign companies so that textbooks can be provided at a lower unit cost. The printing department should also combine printing and delivery of TLMs into the same contract(s) with suppliers to limit the complexity of supply chain management for MoES and to improve accountability for contractor performance. As the accuracy of data improves, projections based on TMIS will be more helpful in guiding planning and procurement.

Responsibility

Lead: MoES Support: MoHA

Distribution of TLMs from the DESB to schools and management at the school level is hampered by several bottlenecks. Separate delivery timings for textbooks and other types of materials presents a challenge for schools that must collect TLMs from the DESB office each year, as several trips may be needed. No funds are provided to DESB to pay for or compensate schools for TLM delivery, which means that school principals invariably use the SBG to pay for transportation. This approach disadvantages more remote schools. Interviews with PESS and DESB officials revealed that some schools wait until all TLMs can be collected in one trip to save transport costs, which often delays getting textbooks into the hands of pupils. Currently, the lack of reliable data on existing TLM stock levels means that all schools receive a pro-rata replenishment based on the number of students rather than based on existing differences in stock levels across schools. While school level visits were not undertaken for this review, previous research suggests that book registration at the school level is poor, with no records on the numbers of books available by grade and condition (MoES 2017).

Recommendation 3.3.4 Strengthen school distribution planning and gradually move towards provision based on actual school needs using improved data to reduce disparities in the availability of TLMs across schools.

Further Details

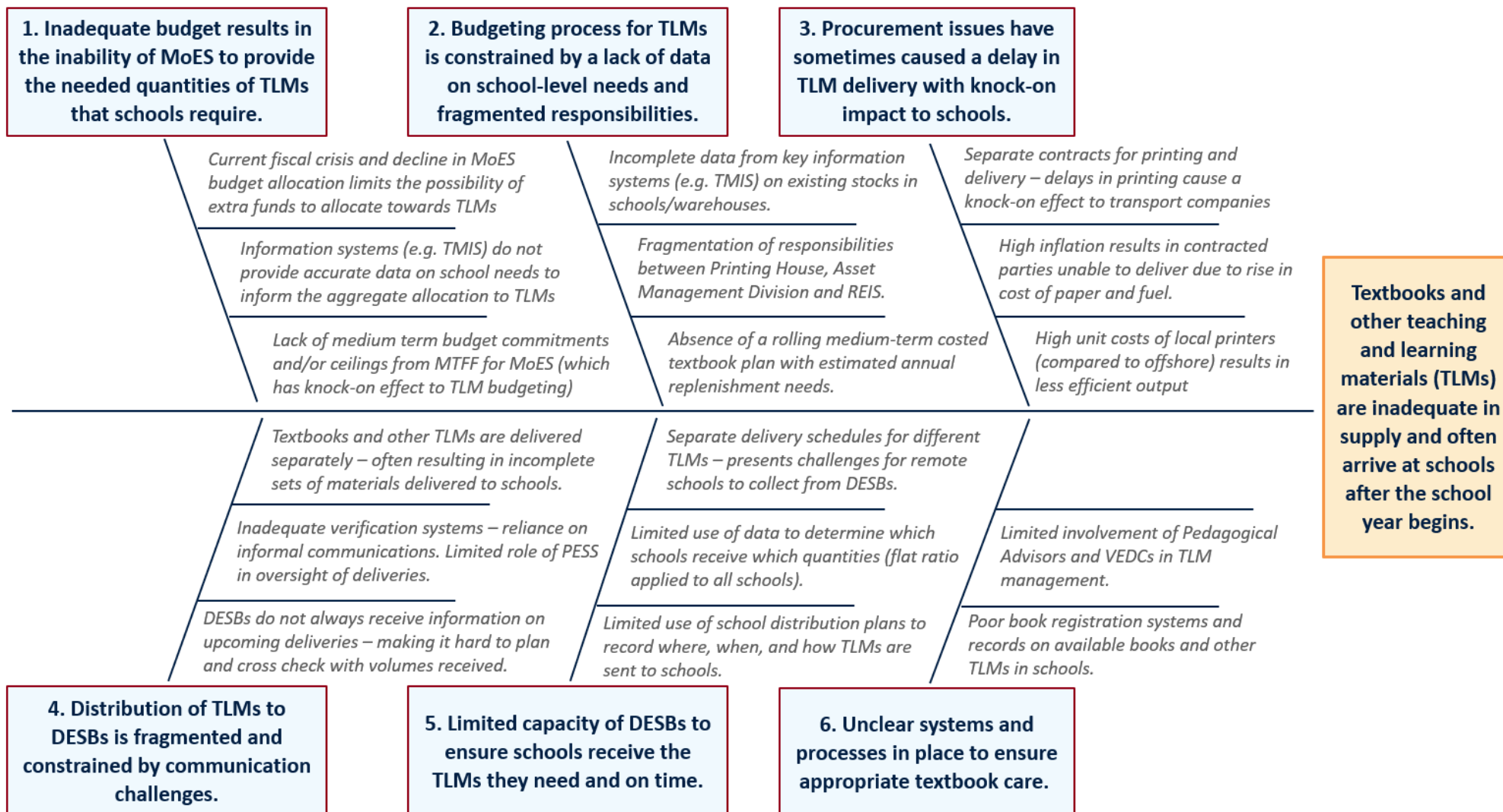
Improved procurement planning by MoES should allow for better coordination of TLM deliveries to DESBs. This will enable DESBs to improve the efficiency of distribution to schools by ensuring that complete sets of textbooks, teacher guides, and other supporting materials are collected at the same time. Over time, DESB officials should be trained to allocate TLMs to schools using improved data on school needs.

Responsibility

Lead: MoES Support: MoHA



Fishbone Diagram Key Bottlenecks in Teaching and Learning Materials





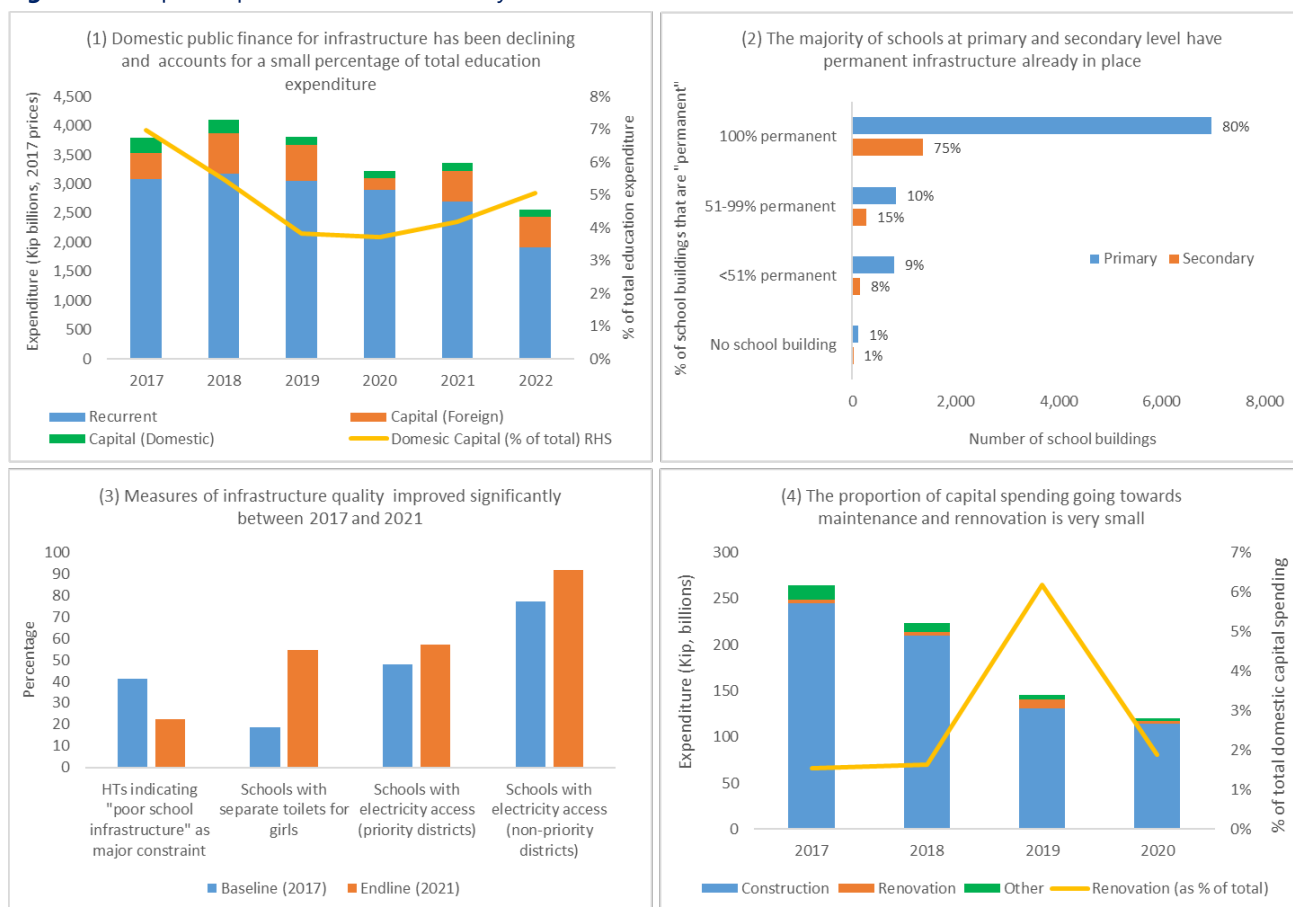
Input 4 School Infrastructure

Domestic capital expenditure halved as a proportion of total spending between 2015 and 2021, although there was an overall improvement in school infrastructure over this period. Domestic public finance for school infrastructure declined from 8 percent of total MoES spending in 2015 to 4 percent in 2021 (Figure 4.7 panel 1) due to the fiscal crisis squeezing discretionary spending. Despite this, there has been a significant improvement in the quality of school infrastructure, according to survey data. For instance, the proportion of primary school principals reporting poor infrastructure as a major constraint declined from 41 percent to 23 percent between the baseline (2017) and endline (2021) SABER surveys. Notable improvements include access to separate toilets for girls and the proportion of schools with electricity access (Figure 4.7 panel 3).

Available data does not suggest an acute shortage of school infrastructure, but too little is spent on maintenance for preventing the deterioration of school buildings over time. According to LESMIS data, most school buildings are classified as 'permanent' (as opposed to 'temporary' or 'semi-permanent') (Figure 4.7 panel 2), indicating that the existing stock of buildings are of adequate quality. In addition, the 2019 LECS6 survey reported that only 10 percent of respondents aged 6-24 years not enrolled in school cited excessive school distance as the main reason and that the average journey time to school was approximately 15 minutes across all quintiles, suggesting that school coverage countrywide is reasonable.⁸⁹ While the construction of new schools should not to be a priority, only 2 percent of the domestic capital budget is typically spent on renovation and maintenance – a level that is almost certainly too low to prevent degradation of school buildings over time (Figure 4.7 panel 4).

⁸⁹ Lack of interest in attending school (38 percent) and working (15 percent) were more common responses.

Figure 4.7 Capital Expenditure and the Quality of School Infrastructure



Note: Foreign capital (in panel 1) includes all ODA disbursements (i.e., ODA for both capital and recurrent expenditures).

Sources: MoF State Budget Implementation Reports; LESMIS; SABER surveys

Recommendation 3.4.1 Reorientate the capital budget towards maintenance and renovation to improve the quality of existing infrastructure and avoid further expansion of the school network.

Further Details

The ongoing fiscal crisis is likely to limit resources for infrastructure in the short to medium term. Furthermore, a large proportion of available funds will likely be accounted for by projects already ongoing or in arrears. The limited discretionary resources left will be best used for upgrading or renovating existing schools. Considering declining average school sizes and the recurrent cost implications that result from new construction, avoiding any further expansion of school network will be critical, especially considering the considerable strain that is already being placed on the recurrent budget.

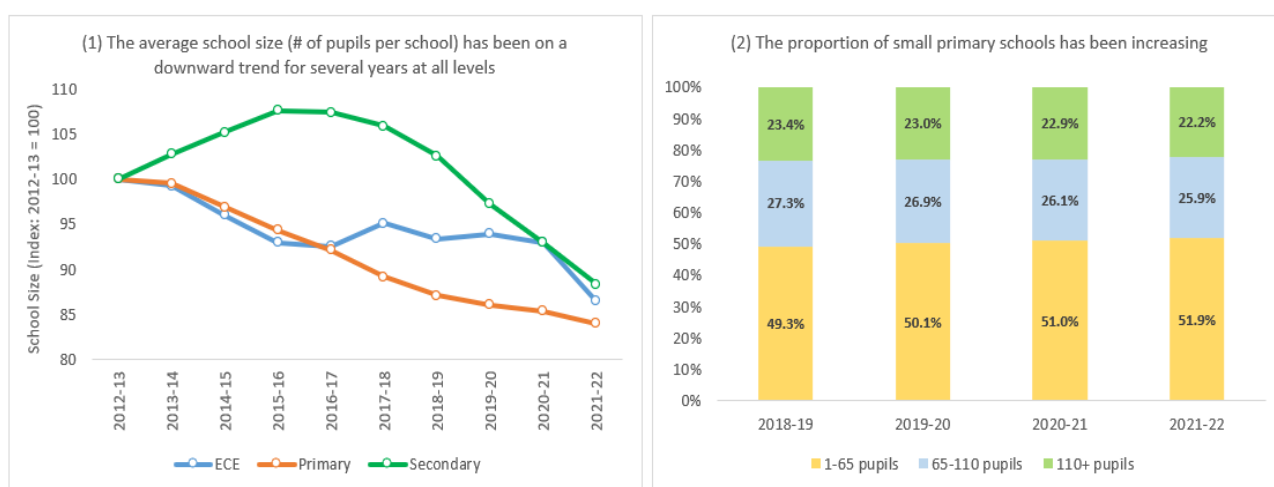
Responsibility

Lead: MoES Support: MoHA

At all levels of basic education, the average school size has been declining for several years indicating a gradual decline in efficiency. At ECE level, enrolments have increased but the number of new ECE facilities has increased at a faster rate, leading to a decline in average facility size (Figure 4.8 panel 1) providing some space for a further expansion in enrolment. Conversely, at primary level, schools have been closing but enrolments have been declining at an even faster pace. As a result, the proportion of small primary schools (65 pupils or

less) has increased by approximately 1 percentage point each year since 2018, reaching 52 percent of the total in 2022 (Figure 4.8 panel 2). At secondary level, the decline in average school size has been even greater as enrolments declined while the number of schools *increased*. The small (and falling) average school size – especially at secondary level – is a significant inefficiency given the high recurrent costs of maintaining a large network of small schools. Given the severe resourcing constraints in the education sector, further school consolidation will be necessary in locations where student numbers do not justify the continued operation of a dedicated school. Efforts to further integrate school facilities across levels (e.g., combining ECE and primary, primary and secondary, etc.) will also help to generate efficiencies through the reduction in administrative overheads, improved management of teacher vacancies and absenteeism, as well the possibility of repurposing of closed facilities (e.g., converting defunct primary schools into ECE centers). Appropriate solutions for addressing the likely consequences of these policies should be developed and appropriately funded, such as subsidies for school transport and an expansion of boarding facilities to address the increased travel distance to schools for rural pupils.

Figure 4.8 Average School Size at ECE, Primary, and Secondary levels



Source: Annual School Census.

Recommendation 3.4.2 **Develop a medium-term capital investment strategy for the education sector to guide the allocation of the capital budget and plans for school consolidation and integration.**

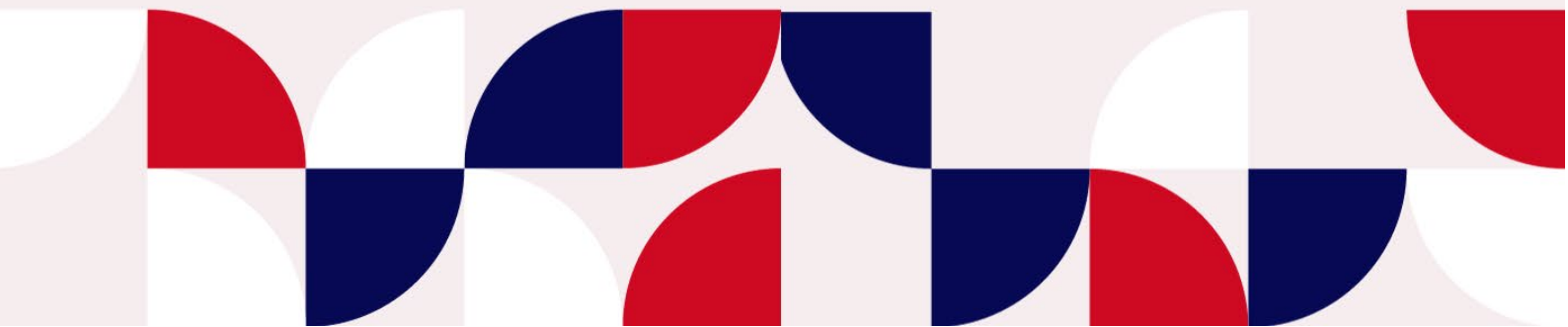
Further Details

Using appropriate school-age population projections, together with a more detailed analysis of the existing school network, MoES should develop a medium-term strategy to guide the allocation of the capital budget over the coming years. This should include plans for school consolidation in locations with very low numbers of pupils, and the integration of schools across levels where feasible. Appropriate solutions for addressing the likely consequences of these policies (e.g., subsidies for school transport and an expansion of boarding facilities to address the increased travel distance to schools for rural pupils) should be developed and appropriately funded. Schools that have closed should be repurposed in line with population projections and policy priorities.

Responsibility

Lead: MoES Support: MoHA

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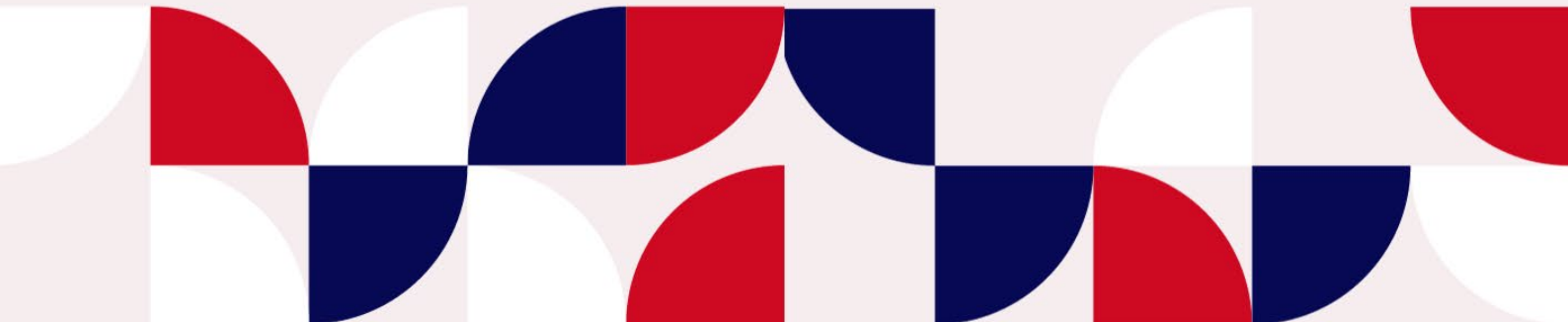
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Annexes



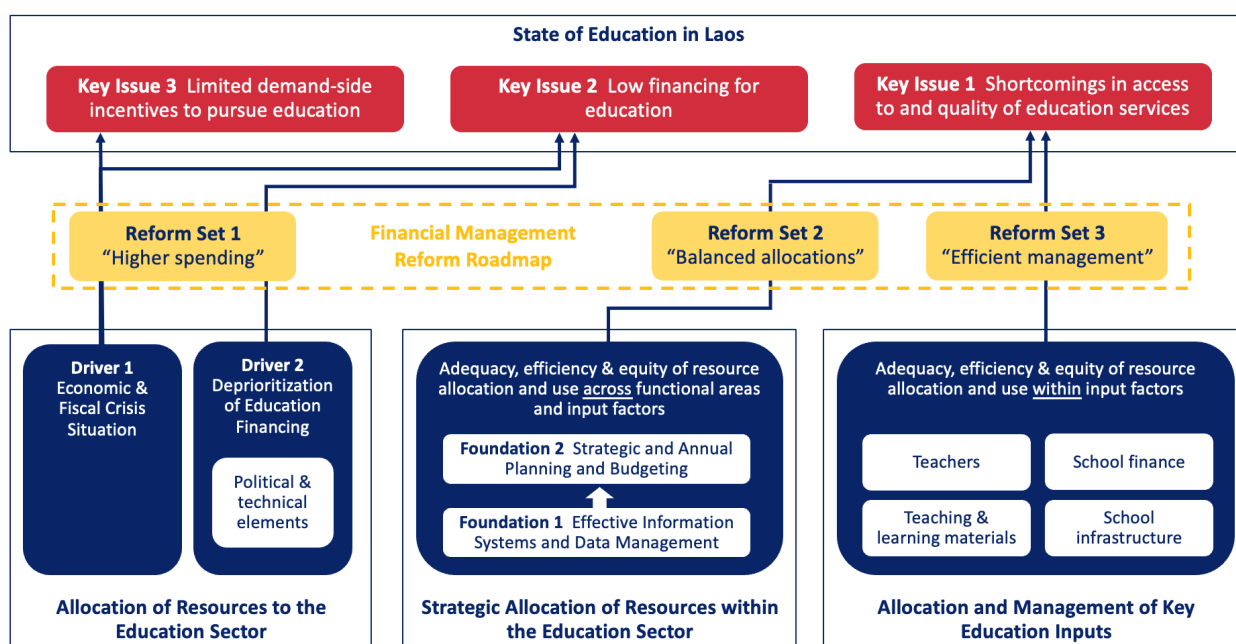
Annex 1 Education Sector Financial Management Reform Roadmap Blueprint

This Education Sector Financial Management Roadmap blueprint sequences the reform recommendations identified in the Public Expenditure and Institution Review (PEIR) and FinEducation assessment, prepared by the World Bank in collaboration between MoES under the Public Financial Management Reform Program implemented by the World Bank with financial support from the Australian Department of Foreign Affairs and Trade. The analysis and recommendations build on the extensive analytical work undertaken by the MoES and other development partners in Laos in recent years.

The Roadmap blueprint suggests a prioritization of recommendations to facilitate adequate resourcing of the education sector in Laos and translating those resources into increased education access, better learning outcomes, and improved equity. Next, consultations involving government stakeholders and development partners should identify priority activities to be taken forward by MoES and other concerned agencies, and suitable institutional arrangements. Identified activities can be integrated into existing planning and reform coordination processes under the Education and Sports Sector Development Plan (ESSDP), including the ESSDP annual operating plans, the ESSDP mid-term review, and the plans of the Education Sector Working Group (ESWG) and its Focal Groups. This would minimize complexity. Alternatively, the Financial Management Reform Roadmap could constitute a standalone but complementary tool for systematic reform planning, coordination, and progress monitoring. If deemed necessary, an inter-ministerial committee composed of MoES, MoF, MPI, and MoHA should be established (or the scope of a suitable existing committee expanded) to provide leadership and oversight of reform implementation. Technical assistance to support the government in the implementation of roadmap activities will be provided by the World Bank and other interested development partners.

The roadmap is structured into three parts. **Reform Area 1** (“higher spending”) identifies actions for stakeholders within and outside the education sector to address the inadequate volume of financing for education in Laos. **Reform Area 2** (“balanced allocations”) identifies actions to improve the equity and overall balance of resource allocation within the education sector. **Reform Area 3** (“efficient management”) targets improvements in the efficiency of resource allocation and management across four key input factors (teachers, school financing, teaching and learning materials, and infrastructure) to advance the quality of education provision.

Figure A: Linkages between PEIR & FinEd Analysis and Reforms in the Financial Management Roadmap



Reform Actions	Responsibilities	Timeframe												Support (to be mapped)		
		2023		2024				2025				2026				
		Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2		Q3	Q4
Reform area 1 (“Higher spending”) Government-wide reforms to address the current inadequate levels of financing and strengthen demand-side incentives for education																
Activity 1.1 Advance economic policy, domestic resource mobilization, debt, and public investment management reforms in line with the <i>Reform Roadmap to Support the Implementation of the National Agenda</i>	GoL Leadership, MPI, MoF															
Activity 1.2 Prioritize education in the annual budget process by increasing its share in the total budget to at least 15 percent by 2027 and 18 percent by 2033	GoL Leadership, MPI, MoF															
Sub-activity 1.2.1 Increase the education sector share to at least 13.5 percent of total FY24 budget																
Sub-activity 1.2.2 Increase the education sector share to at least 14.0 percent of total FY25 budget																
Sub-activity 1.2.3 Increase the education sector share to at least 14.5 percent of total FY26 budget																
Sub-activity 1.2.4 Increase the education sector share to at least 15.0 percent of total FY27 budget																
Activity 1.3 Revisit civil service downsizing policy by expanding its coverage to the entire public sector and considering functional needs of sectors, and implement it via medium-term workforce planning	GoL Leadership, MOHA, MoF															
Sub-activity 1.3.1 Review the civil service downsizing policy considering sector needs based on assigned service delivery responsibilities and factoring in the service delivery model in Laos																
Sub-activity 1.3.2 Expand the civil service downsizing policy to the budget’s ‘other organizations’ to cover the entire public sector																
Sub-activity 1.3.3 Develop a medium-term workforce plan and communicate medium-term quotas to budget agencies (including education) on a rolling basis																
Activity 1.4 Fast-track and expand ongoing macro-fiscal planning and medium-term budgeting reforms	MoF, MPI															
Sub-activity 1.4.1 Fast-track ongoing macro-fiscal planning and medium-term budgeting reforms, including the development of a medium-term macro-fiscal framework and fiscal strategy, introduction of a state budget policy statement, and strengthening of medium-term budget planning and new annual budget templates																
Sub-activity 1.4.2 Integrate, or improve coordination of, the recurrent and capital budgeting processes																
Sub-activity 1.4.3 Expand coverage of the improved medium-term budgeting process to the budget’s ‘other organizations’ to cover the entire public sector																
Activity 1.5 Prioritize implementation of ongoing reforms of the Chart of Accounts (CoA) and the financial management information system (GFIS+ and FMIS)	MoF, MPI															
Sub-activity 1.5.1 Review State Budget and State Budget Implementation Report formats to include a clear functional breakdown of allocations and their use across the whole public sector																
Sub-activity 1.5.2 Improve the timeliness in publishing State Budgets and State Budget Implementation Reports, in line with legal requirements and international good practice																
Sub-activity 1.5.3 Publish quarterly budget execution reports																
Sub-activity 1.5.4 Prioritize the GFIS+ upgrade																
Sub-activity 1.5.5 Prioritize the implementation of the new FMIS																
Sub-activity 1.5.6 Enable the use of the CoA program segment in the new FMIS by the education sector																

Reform Actions	Responsibilities	Timeframe																Support (to be mapped)
		2023		2024				2025				2026						
		Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Reform area 2 (“Balanced allocations”) Education sector reforms to improve equity and balance in resource allocation																		
Activity 2.1	Based on regular budget and expenditure reports by subsector and geographic area, gradually shift resource allocation patterns within the education sector that increase equity, achieve a better balance across different inputs and education levels, and limit overheads	MoES (DoP & DoF), MoF																
Sub-activity 2.1.1	Prepare regular budget and financial reports with a functional breakdown to monitor spending patterns across education subsectors and sector support functions																	
Sub-activity 2.1.2	Prepare regular financial analysis on the targeting of education spending by geographic area and their socio-economic and education indicators (e.g., poverty levels, education access and outcomes) to inform the next budget process																	
Sub-activity 2.1.3	Address identified imbalances across functions and geographic areas through gradual shifts in medium-term and annual budget allocations																	
Activity 2.2	Carry out an in-depth assessment of financing for post-secondary and tertiary education	MoES (DHE, DTVE & DoF), NUOL, PESSs, institutes																
Sub-activity 2.2.1	Prepare assessment covering institutional and student financing arrangements																	
Sub-activity 2.2.2	Start implementing recommendations from the assessment																	
Activity 2.3	Develop an education sector financial and human resource data management and information system (MIS) strategy that sets out a clear path for integration, consolidation, and advancing whole-of-government system migration readiness of education sector systems	MoES (DoF, DoOP & ICT Center), MoF, MoHA																
Activity 2.4	Continue reforms to improve the quality and usage of data and education sector MISs	MoES, LSB																
Sub-activity 2.4.1	Verify and harmonize school-age population data given its importance in education service planning and progress monitoring																	
Sub-activity 2.4.2	Continue integrating or interfacing information systems, including to reduce data inconsistencies and duplication in data entry at all levels (MoES, PESSs, DESBs)																	
Sub-activity 2.4.3	Harmonize financial data (including on official development assistance) across the whole-of-government and education sector to ensure consistent fiscal data																	
Sub-activity 2.4.4	Revisit personnel data collection processes and standardize categories and respective reporting to ensure consistent and useful human resource statistics																	
Sub-activity 2.4.5	Align the CoA of the MoES double-entry accounting system (subject to system capability) with the new CoA for the government-wide GFIS+/FMIS																	
Activity 2.5	Develop the foundations for a pragmatic program budgeting system for the education sector	MoES (DoP & DoF), MoF, PESSs, DESBs																
Sub-activity 2.5.1	Develop a program-activity structure for the education sector																	
Sub-activity 2.5.2	Align organizational structures of public education institutions to the programs, subprograms, and activities (as required)																	
Sub-activity 2.5.3	Embed the program structure in the CoA of the MoES double-entry accounting system (subject to system capability) and in the new FMIS (when ready) as a basis for program budgeting and financial reporting																	
Activity 2.6	Carry out additional education-sector reforms	MoES																
Sub-activity 2.6.1	Assess good practices in private education service provision and review the regulatory framework to facilitate and encourage private sector engagement																	
Sub-activity 2.6.2	Review and revise (as needed) the progressive promotion policy																	

Reform Actions	Responsibilities	Timeframe																Support (to be mapped)
		2023		2024				2025				2026						
		Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Reform area 3 (“Efficient management”) Education sector reforms to improve the efficient and effective management of key education inputs																		
Sub-area 1 Teacher management																		
Activity 3.1.1	Develop a medium-term national school staffing strategy with adjusted PTR standards																	
Activity 3.1.2	Design a teacher rotation policy and pilot implementation in select provinces/districts																	
Activity 3.1.3	Formalize contract teacher modality and pilot implementation in select provinces/districts																	
Activity 3.1.4	Adapt school management protocols to enforce improved monitoring of teacher absenteeism																	
Activity 3.1.5	Pilot blended learning model using appropriate technology to support learning																	
Activity 3.1.6	Design and implement a redundancy program for schools with excess teachers and rebalance to ‘deficit’ locations																	
Sub-area 2 School financing																		
Activity 3.2.1	Review SBG formula to improve the equity of allocation across schools																	
Activity 3.2.2	Engage with MoF to discuss strategies for improving the timeliness of SBG fund releases																	
Activity 3.2.4	Explore mobile money modalities to enable direct transfers of SBG to schools (with safeguards/controls)																	
Activity 3.2.2	Simplify the rules and procedures governing the use of SBG funds and align with school quality standards																	
Sub-area 3 Teaching and learning materials																		
Activity 3.3.1	Expand the roll-out and use of digital learning platforms and expand appropriate ICT provision																	
Activity 3.3.2	Undertake a rapid review of TLM information systems and streamline reporting processes																	
Activity 3.3.3	Review and improve procurement planning process and modalities used to procure and distribute TLMs																	
Activity 3.3.4	Strengthen school distribution planning processes based on improved data of schools’ actual needs																	
Sub-area 4 School infrastructure																		
Activity 3.4.2	Increase the proportion of the capital budget dedicated to maintenance and rehabilitation																	
Activity 3.4.1	Develop a medium-term capital investment strategy for the education sector																	

Annex 2 Institutional and Financing Arrangements in the Education Sector

A2.1 List of 2nd Tier Institutions under the MoES

1. MoES Cabinet	18. Nonformal Education-North
2. Ministry's warehouse	19. Nonformal Education-South
3. National Stadium KM 16	20. Vientiane Provincial Technical School
4. Nonformal Education Centre KM 8	21. Teacher Training College-Luangpabang Province
5. Savannaket Technical and Vocational School	22. Kungkai Teacher Training College
6. Teacher Training College-Salavan Province	23. Teacher Training College-Savannakhet Province
7. Dongkhamxang Teacher Training College	24. Teacher Training College-Champasack Province
8. MoES Kindergarten	25. Ban Keun Teacher Training College
9. Teacher Training and Art School	26. Teacher Training School-Lungnumtha Province
10. Education Sports College	27. Vangvieng Teacher Development and Education Administration Centre
11. Vocational Education Development Institution	28. Ethnic School-Oudomxay Province
12. Monk Teacher Training College-Ongteu Temple	29. Ethnic School-Champasack Province
13. Research Information Education Science	30. Monk Teacher Training College-Champasack Province
14. Pakpassak Technical College	31. Sikeut Sports Training Centre
15. Lao-German Technical School	32. Special Secondary Sports School
16. Poly-Technic College	
17. Dongkhamxang Agricultural Technical School	

Note: Previously, four additional institutions were under direct MoES oversight but have since been reassigned to respective PESSs: (1) Nonformal Education Centre KM 16, (2) Luangpabang Technical and Vocational School, (3) Bokeo Technical and Vocational School, and (4) Lao-Indian Professional Development Centre.

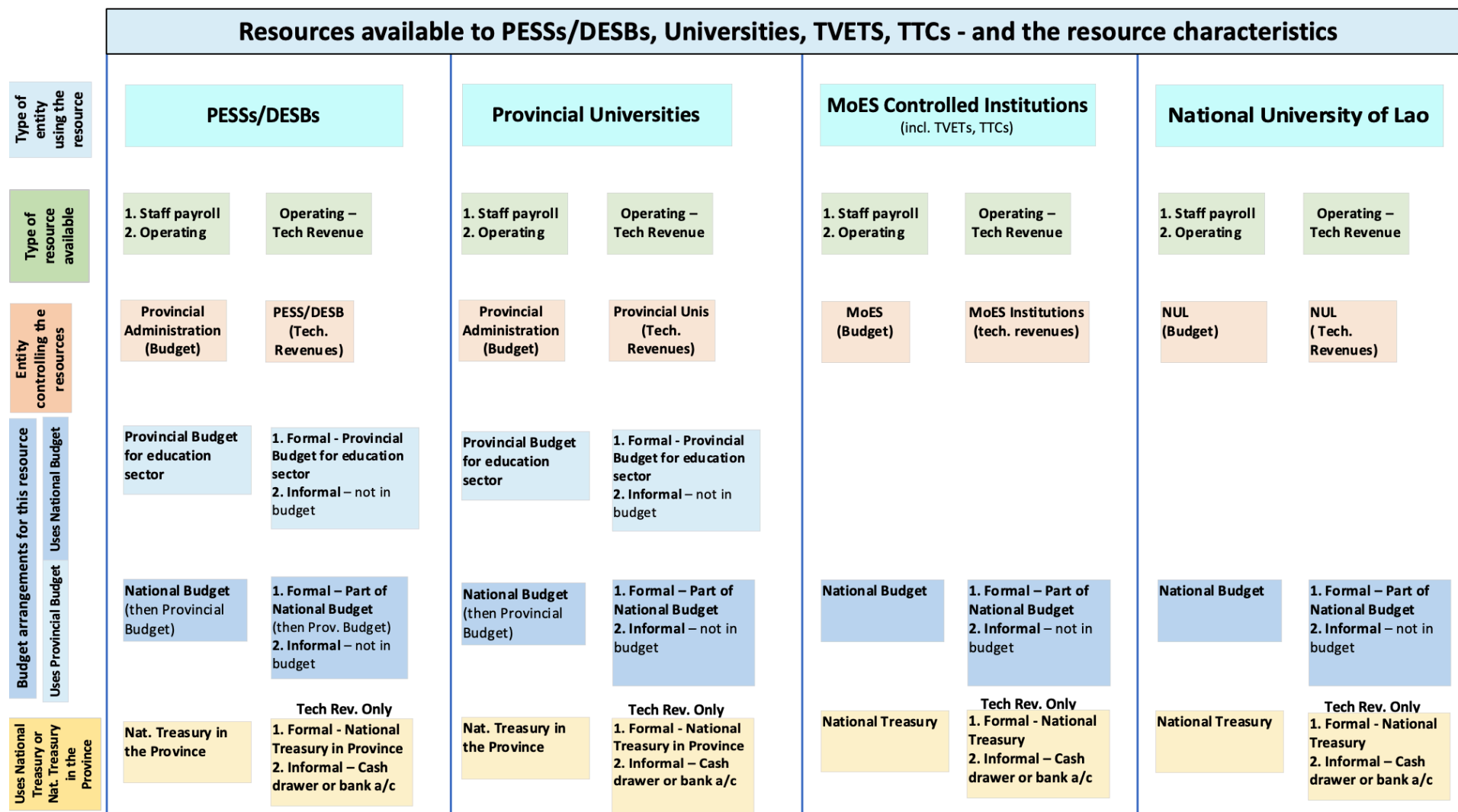
A2.2 School Financing Sources, Budgets, and Treasury Summary

This diagram illustrates the cash and in-kind resources available to schools at all levels (green shaded boxes), the source entity controlling these resources (orange), whether the resources are allocated through the national budget and/or the provincial budget (blue), and treasury/disbursement responsibilities (yellow).

Resources available to schools and the resource characteristics									
Type of school resource using the resource	ECE, Primary, LSE and USE schools								
Type of resource available	VEDC	Volunteer Teachers	Teacher accom'n. & food	Paid Teachers & Principals	School Block Grants (eligible expenses)	School Books	Other school materials	School Infrastructure	School meals
Entity controlling the resources	Local community	Wider community	Local community	PESS/DESB	MoES Budget (Ch. 62)	1. MoES (replenishment) 2. DPs – In-kind (New books)	Local community Local business DPs, NGOs	1. MoES 2. Prov. Gov. Type V 3. DP On-Budget 4. DP In-kind 5. NGOs 6. Local business	1. MoES 2. WFP 3. CRS
Budget arrangements for this resource				National Budget by Province & Sector	National Budget (Ch.62)	1. National Budget 2. DPs pay supplier		1. Nat. Budget Ch.67 2. Nat. Budget by Province & Sector 3. National Budget 4.-6. NA	1. National Budget Ch.61 2&3. In-kind
Uses National Treasury or Nat. Treasury in the Province				Provincial Budget for education sector				1. NA 2. Prov'l Budget Type V 3. NA 4.-6. NA	
Uses National Treasury or Nat. Treasury in the Province				Nat. Treasury in the Province	National Treasury (direct to school bank account)	1. Nat. Treasury 2. DPs pay supplier		1. National Treasury 2. National Tsy in Prov 3. National Treasury 4.-6. DP, NGO or business pay supplier	1. Nat. Treasury 2.&3. NA

A2.3 Other Education Entities' Financing Sources, Budgets, and Treasury

This diagram illustrates the resources available to education institutions at the tertiary and post-secondary level and public education administrations at the provincial (PESSs) and district (DESBs) levels (green shaded boxes), the source entity controlling these resources (orange), whether the resources are allocated through the national and/or provincial budget (blue), and treasury/disbursement responsibilities (yellow).



Annex 3 Methodological Details

Calculation of Public Education Financing

Total public education financing shown under key issue 2 in section 1 is derived from the State Budget Implementation Reports for 2012-2020 and from the State Budget for 2021-2022. The estimate includes:

- Social security contributions that were centrally budgeted and accounted for under the Ministry of Labour and Social Welfare up to 2020 and budgeted under 'other organizations' in the State Budgets for 2021 and 2022. For 2012-2020, these are apportioned based on the education sector share of basic salary (economic item code 60-10-00-00) of the total public sector. Since the State Budgets for 2021-2022 only provide aggregate allocations at chapter-level, the 2020 share of basic salary in total Chapter 60 expenditure has been used and multiplied with the public service social security contribution rate of 8.5 percent. Social security contributions amount to an average of 0.1 percent of GDP over 2012-2022.
- Financing of the 'Sport' subsector is included, as the lack of a functional breakdown of budgets and spending prevented excluding sport-related resources. According to human resource data from the education sector Personnel Management Information System (PMIS), sport subsector personnel was 129 in January 2023 (or 0.2 percent of the total education and sport sector workforce).

Selected spending is not captured due to a lack of data:

- Financing for the University of Health Sciences that is managed under the Ministry of Health.
- Relief and recovery funding, which is divided into emergency relief funding under the Prime Minister's Office and recovery and rehabilitation funding under the Disaster Fund, which is centrally budgeted and accounted for under 'Indemnities for natural disasters' (economic item code 63-60-00-01/02) under the Ministry of Labour and Social Welfare. Sectoral breakdowns of these funds are not available.

Decomposition of Drivers of Education Financing

The impact of the three spending drivers that led to a fall in education spending compared to the peak in 2013 (reduction in total public spending, increase in interest, and (de)prioritization of education spending) are calculated as shown in the table below, illustrated using the spending change in from 2013 to 2019.

Component	Example for 2019 (percent of GDP)	
	Calculation	Impact
2013 spending on education		4.0
1) Fall in overall expenditure levels: Percent reduction in overall public spending between 2013 and 2019 applied to the education spending in 2013	24.9 to 18.8 is a reduction by 24.5 percent, applied to 4.0 percent of education spending	-1.0
2) Increase in interest: Percentage point change between 2013 and 2019 applied to the share of education spending relative to total spending in 2013.	1.0 to 1.8 = 0.8 percentage points, applied to the relative share of education spending of 16.1 percent of total public spending in 2013	-0.1
	Total impact of drivers 1 and 2	-1.1
Hypothetical education spending without any (de)prioritization for 2019	Actual spending in 2013 minus total impact of drivers 1 and 2: 4.0 – 1.1	2.9
2019 actual spending		2.6
3) (De)prioritization: Residual between actual spending and hypothetical spending without any (de)prioritization.	2.6 – 2.9	-0.3

FinEd data collection

As set out in the FinEd Toolkit, the FinEd methodology requires primary data at the school level to inform the assessment of service delivery problems and PFM bottlenecks that contribute to these. This usually requires conducting a school-level survey among a sample of schools in the country/region. However, in the case of the Lao PDR, two recent school surveys had been conducted as part of the SABER initiative (one in 2017 and one in 2021). These contained a lot of the same information that would normally be generated by the FinEd survey. Rather than using scarce resources repeating many of the questions already answered by SABER, a decision was taken to utilize the existing school level data and channel project resources to a more extensive fieldwork exercise at District and Province level to help understand the emerging issues revealed by previous survey work. For the fieldwork, the World Bank team were accompanied by MoES staff and interviewed provincial and district level officials to improve understanding of the underlying problems that resulted in service delivery problems – a process that was invaluable in formulating the analysis in the report and ensuring actionable and appropriate recommendations.

Annex 4 Information Systems

Fragmented MoES Financial Systems: these are necessary MoES medium-term solutions to the lack of integrated national systems, but which present MoES with ongoing challenges. Key messages are:

1. Integrated PFM systems from national level are likely to become available only in the medium to long term (5 to 10 years)
2. MoES institutions, PESSs and DESBs have immediate PFM and MIS needs
3. The current set of necessary but fragmented MoES MIS and FMIS systems meet MoES real needs, add value, and will be necessary for many years
4. Whilst these MoES MIS and FMIS system meet real needs, they come with significant challenges. The MoES financial systems are particularly challenging because they do not currently come within LESMIS

Integrated PFM systems from national level likely to become available only in the medium to long term.

Integrated systems have significant advantages. Data is entered into an integrated system once and is then used and accessed by many modules of that system. Examples of integration in FMIS include:

- revenue and expenditure estimates are entered into a budget preparation module, and once given 'Approved' status, are then automatically used by payroll module, commitment control modules, procurement and purchasing modules, financial management reporting (FMR) modules
- supplier and contractor data (including tax identification numbers, bank accounts etc.) registered on the FMIS vendor system once, and is then accessible to and used by commitment control, procurement and purchasing modules, accounts receivable and accounts payable modules
- purchase orders use data on budget availability and data on suppliers that is already in the IFMIS, and purchasing staff only need to add volume, price, and delivery data
- supplier invoices use purchase order, supplier, price, and volume data already in the system and only need to add data on date of certified delivery, invoice date
- Payroll: employee details and entitlement changes are entered once only, and payroll runs automatically, which automatically updates expenditure data in the ledger and in standard budget execution and double-entry based financial statements
- MoF are working towards this level of integration over the medium to long term with EU and WB support
- Note: interfaces are a second-best option and involve transfers of data between systems or between modules of a system. Interfaces can be automatic or can sometimes require human intervention to ensure compatibility of the data. Interfaces are sometimes unavoidable where systems are controlled by different entities, such as government and commercial banks

The Chart of Accounts is integral to MoF led FMIS reform. However, for MoES and other sector agencies, subsector and program level data are critical to improve the efficiency and effectiveness of their budget allocations to achieve ESSDP outcomes. Unfortunately, for MoF, the performance component or field in the new chart of accounts is a low priority and will only be implemented towards the end of their chart of accounts reform program.

MoES, PESSs and DESBs have immediate PFM and MIS needs. MoES, PESSs and DESBs have immediate needs that are exacerbated by a declining level of resources related to payroll, operating expenses, and infrastructure. These needs include:

- Human resource management, reporting and forecasting by entity, location, and subsector, including over the medium term
- Payroll preparation, reporting forecasting by entity, location, sub sector, including over the medium term
- Teacher allocation options and decisions for both quota and for existing teachers, based on needs
- Operating budget (Ch. 62 & 63) allocation efficiency, including targeting based on needs
- Annual budget preparation for MoES, PESSs and DESBs, as well as budget proposal to MoF and MPI

- In year monitoring of budget execution in both financial and service delivery/performance terms (as well as against the ESSDP financing M&E indicators)
- Annual workplans by 32 institutions, 18 PESSs and 148 DESBs
- To meet requirements of MoF Decrees on double-entry accounting and bank/treasury balance reconciliations

Fragmented MoES FMIS systems meet real needs and will be necessary for many years. The implementation of an Integrated FMIS system (IFMIS) is complex, has a high failure rate, and often takes longer than planned and costs more than expected. Hence, MoES and its partners have invested in short-term (albeit fragmented) FMIS systems that meet its needs for data, information, and accountability that MoF systems cannot currently provide. Some of the MoES short-term solutions and systems developed in recent years are listed below, along with their value to MoES and other stakeholders:

- PB MIS including ACSEP and RB MIS
 - It prepares and tracks budgets at second level entity level and below, i.e., 32 institutions, 18 PESSs and 148 DESBs (MoF GFIS does not do this).
 - It prepares and tracks budgets with subsector information (GFIS does not do this).
 - It links MoES entity budgets to the ESSDP (GFIS does not do this).
 - It recognizes other sources of finance from development partners.
 - PB MIS is adding value for MoES budget preparation and execution compared to just GFIS, but at the expense of increased workload in terms of reentering expenditure data and budget data (which must be entered into Excel and GFIS by MoF).
 - In practice, RB MIS is not consolidating provincial data correctly.
- PMIS standardizes and replaces error prone Excel HR databases and does so down to PESS and DESB level. For teachers it records and reports at subsector level.
- WMIS: MoF and GFIS provide no payroll functionality. WMIS standardizes and replaces error-prone Excel systems down to PESS and DESB level. WMIS handles both administration and teaching employees, and for teachers it records payroll at subsector level (in practice there seems to be problems reporting by subsector by province).
- Accounting for Public Organizations (APO) (double -entry accounting)
 - Compared to MoF GFIS, APO records spending (and technical revenue) by second level budget entity (and DESB); also, by sub sector; APO shows and can be reconciled to bank balance or Treasury Balance (and later budget balance). GFIS does not.
 - APO is adding value for MoES compared to just GFIS, but at the expense of increased workload in terms of entering Payment Voucher data multiple times into GFIS, APO and RB MIS.
 - APO user acceptance testing scheduled for February 2023. It will then be rolled out to all PESSs and DESBs, in addition to the existing 32 institutions and Vientiane Capital. A change management issue is that APO should be able to replace PESS/DESB Excel recording and not exist alongside.
- Much of the data on these systems is the same and is entered multiple times by users in the same department or by users in different departments or at different levels. This is costly, error prone, and time consuming.

MoES is making progress on the development of these systems, as is MoH and other ministries. This necessarily results in a fragmentation of MISs. This means that the same data is entered many times into multiple systems, rather than once through an integrated system. Interfaces between multiple systems are limited, but MoES plan to develop further interfaces to help minimize multiple entry of the same data and provide more usable information for education partners and stakeholders.

Current MoES FMIS systems meet real needs but have significant challenges:

- **Fragmentation:** Data is fragmented across multiple systems which are difficult to access. This is a significant constraint for MoES, the government and for education partners, including World Bank. A significant challenge for the PEIR has been difficulty accessing MIS databases. This was a challenge to earlier WB missions, and to other technical missions endeavoring to support MoES with their ICT and LESMIS development. MoES ICT have a LESMIS strategy to bring all MISs into an overarching database framework, at least for the nonfinancial data. MoES ICT have championed open-source solutions and database tools, as well as industry standard programming and interfaces such as API.
- **Other Challenges for MoES Financial Systems:**
 - Generally, these systems do not use open-source software and they use proprietary databases (e.g., Oracle).
 - They need unique software to be installed on the computers of users, rather than provide access through a web address and log-in.
 - The financial MIS developers have retained control over the databases and provide MoES with a limited set of standardized reports. MoES ICT is not the database administrator.
 - Broader requests for data from planners, researchers, and partners (including this PEIR) cannot be met by MoES without engaging with the developer, sometimes with additional time delays and costs.
 - It is unlikely that relevant MoES departments will have the skills to manage these proprietary databases without the support of the local development firms.
 - The systems are demanding on Internet capacity, and often run slowly in more remote locations. Some users maintain backup Excel systems, at the cost of entering the same data multiple times.
 - Change management issues are sometimes not adequately addressed in specifications or RFP documents for these systems. Some PFS and PT (and DFS/DT) requirements in provinces and districts have unique local requirements, requiring the local PESS/DESB to maintain Excel systems and enter the same data into these Excel systems multiple times.

MoF is leading and piloting medium-term budget reforms. MoF, with EU and World Bank support, is addressing technical challenges related to reliable economic data, fiscal data, reliable revenue forecasts, and expenditure data, especially at subsector/program level which the GFIS and most ministries do not have. Medium-term budget frameworks also require early involvement and engagement with leaders to specify their medium-term spending priorities through transparent ceilings for:

- Debt servicing
- Other Institutions
- Sector level service delivery institutions at central and local level (e.g., MoES, MoH)

MoES need some predictability in its quota and budget over the medium term. Challenges, especially around retirements and quota, require medium-term strategies and resource commitments.



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