CAMBODIA

PUBLIC FINANCE REVIEW

FROM SPENDING MORE TO SPENDING BETTER

2023

Australian Aid
EUROPEAN UNION
WORLD BANK GROUP

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GLOSSARY OF ACRONYMS

ABEs	Authorized Budget Entities
ADB	Asian Development Bank
ADP	Agriculture Development Policy
AP	Account Payable
API	Advocacy and Policy Institute
AR	Account Receivable
ASEAN	Association of Southeast Asian Nations
ASMP	Agriculture Sector Master Plan
AOI	Agriculture Orientation Index
BOG	Board of Governors
BSP	Budget Strategic Plan
BSRS	Budget System Reform Strategy
CBHI	Community-Based Health Insurance
CCC	Cooperation Committee for Cambodia
CCWC	Commune Committee on Women and Children
CDHS	Cambodia Demographic and Health Survey
CHE	Current Health Expenditure
CISIS	Cambodia Irrigation Scheme Information System
COM	Council of Ministers
COVID-19	Coronavirus Disease of 2019
CP	Capital and Provincial
CPA	Complementary Package of Activities
CPS	Center for Policy Studies
CRDB	Cambodian Rehabilitation and Development Board
CS	Commune and Sangkat
CSES	Cambodia Socio-economic Survey
CSOs	Civil Society Organizations
DBST	Double Bituminous Surface Treatment
D&D	Decentralization and Deconcentration
DFAT	Department of Foreign Affairs and Trade
DAH	Development Assistance for Health
DMK	District, Municipality and Khan
DI	Department of Investment
DP	Development Partner
EAP	East Asia Pacific
EMIS	Education Management Information System
FAO	Food and Agriculture Organization
FMIS	Financial Management Information System
FMWG	Financial Management Working Group
GA	General Administration
GDA	General Directorate of Agriculture
GDB	General Department of Budget
GDNT	General Department of National Treasury
GDP	Gross Domestic Product
GDSNAF	General Department of Subnational Finance
GDPP	General Department of Public Procurement
GDT	General Department of Taxation
GIZ	German Agency for International Cooperation GmbH
HEF	Health Equity Fund
HC	Health Center
HIC	High-income Country
HCwB	Health Center with Bed
H-EQIP	Health Equity and Quality Improvement Project
HP	Health Post
HSP	Health Sector Policy
ICT	Information Communication Technology
IP	Investment Plan
IPI	Index of public Integrity
IRF	International Road Federation
KHR	Khmer Riel
LIC	Low-income Country
LPI	Logistic Performance Index
LM	Line Ministry
LMIC	Lower Middle-income Country
LJR	Legal and Judicial Reform
MAFF	Ministry of Agriculture, Forestry and Fisheries
MCFA	Ministry of Culture and Fine Arts
MCS	Ministry of Civil Service
M&E	Monitoring & Evaluation
MEF	Ministry of Economy and Finance
MISTI	Ministry of Industry, Science, Technology & Innovation
MME	Ministry of Mines and Energy
MOC	Ministry of Commerce
MOCAR	Ministry of Cults and Religion
MOE	Ministry of Environment
MOH	Ministry of Health
MOEYS	Ministry of Education, Youth and Sports
MOIn	Ministry of Information
MOLVT	Ministry of Labor and Vocational Training
MOSVY	Ministry of Social Affairs, Veterans and Youth Rehabilitation

MOT	Ministry of Tourism
MOWA	Ministry of Women's Affairs
MOWRAM	Ministry of Water Resources and Meteorology
MPA	Minimum Package of Activities
MRD	Ministry of Rural Development
MTFF	Medium-term Fiscal Framework
MTBF	Medium-term Budgetary Framework
NASLA	National School for Local Administration
NCDD	National Committee on Democratic Development
NP-SNDD	National Program on Subnational Democratic Development
NGO	Non-Governmental Organization
NPAR	National Public Administration Reform
NSDP	National Strategic Development Plan
NSSF	National Social Security Fund
ODA	Official Development Assistance
OD	Operational District
OPD	Out Patient Department
OOP	Out-of-pocket
OBS	Open Budget Survey
OWSU	One Window Service Unit
O&M	Operation and Maintenance
PAEC	Policy on Agriculture Extension in Cambodia
PB	Program Budget
PDAFF	Provincial Departments of Agriculture Forestry and Fishery
PDEF	Provincial Department of Economy and Finance
PFM	Public Finance Management
PFMRP	Public Financial Management Reform Program
PFR	Public Finance Review
PIB	Performance-informed Budgeting
PIP	Public Investment Program
PISA	Program for International Student Assessment
PEFA	Public Expenditure and Financial Accountability
PER	Public Expenditure Rview
PFM	Public Financial Management
PFR	Public Finance Review
PHD	Provincial Health Department
PIM	Public Investment Management
PIMA	Public Investment Management Assessment
Pos	Producer Organizations
PPP	Public Priavte Partnerships
PPPs	Purchasing Power Parity
RMS	Revenue Mobilization Strategy
RGC	Royal Government of Cambodia
RS	Rectangular Strategy
SDGs	Sustainable Development Goals
SDG	Service Delivery Grant
SOA	Special Operating Agencies
SWiM	Sector-Wide Management
SEZ	Special Economic Zone
SOF	School Operations Fund
SNA	Subnational Administration
SSCA	State Secretariat of Civil Aviation
TYDA	Samdech Techo Voluntary Youth Doctor Association
TWG-AW	Technical Working Group on Agriculture and Water
UHC	Universal Health Coverage
UMIC	Upper Middle-income Country
UNFCCC	United Nations Framework Convention on Climate Change
WB	World Bank
WDI	World Development Indicators
WFP	World Food Programme
WHO	World Health Organization

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- Achieving fiscal resilience and maximizing fiscal space by Sodeth Ly, Bradley Robert Larson, Runsinarith Phim, and Ashima Neb with contribution from Sidong Kim and William Chandler.
- Enhancing quality of public spending by Sokbunthoeun So, Serdar Yilmaz, and Khy Touk with contribution from Lindley Higgins, Kimsun Tong, Flavia Giannina Sacco apurro, Zahid Hasnain, Muhammad Faisal Ali Baig, Fata No, Paul Jacob Robyn, Kimchoeun Pak, and Sadig Aliyev.
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EXECUTIVE SUMMARY

This Public Finance Review (PFR) is delivered following the request of the Ministry of Economy and Finance for technical assistance to support more effective budget management. The objective of the study is to inform the next phase of the government's public financial management (PFM) reform strategy (achieving performance accountability) and to provide analytical basis for the government's fiscal reform efforts in the post-pandemic period. The PFR covers six main chapters. The first chapter (achieving fiscal resilience and building fiscal space) examines macro fiscal performance. The second chapter (enhancing quality of public spending) reviews public expenditure covering selected key ministries in social, economic and infrastructure sectors as well as administrative services and cross sectoral programs. The remaining four chapters provided a deep dive exploration into expenditure and public finance management in: Health, Agriculture, Irrigation and Water Resources, and a case study of Preah Sihanouk province. The analysis at the subnational level complements an earlier study on intergovernmental fiscal architecture with a case study of Preah Sihanouk province. The selection of ministries and subnational administration for these deep dive explorations follows the request of the Royal Government of Cambodia. Together these four deep dive chapters cover 21.7 percent of total sectoral spending or 5.6 percent of GDP in 2021.

Cambodia sustained average annual GDP growth of 7.6 percent between 1995 and 2019, becoming one of the fastest-growing economies in the world. The strong economic growth performance together with the implementation of a Revenue Mobilization Strategy (RMS)—RMS 2014-2018 and RMS 2019-2023—helped to boost tax revenues from 12.8 percent of GDP in 2011 to 22.5 percent in 2022. Overall domestic revenues peaked at 25.1 percent of GDP in 2019. In addition, prudent management of public finances helped to increase fiscal buffers—during the same period government savings increased ninefold, from 2.1 percent of GDP in 2011 to 17.8 percent of GDP in 2022. Government savings peaked at 23.6 percent in 2020. All of these improvements enabled the government to strengthen its overall fiscal position, providing Cambodia with fiscal space to respond to Covid-19. However, despite all of these efforts, Cambodia's public debt increased during the COVID-19 pandemic, from US$8.8 billion (28.1 percent of GDP) in 2019 to US$9.9 billion (33.7 percent of GDP) as of end-2022. Nevertheless, Cambodia remains at low risk of external and overall debt distress under the Low-Income Countries Debt Sustainability Framework according to the joint World Bank/International Monetary Fund Debt Sustainability Analysis in 2022.

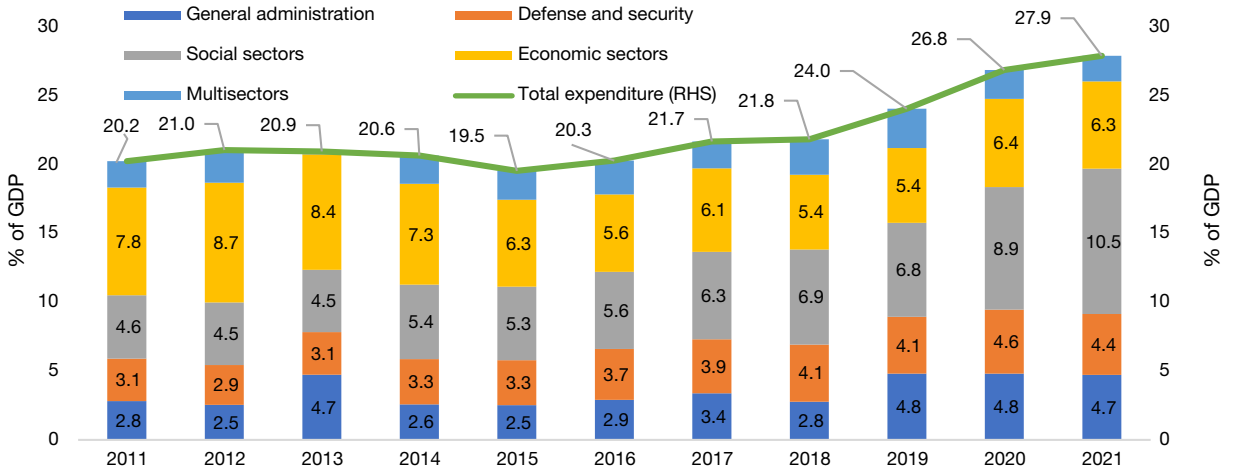
Expanded fiscal space enabled higher spending, especially in social sectors

Increased fiscal space allowed the government to boost overall spending, which reached 27.9 percent of GDP in 2021, up from 20.2 percent in 2011 (Figure ES.1). In line with the government's medium-term development vision, which prioritized human capital accumulation, spending in the healthcare and education sectors increased more than others. The share of social sectors spending more than doubled as a share of GDP to 10.5 percent in 2021 from 4.6 in 2011. The increase in social sectors spending was driven by the education and health sectors. In contrast, the overall spending allocation in economic and infrastructure sectors declined between 2011 and 2021.

However, this boost in spending was driven partly by across-the-board salary increase with the average public sector wage now exceeding the average wage in the private sector for the same job

The public sector is a major source of employment in Cambodia and improvements in

Figure ES.1. Government expenditure, by sector grouping (% of GDP) (2011-2021)



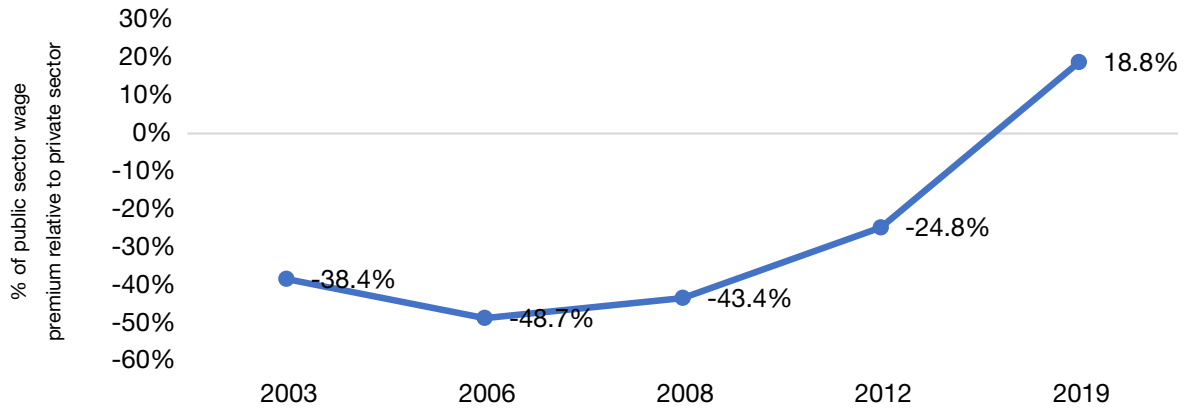
Sources: *Budget Settlement Law (2011-2021); World Bank staff estimates*

Note: *RHS = Right-hand scale*

public sector wages over the years helped to address negative public sector wage premium. Average monthly public sector pay reached KHR 1.5 million in 2019, compared to KHR 1.25 million for the private sector. Before 2019, the public sector workers in Cambodia incurred a wage penalty for the same job in the private sector (Figure ES.2). Between 2003 and 2012, the wage differentials between public and private sector workers have shown a big income gap in favor of private employment, with a wage penalty for public sector workers ranging from 38 to 25 percent. With the introduction of a compensation reform in 2013, the public sector salaries started to improve gradually, leading to positive wage premium. Cambodia's public sector wage premium relative to private sector employees (even after accounting for observable characteristics such as experience, educational qualification, gender, and location) was 18.8 percent in 2019.

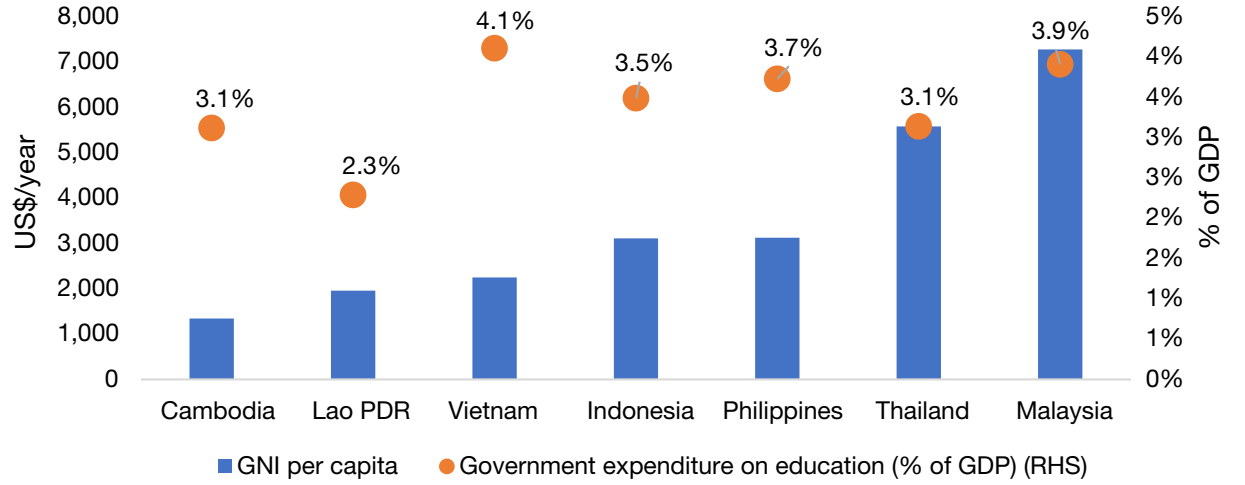
Higher public sector wages are the main source of growth in the public sector wage bill. Cambodia's wage bill has increased over time, from 3 percent of the country's GDP and 26 percent of public expenditure in 2005 to more than 8 percent of GDP and 33 percent of public expenditure in 2020. Even though some regional peers show a similar trend between 2005 and 2020, the rate at which the public expenditure on the wage bill has increased is unique to Cambodia. Cambodia's public wage bill has a relatively high footprint on its general government revenues compared to its regional peers.

Figure ES.2. Cambodia's public sector wage premium over time



Source: World Bank's Worldwide Bureaucracy Indicators

Figure ES.3. Government expenditure on education (% of GDP vs GNI per capita, 2021)



Source: *WDI (extracted 2023)*

Note: *RHS = Right-hand scale*

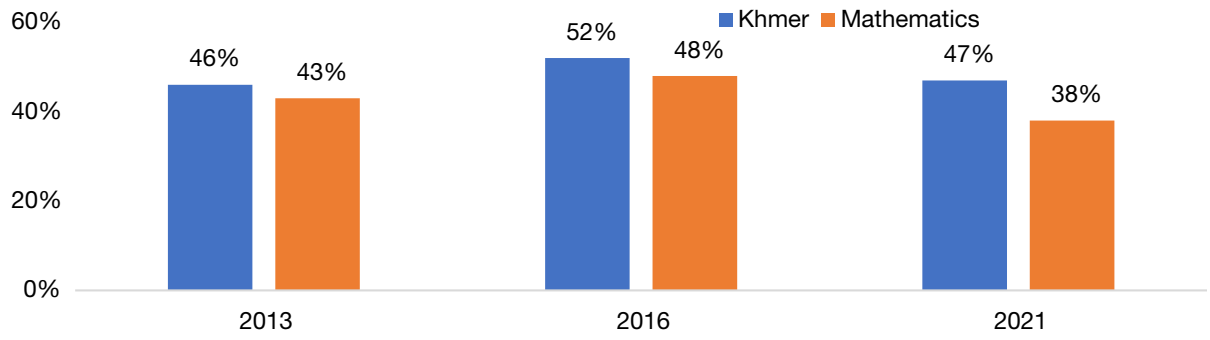
Improvements in public sector wages and higher spending in social sectors have yet to translate into better outcomes

Cambodia's spending on education is the second lowest in the region in terms of percent of GDP and slightly lower than regional average of 3.4 percent of GDP. [1] Cambodia's gross national income per capita is the lowest compared to regional neighbors and its education spending of 3.1 percent of GDP is higher than Lao PDR, on par with Thailand (3.1 percent of GDP), and slightly lower than Indonesia (3.5 percent of GDP), the Philippines (3.7 percent of GDP), and Malaysia (3.9 percent of GDP) (see Figure ES.3).

Cambodia's learning outcomes remain low. Between 2013 and 2021, an average student in Grade 6 could answer less than 52 percent of Khmer questions correctly. Student learning outcomes for Mathematics were even poorer. On average, Grade 6 students answered less than half of the questions correctly—43 percent in 2013, 48 percent in 2016, and 38 percent in 2021 (Figure ES.4).

In the health sector, although overall expenditure

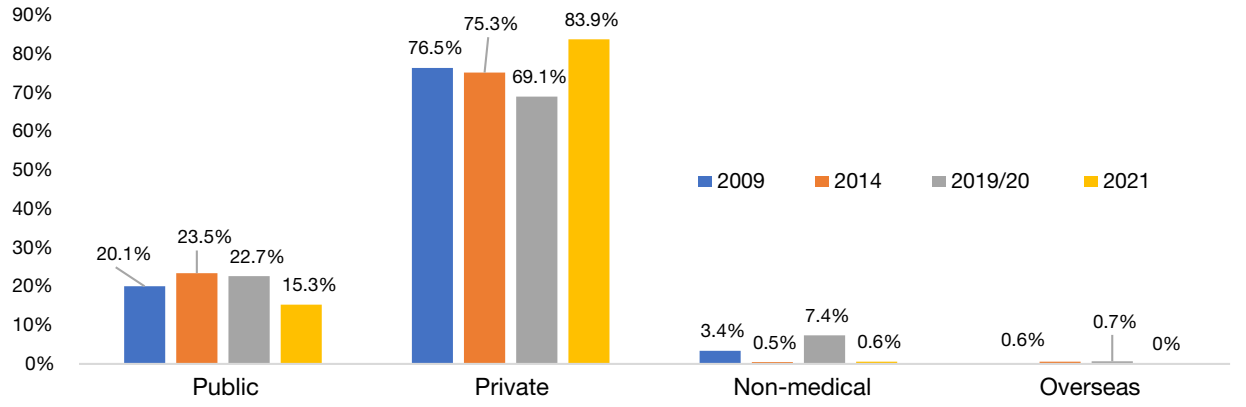
Figure ES.4. Learning outcomes for Grade 6 students deteriorated between 2013 and 2021 (Percentage of questions correctly answered)



Source: *MOEYS*

1 Cambodia's education spending as a percent of GDP is based on current GDP value and is expected to be lower with the upcoming GDP rebasing.

Figure ES.5. Type of health provider consulted first



Sources: *CSES (2009-2021)*

Note: *Public care includes national hospital, provincial hospital, district hospital, health center, health post, provincial or community based rehabilitation center, and other public service. Private care includes private hospital, private clinic, private pharmacy, visit to home/office of trained health worker/nurses, visit to trained health worker/nurses, other private medical service, shop selling drugs/market. Non-medical care includes Kru Khmer/magician, monk/religious leader, traditional birth attendant.*

were increased over the years, there is room for further improving efficiency. In 2021 public health expenditure was 2.2 percent of GDP[2], up from 1.8 percent in 2017. The spending increase was driven mainly by a rise in health sector wages, in-patient services and operational expenses for health centers, whereas spending on drugs remained stable. However, the high levels of expenditure on overhead (health administration), a smaller percentage of expenditure for front line service delivery, and low utilization of public health facilities suggest that there is a lot of room for improving the efficiency of public health expenditure. The low level of usage of public health facilities at 15.3 percent (compared to 83.9 percent for private sector) suggests that public health policy has not been effective (Figure ES.5).

Similar to social sectors, spending on other sectors has yet to translate into better outcomes

Cambodia spent 2.8 percent of GDP (combining both domestically and externally funded resources) on infrastructure in 2021; however, the quality of infrastructure remains poor. Cambodia scored 3.4 out of 7 and ranked 99 out of 137 countries on overall infrastructure quality in the World Economic Forum's 2019 Global Competitiveness Index. The quality of roads, railroads, ports and air transport ranked respectively 99, 94, 81 and 106. In addition, paved roads as a share of total road networks in Cambodia remained the lowest in ASEAN between 2015 and 2020. While 100 percent of 2,254 Km 1-digit national road network is paved, only 72 percent of 2-digit national roads (5,007 km) and 30 percent of 3- and 4-digit provincial roads (9,031 km) are paved.[3] Cambodia also ranked lower than most ASEAN neighbors, except Myanmar, on the logistics performance index. More efficient public investment management and effective public private partnership (PPP) initiatives could help to improve quality infrastructure.

In terms of the agriculture sector, Cambodia's public spending—combined spending of the Ministry of Agriculture, Forestry and Fisheries (MAFF) and Ministry of Water Resources and Meteorology (MOWRAM)—is relatively high compared to other countries in the region. Cambodia spends around 8 percent of total government budget on agriculture, while the average spending by the EAP and ASEAN countries was around 7 percent and 4 percent respectively between 2016 and 2020. MAFF recurrent budget allocation as a share of total budget allocation increased from 81 percent in 2017 to 94 percent in 2021, driven

2 MOH expenditure excludes Covid-19 spending in 2021.

3 ADB, transport sector assessment (2019)

mainly by a rise in the wage bill. This increase in the wage bill crowded out public investment resources, which was reduced three-fold, from 19 percent of total domestic budget in 2017 to 6 percent in 2021. This reduction in available resources for agricultural infrastructure investment was partly offset by mobilizing external financing. MOWRAM is especially dependent on externally sourced funds.

Cambodia needs to do a better job in addressing inequalities: fiscal policies reduced inequality but only marginally

Fiscal policies—revenue and expenditure—reduce inequality as measured by a reduction in Gini coefficient. While Cambodia does reduce inequality through taxes and transfers, the degree of redistribution is small by international comparison. The redistributive effect of fiscal policies (including in-kind transfers) is lower in Cambodia than in some other lower middle-income countries. Further improvements in targeting poorer provinces, such as for the healthcare sector, can help to improve the equity of spending.

Limitation of planning impedes achieving allocative efficiency and quality of expenditure

There is a significant deviation between amounts planned in the National Strategic Development Plan (NSDP) and overall government spending, reflecting weak linkages between government strategic planning and budget execution. Annual investment spending did not reflect targets in the NSDP capital planning. NSDP planned investment expenditure were over-executed between 2014 and 2019 and under-executed in 2020 and 2021. While the NDSP is expected to be superseded by annual budgets as circumstances evolve, significant financing gaps between the NSDP and the annual budgets that Cambodia has experienced so far indicate that planning needs further improvements.

However, annual budget credibility is high. Budgeted amounts approved by the National Assembly are generally closer to the actual amounts spent for the total budget. The most recent PEFA assessment (2021) suggested a high level of budget credibility since expenditure outturns compared to approved budget for 2017, 2018, and 2019 was within +/- 5 percent: 97.9 percent in 2017, 99.4 percent in 2018, and 99.3 percent in 2019 (PEFA 2021). Expenditure outturns based on comparison between Budget Law and Budget Settlement Law was 91 percent in 2020 and 92 percent in 2021.[4] However, the difference between budgeted and actual spending amounts varies substantially among ministries. For example, the Ministry of Agriculture, Forestry and Fisheries (MAFF) spent around three folds its planned investment budget in 2021, while the Ministry of Education, Youth and Sport (MOEYS) spent only 63 percent of domestic capital budget for the same year. The Ministry of Post and Telecommunication's recurrent budget outturn fluctuated from 120 percent to 151 percent of total budget between 2017 and 2021.

Strengthening budget discipline can help to improve operational efficiency, and hence the quality of expenditure. A close examination of expenditure suggests a need for more attention to operational efficiency. In general, recurrent budget outturn is much closer to the approved budget; however, capital expenditure fluctuated significantly. Historically, there has been a huge fluctuation in budget outturn for both government and externally funded public investment. For government-funded public investment programs, the budget execution rate has been 90 percent for all years, except in 2019 when the execution rate reached 130 percent. For externally funded investments, the budget execution rate was above 100 percent between 2012 and 2016, however, the rate went below 100 percent between 2017 and 2021.

Despite steps to enhance the result orientation of the budgeting process, linkages to outcomes remains weak

4 Budget Law and Budget Settlement Law 2020 and 2021

Budget Strategic Plan (BSP) and Program Budgeting (PB) have been introduced to all ministries under the Public Financial Management Reform Program (PFMRP). BSP and PB attempt to connect line ministry expenditure allocations to policy priorities and outcomes across a three-year horizon. The preparation of the BSP precedes the annual budget preparation and provides the background information and parameters to shape the basis for budget allocations. However, the contents of the BSP currently have weak linkages to annual PB. While planned budgets in BSP increasingly improved over the year with the medium-term budget framework introduced in the BSP budget circular, BSP could be further improved in terms of realism of its planned budget and performance indicators. Further, expenditure by a program currently do not accurately capture all of the program costs, including personnel costs and capital expenditure costs. This is because PB has been designed to accommodate the existing administrative organigram of ministries. Salary expenses are registered in one program (usually the last program) rather than reflecting the actual personnel costs of each program.

Summary of recommendations

During the last decade Cambodia succeeded in achieving significant domestic resource mobilization which in turn enabled a rapid expansion of social spending. During the next decade it should shift from spending more to spending better. The large expansion of public spending on critical social sectors demands commensurate efforts to improve the quality of public services and ensure that higher spending translates into better human development outcomes. The following policy options could be helpful in achieving efficiency and equity to ensure that increased spending translates into improved outcomes and equitable service provision.

Achieving fiscal resilience and maximizing fiscal space to address structural spending needs

Cambodia needs fiscal space to address remaining and emerging development challenges. Poverty reduction gains are continually threatened by households' exposure to shocks and low human capital formation, particularly among poor and vulnerable households.[5] Additionally, Cambodia is ranked in the top 40 countries most at risk from the impacts of climate change, particularly to floods, droughts, windstorms, and seawater intrusion. This is likely to impact Cambodia's economy, especially the agriculture sector. Addressing these development needs will require sustained public investment while maintaining adequate buffers to respond to crises if and when they occur.

It will be necessary to further strengthen the tax administration system in the next phase of Revenue Mobilization Strategy using the Tax Administration Diagnostic Assessment Tool (TADAT). In addition, potential areas for expanding revenue could be explored. This may include rationalizing tax expenditure, improving health excise taxes, and introducing climate smart fiscal policy. Rationalizing tax expenditure supported by robust tax expenditure analysis can help to ensure that exemptions granted contribute to economic development needs. Cambodia forfeits nearly a third of its potential revenues from imports as a result of tax exemptions. While free trade agreements will naturally result in the decline of revenues from customs, ineffective incentives can result in further decline of revenues without substantial gain in economic growth.[6] The implementation of the 2021 Law on Investment, which is more generous than the old law, will likely have impact on profit tax collection. Similarly, health excise taxes can contribute to improved public health while generating revenues

5 Cambodia has recently redefined the poverty line, using the most recent Cambodia Socio-Economic Survey for 2019-20, cost-of-basic need, and common basket approach. The national poverty line is now KHR 10,951 per person per day. Under the new poverty line, about 17.8 percent of the population is identified as poor. See World Bank (2018). Realizing the Promise of Social Assistance. Washington, DC: World Bank. See https://openknowledge.worldbank.org/handle/10986/30925

6 An assessment has not been undertaken about the effectiveness of the the country's new Law on Investment (2021) increasing the risk that tax incentives erode the revenue base.

to help boost health spending needs. Cambodia has implemented excise taxes since the mid-1980s and has made gradual reforms to the excise tax structures. Increases in tax rates have been few. There is no comprehensive legal instrument governing excise tax policy and administration. Bringing excise tax structure in line with good practice and trends in other countries can help to boost revenue. At the same time, the introduction of climate smart fiscal policy could provide Cambodia with buffers to mitigate climate effects and improve resilience for the economy. Introducing carbon taxes help Cambodia to increase fiscal space to mitigate climate change impacts on its economy.

Cambodia needs to improve the quality of public expenditure through a number of policy and institutional measures

Linking public sector pay increase to performance

Continuing across-the-board pay increase without linking them to performance is fiscally unsustainable. Salary increase across the board has not contributed to improved performance. The increase in the public sector wage bill places Cambodia among those countries that spend a large share of government revenues on public wages. All regional peers except Vietnam and Palau (both of which have higher per capita income levels) spend less than Cambodia on their wage bill. A higher wage bill has the potential to crowd out necessary resources for critical public investment projects.

The full scale implementation of reforms in budget execution system (rolling out of Financial Management Information System-FMIS) as well as improvements in program budgeting

Cambodia needs to refine the Budget Strategic Plan (BSP) of ministries together with their program budgeting architecture and shift from budget negotiation practice based on line items to outcomes to make the best use of performance-informed budgeting reform. The current program architecture of ministries does not support this performance orientation. More importantly, Cambodia's central systems (human resource and financial management) are disconnected and fragmented to support performance-orientation of budgets. Last but not least, BSP of sector ministries requires a very close examination to improve realism and ensure achievability of targets.

The foundations of performance-orientation for budgets can be strengthened by the PFM reform program. Currently, the Financial Management Information System (FMIS) connects the Ministry of Economy and Finance (MEF) to all provincial treasuries, all provincial departments of economy and finance, and all line ministries; however, the full benefits of the system have not materialized. First, despite the installation of a treasury single account, there is still an extensive use of cash advance in line ministries. Due to inadequate business process streamlining, cash advance has been used to provide quicker access to resources at line ministry and service delivery spending unit levels.[7] Second, currently FMIS is not functioning at the spending unit levels. Hence, all of the spending units of the sector ministries are not connected to the system. Therefore, the transactions for these units are conducted offline. The recent use of FMIS portal at the commune/sangkat level brings FMIS closer to spending units—a step in the right direction. Third, there are still limitations in the budget classification, thereby restricting the potential for use of information for management purpose. For example, program classification usefulness is limited by program architecture, which does not capture all expenditures including personnel costs and capital investment. Therefore, we would not know for sure how much has been spent on a particular program. This severely

7 FMIS budgetary coverage is quite high, but a more granular assessment of the expenditure transactions ecosystem reveals an interesting profile: although the national level captures 62.9 percent of the total expenditure, it only covers 8.7 percent of all payment transactions. Since only 15 percent of central expenditure's financial transactions were below US$2,500, the FMIS was mainly used for drawing out advances from Treasury which were then processed off-line.

limits the ongoing effort to use performance informed budgeting. It is important to fully implement all seven segments of budget classification, which captures information about economic, administrative, program, function, geography, source of fund, and project classification. A comprehensive classification system is the fundamental building block for a performance-informed budget management system, facilitating decision-making and contributing to improvements in financial and performance accountability.

Improving the adequacy and effectiveness in the distribution of responsibilities and resources across levels of government

Having the right amount of public resource and personnel at the right place is critical to improving public sector performance, and ultimately improving the quality and quantity of public services. Cambodia is one of the most centralized countries in the region, with less than 10 percent of total budgetary resources going to subnational governments. Concurrently, the Cambodian public administration remains highly centralized, even 20 years after the initiation of the government's deconcentration and decentralization program. The lack of qualified technical and frontline personnel has been noted in rural Cambodia, while central offices of ministries are over-staffed. In the irrigation sector, for example, each province has only about 25 staff, less than half what would be required to run just one large irrigation scheme (40,000 ha or more); whereas the headquarters of the MAFF and MOWRAM have excess staff. Similarly, within the healthcare sector, there are sharp disparities in the availability of resources in the richest and the poorest provinces, as well as between urban and rural areas. About 60 percent of the health budget, for example, is spent at the provincial level; however, the average distance to a health center in rural areas is very long, and few doctors are available in rural public health centers.

Strengthening quality of public investment management for improved quality of infrastructure investment

Improving quality of infrastructure will require strengthening public investment management (PIM). Key recommendations in the 2019 Public Expenditure Review (PER) pointed to the need for upgrading PIM upstream project appraisal; strengthening PIM downstream project budget execution; and upgrading PIM database and build capacity. While some progress has been made with regard to upstream process (as seen in the adoption of PIM Sub-decree and PIM reform strategy) and upgrading of PIM database with monthly report being transformed into shared database that automates production of consolidated monitoring report, required capacity for downstream implementation appeared limited. Required PIM guidelines have been adopted and it is necessary to build required capacity for implementation in line with the guidelines (see Table ES.1).

Table ES.1. Summary of recommendations on PIM from the 2019 PER

Areas for PIM reform	Key recommendations	What has been achieved and remaining challenges
Strengthen PIM upstream project appraisal	Upgrade PIM strategy and planning with a PIM Sub-decree	• Improved PIM legislation: PIM Sub-decree adopted; however, this sub-decree does not include climate change to support resilient infrastructures. • Public Investment Management System Reform Strategy (PIMSRS) 2019-2025 adopted • Fiscal risk statement developed as part of the MTFF document; however, **MTFF is not yet formally adopted by the Council of Ministers.**

Areas for PIM reform	Key recommendations	What has been achieved and remaining challenges
	Strengthen project pre-appraisal and appraisal procedures and guidelines	• Standard criteria adopted in Sub-decree# 41 ANKr.BK provided guidelines on project rationality, economic and financial viability, project options, affordability principles, deliverability principle, and project implementation. • Public investment committee (PIC) has been formed to act as gatekeeper and harmonize all public investment sources. • **Ensuring the quality of project appraisal remains a challenge.**
	Upgrade project prioritization and budgeting procedures	• Projections of project cost for major investment included in Public Investment Plan attached to budget document • Mechanisms to give funding priority to ongoing domestically funded projects exist. • **Routine maintenance included in budget, but capital maintenance (infrastructure renovation, reconstructions and enlargements) is not included in any budget documents.**
	Frame the PPP upstream processes under a unified framework with PIM	• Law on Public Private Partnership adopted in 2021 and various guidelines • Policy Paper on the Development of PPP Mechanism for Public Investment Project Management 2016-2020 issued in 2016 • **Limited PPP information in budget documents**
Strengthen PIM downstream project/ budget execution	Strengthen project implementation and procurement	• Projects are required by Law to adopt competitive and open procurement. • Required PIM guidelines including for domestic fund have been adopted. • **No requirement for monitoring or for the independent review of complaints; lack of database to monitor key steps in the tender process**
	Develop clear project adjustment procedures and guidance	• Several Line Ministries (LMs) have multi-year projections of capital spending in Budget Strategic Plan (BSP). • Capital funding are annually appropriated for domestically and externally financed project. • **There may be shifting in budget prioritization resulting in reduced capital investment.**
	Introduce completion review and ex-post evaluation	• Department of Investment (DI) verified domestically financed project completion and reported to MEF on monthly and quarterly basis. • **Some portfolio oversight has been conducted while ex post audits of individual projects not systematically required.**
Upgrade PIM database and build capacity	Build a PIM database (CAPEX) to register public investment projects and processes	• IT systems are being developed to support macro-fiscal statistics management, performance management, and asset registry; FMIS supports budget and treasury functions. • **Asset monitoring system is primarily used for controlling asset sales rather than as an input for decision making throughout the public investment management cycle.**

Sources: *PER (2019), PIMA (2019), PEFA (2022) and World Bank staff*

Cambodia can also leverage upon effective public private partnership (PPP) initiative to address infrastructure gap. However, a PPP project is not 'free' as the end users must pay for the project through escalating tolls or tariffs over the term of the concession. It is, therefore, critical to carefully assess the technical and financial proposals (particularly in terms of the tariffs/tolls being charged and the tax/royalty exemptions being sought) to ensure that projects are providing 'value for money' to the public.

Maximizing effectiveness of public health policy

Cambodia's health sector is challenged by high out of pocket expenditure, inequalities in health outcome, and low utilization rate for public health facilities. Out-of-pocket (OOP) spending in Cambodia at around 60 percent of total health spending is high compared to around 30 percent for similar income level countries, exposing households to financial risks associated with major illnesses or accidents. While health outcomes generally improved, disparity between the richest and the poorest and between urban and rural areas remain high. Between 2005 and 2021, the rates of mortality for infants and children under five significantly declined in both urban and rural areas; however, rural areas and the poorest populations continue to experience higher mortality rates for infants and children under five. Low utilization of public health services reflects the limited effectiveness of public health expenditures. Over the last decade, there was an increase in households seeking first treatment in private sector facilities from 76.5 percent in 2009 to 83.4 percent in 2021, while utilization of public health services declined from 20 percent to 15 percent during the same period. This trend is seen even for households with access to HEF and NSSF. Higher private health care utilization means higher chance of increased OOP spending, thus less financial health protection.

Other than BSP and program budgeting challenges discussed earlier, Cambodia's health sector also faces some key technical challenges. Spending at provincial level is not reducing regional disparities since there is no targeting of poorer areas during the budget preparation exercise. With more spending at central level, there is a shortage of health workers, medicine, and equipment at the facility level. Last but not least, there are inadequate resources for emerging challenges, like non-communicable diseases, at the health center level—which provide primary health care service to people in rural areas.

Improving human resource management and public finances for better quality education services

The 2019 PER made three recommendations for education sector (i) improving program budgeting by delegating authority to budget managers, (ii) addressing uneven distribution of teachers, and (iii) enhancing student learning outcomes. Efforts have been made but there has been limited achievement in relations to these earlier recommendations (See Table ES.2).

Strongly salary-driven budget and ineffective human resource management continue to impact the performance of Cambodia's education sector. With more than 78 percent of budget spent on wages, human resource is the largest expenditure item in the education sector. The Ministry of Education, Youth and Sports (MOEYS) faces challenges in addressing the distribution of teachers—there are surplus and shortage of teachers in geographic areas as well in schools. The distribution of teachers is skewed toward urban areas and not responsive to learning needs of students. In 2021, urban areas had teacher shortage of 490 while rural areas had a net teacher shortage of 19,867. At provincial level, the teacher distribution is tilted toward Phnom Penh where surplus of teachers concentrated between 2018-2021. In addition, there are surpluses and shortages of teachers in certain subjects at the school level.

Table ES.2. Summary of recommendations for improving education outcomes from the 2019 PER

Areas of reform	Recommendations	What has been achieved and remaining challenges
Flexibility of school using funds	• Delegation of authority to budget managers to facilitate expenditure execution • Assign personnel costs to specific programs • Include DP-funded projects in the BSPs	MOEYS prepares BSP based on guidance from MEF. Three-year rolling PB is prepared. DP funded projects are included as part of BSP. **Challenge: (1) School has limited flexibility in expenditure execution; (2) personnel cost is capture under only Program 5 and not allocated in respective program.**
	Progress towards school-based management	School-based management has been introduced and gradually rolled out **Challenge: Delegation of authority to school in managing resources has been limited.**
Addressing enrollment gap between rich and poor	Expand the coverage and funding of the current student grant programs to reduce the opportunity cost of schooling	Effort has been made to improve enrollment rate in primary school. **Challenge: There is still a gap between urban and rural areas in education enrollment, especially for secondary school between 2014 and 2021.**
Addressing uneven distribution of teachers	Reallocate teachers to nearby schools through monetary incentives or allowance for travels	Sub-decree # 102 dated 2002 set out one time allowance for redeployment; MOEYS' teacher norm was introduced in 2018. **Challenge: Shortages and surpluses of teachers continue to be a key challenge for schools in delivering education services.**
	Enforce student-teacher ratios	
Improving student learning outcomes	Increase parents' engagement in improving student learning outcomes	Effort has been made to strengthen teachers' accountability by engaging parents in improving student learning outcomes under school based management pilots. **Challenge: many public schools continue to experience limited accountability from teachers.**
	Enhancing quality of teaching and reducing teacher absence	

Sources: *PER (2019) and World Bank staff*

The Ministry of Education, Youth and Sports (MOEYS) and its provincial departments also face challenges in budget management practices and systems. At the school level, the management of school operating fund (SOF) is not responsive to efficient public service delivery. SOF is wired to schools as an advance payment via their bank account. Transfer of SOF takes place twice a year (January and June) to school bank account; however, schools withdraw the funds four times a year, leaving half of SOF advance payment idle in school commercial bank accounts. Enabling schools to have direct access to common pool of resources in the Treasury Single Account using something similar to FMIS portal (successfully piloted at the subnational administration level) but tailored to accommodate the need and business processes of MOEYS could help to make SOF more responsive to spending needs of schools.

Strengthening performance orientation of public spending to boost agricultural productivity

Agriculture remains an important sector of Cambodia's economy. Cambodia's public spending on agriculture-including MAFF and MOWRAM- is relatively higher than other countries in the region.

MAFF planned expenditure were characterized by recurrent spending and dominated by wage bill. The wage bill is increasingly dominating spending in the agriculture sector, reducing fiscal space for development spending and provision of key agricultural public goods. Although MAFF piloted program budget (PB), the implementation of PB does not link expenditure to outcomes. Like the health and education sectors, the structure of PB in MAFF is not responsive to performance-informed budgeting. In addition, there is a limited expenditure planning practice in the sector. MAFF's BSP amounts significantly deviated from actual spending. Last but not least, MAFF's performance monitoring indicators lack realism. This was reflected by weak performance matrix and performance information which are not comparable across budget years. Some of these budget management challenges were also noted in the 2019 PER for agriculture, which recommended a number of key actions including (1) improving BSP by consolidating the number of BSP subprograms and improving alignment with national priorities, while systematically collecting and monitoring performance data (partially implemented); (2) enhancing strategic engagement and coordination among sector actors by revamping the Technical Working Group for Agriculture and Water (TWGAW) (partially implemented); (3) undertaking an institutional assessment of current capabilities and future resource needs in inspection services, plant and animal health, and water usage (not yet implemented); (4) elaborating on a national agricultural research strategy addressing research priorities as well as institutional and financing matters (not implemented); and (5) undertaking regular project unit-cost analysis, combining the information with that in the Cambodia Irrigation Scheme Information System (CISIS) and use it to support informed decision-making (not yet implemented).

Similar to MAFF, improving expenditure management is at the heart of MOWRAM spending efficiency. MOWRAM's expenditure is dominated by capital investments. Therefore, improving the realism of budget planning and the execution of capital investment are necessary conditions to increase spending efficiency in the irrigation and water resources management sector. MOWRAM's investment spending was significantly higher than plan, ranging between 100 percent to 200 percent of approved budget between 2017 and 2021. Limited planning practices, poor quality of medium-term investment estimates, and the limited practice of open bidding in public procurement remained key challenges for improving efficiency in MOWRAM's expenditure execution.

The examination of irrigation and water resources management's capital expenditure further emphasizes the needs to improve public investment management (PIM). Specific to irrigation and water resources, key areas that require improvement include 1) project pre-appraisal and selection and 2) increasing the number of open bidding procurement. Experiences from other countries suggested that strategic sourcing methodology for procurement has yielded substantial saving and improved efficiency on goods and service spending. Another important aspect of investment budget management is to improve the forecast of 'flood damage repair' needs in order to reduce the ad-hoc /in-year budget from the 'unallocated budget.'

Key lessons on sub-national PFM based on experiences from Preah Sihanouk province

In Preah Sihanouk province, overall budget management at provincial level encountered a couple of challenges. First, there is limited capacity

for revenue forecasting and expenditure planning in the province. Lack of data and methodology for estimation limits the accuracy of forecasting for both tax and non-tax revenues. For example, there was significant variation between planned and actual revenue collection for property taxes between 2018 and 2019. The revenue collection from stamp taxes was five times higher than the plan during the same period. Second, the province suffers from ineffective budget execution. Although the execution of staff salaries is smooth, the execution of repair and maintenance expenditures varies—from 70 percent to 195 percent of approved budget. In addition, investment expenditure tended to be over executed 1.3 to 4.3 times of the approved budget and there is a high level of expenditure bunching during Q4 of fiscal year.

District, Municipality, and Khan (DMK) in the province face personnel shortage. Despite the transfer of some personnel as part of the transfer of service delivery responsibilities, personnel shortage at DMK level remains a key challenge and has an impact on services delivery. In addition, there is a lack of coordination between DMK administration and line ministries to ensure effective local service delivery. At the commune and sangkat (CS) level, the capacity for executing investment projects is very low. Therefore, delay in project implementation is a major challenge. There is a need to build the capacity of commune officials to plan and implement investment projects.

Table ES.3 below presents a summary of policy options considered most important to improving public expenditure efficiency.

Table ES.3. Summary of key selected policy options

Sector	Challenges	Short-term recommendations (1- 2 years)	Medium-term recommendations (3-5 years)
Improving PFM across all sectors	Weak link between planning and budgeting	• Formally adopting a medium-term fiscal and expenditure framework to serve as the basis for multi-year development planning • Strengthening coordination among sectors	Ensure full budget discipline across all line ministries
	Improving linkages between spending and performance outcomes	• Revisit and refine Budget Strategic Plan to define realistic outcome indicators and performance information that is comparable across the reporting period • Provide program directors greater authority over resources allocation and hold them accountable for performance outcomes • Review and restructure program budgets across the sector to support links between expenditure and performance outcomes • Develop effective systems to collect non-financial performance data and direct it to program managers and budget officials	Fully implement performance informed budgeting; provide more discretion to budget managers, and ensure accountability for result

Sector	Challenges	Short-term recommendations (1- 2 years)	Medium-term recommendations (3-5 years)
		Addressing foundational elements of PFM: • Strengthen treasury single account and devising mechanism to allow spending unit to have direct access to common pool of resources • Expand FMIS coverage including the use of FMIS portal or something similar for small budget spenders, such as at the school levels • Further improve budget classification and move beyond level one to include all spending units	
	Improving accountability framework for performance in public sector	• Introduce performance-based management for mid-management level (general department and department level) across all sectors • Link pay increase to performance	Introduce performance-based management for all civil servants
	Challenges in capital budget management and public investment management (PIM)	• Further strengthening project pre-appraisal and selection • Build capacity for key ministries involving large public investment	Build capacity for all ministries to implement PIM in line with the PIM legislation
Achieving fiscal resilience and maximizing fiscal space	Strengthening fiscal resilience and meet longer-term spending needs	• Maintaining macro fiscal prudence and maintain debt at low risk level • Further improve tax administration system • Diversifying revenue sources: Considering more progressive and stable revenue alternatives such as taxes on personal income, capital gains, property transfers, carbon, health excise, and digital services • Boosting job creation and social protection programs	Broadening the income tax base that the informal sector can otherwise erode by delivering social transfers through refundable tax credits when there is a fully operational personal income tax
	Build resilience against climate catastrophe	Adopt climate smart fiscal policy and introduce carbon and coal taxes as a part of broader tax reform	Incentivize green private investment projects

Sector	Challenges	Short-term recommendations (1- 2 years)	Medium-term recommendations (3-5 years)
Maximizing effectiveness of public health policy	Shifting from a heavy reliance on out-of-pocket spending to increasingly and efficiently using public spending on health in line with the Universal Health Coverage Roadmap	• Improve efficiency of public health spending with more resources allocated for preventive and curative care and less on health administration through shifting line-item budgeting elements of provider payment mechanisms to capitation • Increase government health expenditure for Health Equity Fund (HEF) service payments	• Revisit the benefits packages included in current social health protection schemes to improve the protection of these schemes to avoid financial hardship • Increase health coverage by building on existing social health protection schemes
	Increasing equitable access to health services for the poor	Expand social protection coverage for the poor under existing schemes	Integrate all existing social protection schemes, which includes (i) establishing an administration and governance body to oversee a unified health protection scheme, (ii) harmonizing health benefits packages of all health protection schemes, and (iii) ensuring sufficient budget to finance healthcare under the unified health scheme

Sector	Challenges	Short-term recommendations (1- 2 years)	Medium-term recommendations (3-5 years)
Achieving better quality from public spending in education	Improving HR governance	• Improve information on teacher surpluses and shortages for management purposes • Improve teacher recruitment and deployment to ensure that newly recruited teachers will stay at their assigned workplaces • Introduce redundancy (termination) for teachers in subject matters not in demand and early retirement for those not teaching the minimum required number of hours • Introduce performance-based salary increase and career promotion for teachers and education staff • Continue to build capacity	• Delegate authority to schools that meet school effectiveness standards to hire contractual teachers and allocate resources for it • Introduce teacher licensing that requires renewal every specific number of years, and that requires mandatory service in remote locations
	Making SOF more responsive to school spending needs	Make use of FMIS portal (or something similar tailored to the need of education sector) for school spending needs	Fully implement school-based management and strengthen accountability; Enforce teacher standards
Agriculture and irrigation and water resources	Strengthening performance orientation of budget to improve agriculture productivity in line with earlier PER recommendations, which had been partially implemented.	• Further strengthening of BSP content in terms of realism of planned budget (following available budget ceiling in the formally adopted circular for BSP) and performance indicators • Integration of BSP and program logic into negotiations (shifting from line item based budget negotiation to outcome based negotiation), appropriation, monitoring, and evaluation, and the legal framework	• Explicit costing of new proposed subprograms, activities, policy initiatives, capital investments, and required funding to continue with existing activities. This could include expenditures related to risks such as climate events. • Map out resources needed for government at national and subnational level

Sector	Challenges	Short-term recommendations (1- 2 years)	Medium-term recommendations (3-5 years)
	Enhancing capital budget management for improved irrigation investment and management	In addition to improvement to PIM in general, there is a need to: • Increase the number of open bidding procurement • Improve the forecast of 'flood damage repair' needs in order to reduce the ad-hoc /in-year budget from the 'unallocated budget.'	Application of strategic sourcing methodology for procurement to improve saving and efficiency on goods and service spending for irrigation work
Key lessons from sub-national PFM in Preah Sihanouk province	Improving allocative and operational efficiency at provincial administration level	• Strengthen planning capacity of provincial administration • Improve tax and non-tax revenue forecasting • Strengthen state asset management • Improve budget execution process	• Consider increasing the percentage of tax revenue sharing from CP to DMK and CS levels in order to reduce the current vertical imbalance among the three tiers of SNAs • Ensure check and balance between the C/P governors and C/P councils
	Improving HR governance at DMK administration	• Address personnel shortages for key services such as water supply, solid waste management, and mining • Clarify how technical staff at the DMK administrations should perform their daily operations under the new working arrangements	Move toward decentralized finance and HR management with centralized information supported by modern shared platform GovTech system
	Building capacity of CS administration on project implementation	Support CS officials to implement the circular associated with the CS development project implementation to prevent delays to project development and preparation	Monitor the implementation and collect feedback for future adjustments and strengthening

1 ACHIEVING FISCAL RESILIENCE AND MAXIMIZING FISCAL SPACE

1.1. Introduction

Prior to the COVID-19 pandemic, Cambodia was one of the fastest growing economies in the world, with a sustained average real growth rate of 7.6 percent over the period 1998–2019. This growth was driven largely by tourism, manufacturing exports, and real estate and construction. The country reached lower middle-income status in 2015 and is aspiring to attain upper-middle-income status by 2030 and high-income status by 2050. However, the global epidemiological and economic crises unleashed by COVID-19 significantly hurt the economy. After shifting to "living with COVID-19" in late 2021, the economy is on a path to recovery, but challenges remain for public finances.

Cambodia has pursued a conservative fiscal policy that created sufficient fiscal buffers for the government to respond effectively to economic fallout from the COVID-19 pandemic. Decades of fiscal reforms and solid economic growth culminated in a fiscal surplus in 2018–2019. However, slower revenue collection and increased fiscal support to offset economic and social impacts of the pandemic resulted in a fiscal deficit of 4.5 percent of GDP in 2020 and 6.1 percent of GDP in 2021. To finance these deficits, the government drew upon its fiscal reserves and borrowed from official creditors. As result, Cambodia's outstanding public debt increased from 28.1 percent of GDP in 2019 to 33.7 percent of GDP in 2022 while its fiscal reserves (government deposits) declined from 21.7 percent of GDP to 17.8 percent of GDP over the same period.[8] Rising demand for public expenditures will continue to put upward pressure on the government's budget for years to come. Cambodia needs to adopt measures under the new Revenue Mobilization Strategy (RMS) to further strengthen tax administration system and increase revenue collection to meet future expenditure requirements and restore fiscal buffers.

This chapter assesses Cambodia's fiscal policy from a fiscal sustainability perspective. It starts

8 Despite the increase in public debt, Cambodia remains at low risk for debt distress.

with an overview of recent economic trends. It then describes the drivers of revenue and expenditure trends over the last decade, including during the COVID-19 pandemic period. It then assesses the impact of economic trends and fiscal reforms on Cambodia's fiscal balance, debt stock, and debt service requirements. It concludes with policy recommendations to improve fiscal management and reestablish fiscal buffers.

1.2. Recent macroeconomic trends

The economic shock caused by COVID-19 was severe, pushing Cambodia into its first recession in 25 years. The pandemic's impact was propagated through falling global demand, supply chain disruptions, and nationwide lockdowns. GDP growth dropped sharply from 7.1 percent in 2019 to -3.1 percent in 2020, before recovering to 3 percent and 5.2 percent in 2021 and 2022, respectively. Cambodia's key merchandise exports of garment, footwear, and travel goods contracted by 8.1 percent in 2020 as a result of multiple shocks, including the temporary shortage of raw materials from China, plunging export orders from the United States and Europe, and the partial withdrawal of the EU's "Everything But Arms" (EBA) trade preferential treatment. Simulations indicate that the economic contraction reversed two years of Cambodia's poverty reduction progress, increasing the poverty rate by 2.8 percentage points and pushing around 460,000 individuals into poverty.[9]

The government took advantage of the fiscal space afforded by its prudent fiscal policy to respond to these shocks, but those buffers are now depleting. After years of running fiscal deficits, Cambodia achieved small fiscal surpluses in 2018 and 2019. Subdued domestic economic activity and pandemic-related fiscal relief reduced total revenues in 2020, while total expenditures increased because of higher spending commitments under the public health, social, and economic intervention programs, which amounted to 3 percent and 4.9 percent of GDP in 2020 and 2021 respectively. The COVID-19 pandemic thereby turned modest overall surpluses into widening fiscal deficits. Nevertheless, government deposits stand at around 17.8 percent of GDP as of end-2022 and Cambodia is assessed to be at a low risk of debt distress under the 2022 Joint World Bank/International Monetary Fund Debt Sustainability Analysis.[10] But a program of fiscal consolidation, including increased attention to fiscal sustainability and resilience, is necessary to rebuild fiscal buffers and guard against future shocks.

After shifting to "living with COVID-19" in late 2021, the economy is firmly on a path to recovery and has now returned to its pre-pandemic growth trajectory. Cambodia's economic recovery solidified in 2022 with real growth accelerating to 5.2 percent, up from 3 percent in 2021. Initially led by the strong performance of export-oriented manufacturing, growth drivers are rotating to the services and agriculture sectors. The overall contribution of the services sector to economic growth is returning to 2019 levels, and the complete removal of COVID-19-related mobility restrictions and China's recent reopening have caused a rebound in international tourist arrivals. Cambodia's real GDP growth is projected to accelerate to 5.5 percent in 2023, despite a decline in external demand, which has weakened the country's export-oriented manufacturing. Over the medium term, the economy is expected to trend back to potential, growing at 6 percent. However, a return to pre-pandemic growth rates of above 7 percent is not expected, largely reflecting the challenging external environment, including synchronous policy tightening around the world aimed at containing very high inflation, worsening financial conditions, and

9 Poverty simulations are based on actual GDP, sectoral growth rates, and estimated employment figures for 2020. Simulations were implemented using the ADePT macro-simulation module and using the new national poverty line of KHR10,951/person/day in 2019/20 Phnom Penh prices.

10 See https://www.imf.org/en/Publications/CR/Issues/2022/12/15/Cambodia-2022-Article-IV-Consultation-Press-Release-Staff-Report-and-Statement-by-the-526993

continued disruptions stemming from Russia's war in Ukraine.[11]

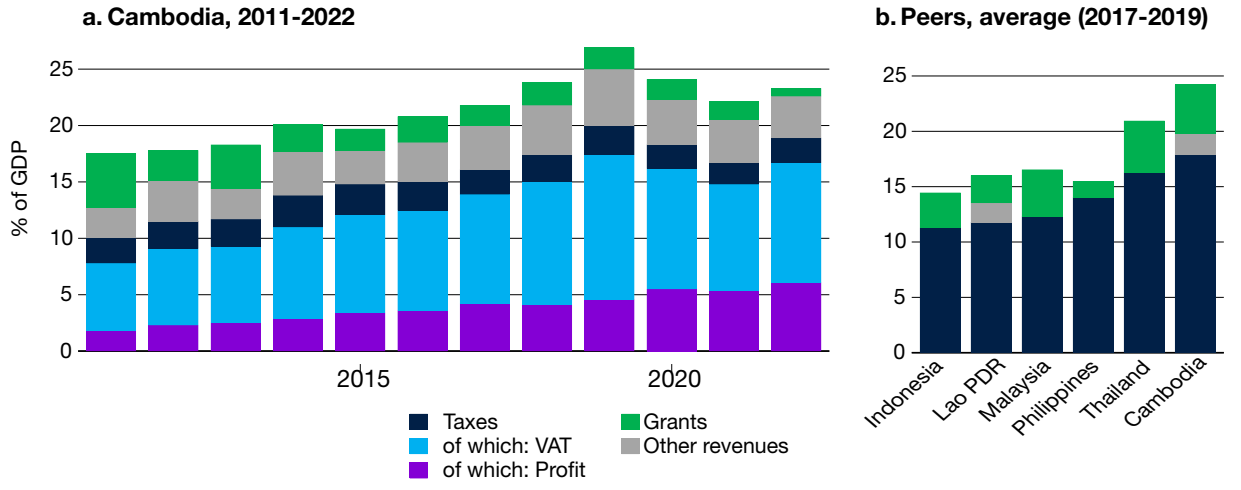
Key economic indicators are expected to normalize in the coming years. Inflation has eased significantly, with high levels of dollarization and a broadly stable KHR versus U.S. dollar exchange rate keeping expectations relatively well-anchored. Goods and services export growth is projected to improve, outpacing goods and services import growth, due largely to a rapid recovery in tourism and remittances.

Nevertheless, the broader macroeconomic outlook is subject to downside risks emanating from a deteriorating global environment. The ongoing impacts of higher energy prices are expected to cause the current account deficit to remain at relatively high levels. Cambodia's economy remains vulnerable to downturns in external demand and disruptions in global supply chains, given its reliance on a relatively undiversified set of exports. Cambodia has also been experiencing a deceleration of foreign currency deposit growth, reflecting the easing of capital inflows, and depreciation pressures on the KHR/U.S. dollar exchange rate that required interventions in the foreign exchange market and led to the decline in Cambodia's gross international reserves. Finally, increasingly leveraged corporate balance sheets create the potential for a debt overhang, which could weigh on future investment and hiring decisions. Fast credit growth and the concentration of domestic credit in the construction and real estate sector may also lead to a rise in Non-Performing Loans (NPLs), which could pose a threat to financial stability, with potential spillovers to the real economy. The NPL ratios for the banking and microfinance sectors were 4 percent and 3.1 percent, respectively in the second quarter of 2023, according to the mid-year 2023 report of the National Bank of Cambodia.

1.3. Revenue

Prior to the COVID-19 pandemic, Cambodia more than doubled its domestic revenue collection under the Public Finance Management Reform Program (PFMRP), from 10.4 percent of GDP in 2005 to 25.1 percent of in 2019. Under the PFMRP, the government improved customs and tax administration, eliminated off-budget expenditures, and established a cash management system that sweeps all revenue account balances held in the banking system into a Treasury Single Account (TSA) at the end of the business day, enabling the government to move from a situation of chronic cash

Figure 1.1. Cambodia has substantially improved domestic revenue mobilization (% of GDP)



Sources: *Staff calculations based on RGC Budget Settlement Laws, World Bank staff estimates, and GFS (2023)*

11 World Bank (2023). East Asia Pacific Economic Update: Reviving growth. Washington, D.C. See https://openknowledge.worldbank.org/collections/892c8eb3-e78d-5012-875b-98af1149d8a8.

shortages to a rapid accumulation of cash surplus (fiscal reserves). Taxes on goods and services accounted for the largest source of growth, while non-tax revenue remained largely unchanged (Figure 1.1, panel a). On the eve of the COVID-19 pandemic, Cambodia's revenue as a share of GDP was higher than its regional peers (Figure 1.1, panel b).[12]

These reforms helped redress fiscal problems and established the buffers necessary to respond to the COVID-19 pandemic. Payment arrears that amounted to about one quarter of the annual budget in 2005 were eliminated in 2007, ensuring the predictability and credibility of the government budget. After years of running fiscal deficits, Cambodia achieved a fiscal surplus in 2018 and 2019 (of about 0.4 percent and 1.5 percent of GDP, respectively). The authorities accumulated government deposits (fiscal reserves), which peaked in 2020 at 23.7 percent of GDP and were used as fiscal buffers during the pandemic. Accumulation of government deposits have been underpinned by the success in establishing the Treasury Single Account, built upon a centralized cash management system after eliminating off-budget expenditures under the Public Financial Management Reform Program (PFMRP). Revenue collection improvements together with an efficient cash management system enabled both more allocation of spending and accumulation of fiscal reserves.

The impact of the COVID-19 pandemic on the economy, coupled with tax relief to affected firms, significantly impacted Cambodia's revenue base. Total revenues, including grants, fell from a peak of 27 percent of GDP in 2019 to 22 percent of GDP in 2021.[13]

Domestic revenue collection quickly recovered following the COVID-19 pandemic, reflecting the resiliency of the government's fiscal reforms and the strength of the country's broad-based economic recovery. General government domestic revenue (excluding grants) reached 22.5 percent of GDP, representing a 21.9 percent year-on-year increase in 2022. In 2022, direct revenue, consisting mainly of profit tax, rose quickly to 6.1 percent of GDP, exceeding VAT collection of 5.8 percent of GDP for the first time in the recent history of domestic revenue collection. Non-tax revenues are expected to remain well below pre-pandemic levels, as they are heavily dependent on tourism receipts.

Cambodia's current tax mix is such that it raises most of its revenues from indirect taxes, contributing to a relatively efficient tax system. It is worth noting that Cambodia's tax structure consists of both direct tax (profit tax), indirect taxes (VAT and excise tax) and international trade tax. The largest component of Cambodia's tax revenue continued to be taxes on goods and services (indirect taxes), comprising mainly the value-added tax (VAT) and excise taxes, accounting for 56.2 percent of tax revenue (10.6 percent of GDP) in 2022. However, collection of direct tax revenues improved steadily, thanks to better tax administration and modernization. The share of direct tax revenue collection to total tax revenue rose to 32.3 percent (6.1 percent of GDP) in 2022, up from 19.8 percent (2.3 percent of GDP) in 2012. During the same period, taxes on international trade declined to 11.5 percent of tax revenue (2.2 percent of GDP), down from 20.7 percent (2.4 percent of GDP) due to increased commitments under bilateral and regional free trade agreements. During the pre-COVID-19 period, rising tax revenues from goods and services were driven in part by strong consumption and investment demand for durable goods during the construction boom period covering 2015–2019. Continued strong performance of domestic tax collection is attributed to better tax administration and modernization, with the introduction of e-filing, e-payment, and better taxpayer services. In addition, efforts have been made to eliminate loopholes in the Law on Taxation and to harmonize the legal framework to prevent fiscal evasion, transfer pricing abuses, and double taxation. A taxpayers' survey revealed that 88 percent of respondents agreed that modernization

12 Budget Settlement Laws and World Bank staff estimates; WDI 2023.

13 Revenue collection remained relatively strong in 2020, when ballooned profit taxes for 2019 were filed.

of tax administration, especially automation, helped improve tax payments.[14]

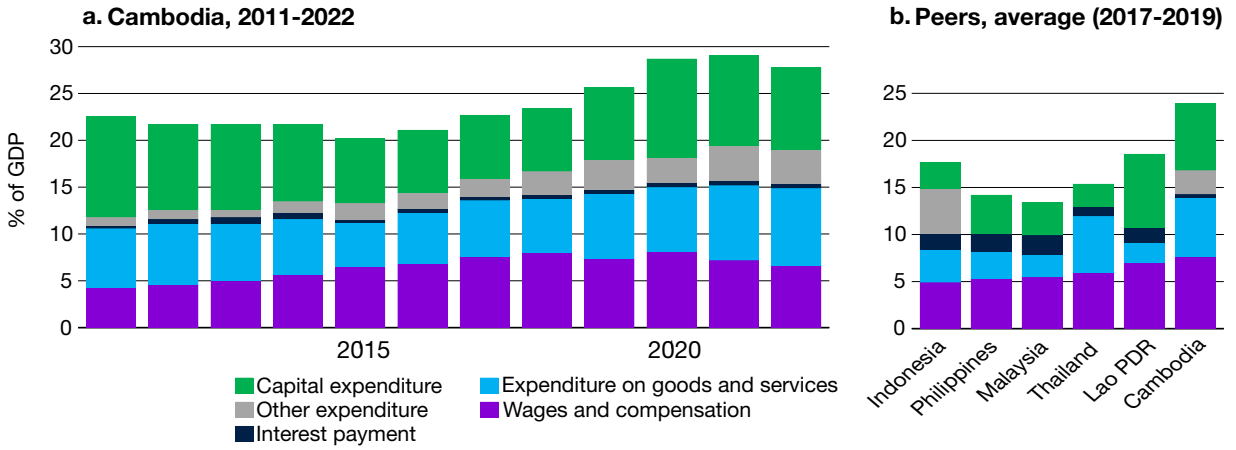
Cambodia could substantially increase revenue from direct taxes by introducing a personal income tax and rationalizing tax incentives. There is currently no personal income tax (PIT), per se, in Cambodia. Instead, a monthly salary tax is imposed on individuals who derive income from employment. Introducing a PIT would also mitigate the regressivity of Cambodia's current consumption-based tax structure. Furthermore, while the country has a competitive corporate income tax rate, collections underperform because of the country's generous tax incentive system. Cambodia currently forfeits nearly a third of its potential revenues from imports. Over the period 2016–2020, the amount of revenue foregone on imports into Cambodia rose about 45 percent from around KHR 3.3 trillion to nearly KHR 4.7 trillion. Cambodia is expected to forego even more revenue in the years to come under the 2021 Law on Investment, which is more generous than its predecessor. Any future tax expenditure reforms will need to balance revenue performance and the necessity to stimulate specific sectors through targeted relief (see Annex 1.2).

1.4. Expenditure

Prior to the pandemic, Cambodia's rapidly expanding fiscal revenue enabled it to substantially boost general government expenditure, from 22.5 percent of GDP in 2011 to 25.5 percent of GDP in 2019 (Figure 1.2). Across-the-board salary increases comprised the largest share. Over the period 2013–2020, Cambodian authorities tripled civil servants' minimum wage to more than 1 million KHR (US$250) a month, in turn increasing wages and compensation as a share of GDP from 5 percent to 8.1 percent. Over the same period, spending on social sectors—especially education—increased significantly, broadly in line with the government's priorities (see chapter 2). Meanwhile, Cambodia's rapidly expanding physical infrastructure was increasingly financed by domestic capital,[15] underpinning a structural transformation as the economy grew, with demand for operations and maintenance increasing commensurately.

The government responded to the economic

Figure 1.2. Expenditure increased significantly during the COVID-19 pandemic (% of GDP)



Sources: *Staff calculations based on RGC Budget Settlement Laws, World Bank staff estimates, and GFS (2023)*

14 "Tax Bulletin - Quarter Four, 2022"; https://www.tax.gov.kh/en/tax-bulletin.

15 The authorities have been boosting their domestically financed capital investment projects, underpinning manufacturing and tourism activities, two main growth drivers to facilitate the on-going structural transformation. A US$300 million public investment project to build 34 roads with a total length of 82.5 kilometers in the Preah Sihanouk province where Cambodia's largest deep-sea port and special economic zone are located, was approved in 2019 and completed in 2020. A similar US$150 million public investment project to build 38 roads in Siem Reap province, the country's largest tourist attraction site, was approved in 2020 and completed in 2021.

crisis caused by the COVID-19 pandemic through timely and targeted support to households, workers, and firms (Table 1.1). Among the most significant interventions was the government's expansion of the country's social protection systems. In June 2020, the government leveraged the existing IDPoor registry to deliver cash transfers to vulnerable households. It has since extended the program multiple times to reach approximately 706,060 households (2.8 million individuals) or 17 percent of the population. As of July 2022, the program had disbursed US$714 million (2.4 percent of GDP) and was widely successful in reaching IDPoor households and alleviating financial hardship resulting from the COVID-19 pandemic. A recent study found significant positive impacts of the cash transfer program across human development dimensions and socioeconomic indicators including food security, nutrition, children's education, savings, debt repayments, productivity, healthcare, gender empowerment, and perception of local and national governments.[16]

Table 1.1. Government fiscal intervention (% of GDP)

Intervention		2020		2021		2022
		Plan	Disbursed	Plan	Estimate	Plan
Health Masterplan & Outbreak Prevention and Treatment	Scaling up health response by increasing prevention and detection facilities, clinical management, and treatment as well as coordination and support system	0.4	0.1	0.1	2.5	0.9
Wage subsidy and skill training	Providing partial wage subsidies of US$40 per month and technical/soft skills training for furloughed workers in the tourism and garment industries	0.2	0.2	0.2	0.2	0.2
Cash for work	Providing jobs in rural areas through construction, upgrade, and maintenance of rural roads, drainage and small-scale irrigation	0.4	0.4	0.5	0.5	0.3
Cash Transfer	Providing monthly cash grants to poor and vulnerable individuals that are registered in the government's IDPoor database	1.2	1.1	0.7	1.1	0.6
Food support During Lockdown	Providing food support to local people during lockdown period				0	
Financing through ARDB	Providing low-interest loans for working capital and investment in agricultural sector through capital injections to Agricultural and Rural Development Bank	0.2	0.2			
Co-Financing through SME Bank	Co-financing with commercial banks by providing low-interest loans for working capital and investment in 6 targeted SME sectors through newly established SME bank	0.2	0.2			
Credit Guarantee Fund	Providing capital to establish the Credit Guarantee Corporation of Cambodia which helps bear risk-sharing with businesses	0.8	0.7			
SME Financing Facility	Reserving contingent funds to provide any necessary financing to SME sector	1.2	0.1	0.9	0.5	0.8
Total		**4.6**	**3.0**	**2.4**	**4.8**	**2.8**

Source: *RGC (2023)*

16 See "Socioeconomic Impacts of the COVID-19 Cash Transfer Program in Cambodia."

The cash transfer program appears to have ushered in a new era of more robust social protection systems in Cambodia. Additional social assistance measures were introduced from December 2022 to March 2023 to address the food and oil price shocks and fallout from major floods.[17] The government also recognized the need for medium-term reforms to support the country's economic recovery, including measures to improve Cambodia's competitiveness for medium to long-term growth, particularly by improving productivity, trade facilitation, and ease of doing business.

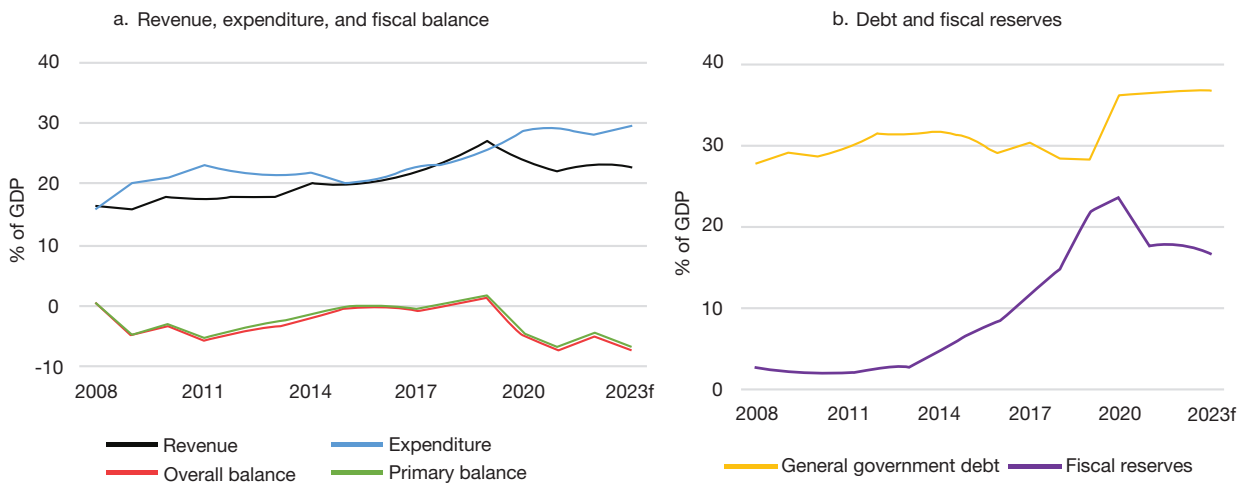
Driven mainly by these interventions, public expenditure reached 26.8 percent of GDP in 2020, up from 24 percent of GDP in 2019. Spending on subsidies and transfers as part of the fiscal response program rose from 1.6 percent in 2019 to 2.9 percent in 2020 and 3.2 percent of GDP in 2021. Development (capital) expenditures—much of which are financed by development partners—also increased, from 7.7 percent of GDP in 2019 to 8.7 percent in 2020. To offset these increases, the government reduced spending on goods and services and "other expenditures" (which include administrative expenses and subnational administration). Wage bill spending has also been contained, in part due to a freeze in public-sector salaries since 2021. As a result, the wage bill declined to 7.2 percent of GDP in 2021,[18] although the country's public-sector workers still earn a higher average salary than their private sector counterparts because of the government's reforms in 2013–2018.

1.5. Fiscal balance

For decades, Cambodia has pursued a conservative fiscal policy resulting in low debt and high government deposits. Revenue and expenditure increased in tandem until the COVID-19 pandemic, resulting in small fiscal deficits in most years (Figure 1.3, panel a). To finance these deficits, the government drew upon its fiscal reserves and borrowed from official creditors (Figure 1.3, panel b). Despite economic downturns during the Asian Financial Crisis and COVID-19 pandemic, Cambodia's conservative fiscal policy enabled it to preserve fiscal buffers.

Cambodia's fiscal buffers have enabled it to implement a countercyclical fiscal policy. Given the high level of dollarization of the Cambodian

Figure 1.3. Cambodia has pursued a conservative fiscal policy resulting in low debt and high reserves



Sources: Staff calculations based on RGC Budget Settlement Laws and World Bank staff estimates

Note: Revenue and balance figures include grants.

17 https://www.khmertimeskh.com/501253915/cash-transfer-programme-for-flood-affected-families-completed/

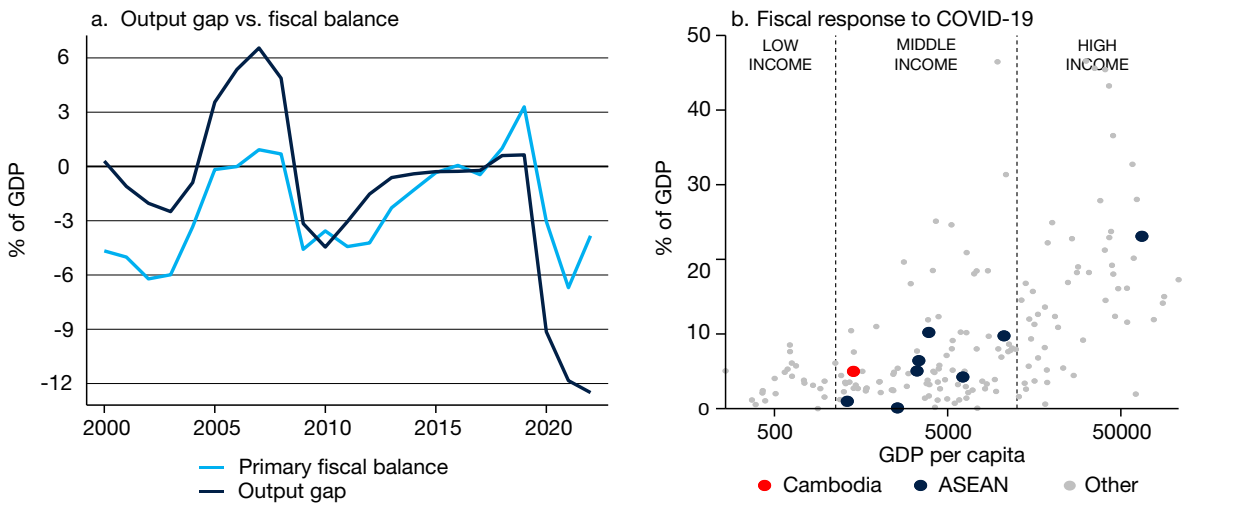
18 In part due to a reclassification of social security and social assistance were.

economy, this was the only viable policy instrument for maintaining macroeconomic stability. In 2009, the government provided fiscal stimulus equal to approximately 4.2 percent of GDP to mitigate the negative impacts of the 2008–2009 global financial crisis. Subsequent fiscal consolidation enabled it to rebuild the fiscal buffers it then employed in response to the COVID-19 pandemic (Figure 1.4, panel a). As a result, Cambodia's fiscal intervention in 2019 was relatively large compared to other lower-middle income countries, including those in the region (Figure 1.4, panel b).

Due to the scale of the government fiscal intervention during the COVID-19 pandemic, the overall fiscal position has deteriorated quickly, from modest fiscal surpluses in 2018–2019 to historically large fiscal deficits in 2020–2022. A drawdown of government deposits (fiscal reserves) covered 20.5 percent of the deficit in 2020 and nearly two-thirds of the deficit in 2021, reducing the stock of government deposits from 23.6 percent of GDP at the end of 2020 to 17.8 percent of GDP in 2022. The rest of the deficit was financed by external borrowing, with Cambodia's official creditors accelerating their loan disbursements, which rose from 3.1 percent of GDP in 2019 to 4.5 percent of GDP in 2022 (see Annex 1.1, Table A.1.3). The authorities effectively used the availability of fiscal space (capacity to borrow) to help mitigate the detrimental effects of the pandemic by introducing a number of social protection programs, especially the COVID-19 cash transfer. While global trends in cash transfer responses indicated that cash transfers were of short duration, averaging 4.5 months,[19] the Cambodian authorities extended the COVID-19 cash transfer program in 2023. As of March 2023, it had disbursed US$994 million since the launch in June 2020. The funds have been well spent for the programs which will be phased out over time.

As the economy recovers, authorities remain committed to restoring fiscal discipline, rebuilding fiscal buffers, and maintaining prudent fiscal management and stable macroeconomic performance. Due mainly to improved revenue collection, the fiscal deficit is expected to narrow to 4.7 percent of GDP in 2022. Plans to improve revenue collection in the coming years include modernizing the tax system and customs administration by embracing further reforms. A new revenue mobilization strategy to cover

Figure 1.4. Cambodia's fiscal discipline has enabled countercyclical spending (% of GDP)



Sources: *Staff calculations using data from IMF 2022; World Bank 2023; and Kose, M. Ayhan, Sergio Kurlat, Franziska Ohnsorge, and Naotaka Sugawara. 2022. "A Cross-Country Database of Fiscal Space." Journal of International Money and Finance 128 (November): 102682.*

19 Ugo Gentilini. 2022. Cash transfers in Pandemic Times: The World Bank. See https://documents1.worldbank.org/curated/en/099800007112236655/pdf/P17658505ca3820930a254018e229a30bf8.pdf

the period 2024–2028 is being prepared that may introduce a personal income tax and excise policy reforms. Authorities also continue to work to improve resource allocation, linking the budget to medium term planning and development objectives under the public financial management reform program as a part of Platform 3 (Policy Budget Linkage) and the current Platform 4 (Performance-Accountability). However, continued upward demand for public expenditures to finance social protection and the general election in 2023 will remain, and total public expenditure is projected to hover around 27 percent of GDP in 2023 and 2024. As a result, the deficit is projected to deteriorate to 5.9 percent of GDP in 2023 before again improving to 4.3 percent of GDP in 2024.

1.6. Public debt

Cambodia's public debt increased during the COVID-19 pandemic, from US$8.8 billion (28.1 percent of GDP) in 2019 to US$9.9 billion (33.7 percent of GDP) as of end-2022. Approximately two-thirds of Cambodia's public debt is owed to bilateral donors, with China accounting for about 40 percent of the total debt stock.[20] Approximately one-third of public debt is owed to multilateral donors, mainly the Asian Development Bank. Only a tiny fraction (0.2 percent) of public debt is owed to domestic lenders, but Cambodia is in the process of establishing a domestic debt market to help diversify financing sources, promote domestic savings, and de-dollarize the economy. Public debt is mainly denominated in U.S. dollars.

External borrowing remained highly concessional during the pandemic, with a weighted grant element of 44.8 percent in 2022—high by international standards. The weighted average interest rate of contracted loans was 1.1 percent per year, while weighted average maturity was 26.7 years. Approximately 69 percent of loans in 2022 financed the country's public infrastructure sector, including transport, irrigation, energy, and water supply, while the remaining 31 percent funded other prioritized (non-infrastructure) sectors, including health, education, and agriculture.

The joint World Bank/International Monetary Fund Debt Sustainability Analysis conducted in 2022 indicated that Cambodia remained at low risk of external and overall debt distress under the Low-Income Countries Debt Sustainability Framework (Box 1.1). The total public and publicly guaranteed debt-to-GDP ratio is projected to rise by around 4 percentage points during the next decade. The present value of the external debt-to-GDP ratio breaches its threshold in the exports stress test, which would imply a moderate risk rating. However, the breaches are small, short-lived, and driven by the exceptional volatility of exports in 2020 that has increased the sample volatility for the standardized shock. Moreover, other debt burden indicators are projected to remain well below their thresholds under the baseline and the shock scenarios.

A gradual fiscal consolidation is expected to result in public debt stabilizing at its current level. As growth converges to potential, revenue performance is expected to improve, while spending is expected to remain higher than pre-COVID levels due to a continuation of support measures for vulnerable households, increased public investment to support the economic recovery, and larger transfers to subnational administrations to support decentralization reforms. Taken together, these trends are consistent with a gradual narrowing of the fiscal deficit over the next few years, with public debt expected to stabilize at the current level of just above 35 percent of GDP. Around 80 percent of gross financing needs will continue to be met by external borrowing, with the remainder to be financed by a drawdown of fiscal reserves and domestic bond issuance.

20 There is no loan classification by creditor and by sector; therefore, it is not possible to elaborate what sectors the proceeds from Chinese loans have been invested in. However, based on the latest biannual public debt statistical bulletin publication (volume 18, Q1-2023), 70 percent of all loan proceeds have been invested in physical infrastructure (transport, energy, water supply, irrigation and other infrastructure) while the remaining 30 percent in other priority sectors (health, education, agriculture and other priorities).

Box 1.1. Cambodia has a low risk of debt distress according to the LIC-DSF

Cambodia Joint Bank-Fund Debt Sustainability Analysis	
Risk of external debt distress	Low
Overall risk of debt distress	Low
Granularity in the risk rating	Not applicable
Application of judgment	Yes: the breach of the export shock stress test is small and temporary.

Cambodia remains at low risk of external and overall debt distress under the Low-Income Countries Debt Sustainability Framework (LIC-DSF). The current debt-carrying capacity remains consistent with a medium classification. The baseline scenario assumes steady economic recovery, largely driven by exports of tourism services and, to a lesser extent, manufacturing goods, notwithstanding pressures on external demand in the near term. The total public and publicly guaranteed (PPG) debt-to-GDP ratio is projected to rise by around 4 percentage points during the next decade. The present value of the external debt-to-GDP ratio breaches its threshold in the exports stress test, which would imply a moderate risk rating. However, the breaches are small, short-lived (only four periods, the last barely), and driven by the exceptional volatility of exports in 2020 that has increased the sample volatility for the standardized shock. Moreover, other debt burden indicators are projected to remain well below their thresholds under the baseline and the shock scenarios. Given the expectation of a steady and solid recovery, and because the breaches for one of the tests are small, temporary, and driven by the exceptional volatility of exports in 2020, judgment has been applied that the external risk of debt distress remains low. Nonetheless, the analysis shows that debt sustainability remains vulnerable to shocks in exports and growth. These findings reinforce the importance of implementing reforms to increase the economy's resilience to external shocks and to facilitate export and economic diversification. Efforts to mobilize fiscal revenue, strengthen the Public Investment Management Framework, and further enhance monitoring of Public-Private Partnerships (PPP) and financial sector risks are needed to ensure debt sustainability over the medium term.

Source: *The 2022 WB/IMF DSA*

Note: *The 2022 WB/IMF DSA follows the Guidance Note of the Guidance Note of Joint Bank-Fund Debt Sustainability Framework for Low-Income Countries, issued in February 2018. Cambodia's Composite Indicator (CI) index, based on the April 2022 WEO update and the World Bank's 2020 CPIA, indicates that the country's debt-carrying capacity remains medium (2.968), the same as in the 2021 DSA (in which the CI index was 2.966).*

1.7. Maintaining fiscal space and promoting progressivity

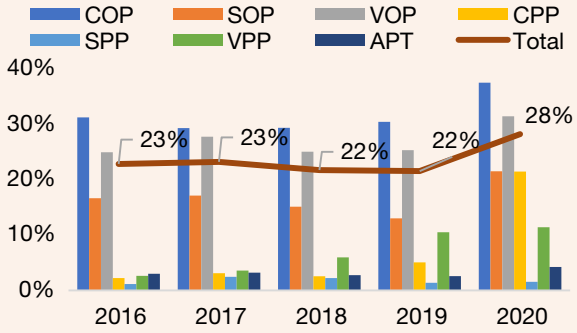
Meeting Cambodia's longer-term public spending needs while maintaining fiscal sustainability and restoring fiscal buffers will require difficult tradeoffs. Cambodia's ability to respond effectively to the COVID-19 pandemic relied on fiscal buffers established over years of strong economic growth. Those buffers are now in decline, and concerted action is necessary to restore them. However, Cambodia's tax burden is high by regional standards, and the government needs to balance fiscal tightening against economic growth. In the short term, Cambodia needs to unwind the countercyclical fiscal policy deployed during the COVID-19 pandemic to shore up its fiscal buffers while maintaining the important progress it has made in establishing a social safety net.

A key source of savings could be the elimination of ineffective tax incentives. Currently available data show that the country forfeits nearly a third of its potential revenues from imports through tax expenditures under the 2003 Investment Law (see Box 1.2). While free trade agreements will naturally result in the decline of revenues from customs, the

Box 1.2. Tax expenditure analysis summary

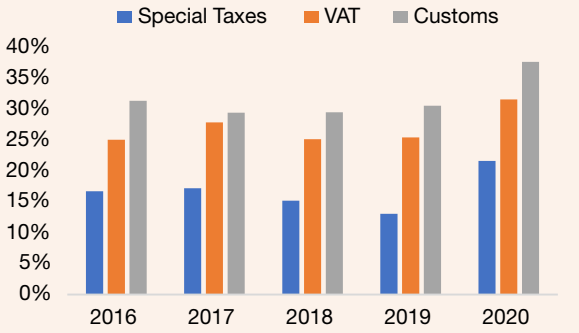
Customs, which is often responsible for collecting taxes on international trade, may not be the best way to generate revenue from an equity, efficiency, and growth perspective. However, Cambodia's customs which, in addition to custom duties, collects value-added tax and excise on imports, contributed as much as 40 percent of total domestic revenue in 2022. And the country forfeited 28 percent of its revenue from imports to tax incentives in 2020 (Figure B.1.2.1). Between 2016 and 2020 the amount of revenue foregone on imports into Cambodia rose about 45 percent from around KHR 3.3 trillion to nearly KHR 4.7 trillion.

Figure B.1.2.1. Tax relief on imports as a share of tax imposed at customs



Note: COP: Customs other than petroleum, SOP: Special taxes other than petroleum, VOP: VAT on other than petroleum, CPP: Customs on petroleum products, SPP: Special taxes on petroleum products, VPP: VAT on petroleum products, APT: Additional petroleum taxes

Figure B.1.2.2. Share of taxes relieved on imports for QIPs and SEZs



Note: QIPs: Qualified investment projects; SEZs: Special Economic Zones.

Relief for special taxes (excise), value added taxes, and customs duties on imports is attributable mainly to Qualified Investment Project (QIPs) and Special Economic Zones (SEZs) beneficiaries (Figure B.1.2.2). These two categories of beneficiaries receive a disproportionate amount of customs tax relief and their share rose consistently between 2016 and 2020 (Table B.1.2.1).

Table B.1.2.1. Share of relief granted through QIP or SEZ

	2016	2017	2018	2019	2020
QIP	63%	63%	59%	59%	51%
SEZ	29%	29%	32%	30%	34%
Non-QIPSEZ	8%	8%	9%	11%	15%
Total	100%	100%	100%	100%	100%

Note: Non-QIPSEZ refers to relief granted to investments that are not qualified investment within special economic zones.

The tax incentive targets and instruments under the 2021 Law on Investment (see Box 1.3) which are more generous than those under the 2003 Law on Investment should be revisited to prevent abuses. Given the new sub-decree to implement the 2021 Law on Investment has not been finalized, the decision making process remains to be seen. However, under the previous Investment Law (2003), the Council for the Development of Cambodia decided what was qualified and on what basis.[2]

Source: World Bank (2023)

1 Analyzing tax expenditures is constrained by the lack of the data from the General Department of Taxation. The data used for this analysis are those from the General Department of Customs and Excise alone.

2 For more detail, please see https://cdc.gov.kh/incentives-and-schemes/

ineffective incentive can result in further decline of revenues without substantial gain in economic growth. The country's new Law on Investment (2021) (Box 1.3) is more generous than its predecessor, increasing the risk that tax incentives erode the revenue base. At the same time, the COVID-19 relief cash transfer program mitigated some of the worst impacts of the pandemic on poor and vulnerable households. However, its coverage remains relatively narrow and formal social protection in Cambodia is incipient. The government should continue strengthening the system, particularly in light of the country's vulnerability to climate risks that disproportionately affect poor and vulnerable households.[21]

Box 1.3. The Law on Investment

The 2021 Law on Investment (LOI) attempts to: (i) create transparent and conducive investment climate to attract FDI, (ii) promote sustainable investments through incentives for investment schemes that are environmentally friendly, (iii) enhance productivity by attracting high value added FDI.

While a quantitative assessment has not been undertaken, the LOI has the potential to erode revenue base. First, the LOI provides more generous incentives to investors which will erode the base for income taxes. These include a tax holiday from 3 to 9 years with an additional 6 years of reduced CIT rates, and the tax holiday can be extended beyond this period, if investments are qualified as expanded QIP; and accelerated depreciation at the rate of 40 percent of the value of tangible property purchased by QIPs. Profit-based tax incentives such as tax holidays are less effective for attracting and retaining capital investment than cost-based incentives such as investment tax credits or accelerated depreciation (Source: PCT, 2015). Retaining both options – a profit tax holiday and an accelerated depreciation – adds additional costs and would lead to revenue losses without additional economic or social benefits.

Second, by expanding import duties and special tax exemptions on a wide range of imported construction materials and equipment, and VAT exemptions on locally sourced construction materials and equipment, and production material and inputs for export, foregone tax revenue is projected to increase substantially. Between 2016 and 2020, forgone revenue as a result of taxes exemption accounted for around half of the overall tax revenue collected or approximately 9 percent of GDP as compared to 6.2 percent in 2001.[22] In 2020, QIP has taken around 51 percent of total tax exemption, followed by SEZ (34 percent) and non-SEZQIP (15 percent). Broader scope of tax exemptions by the LOI will lead to higher foregone tax revenue.

Third, unclear definition of incentive schemes could potentially lead to a greater risk of interpretation to increase exemptions. For example, generous additional incentives in the form of a 150 percent deduction of expenditure incurred on some activities such as R&D and innovation, staff training and welfare, construction of workers' accommodation and canteens, will add to the period of the tax holiday causing additional tax expenditures. Another case in point includes special incentives for priority industries such as the motor vehicle assembly industry. Clarifying the definition of incentives schemes is important to reduce the risk of violating the essence of incentives.

Based on international practices, a sunset clause is recommended to set an end date to incentives provision. These sunset clauses mean that provisions are more likely to be periodically re-evaluated and can make ineffective relief easier to repeal. Clearly defining sunset provisions and ensuring transparency of its implementation to investors are vital for effective implementation of incentives provision.[23]

Source: *World Bank (2023)*

21 https://www.imf.org/en/Publications/CR/Issues/2022/12/15/Cambodia-2022-Article-IV-Consultation-Press-Release-Staff-Report-and-Statement-by-the-526993

22 IMF, Cambodia Rebuilding for a Challenging Future 2006

23 South Korea offers a best practice model applying a sunset clause to 60 percent of the tax expenditure items (157 out of 276 in 2019)

In the long term, Cambodia needs to make space for emerging spending needs through a more balanced, efficient, and equitable tax system. To this end, preparation for the new revenue mobilization strategy for 2024–2028 is underway. Under tax system reform activities, customs and tax administration diagnostic analyses (DIAMOND and TADAT) have been conducted, while potential introduction of personal income tax, excise tax reforms, and tax expenditure analysis are being discussed. The medium-term fiscal framework (MTFF) and medium-term budgetary framework (MTBF) are being prepared to ensure sound financial management and fiscal policy.[24] Health excise tax is another potential area that can contribute to improved public health while generating revenues to help boost health spending needs (Box 1.4). Finally, the government could introduce carbon taxes, charged on the carbon content of fossil fuels, to raise revenue and help mitigate Cambodia's contribution to global climate change in the context of broader tax reform without earmarking. This can facilitate the transition to a greener, low-carbon economy by investing in climate-smart infrastructure such as renewable power generation and supporting research and development in climate-smart technologies.

Box 1.4. Global experience - Health excise taxes

In the current global context, health taxes are also being explored to simultaneously support targeted revenue use for specific sectors, programs or populations and as a way to meet particular policy objectives. Health excise taxes, or excise taxes imposed on products that have a negative public health impact (e.g., tobacco, alcohol, sugar-sweetened beverages (SSBs)) can be used as a tool to target negative internalities and externalities and through changes in price, reduce consumption. Through this pathway, health excise taxes can generate health benefits, while still accruing revenue. For instance, tobacco generates on average 0.6 percent, and alcohol 0.3 percent of GDP in most countries with excise taxes in place on these products. SSB excise taxes generally generate very low revenues (less than 0.1 percent of GDP) due to less inelastic demand.

Health taxes can provide additional revenue for health without earmarking by way of increasing allocations to the health sector—either by increasing the size of the government budget and keeping current sector allocations constant, or by active reprioritization of health through health tax reform and adaptive social assistance programs, spurring growth and increasing progressivity while protecting households against crisis. This includes complementary measures like targeted transfer mechanisms that can support vulnerable populations, as was used in Cambodia through the IDPoor program to deliver cash transfers to registered households.

However, in part due to the special nature of health tax revenue being linked so closely to health-related internalities and externalities, earmarking of health tax revenue has often, although not exclusively been proposed as a mechanism to direct resources towards the health sector. Earmarking for the health sector has also been employed as an option globally and within the region (notably Philippines, Thailand, Vietnam). However, applying earmarks as a policy option needs to be done with a consideration of the current fiscal system in a country, as well as in alignment to public financial management rules and capacities and an understanding of the resulting tradeoffs in terms of budget flexibility.

24 World Bank Technical Assistance Mission - Cambodia Tax System Reform March 2-3, 2023.

2 ENHANCING QUALITY OF PUBLIC SPENDING

2.1. Public expenditure trends in aggregate

The improvements in the fiscal space allowed the government to boost total spending. Expenditure increased from 20.2 percent of GDP in 2011 to 27.9 percent in 2021. However, Cambodia's expenditure boost was driven partly by across-the-board salary increase for its civil servants. Between 2011 and 2020, the public sector wage bill as a share of GDP almost doubled, peaking at 8.1 percent of GDP in 2020, up from 4.3 percent of GDP

Figure 2.1. Government overall spending increased between 2011 and 2021, driven by rise in wage bill and non-wage recurrent planned expenditure

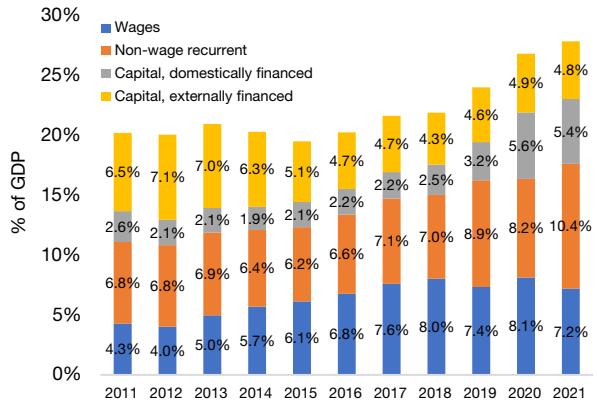
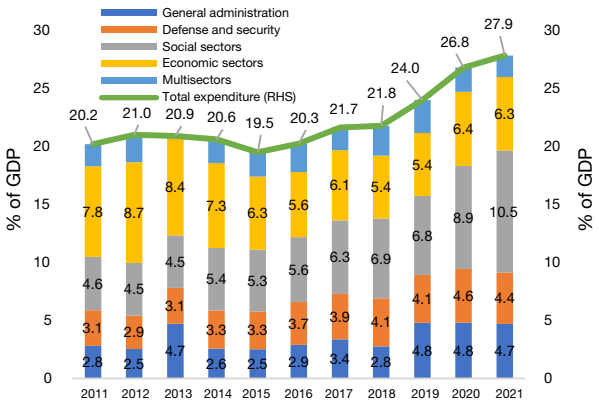


Figure 2.2. Government expenditure, by sector grouping (% of GDP) (2011-2021)

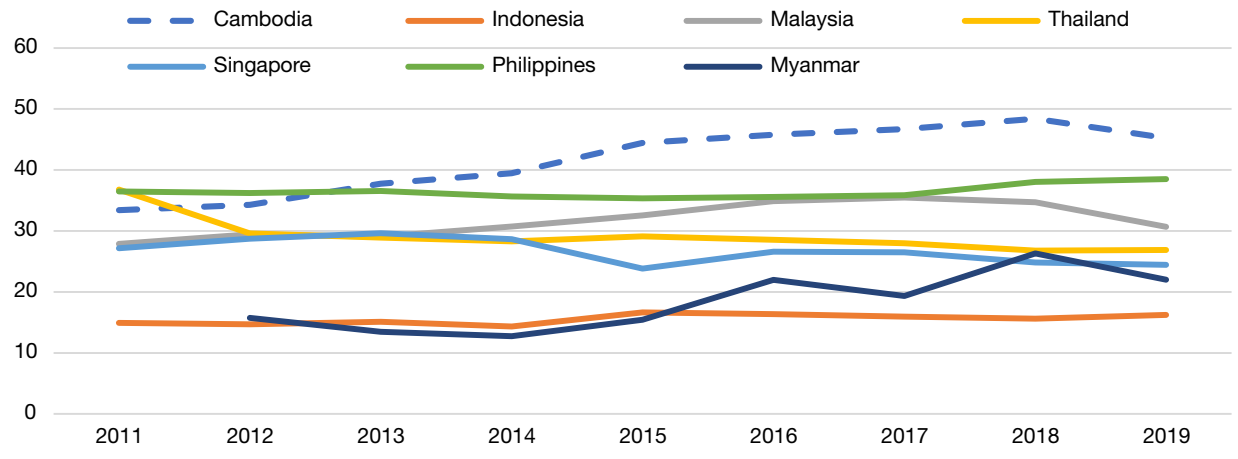


Sources: *Budget Settlement Law (2011-2021); World Bank staff estimates*

in 2011 (Figure 2.1). This represented a tripling of civil servants' minimum wage, compared to the level in 2013, having reached the target of KHR 1 million a month by 2018. Non-wage expenditure increased at a slower pace, from 6.8 percent of GDP in 2011 to 8.2 percent in 2020, and jumped to 10.4 percent in 2021. The increase in the social sector spending, which almost doubled from 4.6 percent of GDP in 2011 to 10.5 percent in 2021, is the main driver of expanded recurrent budget allocation (Figure 2.2). The increase in the public sector wage bill put Cambodia ahead of other ASEAN countries in terms of share of wage expenses as a percentage of total government operating expenditure (Figure 2.3).

In general, capital investments relied heavily on development-partner (DP) financing. However, there has been a significant increase in the domestic financing of capital investments starting in 2020 (Figure 2.4.a). The increase in domestically financed investments is particularly pronounced in the social sectors, which reached 1.8 percent of GDP in 2021. In contrast, DPs' capital spending declined from 6.5 percent of GDP in 2011 to 4.8 percent in 2021, due mainly to the decline in capital spending in the economic sector (Figure 2.4.b). Government net investment as a share of GDP fluctuated but remained the highest in ASEAN between 2011 and 2019 (Figure 2.5).

Figure 2.3. Compensation of government employee (% of total expenses) (2011-2019)



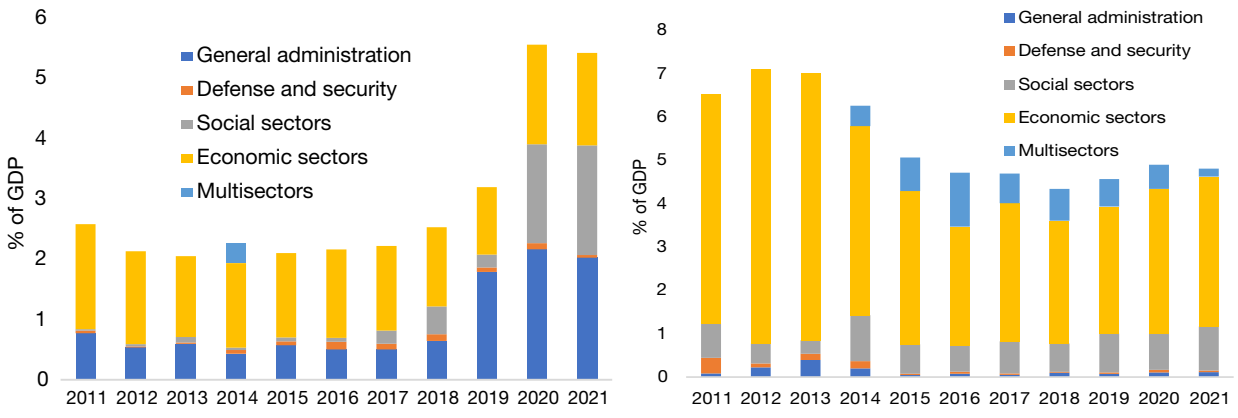
Source: *WDI*

Note: *Expense is cash payments for operating activities of the government in providing goods and services. It includes compensation of employees (such as wages and salaries), interest and subsidies, grants, social benefits, and other expenses such as rent and dividends.*

Figure 2.4. Trend of capital spending, by sector (% of GDP) (2011-2021)

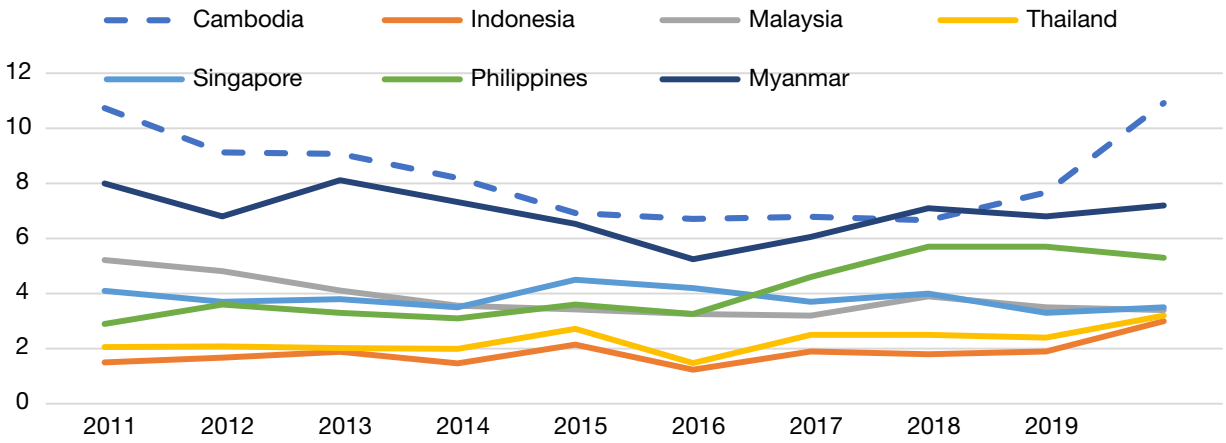
a. Capital spending, domestically financed, by sectors grouping (% of GDP) (2011-2021)

b. Capital spending, externally financed, by sectors grouping (% of GDP) (2011-2021)



Sources: *Budget Settlement Law (2011-2021); World Bank staff estimates*

Figure 2.5. Net investment in government nonfinancial assets (% of GDP) (2011-2019)



Sources: *WDI, IMF Article IV and Cambodian authorities*

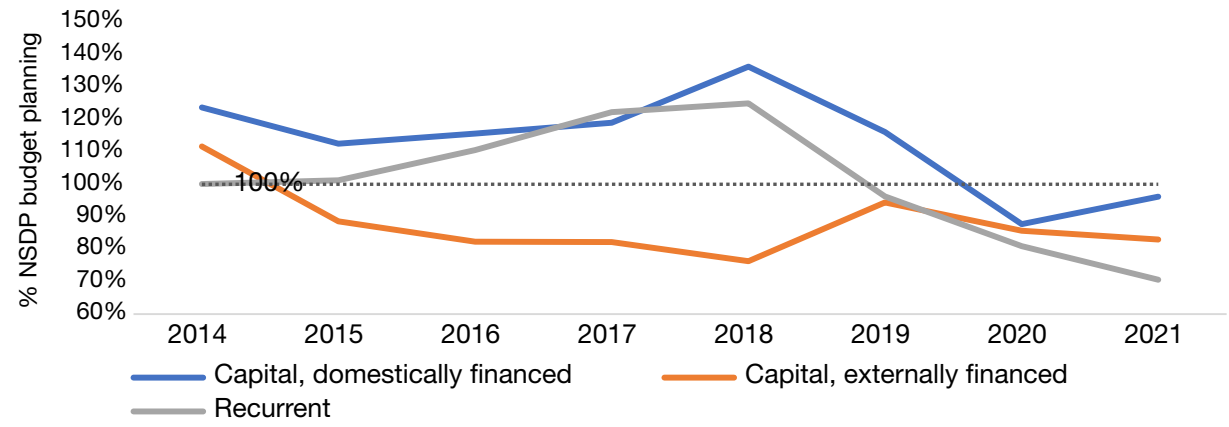
Note: *Net investment in government nonfinancial assets includes fixed assets, inventories, valuables, and non-productive assets.*

2.2. Strategic public expenditure prioritization

The two documents that guide the government's public expenditure are the 2019-23 Rectangular Strategy Phase IV (RS4) and the National Strategic Development Plan (NSDP) 2019-2023. The RS4 is a blueprint that guides the government policies, plans and strategies in achieving sustainable development. It is prepared as a dynamic policy document to address challenges as they emerge within a 5-year planning cycle during the period of 2019-23. Unlike other Rectangular Strategies, the 2019-23 RS4 targets human capital as the top priority to underpin the authorities' inclusive and sustainable development objectives. RS4 pursues four strategic goals: (i) maintaining a sustainable and resilient real economic growth rate of around 7 percent per year; (ii) creating more jobs; (iii) achieving the poverty reduction target of below 10 percent; and (iv) further strengthening the capacity and governance of public institutions to ensure an effective and efficient delivery of public services. NSDP provides the macro-economic framework, and outlines policies and priority actions that the relevant ministries will carry out, estimating the resources and expenditures needed and framework for monitoring and evaluation.

Cambodia could benefit from improved linkages between NSDP planning and overall government spending toward improvement of

Figure 2.6. Deviation of actual spending against NSDP planning (2014-2021)



Sources: *NSDP (2014-2018) and NSDP (2019-2023), Budget Settlement Law (2014-2021) and World Bank staff estimates*

Note: *Over 100 percent means actual spending exceeds planned expenditure. Lower than 100 percent means under execution of planned expenditure.*

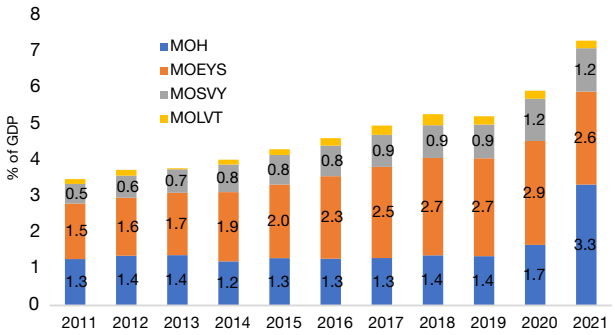
expenditure prioritization in line with the national development strategy. Recurrent spending peaked at 125 percent of NSDP in 2018 from 100 percent in 2014; the spending then dropped to 71 percent of NSDP planned expenditures. Similarly, NSDP capital planning did not reflect investment spending. NSDP planned investment expenditures over-executed between 2014 and 2019 and under-executed in 2020 and 2021. However, DP funded capital was mostly under-executed for all years except in 2014 (Figure 2.6). While the NDSP is expected to be superseded by annual budgets as circumstances evolve, significant financing gaps between the NSDP and the annual budgets that Cambodia has experienced so far indicate that planning needs further improvements.

2.2.1. Public expenditure and outcomes: Social sectors

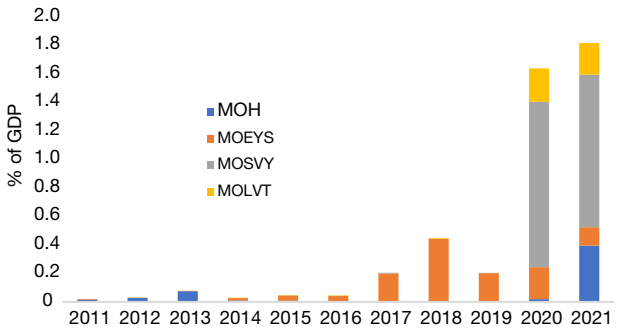
With an emphasis on human capital development in Rectangular Strategy 4, the government spending on social sectors increased from 4.3 percent of GDP in 2011 to 10.4 percent in 2021, driven by recurrent spending. Recurrent spending in social sectors doubled between 2011 and 2021, reaching 7.3 percent of GDP in 2021 from 3.5 percent. Among social sector ministries, recurrent spending in the MOEYS increased more than others, except that there was a significant increase in MOH's spending in 2021 due to COVID-19 (Figure 2.7.a). In terms of capital spending, Cambodia mainly relied on DPs for financing until 2020. The government significantly increased investment spending to 1.8 percent of GDP in 2021, from 0.2 percent of GDP in 2019. The domestic capital expenditure of MOEYS peaked in 2018 reaching 0.4 of GDP, then declining to 0.1 percent of GDP in 2021. Driven by Covid-19 spending, MOH capital spending spiked in 2021 (0.4 percent of GDP). For the MOSVY, government investment spending jumped to 1.1 percent of GDP in 2021 from a very low base in 2011 (Figure 2.7.b). DP-funded spending fluctuated significantly over the same period (Figure 2.7.c). The significant fluctuation

Figure 2.7. Expenditure trend for social sectors, by line ministry (% of GDP) (2011-2021)

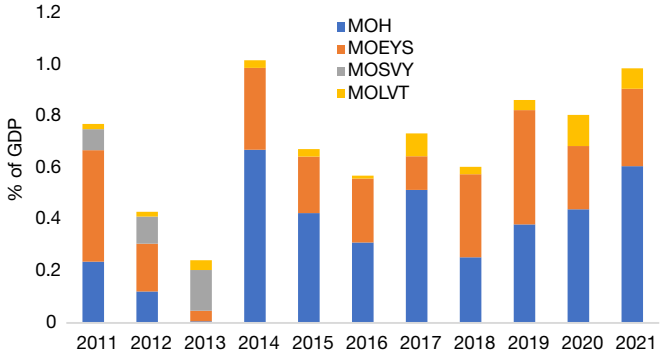
a. Reccurent spending for social sectors, by line ministry (% of GDP) (2011-2021)



b. Government capital spending for social sectors, by line ministry (% of GDP) (2011-2021)



c. DP capital spending for social sectors, by line ministry (% of GDP) (2011-2021)



Sources: *Budget Settlement Law (2011-2021); World Bank staff estimates*

of available resources for capital investment projects—for both government and DP funded—is a major concern for capital budget planning.

Trends in the education sector

The government increased education expenditure between 2011 and 2021, driven mainly by a rise in salary for the large number of education staff. Starting salary for upper secondary teachers doubled between 2014 and 2020 due to the increase in both base salary and functional allowance. In addition, the total number of educational staff increased by 6 percent during the same period, from 107,395 in 2014 to 114,170 in 2020. Wage expenditure as a share of total MOEYS expenditure reached nearly 80 percent in 2021. At the same time, the MOEYS capital expenditure has dropped significantly, declining from 27 percent in 2011 to only 17 percent of total MOEYS expenditure in 2021 (Figure 2.8). It is necessary to ensure that adequate budget is allocated for recurrent non-salary and capital expenditures to support education development and reforms.

Education capital expenditures relied mainly on development partners (DP). Between 2011 and 2016, DP-funded capital investment dominated total MOEYS investment. From 2017 to 2021, there is an increasing importance of government investment and fluctuating DP-funded capital investment in the education sector. MOEYS capital investment peaked in 2018 at 0.4 percent of GDP, later declined to 0.1 percent in 2021. Overall, DP-funded capital investment and MOEYS investment fluctuated over the last decade (Figure 2.9).

Budget outturns for capital expenditures—both domestically and externally financed—significantly fluctuated (Figure 2.10). This suggests weaknesses in the planning and execution of capital expenditures.

Compared with regional peers, Cambodia's gross national income per capita is the lowest. Cambodia's education spending of 3.1 percent of GDP is the second lowest in the region and slightly lower than regional average of 3.4 percent of GDP [25] (Figure 2.11).

Despite the persistent effort of the MOEYS to improve student's learning (Box 2.1), the quality of spending remains low as reflected in low level of students' learning outcomes for Grade 6 and Grade 8. Between 2013 and 2021, an average student in Grade 6 could answer less than

Figure 2.8. MOEYS spending, by category (% of total MOEYS domestic spending) (2011-2021)

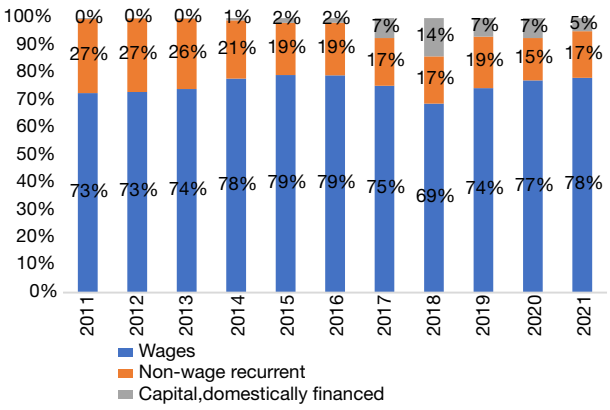
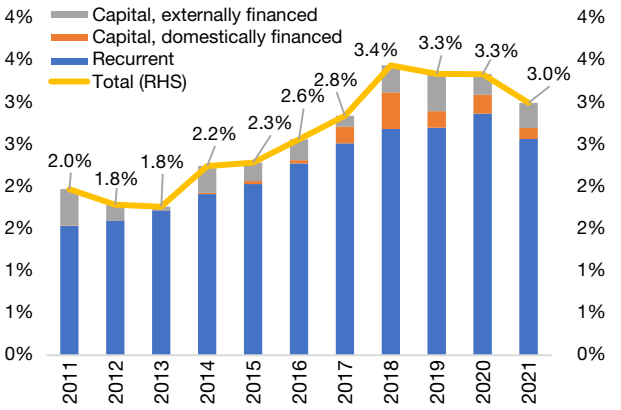


Figure 2.9. MOEYS spending, by category (% of GDP) (2011-2021)

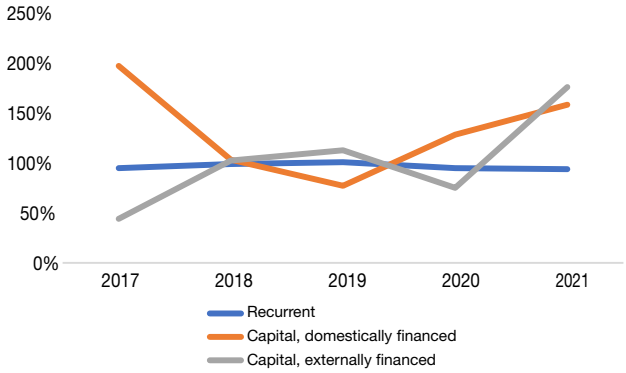


Sources: *Budget Settlement Law (2011-2021); World Bank staff estimates*

Note: *RHS = Right-hand scale*

25 Cambodia's education spending as a percent of GDP is based on current GDP value and is expected to be lower with the upcoming GDP rebasing.

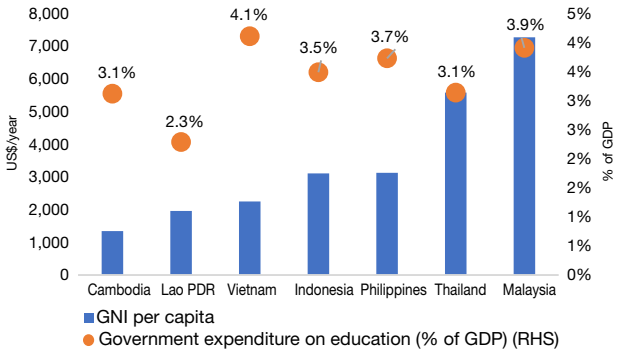
Figure 2.10. Planned capital spending and budget outturn



Sources: *Budget planning figures sourced from Budget Law and actual spending sourced from Budget Settlement Law (2017-2021) and World Bank staff estimates*

Note: *Budget outturns over 100 percent of the approved budget reflect actual spending exceeding the planned budget (overspent); under 100 percent means actual spending was below the planned budget (underspent).*

Figure 2.11. Government expenditures on education percent of GDP vs. GNI per capita (2021)



Source: *WDI (extracted 2023)*

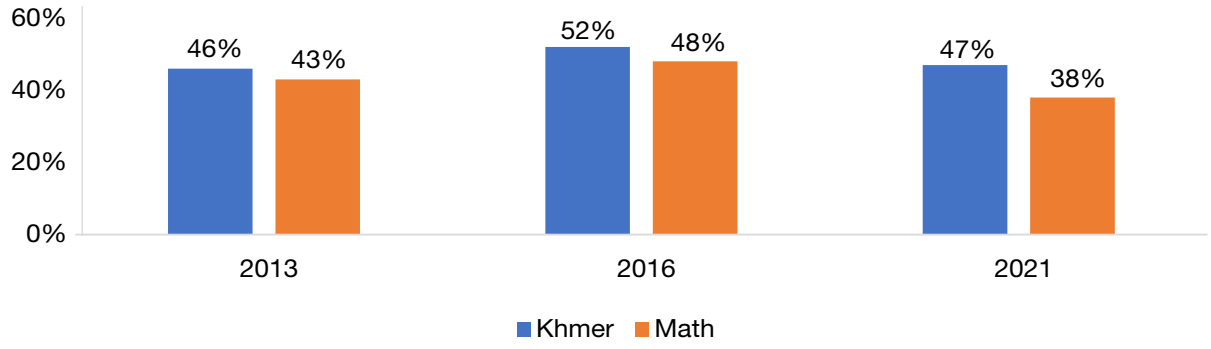
Note: *RHS = Right-hand scale*

52 percent of Khmer questions correctly. Student learning outcomes for mathematics were even poorer. On average, Grade 6 students answered less than half the questions correctly—43 percent in 2013, 48 percent in 2016, and 38 percent in 2021 (Figure 2.12). Grade 6 student learning outcomes showed slight improvement between 2013 and 2016 in both Khmer and Math. However, the deterioration of the 2021 test result was due to the negative impact of the COVID-19 pandemic. Similarly, 36 percent, 19 percent, and 52 percent of students in Grade 8 performed below basic proficiency level for math, Khmer reading, and physics respectively in 2017. Between 2017 and 2022, higher numbers of students of Grade 8 performed below basic for math, while students with basic, proficient and advanced level for math declined. In physics, student performance deteriorated during the same period. Students with below basic level increased around one third, while students with basic, proficient and advanced level declined. There was an improvement in Khmer reading for Grade 8 students. The proportion of students with basic and advanced level for Khmer reading increased. This was offset by the decline in the proportion of students with below basic and proficient level (Figure 2.13).

The Covid-19 pandemic has had impact on

Figure 2.12. Learning outcomes for Grade 6 students deteriorated between 2013 and 2021

Percentage of questions correctly answered



Source: *MOEYS*

Box 2.1. MOEYS's effort to improve student learning

Improving early age reading and math: MOEYS introduced a new approach to improve early age reading and math for pupils. A pilot program was successfully conducted in Kampong Thom province and Siem Reap province. The approach is being rolled out across the country and in teacher training centers.

Response to Covid-19: In response to Covid-19 pandemic, schools were fully or partially closed between February 2020 and February 2022. Since students in rural areas lack access to digital instruments, MOEYS has introduced digital education content such as video, self-study or virtual lessons and other digital materials broadcasted on TV and other online platforms and provided those digital materials to schools.

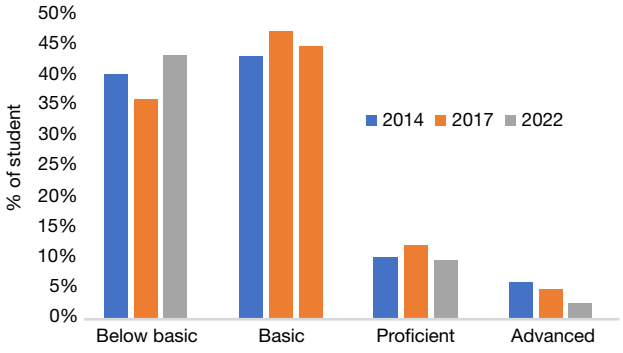
Learning curriculum and textbooks: MOEYS has successfully improved national learning curriculum and it is working on improving and updating textbooks. Textbooks were distributed to schools and school management mechanism including school information system was strengthened to allow for Provincial Office of Education (POE) to effectively monitor and manage text books, including timely distribution of text books to schools in need.

Teaching approaches: new teaching approaches such as self-regulated learning, project-based learning, research-based learning is strongly considered by integrating the teaching approaches at teacher training centers, new generation schools, and other schools across the country.

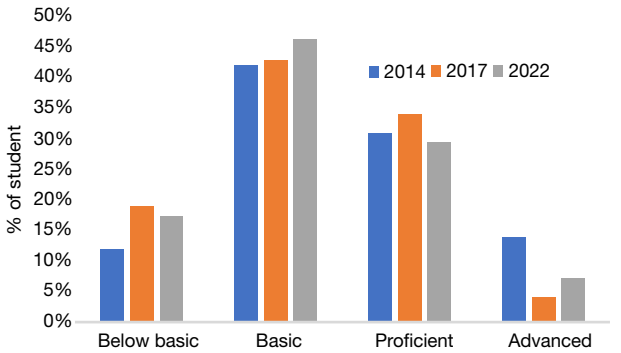
Source: *MOEYS*

Figure 2.13. Percentage of Grade 8 students proficiency in Khmer reading and Mathematics (2014-2022)

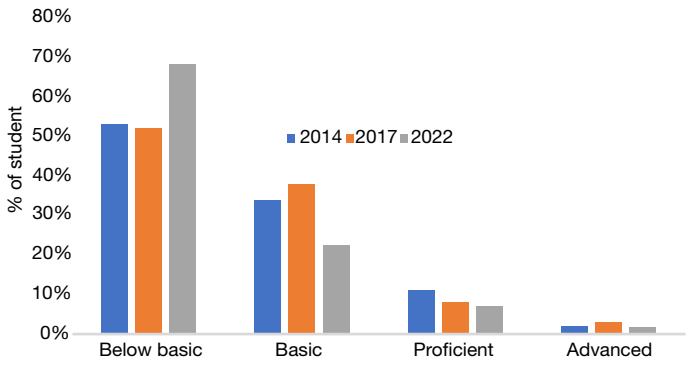
a. Proficiency of Grade 8 students in Math



b. Proficiency of Grade 8 students in Khmer reading



c. Proficiency of Grade 8 students in Physics



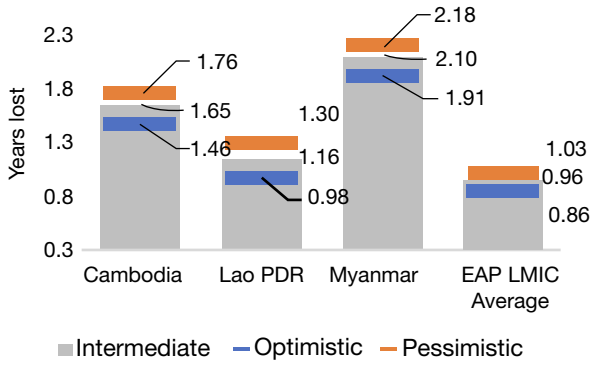
Source: *MOEYS*

student learning loss and learning poverty rate in Cambodia. Learning loss means quality of education deteriorated and children learn less, reflected by learning adjusted years of schooling (LAYS). The simulation model of Azevedo et al. (2022) revealed that the Covid-19 has resulted in substantial reductions in LAYS, an increase in learning poverty in Cambodia. The estimated average LAYS loss was between 1.46 years and 1.76 years, higher than EAP LMIC, which range from 0.86 to 1.03 years. Learning poverty rate (percentage of 10-year-olds who can not read and understand a short passage of age-appropriate material) is expected to reach 99.7 percent as compared to EAP LMIC at 79 percent (Figure 2.14).

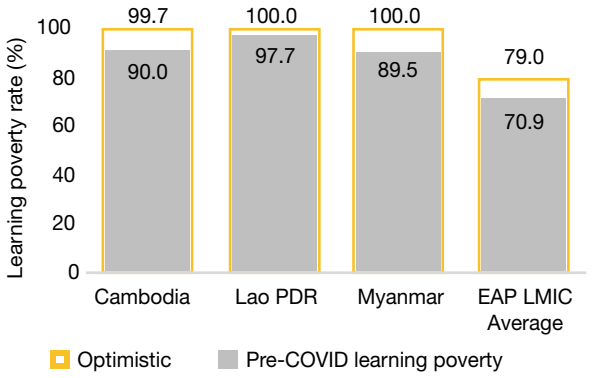
More importantly, there is a gap between urban and rural areas in education outcomes (Figure 2.15). The net enrollment rate for primary, lower secondary and upper secondary increased respectively, from 81.1 percent to 90.1 percent, from 31.5 percent to 47.5 percent, and from 17.9 percent to 30.9 percent between 2009 to 2019. The literacy rate for the population aged 15 and above increased from 73.9 percent to 81.9 percent for the same period. However, there is a big difference between urban and rural areas in terms of net enrollment and literacy rate. Although Cambodia has reduced the percentage of people with no schooling, completion rates for primary and secondary remained flat.

Figure 2.14. Loss in learning adjusted years of schooling and increase in learning poverty

a. Loss in LAYS under different scenarios



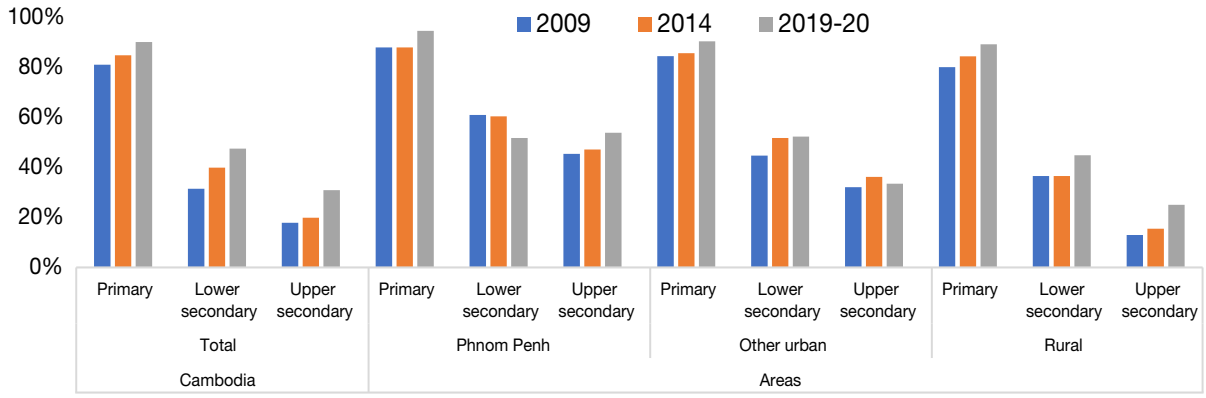
b. Learning poverty in optimistic scenarios



Source: *Simulation model from Azevedo et al. (2022)*

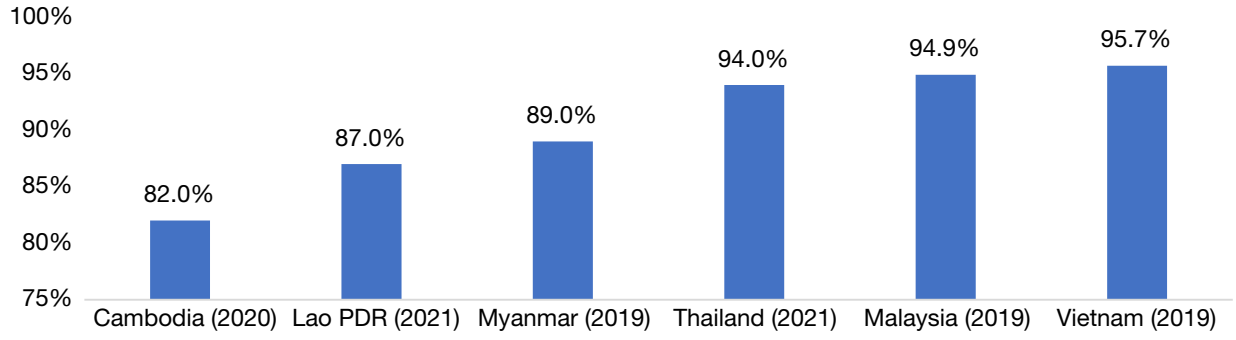
Note: *Assumptions for mitigation effectiveness are based on the assumptions used by Azevedo et al. (2022) for Lower Middle-Income Countries (LMIC). Three scenarios include: (i) Intermediate scenario means 85 percent of the schools are closed and mitigation effectiveness is 7 percent; (ii) Optimistic scenario means 75 percent of the schools are closed and mitigation effectiveness is 14 percent, and (iii) Pessimistic scenario means 100 percent of schools are closed and mitigation effectiveness is 7 percent.*

Figure 2.15. Net enrollment rate, by urban and rural areas (2009-2019/20)



Sources: *CSES (2014) and CSES (2019/20)*

Figure 2.16. Cambodia improved literacy rate, but still lags behind its peers in ASEAN



Sources: *Cambodia extracted from CSES (2019/20) and other countries sourced from World Development Indicators (WDI) (extracted in March 2023)*

In comparison to its ASEAN peers Cambodia lags behind in education outcomes, such as literacy rates (Figure 2.16). Completion rates are also lower than most ASEAN countries, suggesting that more work and investment need to be done to retain students in secondary education. In addition, drop-out rates at primary school remained the highest in the ASEAN region. While those with no schooling dropped from 28 percent in 2009 to 18 percent for the 2019-20 school year, students in Cambodia performed below the average score for other participating ASEAN countries in three domains: reading, mathematics, and science. The 2022 Program for International Student Assessment (PISA) showed slight improvements in performance scores for Cambodian students in reading, mathematics and science. Average performance scores for reading increased to 329 in 2022 from 321 in 2017, while the scores for mathematics reached 336, an increase from 325 and the score for science increased from 330 to 347 for the same period. However, the scores for Cambodian students are lower than its peer countries such as Philippines and Indonesia in reading, mathematics and science. Around 8 percent of students in Cambodia reached level 2 or higher in reading (student comprehends the main idea in a text and can reflect it), 12 percent in mathematics and 10 percent in science, compared to 74 percent in reading, 69 percent in mathematics and 76 percent in science in OECD countries.[26]

The poor deployment of teachers negatively affects class sizes. At the national level, the total number of teachers is generally inadequate. Class size remains relatively larger than its ASEAN peers. Cambodia had the highest student-teacher ratio for primary school from 2013 to 2018. For secondary school, the student-teacher ratio remains high, but just lower than Thailand and Myanmar for the same period. The larger class size in Cambodia is mainly attributable to the inefficient distribution of teachers. At national level, based on the 2018 MOEYS norm for student and teacher proportion, Cambodia ran an overall shortage of teachers of 20,356 in 2021. Teachers were surplus in lower secondary and shortage at upper secondary level for the same year (Table 2.1).

The shortage of teachers has a greater effect in rural areas, as the distribution of teachers appears skewed toward urban areas. In 2021, urban areas have a low level of teacher shortage (490) while rural areas have a net teacher shortage of 19,867 (Table 2.1). This is based on calculation of actual demand for teachers by dividing total number of student enrollment by students per class as required by 2018 MOEYS norms. Pre-schools and primary schools in rural areas were particularly starved of teachers, reaching a net teacher shortage of 4,833 and 13,403 respectively. At provincial level, the teacher distribution is tilted toward Phnom Penh where the surplus of teachers was concentrated between 2018-2021 (Figure 2.17). Most provinces had shortages of teachers for the same period.

26 PISA (2018-2022)

While public sector pay is higher than private sector, the education sector continues to face shortage of teachers in certain subjects. Despite MOEYS's effort to address teacher surplus and shortages (Box 2.2), Cambodia still has a teacher deployment challenge. Shortages and surpluses of teachers appeared to be a key challenge for schools in delivering education services. A number of reasons help explain the surplus and shortage of teachers:

- The Education Management Information System (EMIS) was introduced by MOEYS to provide information on student enrollment. However, teacher surplus and shortage at school level was

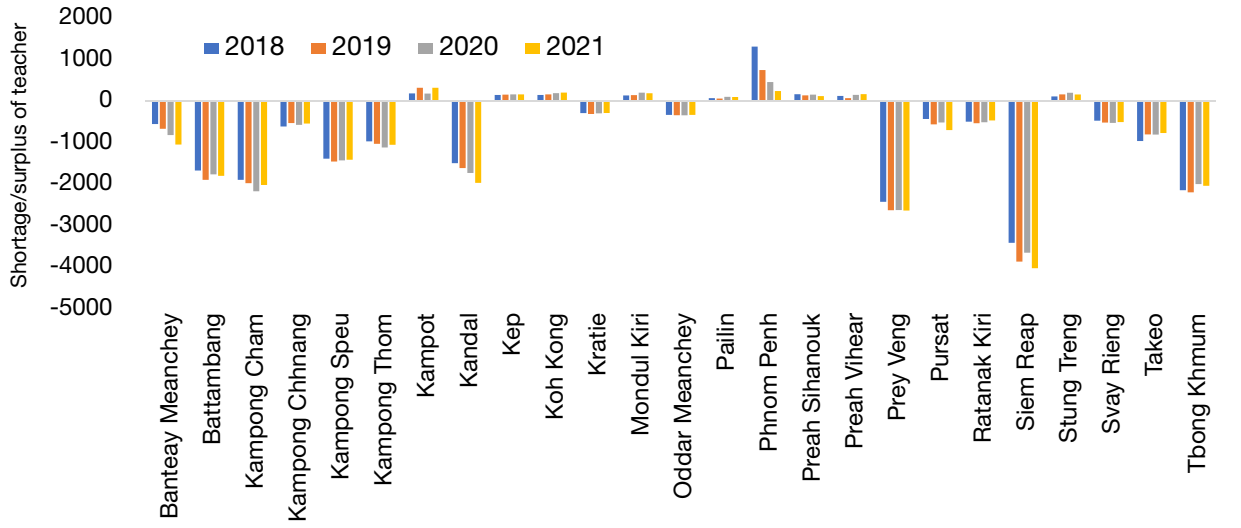
Table 2.1. Schools in rural areas have the highest level of teacher shortage in 2021

		Pre-school	Primary	Lower secondary	Upper secondary	Total
National	Current teacher	5,621	45,148	14,704	29,245	94,718
	Actual demand for teacher	10,454	58,551	13,928	32,141	115,074
	Net teacher shortage/surplus	**-4,833**	**-13,403**	**776**	**-2,896**	**-20,356**
Urban	Current teacher	1,021	8,850	2,635	10,119	22,625
	Actual demand for teacher	1,770	9,999	1,816	9,530	23,115
	Net teacher shortage/surplus	**-749**	**-1,149**	**819**	**589**	**-490**
Rural	Current teacher	4,600	36,298	12,069	19,126	72,093
	Actual demand for teacher	8,684	48,552	12,111	22,612	91,960
	Net teacher shortage/surplus	**-4,084**	**-12,254**	**-42**	**-3,486**	**-19,867**

Source: *World Bank's staff calculation based on MOEYS' data in 2021*

Note: *Needs for teachers per the 2018 MOEYS norms: Pre-school: 1.2 teacher per class and 25 pupils per class. Primary: 1.15 teachers per class; for 1-3rd grade, 35 to 45 pupils per class and for 4-6th grade, 40 to 50 pupils per class. Lower secondary: 2.062 teachers per class and 40 to 50 pupils per class. Upper secondary: for 10th grade, 2.062 teacher per class and 40 to 50 pupils per class; for 11-12th grade, 2.187 teachers per class and 40 to 50 pupils per class.*

Figure 2.17. Net school teacher shortage, by province (2018-2021)



Source: *World Bank's staff calculation based on MOEYS' data (2018-2021)*

Box 2.2. MOEYS efforts to address the issue of surplus and shortage of teacher

MOEYS has introduced quality upgrading program for upgrading teachers from lower secondary to upper secondary level, within which 2,684 teachers were trained. This has contributed to addressing teacher shortage by subject at upper secondary level.

Principles for distribution of new recruited teachers:

- Planning for distribution of newly recruited teachers is prepared based on teacher shortage status by subjects at school level.
- POE is required to prepare list of schools that have demand for teachers by subject through projecting teacher demand over the next two to four years based on teacher training program.
- Candidates applying to be newly recruited teachers are required to choose schools that are in need for the new teachers and singed teaching contract upon deployment.

Principles for addressing surplus teachers:

- MOEYS issued an instruction # 28 dated May 5, 2014 not allowing for transfer of teacher to schools with teacher surplus.
- MOEYS continues to implement Sub-decree # 102 dated 2002 which sets out one time allowance for redeployment: redeploy within commune, approx. US$ 74; redeploy between commune, approx. US$120; redeployment between districts, approx. US$200; redeployment from low land provinces to low land provinces, approx. US$ 250; and redeployment from low land from province to isolated province, approx. US$ 365.

MOEYS introduced the following measures:

- Conduct study at schools with teacher surplus, starting from the schools in Phnom Penh.
- Set out conditions and criteria for teachers to be redeployed from teacher-surplus schools to teacher-shortage ones.
- Set out principled incentives for redeployed teachers.
- Review and reclassify hardship schools (type 1 and type 2) and request for principal to provide further incentives to teachers working at those schools.
- Prepare a mechanism in redeploying surplus teachers and enforce the current teaching norm.
- Set out conditions for redeploying teachers who teach less than 9 hours per week to teacher-shortage schools.
- Review and increase teaching hour norm.

Strengthen effectiveness of the current data management systems including Duraseksa website and Education Management Platform (EMP) so that MOEYS can manage data in a thorough and concrete way for the purpose of analysis and decision making.

Teacher training is prioritized measures taken by MOEYS. The achievement includes:

- Conduct review of teacher training programs at all level.
- Prepare mechanism to attract high performance students to select teaching careers.
- Convert teacher training centers in Battambang province and Kampong Cham province to be teacher training institutes which implement 12+4 years of training.
- Implement full Bachelor + 2 program at National Institute of Education (NIE).
- Start implementing teacher license through payment-based teacher training to respond to the future planning which delegate autonomy to school principal to recruit teachers based on school demand as well as avoiding employment of public teachers in the private schools.

Implement Sub-decree on the transfer of education, youth and sport functions to district, municipality and khan administration across the countries. Review and monitoring on the implementation of administration, staff, finance and learning and teaching will be conducted.

Source: *MOEYS*

not articulated in EMIS reports. Lack of credible and transparent information on teacher surplus and shortage at school level tended to exacerbate the issue by encouraging further teacher transfer, hence increasing uneven distribution of teachers between rural and urban areas.

- The shortage of teachers in the rural areas tended to increase for a number of reasons. First, there is a limited incentives to move to rural areas, and insufficient housing for those who do. Second, there is a need for teachers to move closer to their spouses who live outside of their duty station. Third, informal payment facilitated the transfer process. Teacher recruitment was done at the central level based on demand of teacher by region. In general, only candidates who are resident or high school graduate (Bac II level) from a particular province are allowed to apply for teaching in that province. New teachers were normally allocated to their own resident province where they graduated high school (Bac II level). Despite the requirement set out by MOEYS for teachers newly deployed to serve for a period specified in a contract, teachers were then transferred from rural to urban areas within the same province where there are opportunities for additional income earnings through private tutoring.[27]
- Redeployment faced tough challenges. Teachers in urban areas tended not to be redeployed since that means moving away from their families and loss of opportunity for additional income from additional teaching in urban private schools. Although the government introduced redeployment policy and provide some monetary incentives for voluntary redeployment to schools that have a shortage of teachers—especially to the rural areas—the redeployment allowance was limited.[28]
- In 2018, the MOEYS introduced norm for teaching hours at school level. However, in practice, there is a lack of enforcement. For instance, teachers at surplus upper secondary schools taught approximately 5 hours per week as opposed to the required 16 hours per week[29] and engaged in teaching at private schools or family businesses in their spare time. Furthermore, since there is no teacher performance assessment and management in place, the salary for those surplus teachers continued to rise as a part of salary across the board increase.
- While teacher recruitment and deployment are conducted at national level, teacher shortage remains a key concern for schools to deliver educational services. Within schools where there is a shortage of teachers, teachers are tasked to teach long additional hours and teach subjects beyond their specialized areas. Schools have limited resources to address the challenge. Aside from the School Operation Fund (SOF)—an average annual SOF per school in 2023 was as low as KHR 10.8 million (equivalent to US$2,677 per year)—resources for schools to address the teacher shortage are missing.

Trends in the health sector

Public health (Ministry of Health) expenditure constitutes a small portion of total health expenditure in Cambodia. A larger chunk of health expenditure comes from patients' out-of-pocket spending. Prior to the COVID-19 outbreak, Ministry of Health spending slightly fluctuated, reaching 7.9 percent of government spending in 2021 from 8.4 percent in 2017. (Figure 2.18).

Capital expenditures at MOH are mainly financed by externally funded capital allocation. Between 2017 and 2021, MOH capital investment as a share of total spending accounted for less than 1 percent, except in 2021 when planned government capital expenditures reached 18 percent (Figure 2.19), as a part of broader COVID-19 response.

27 MOEYS, Teacher management and redeployment: issues and practical way forward (December 2018)

28 Sub-decree # 102 dated 2002 set out one-time allowance for redeployment: redeploy within commune, approx. US$74; redeploy between commune, approx. US$120; redeployment between districts, approx. US$200; redeployment from low land provinces to low land provinces, approx. US$250; and redeployment from low land from province to isolated province, approx. US$365.

29 MOEYS' teacher norm (2018)

Figure 2.18. MOH expenditure (2017-2022)

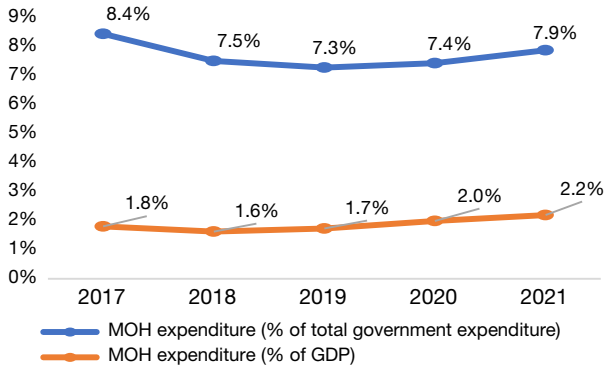
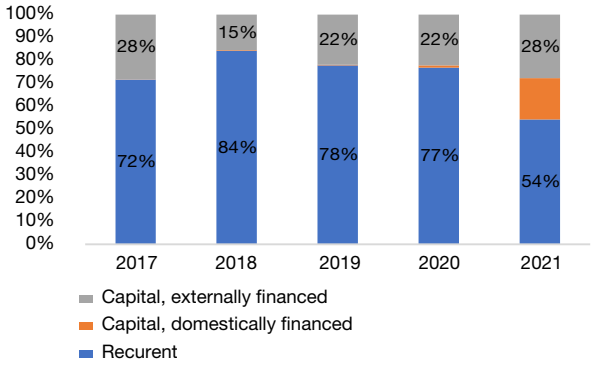


Figure 2.19. MOH spending, by category (% of total) (2017-2022)

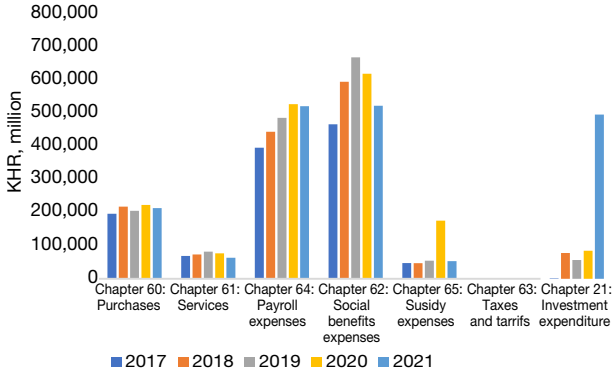


Sources: *Budget Settlement Law (2017-2021); World Bank staff estimates*

Note: *Recurrent expenditure includes expenditures other than infrastructure such as wages, drugs, medical supplies, and other operating expenses; it however, excludes Covid-19 spending in 2020 and 2021. Capital expenditures budget is used to acquire infrastructure fixed assets such as hospitals or health center buildings.*

Increase in the MOH recurrent spending in nominal terms between 2017 and 2021 was driven mainly by social benefits expense and wages[30] (Figure 2.20). Social benefits expenses (Chapter 62)[31] support health service delivery and include in-patient and operational expenses at the health facilities, drug purchases, and medical supplies (Figure 2.21). Between 2017 and 2021, the spending for nominal social benefits expenses (Chapter 62) excluding Covid-19 spending slightly increased by 12 percent. As a share of GDP, the spending on social benefit expense increased from 0.5 percent in 2017 to 0.6 percent in 2020 and slightly declined to 0.5 percent in 2021 due to

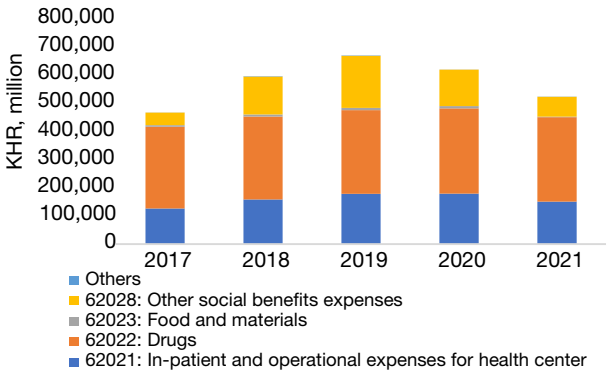
Figure 2.20. MOH spending, by economic classification (KHR, million) (2017-2021)



Source: *MEF*

Note: *MOH spending excludes Covid-19 expenditure*

Figure 2.21. MOH spending on social benefits expenses, by economic classification (KHR, million) (2017-2021)



Source: *MEF*

Note: *MOH spending on social benefit expenses excludes Covid-19 expenditure*

30 Social benefits expenses (Chapter 62) include in-patient travel expenses at health center, drug purchases expenses, and medical supplies

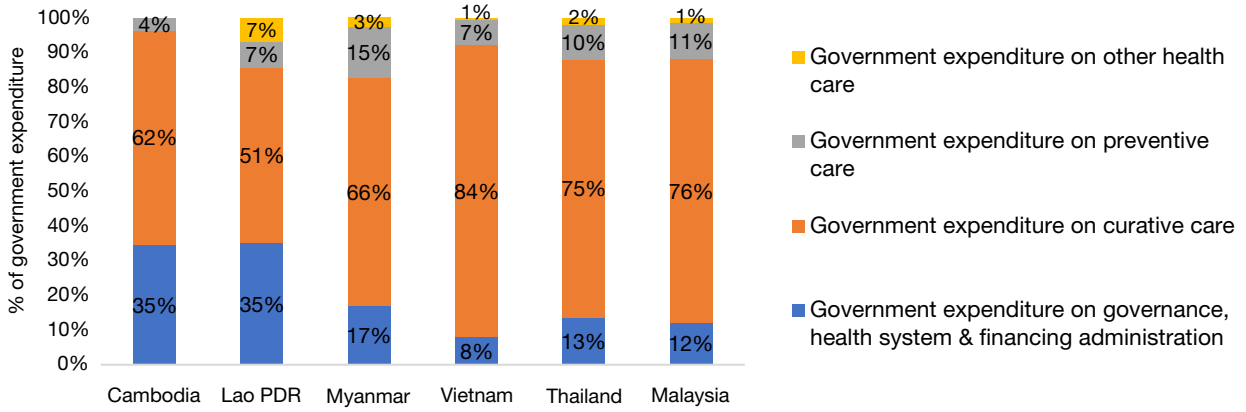
31 Chapter refers to group of account and sub-account of public revenues and expenditures for respective economic classification. Under Cambodia's public expenditures, expenditure chapter by economic classification includes: Chapter 60=Purchases, Chapter 61=Services, Chapter 62=Social benefits expenses, Chapter 63=Taxes and tariffs, Chapter 64=Payroll expenses, Chapter 65=Subsidy expenses, and Chapter 21=Investment expenditure.

Covid-19. This was driven by a rise in subsidies to informal sector Health Equity Fund-HEF[32] (Chapter 62028) and drug expenditures (Chapter 62022). Domestically financed capital spending (Chapter 21) was modest in 2017 (KHR 1,199 million or 0.001 percent of GDP) with a modest increase in 2020 (KHR 84,738 million or 0.08 percent of GDP) and a substantial increase in 2021 (KHR 496,839 million or 0.45 percent of GDP) (Figure 2.20).

Spending on health system administration remains high compared to ASEAN countries, while spending on health service delivery (particularly preventive care) remains very low as a total share of public expenditures. In 2019, Cambodia's spending on health system administration as a share of government health expenditures (35 percent), was twice as high as in Myanmar, more than four times higher than in Vietnam, and nearly three times higher than in Thailand and Malaysia. On the other hand, as a share of government health expenditures, Cambodia's public spending on curative care (62 percent) is only second lowest to Lao PDR, and lower than Myanmar, Vietnam, Thailand, and Malaysia (66 percent, 86 percent, 75 percent, 76 percent respectively). When expenditure on preventive care is measured as a share of government health expenditure, Cambodia was the lowest (Figure 2.22). The share of government spending on preventative care is the lowest among comparator countries. There should be a transition towards higher prioritization for preventive care, including introducing policies to increase targeted prevention measures where health spending is high and institutionalizing incentives for people to seek preventive services.

It is important to note that overall healthcare expenditure in Cambodia is higher than all of its neighbors despite the low level of public spending. On average, healthcare financing from all sources in Cambodia has been greater than 5.7 percent of its GDP from 2009 to 2019, consistently higher than any of its ASEAN neighbors (Figure 2.23). This level of spending persists despite relatively low levels of government spending on health in both per capita terms (Figure 2.24) and as a share of the government budget (Figure 2.25) – both lower than nearly all in the region. This means the remaining is financed by external (DP) financing and out-of-pocket spending.

Figure 2.22. Cambodia's health spending as compared to its peer countries in ASEAN, by health care functions, (% of government health expenditure) (2019)



Sources: *WHO-Global Health Expenditure (2022) and World Bank staff estimates*

Note: *MOH=Ministry of Health*

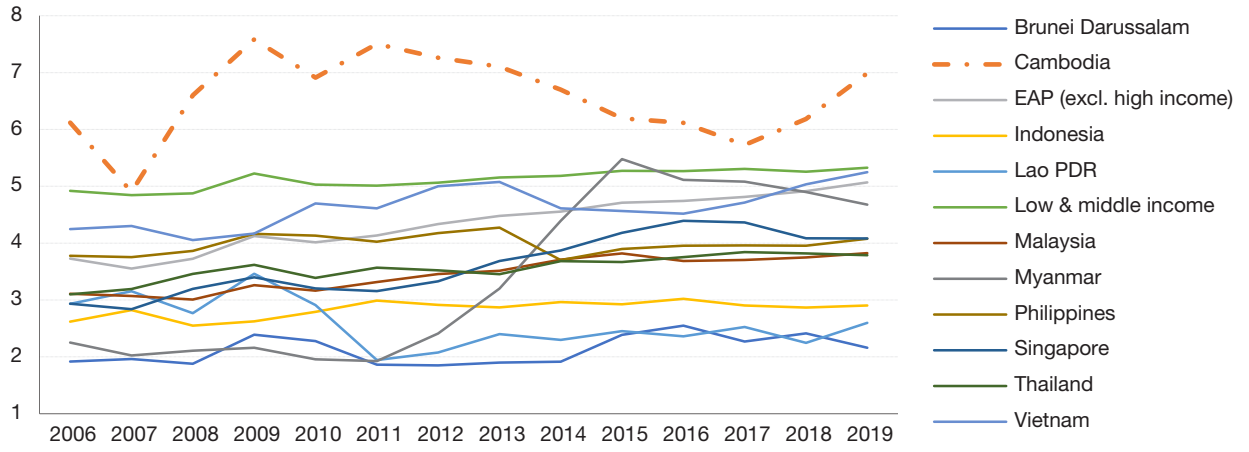
Government health expenditure from 2016 to 2019 (graph a) are PPP-adjusted nominal values.

Other healthcare includes rehabilitative care, long-term healthcare, ancillary services, medical goods, and other healthcare services

32 HEF is social health protection fund for the poor. HEF purchases healthcare for the poor from public health facilities. The detail of HEF is discussed in Chapter 2.

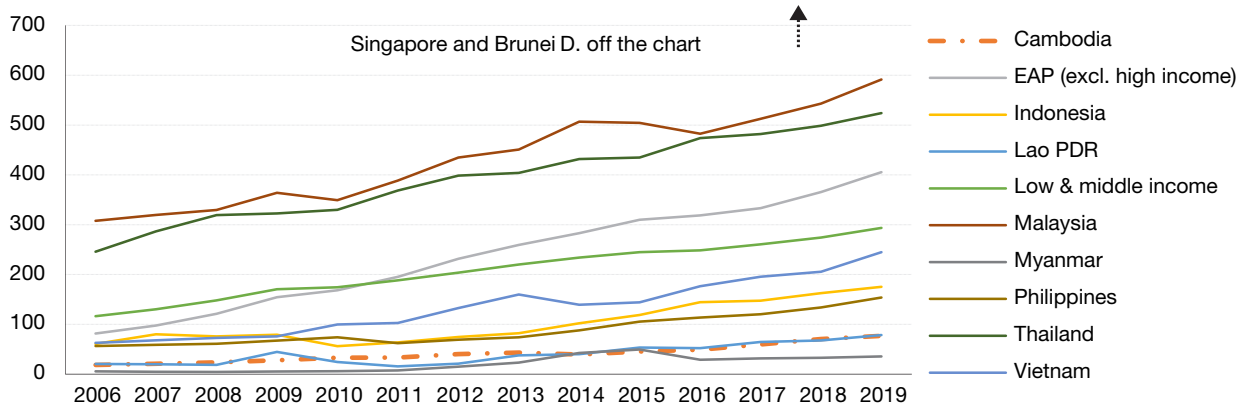
The volume of financing for health in Cambodia is consistent with what other countries are spending at similar income levels, but the composition is skewed towards private out-of-pocket (OOP) expenditures. OOP financing is neither an efficient nor equitable way to achieve universal health coverage (UHC). Total health expenditure per capita increased in real terms from about US$35 per annum in 2000 to about US$115 in 2020 (Figure 2.26.a). Countries transitioning from low- to middle-income status typically also achieve a health financing transition whereby the volume

Figure 2.23. Health expenditure (% of GDP)



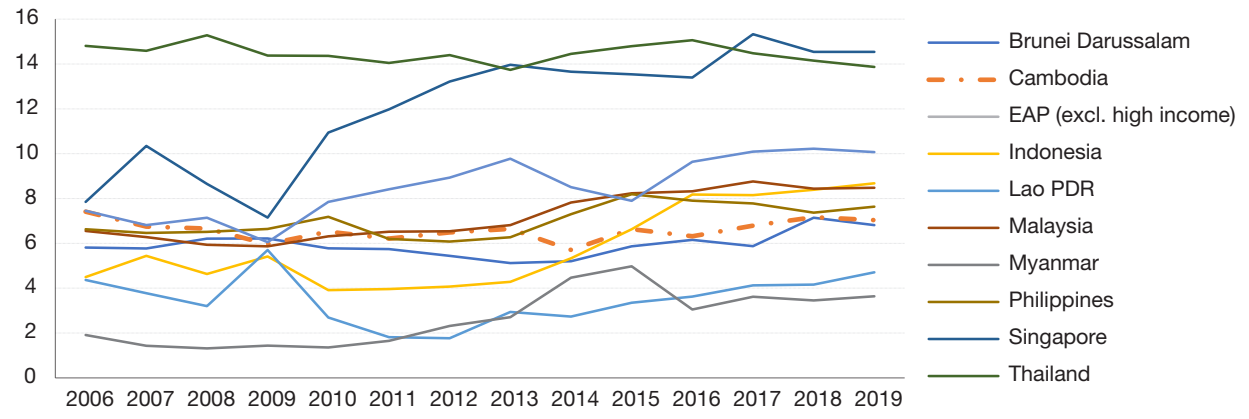
Source: *WDI*

Figure 2.24. General government health expenditure per capita, PPP (current intl. US$)



Source: *WDI*

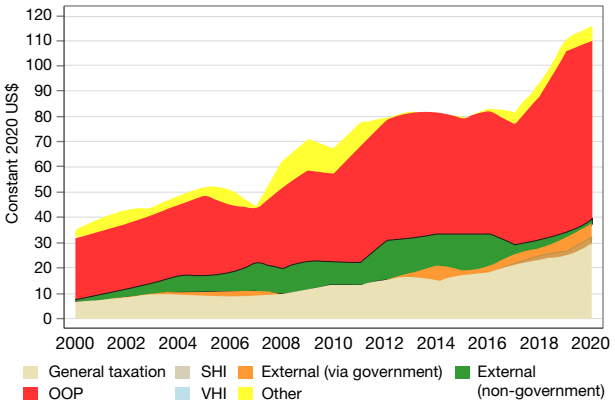
Figure 2.25. Domestic health expenditure (% of general government expenditure)



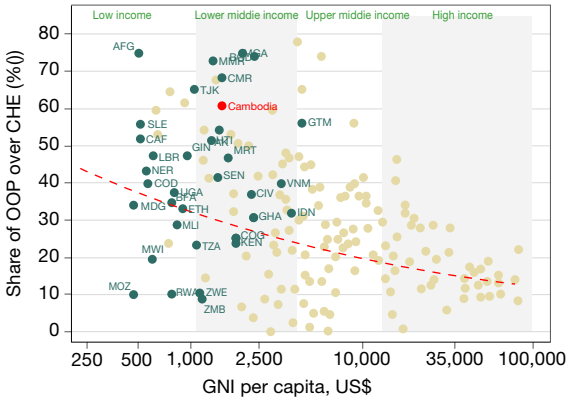
Source: *WDI*

Figure 2.26. Cambodia health financing relied mainly on OOP over the last two decades and OOP expenditure tends to increase further

a. Volume of health financing per capita per year



b. Over-reliance on OOP



Sources: *Author's calculation based on various data sources*

Note: *SHI=Social Health Insurance, VHI=Voluntary Health Insurance*

of financing invested in health increases and its composition transitions away from external and OOP dependence to predominant pre-paid mechanisms, including increased public health financing or some form of health insurance mechanisms (e.g., social health insurance). In Cambodia however, while the share of external financing decreased since 2015 (Figure 2.26.a), OOP expenditure remain the main financing channel for the sector, and the share of OOP financing (60 percent in 2020) is well above what is observed on average for countries at similar income levels (about 30 percent) (Figure 2.26.b).

Utilization of health care services provided by public health facilities is low. In 2021, more than three-fourths of sampled household members (83.9 percent of households) sought care for illness and injury from a private healthcare provider in the last 30 days, while only 15.3 percent sought care from a public healthcare provider.[33] Low utilization of public health facilities is caused by distance of travels to the nearest health center, omnipresence of private service providers, which allows quick access,[34] and perception of public health quality among citizens. Low utilization of public health services means that public expenditure has not achieved its fullest potential.

Despite low utilization of public health facilities and preference for the private sector, which contributes to high out of pocket expenditure, Cambodia has significantly improved health outcomes over the last two decades. Cambodia has seen substantial increases in immunization coverage and declines in the unvaccinated (Figure 2.27). It has also seen large reductions in childhood mortality, with under-5 mortality dropping from 124 per thousand births in 2000 to 16 in the 2021-22 health survey (Figure 2.28).

Despite the improvement in health outcomes, Cambodia lags behind most peers in ASEAN in life expectancy (Figure 2.29.a). Over the last two decades, life expectancy increased from 67.7 years in 2010 to peak at 70.4 years in 2019 and slightly decreased to 70.4 years and 69.6 year respectively in 2020 and 2021.[35] However, Cambodia's life

33 Draft report: Analysis of Financial Risk Protection in Cambodia's Health System using CSES (Cambodia Socioeconomic Survey) Data: 2009–2021. GIZ (2023, forthcoming).

34 In 2022 there was a total of 1,408 public sector health facilities, which accounts for less than 10 percent of the total health service providers across Cambodia with the majority of health care providers being private sector. Between 2017 and 2022 the number of Health Centers (primary care level) increased from 1,190 to 1,288.

35 Cambodia's 2019 Population Census reported that life expectancy at birth was 75.5 which was approximately 5 years higher than Worldwide Development Indicators (WDI). WDI used the data from United Nations Population Division's World Population Prospects which interpolated data from 5-year period. Therefore, WDI data may not reflect observed data in specific survey in Cambodia. However, for comparative purpose, WDI data is used.

Figure 2.27. Trends in immunization coverage

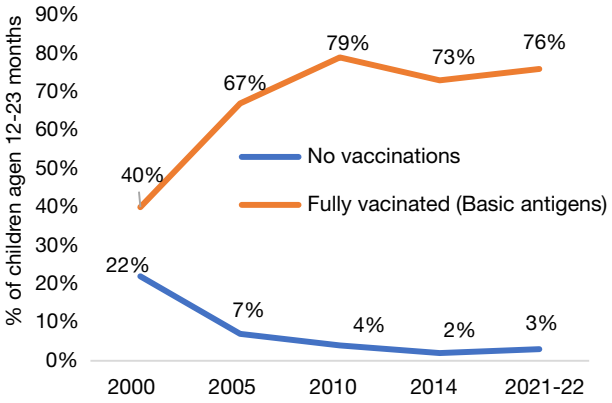
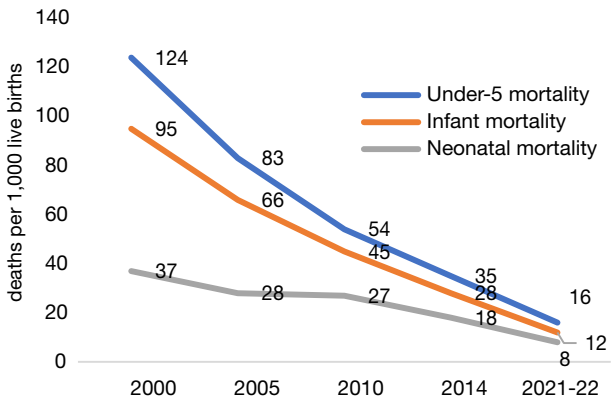


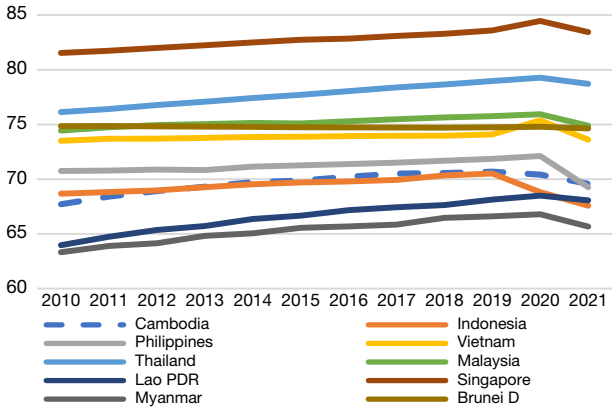
Figure 2.28. Trend of childhood mortality



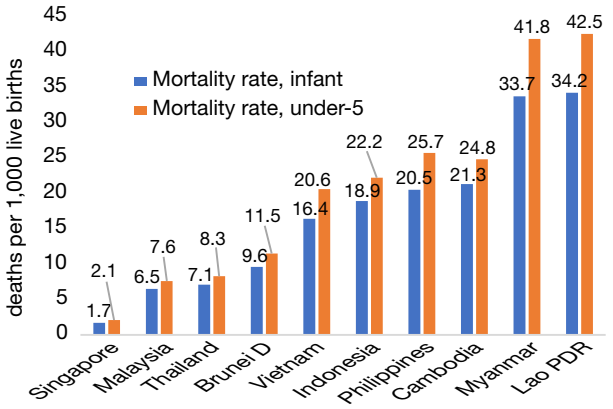
Sources: *Cambodia Demographic and Health Survey (CDHS) (2021/22) Key Indicators Report (2022)*

Figure 2.29. Life expectancy as compared to ASEAN peer countries

a. Life expectancy vs. regional peers (2010-2021)



b. Child mortality rate and life expectancy in Cambodia (2021)



Source: *WDI (2023)*

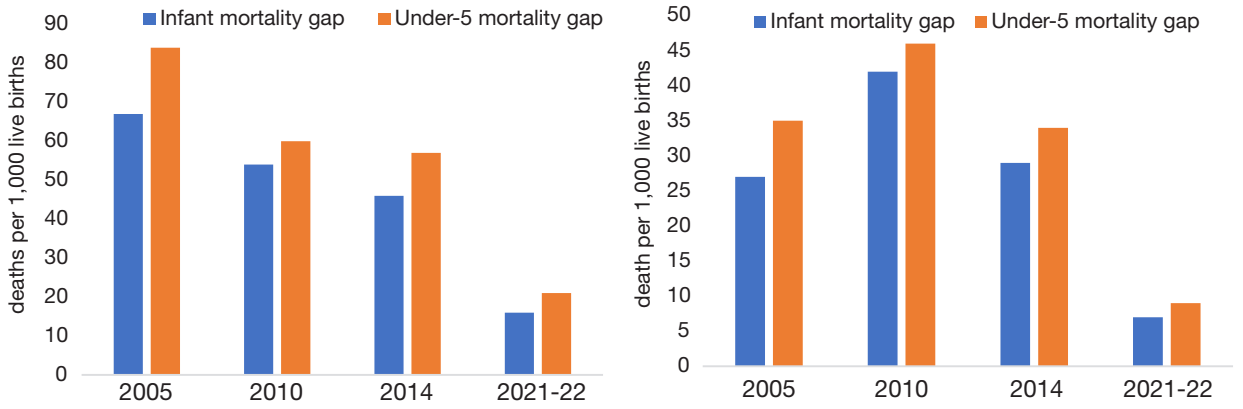
expectancy was only higher than Lao PDR, Myanmar, and Philippines but remained lower than the rest ASEAN peer countries. Cambodia had improved child mortality rate over the last two decades. However, Cambodia's infant and under-five mortality rate was around three times higher than in Thailand and Malaysia (Figure 2.29.b).

Cambodia has disparities in health outcomes between rural and urban areas and among wealth levels that are likely to remain as a challenge. Between 2005 and 2021, infant mortality and under-5 mortality for urban and rural places significantly declined; however, the urban and rural gap remained. Infant mortality and under-5 mortality in rural areas were respectively 7 and 9 deaths per 1,000 live births higher than mortality rates in urban areas in 2021. The gap in infant mortality and under-5 mortality between the highest and lowest income quintiles declined as well, during the same period. However, the gap between the poorest and richest in infant mortality and under-5 mortality persists. In 2021, the poorest infant mortality and under-5 mortality were respectively 16 deaths per 1,000 live births and 21 deaths per 1,000 live births higher than those of the richest (Figure 2.30). The evaluation of targeting quality is hindered by data availability constraints, which prevent the inclusion of more up-to-date health outcome data, as well as data at the district and commune levels to evaluate the equity of access within provinces. However, correlations across 25 provinces between the size of the recurrent budget against poverty levels and health outcomes suggest that government resources may not be effectively targeting some of the poorer provinces (Figure 2.31 and Figure 2.32).

Figure 2.30. Infant and under-5 mortality for both urban and rural significantly declined over the last two decades; child mortality gap between urban and rural areas and gap between poorest and richest persists

a. Child mortality gap, infant and under-5, between poorest and richest (deaths per 1,000 live births) (2005-2021/22)

b. Child mortality gap, infant and under-5, between urban and rural (deaths per 1,000 live births) (2005-2021/22)



Sources: *CDHS (2005-2021/22)*

Note: *CDHS=Cambodia Demographic and Health Survey*

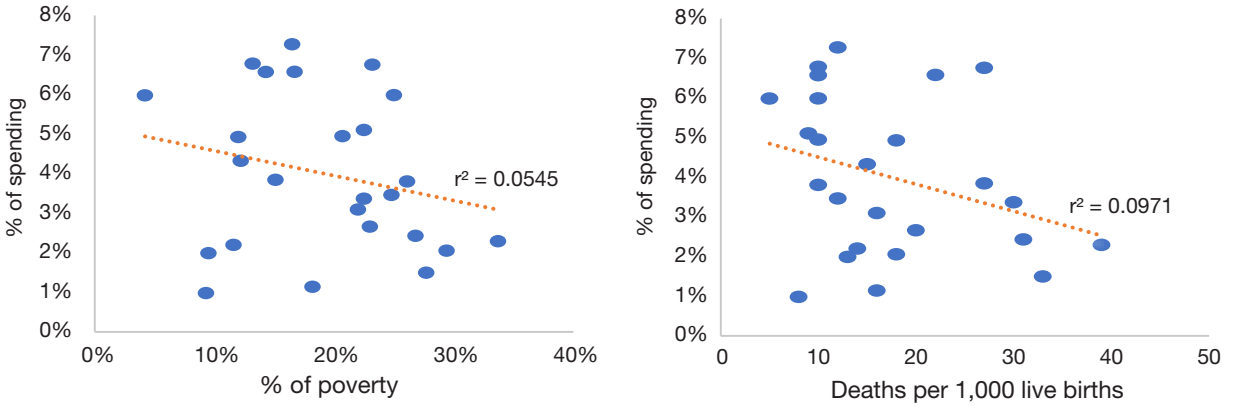
Infant mortality: the probability of dying between birth and the first birthday.

Under-5 mortality: the probability of dying between birth and the fifth birthday.

Child mortality gap=rural mortality rate-urban mortality rate. The higher the figure, the wider the gap.

Figure 2.31. Recurrent spending 2021 (% of total) and poverty rate (2021), by province

Figure 2.32. Recurrent spending 2021 (% of total) and infant mortality 2021 (deaths per 1,000 live births), by province



Sources: *MEF, MOH (2022), CDHS (2021/22), Cambodia Poverty Assessment (2022), General Population Census (2019) and World Bank staff estimates*

Note: *MEF=Ministry of Economy and Finance, CDHS=Cambodia Demographic and Health Survey*

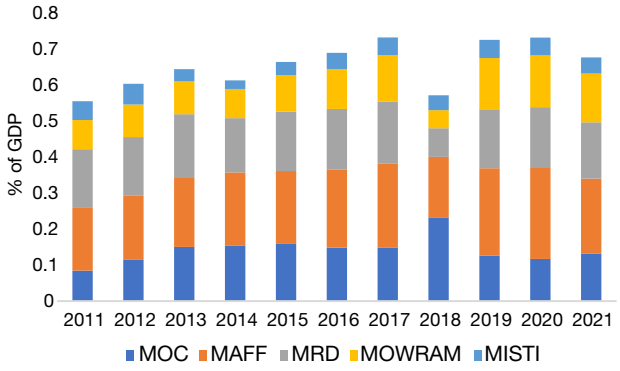
Infant mortality: the probability of dying between birth and the first birthday. Under-5 mortality: the probability of dying between birth and the fifth birthday. The budget allocation at the provincial level covers PHD, OD and health facilities in the provinces; that excludes budget allocation for regional health training centers in the provinces

2.2.2. Public expenditure and outcomes: Economic sectors

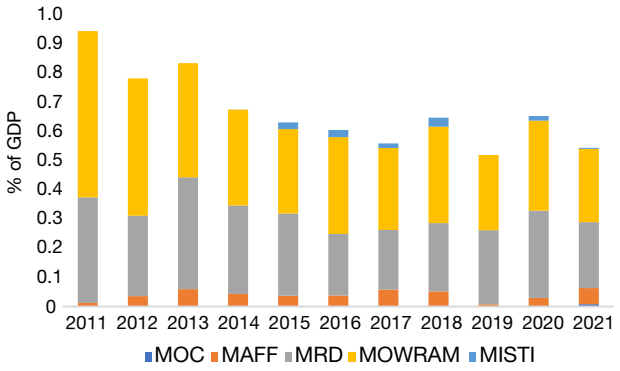
Overall expenditure for economic sectors declined from 3.4 percent of GDP in 2011 to 2.8 percent in 2021, due to a decline in both government investment spending and DP-funded projects. DP-funded investment spending has the largest share of total spending, accounting for around two-thirds of total spending for the sector.

Figure 2.33. Expenditure trend for economic sector, by line ministry (% of GDP) (2011-2021)

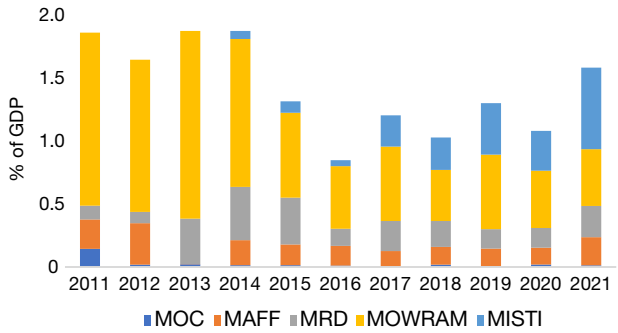
a. Reccurent spending, by line ministry (% of GDP) (2011-2021)



b. Government public investment spending, by line ministry (% of GDP) (2011-2021)



c. DP-funded public investment spending, by line ministry (% of GDP) (2011-2021)



Sources: *Budget Settlement Law (2011-2021); World Bank staff estimates*

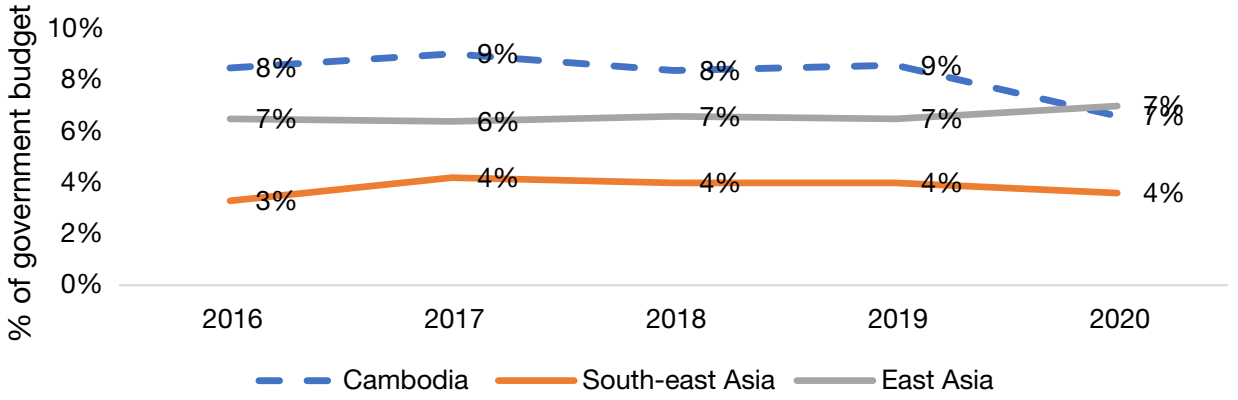
Recurrent spending in economic sectors slightly increased from 0.5 percent of GDP in 2011 to 0.7 percent in 2021, driven by a rise in recurrent spending allocated to MAFF and MOWRAM, while MRD, MOC and MISTI recurrent spending remain stable (Figure 2.33.a). Government investment spending in the economic sectors declined from 0.9 percent of GDP in 2011 to 0.5 percent in 2021, driven by a decline in MOWRAM and MRD capital expenditures (Figure 2.33.b). Similarly, MOWRAM's and MAFF's external funded capital spending also declined, resulted in the decline for the economic sectors (Figure 2.33.c).

Trends in the agriculture sector

Public budget allocation on agriculture sector is spread between MAFF and MOWRAM. Cambodia allocated more on agriculture than others in the region (Figure 2.34). MAFF recurrent budget allocation as a share of total budget allocation increased from 81 percent in 2017 to 94 percent in 2021, driven mainly by a rise in the wage bill (Figure 2.36). Wage bill costs reached 46 percent of the total budget, an increase from 37 percent in 2017, which has the potential to crowd out capital spending.

Externally financed project spending accounted for nearly half (46 percent) of total MAFF expenditure, up from 30 percent in 2016. Externally financed capital allocations have increased from KHR 114,410 million in 2017 to KHR 246,136 million in 2021. This is a continuation of a long-term trend, following a doubling of donor-funded spending in agriculture between 2007 and 2015 (World Bank, 2019). In contrast, the domestically-funded capital spending have decreased from 14 percent of total MAFF expenditure to 2 percent in 2019, before reaching 11 percent in 2021 (Figure 2.35). From 2017 and 2020, a rise in wage bill and non-wage expenditure appeared to have crowded out government public investment. In 2021, wage bill and non-wage expenditure declined while MAFF

Figure 2.34. Agriculture allocation as % of total government budget: An international comparison



Sources: *MEF; FAO*

Note: *Agriculture budget includes MAFF and MOWRAM budget.*

Figure 2.35. MAFF expenditure, by category (% of total)

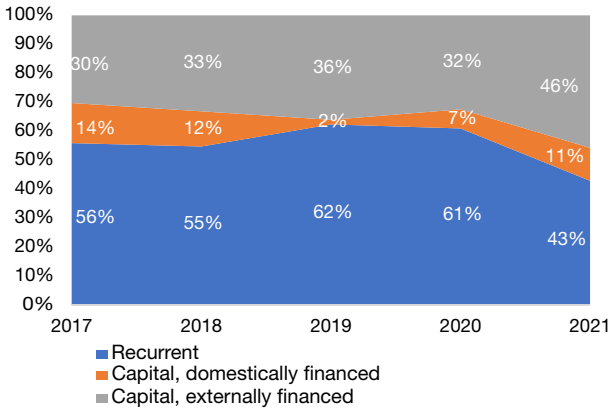
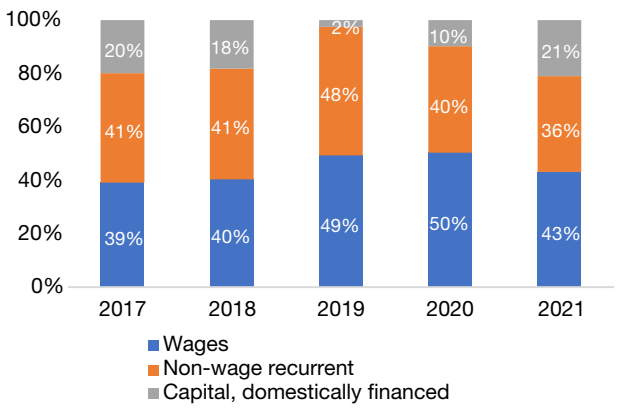


Figure 2.36. Composition of MAFF expenditure (% of total domestic budgeted spending)



Sources: *Budget Settlement Law (2017-2021); World Bank staff estimates*

public investment jumped to 21 percent of MAFF domestic spending (Figure 2.36).

Actual aggregate expenditure that deviates significantly from the original approved budget undermines fiscal discipline and the ability to control the total budget and, subsequently, manage it effectively. Service delivery may also be affected where large deviations from planned expenditure result in the contraction of services, limitations on essential expenditures for key inputs, or the suspension of certain services. DP-funded budgets tend to have lower spending relative to planned amounts (Figure 2.37). The deviations from planned spending of externally funded resources have been modest between 2016 and 2018 (with two of the years showing a variance of less than 5 percent) but have since deteriorated, reaching a 44 percent expenditure outturn in 2020. On average, there is a gap in performance between domestically financed capital projects (that tend to overspend) and externally financed projects (that tend to underspend). The pattern is observed in the sector as a whole (Figure 2.38). This could be partially explained by the difference in budgetary practices that guide the planning and implementation of domestically and externally financed projects.

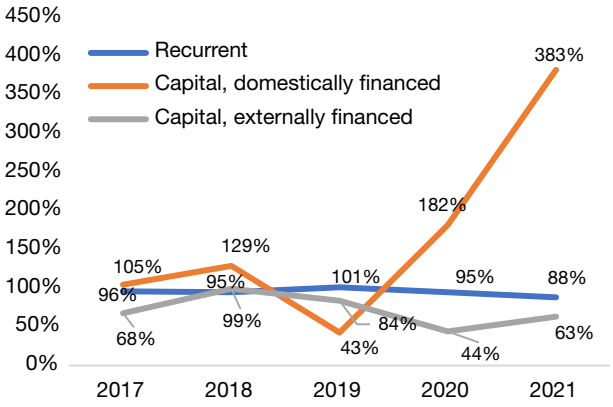
The agriculture sector continues to play a significant role in Cambodia's economy, contributing approximately 22 percent of the country's GDP. Impacted by the COVID-19 pandemic, the

economy contracted by 3.1 percent in 2020. Against the backdrop of the pandemic-induced slowdown, agriculture was the only sector that showed real annual positive growth – albeit at a slower pace of 0.6 percent (Figure 2.39).

For the agriculture sector, crops are the best-performing subsector, with livestock and poultry and fisheries growing again in 2020 after declining in 2019 (Figure 2.40). Agriculture contribution to GDP decline in 2019 was due mainly to bad weather. Total rice production 2019-2020 harvesting was marginally lower than 2018 production, while rice yield declined by 0.5 percent, reaching 3.1 metric tons per hectare.[36] Agriculture is projected to grow at an annual pace of 1 to 1.5 percent between 2021 and 2023. As the best-performing subsector, crops account for 12.9 percent of GDP in 2020 or about half of the agriculture sector's output. Production of rice, Cambodia's main crop, accounts for close to 60 percent of agricultural GDP, and has risen by 9.3 percent during the 2021-22 rice production year (World Bank, 2022). While no value added for specific crops is presented in the national accounts, export data reveals a substantive increase in exports of a few major commodities.[37] In 2020, Cambodia exported over 13 million tons of agricultural products worth approximately US$3.5 billion, a 17 percent increase from a year earlier (MAFF, 2021). These account for 5.5 percent of total exports, which are predominantly comprised of garments and footwear products.[38] Agriculture exports[39] increased by 76 percent between 2010 and 2021, driven by the surge of exports of cashew nuts (+328 percent, at more than US$1,000 million), fresh mango (+27 percent), dried mango (179 percent), and black pepper (+478 percent).[40]

Strengthening the agricultural product market infrastructure could help increase production. Collection points, marketplaces, packing houses, and cold chains are essential to meet greater

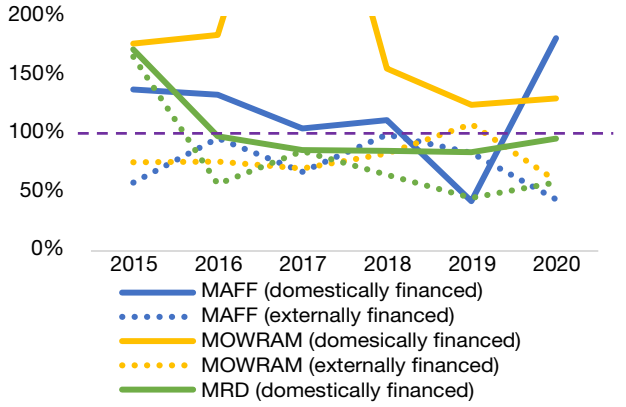
Figure 2.37. MAFF budget outturns
(% of approved budget, by budget type)



Sources: *Comparison of Budget Law and Budget Settlement Law (2017-2021); World Bank staff estimates*

Note: *Budget outturns over 100 percent of the approved budget reflect actual spending exceeding the planned budget (overspent); under 100 percent means actual spending was below the planned budget (underspent).*

Figure 2.38. Actual capital expenditure
(% of approved budget, by ministry and source of financing)



Source: *MEF; World Bank staff estimates*

Note: *Budget outturns over 100 percent of the approved budget reflect actual spending exceeding the planned budget (overspent); under 100 percent means actual spending was below the planned budget (underspent). MOWRAM 2017 budget outturn was 416 percent*

36 World Bank, Cambodia Economic Update (May 2020)

37 Data reported by the General Department of Agriculture (GDA) of MAFF.

38 World Bank (2021). Cambodia Economic Update June 2021. Phnom Penh: World Bank.

39 Data from the Department of Plantation and Sanitary and Phytosanitary of the General Department of Agriculture, MAFF

40 Data obtained from the General Directorate of Agriculture, Department of Plant Projection and SPS, MAFF

Figure 2.39. GDP growth, constant prices (% year-on-year change)

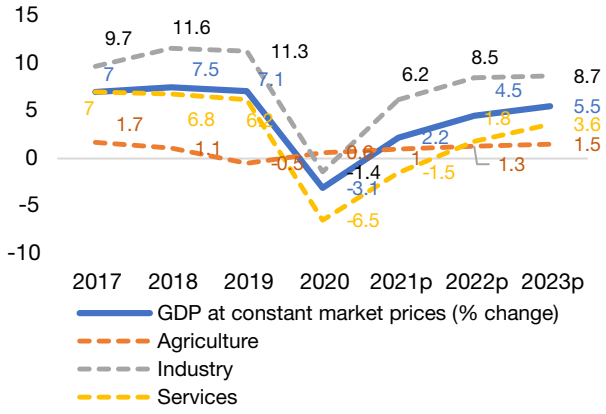
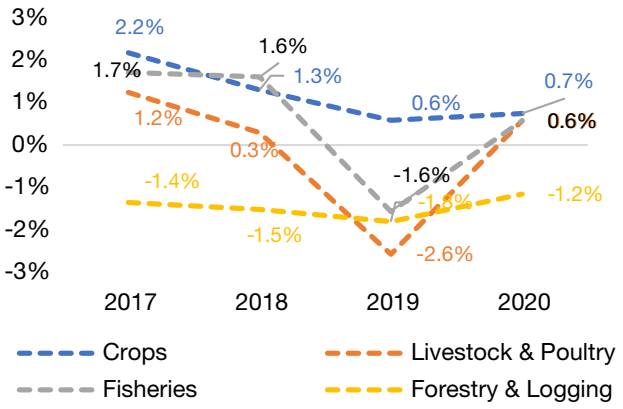


Figure 2.40. Growth in Agriculture subsectors (2017-2020)



Sources: *National Institute of Statistics for data from 2017 to 2020 and World Bank (2021) Cambodia Economic Update (December: 2021) for projection data from 2021 to 2023*

production and modernization. Although the road networks and grid lines have been expanded across Cambodia in the past decade, many dirt roads still need to be upgraded to accommodate large trucks to transport agricultural produce. Cambodia has not benefited from the increase in demand (hence higher prices for crops) due to its weakness in infrastructure, as well as costly trade logistics and trade facilitation (World Bank, 2022).

Trends in the irrigation sector

Irrigation is another key area for the economic sector, particularly for agriculture. Irrigation contributes to productivity improvements in the agricultural sector, especially the crop sub-sector. In the wake of the COVID-19 crisis, the Government gives more priority to agriculture (and agro-industry) in order to maintain economic stability and ensure food security.[41] The Ministry of Water Resources and Meteorology (MOWRAM) is responsible for the irrigation water supply and the use of water resources in general. Most of MOWRAM's funding comes from external financing, averaging more than two-thirds of the agency's budget in 2021, most of which comes from China.

In terms of start-of-the-year allocation, the overall spending for MOWRAM has fluctuated between 2017 and 2022, driven by fluctuation of externally funded capital allocation (Figure 2.41). MOWRAM domestic spending fluctuated as well. It increased from 2017 and peaked in 2019, the dropped between 2020 and 2022 due to the fiscal constraint resulting from the COVID-19 pandemic. From 2021 and 2022, the domestic spending remained flat (Figure 2.42). Figure 2.43 shows that the wage bill as a share of recurrent spending was flat over the period 2017 and 2021. The wage bill did not seem to have implications for Operations and Maintenance (O&M) (Chapter 61). O&M spending as a share of recurrent spending slightly increased from 63 percent in 2017 to 66 percent in 2021.

Similar to other ministries, MOWRAM's recurrent budget was well executed between 2017 and 2021. Recurrent spending was within a range of 5 percent deviation from recurrent budget allocation. However, actual domestically financed capital spending deviated from the originally approved budget. The deviation from the approved budget grew, from 174 percent of approved budget in 2017 to 231 percent in 2021 (Figure 2.44), suggesting weak government budget planning in rehabilitation and construction of irrigation. The budget of investment expenditure (Chapter 21) was generally approved in the budget law at the beginning of the year. The government has introduced regulatory framework governing the implementation of PIM (Box 2.3). However, within the implementation phase, the

41 RGC, 2021

Figure 2.41. Recurrent and external financing for MOWRAM (KHR, million)

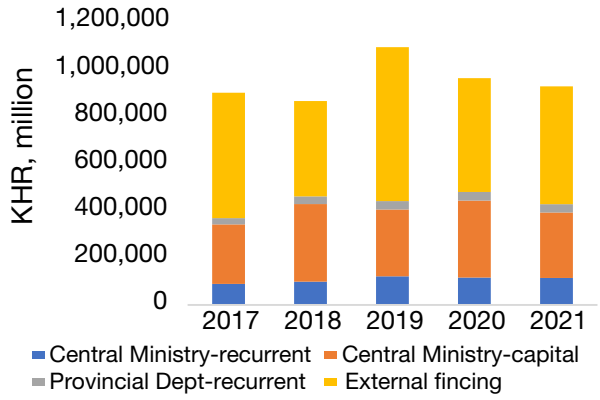
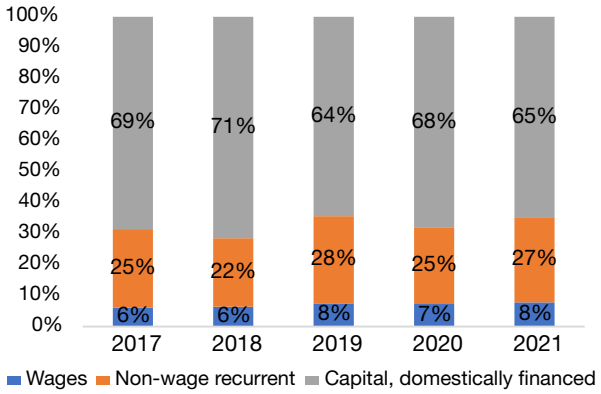


Figure 2.42. Composition of MOWRAM spending (2017-2022)



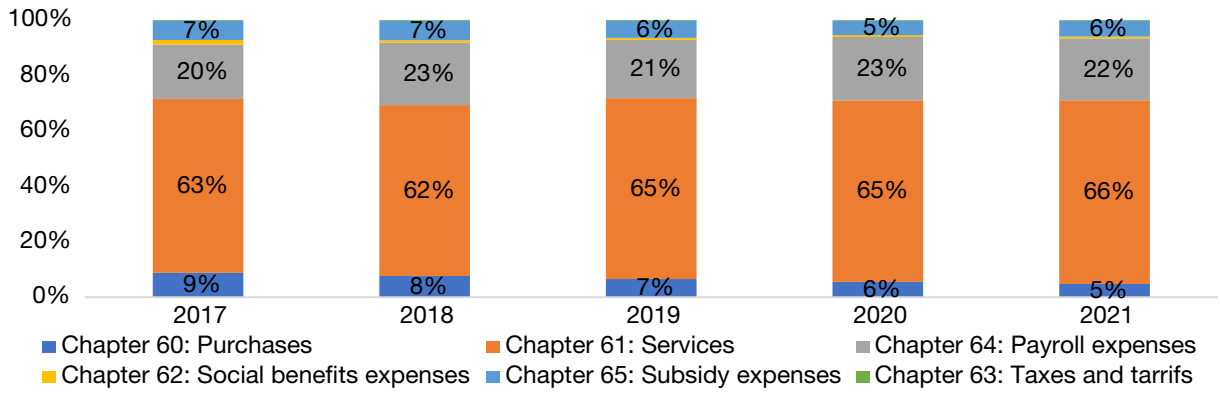
Sources: *Budget Settlement Law (2017-2021); World Bank staff estimates*

budget of investment expenditure (Chapter 21) can be adjusted significantly, from 0 percent to 100 percent of budget approved in the budget law. This tended to reduce the operational efficiency of spending. There should be proper planning for rehabilitation and construction of irrigation (Chapter 21) in the budget law at the beginning of the year. Execution of DP-funded investment fluctuated between 60 percent of investment budget and 108 percent (Figure 2.44).

Effective operations and maintenance (O&M) is critical to ensuring the functioning of irrigation schemes. Development partners who have invested large sums rehabilitating irrigation schemes suggested the importance of effective O&M to ensure maximum utilization. As a response, the government has ensured that MOWRAM takes on O&M jobs for newly completed irrigation projects' budgets for them under service expenses (Chapter 61). At the same time, it has also allocated part of the national budget for investment expenditure (Chapter 21) to rehabilitate irrigation schemes if the cost is less than US$3 million. The O&M budget has increased over time both in absolute amount and as compared to the rehabilitation budget. However, effective O&M is limited by unclear assignment of roles and responsibilities for Provincial Departments of Water Resources and Management (PDWRAM), especially on regular tasks such as overall water management, O&M of small and medium size irrigation schemes, and support to Farmer Water User Committee (FWUC).

Along with support to farmers, another

Figure 2.43. MOWRAM recurrent spending, by economic classification (% of recurrent) (2017-2021)



Sources: *Budget Settlement Law (2017-2021)*

Box 2.3. Current status of Public Investment Management

Public Investment Management (PIM) is at its early stage of development. In 2020, RGC started piloting the integration of capital and recurrent budgeting within three line ministries: the Ministry of Public Work and Transport (MPWT), the Ministry of Rural Development (MRD), and the Ministry of Water Resources and Meteorology (MOWRAM). Built on experience working with the three ministries, MEF scaled up the implementation of full-fledged budget integration by combining capital and recurrent expenditure in BSP in nine line ministries, including MOH in 2022. PIM system reform strategy 2019-2025 has been adopted. To strengthen PIM, Sub-decree 41 on the management of public investment dated 2020 outlined (i) SOP for domestically financed public investment, (ii) public investment for sub-national administration, and (iii) project preparation and prioritization. Six main criteria for public investment project selection and budgeting: (1) rationality, (2) economic and financial viability, (3) best option, (4) affordability principle, (5) delivery principle, and (6) project readiness.

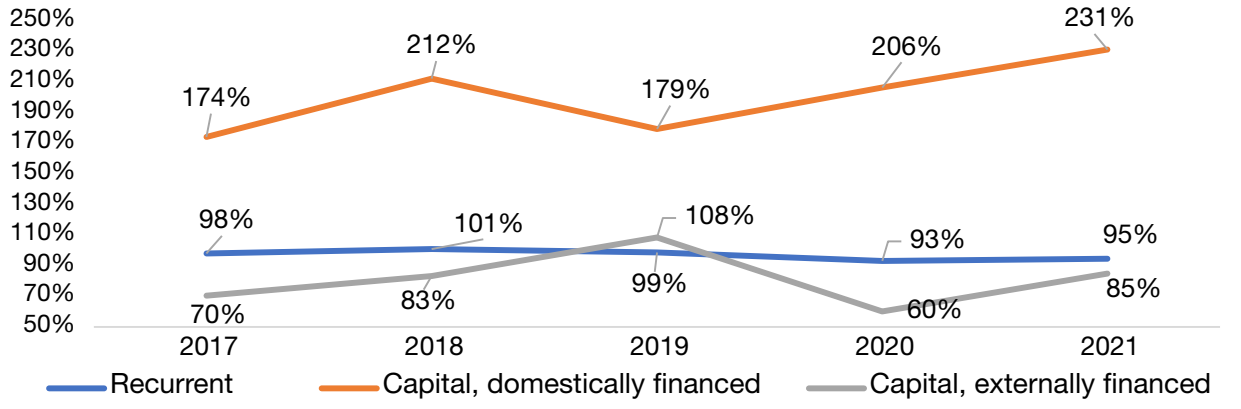
MEF has adopted guidelines on Monitoring and Evaluation in the framework of performance informed budgeting in January 2020, setting out obligations and procedures for the preparations of quarterly and plans and reports. Department of Monitoring and Evaluation was established under GDB to manage the mechanism for performances monitoring and evaluation on the government financed programs. Trainings were provided to 23 LMs on annual performance plan and annual performance report. Fourteen additional LMs will be trained.

Sources: *MEF's PEFA (2021) and Interview with MEF*

Note: *MEF=Ministry of Economy and Finance; MRD= Ministry of Rural Development; MPWT= Ministry of Public Work and Transport; MOWRAM= Ministry of Water Resources and Meteorology, PIM= Public Investment Management; SOP=Standard Operating Procedure; PPP=Public Private Partnerships*

contextual relevance to the irrigation sector is climate change. Cambodia is one of the world's most flooding-exposed nations. Higher global temperatures are also expected to increase climate risks and natural hazards for the country. Droughts and floods have affected agricultural sectors, while fluctuations in Mekong River flows partly due to dam construction have affected traditional irrigation systems, fishing, and transportation systems. The share of climate change expenditure in GDP in 2020 and 2021 were 2.2 percent and 2.3 percent respectively, mainly infrastructure development, general health intervention and cash distribution in social protection to the poor and the vulnerable.

Figure 2.44. MOWRAM budget outturn (2017-2021)



Sources: *Comparison of Budget Law and Budget Settlement Law (2017-2021); World Bank staff estimates*

Note: *Budget outturns over 100 percent of the approved budget reflect actual spending exceeding the planned budget (overspent); under 100 percent means actual spending was below the planned budget (underspent).*

Table 2.2. Irrigation outputs reported from MOWRAM spending

Reported outputs in irrigation coverage	Irrigated areas (ha)			Irrigated areas (% of total)		
	2019	2020	2021	2019	2020	2021
Total increase in irrigated areas for rice	28,489	27,962	22,588	98.5%	98.1%	94.7%
Increase in irrigated areas for rainy season rice	19,432	17,902	15,601	67.2%	62.8%	65.4%
Increase in irrigated areas for dry season rice	9,057	10,060	6,987	31.3%	35.3%	29.3%
Other crops	412	535	1,261	1.4%	1.9%	5.3%
Total	**28,901**	**28,497**	**23,849**	**100%**	**100%**	**100%**

Sources: *MOWRAM's annual report (2019-2021)*

A related area for review is the Ministry's focus on irrigation for rice. Based on MOWRAM data, its investment in irrigation is for use in rice cultivation more than 98 percent in 2019 and 2020 and about 95 percent in 2021 (Table 2.2).

The main gap in the current system is the lack of information on outcomes from investment and spending on irrigation. The government is aware of the need for more information at the impact level and has concrete plans for addressing this shortcoming. While much information on outputs has been produced, there is virtually no information available on impact.

2.2.3. Public expenditure and outcomes: Infrastructure sectors

While Cambodia's growth was impressive in the last decade, it lacked a diversified base. Economic diversification is necessary to underpin sustained and robust growth, driven by diversifying exports and moving up to high value-added products. However, economic diversification requires investments in infrastructure. The NSDP 2019-2023 articulates four interconnected and complementary priorities: (i) improving the logistics system, enhancing physical infrastructure, energy, and digital connectivity; (ii) developing important and novel sources of growth; (iii) being prepared for the digital economy; and (iv) fostering the growth of the financial and banking sector.

While Cambodia continued to depend on external financing for its physical infrastructure development, rising domestic revenue and expanding fiscal space allowed the country to boost its domestically-financed capital spending. In the past, externally-funded capital spending was the largest share of total spending on infrastructure.[42] It dropped by nearly half, accounting for around 1.8 percent of GDP in 2021, a decline from 3.4 percent in 2011. Domestically funded infrastructure spending increased from 0.8 percent of GDP in 2011 to 1 percent in 2021. Ministry of Public Work and Transport (MPWT) spending allocated for infrastructure has taken up the largest share of infrastructure expenditures.

Recurrent spending in infrastructure sectors fell as low as 0.2 percent of GDP in 2011-2013, spiked in 2014 corresponding with a spending rise in MME, then started to stabilize at around 0.6 percent (Figure 2.45.a). The increase in government staff salary between 2011 and 2021 appeared to crowd out other non-wage expenditures in infrastructure sectors. Over the period 2011 and 2021, government staff salary as a share of GDP tripled. However, this salary increase was offset by the decline in purchases expenses (Chapter 60), maintenance services expenses (Chapter 61) and social benefits expenses (Chapter 62), resulting in stabilized total recurrent spending in infrastructure sectors. The spike of expenditure subsidy in 2004 was due to a rise of subsidy including grant to

42 Cambodia transport sector assessment, strategy and roadmap (2019)

establishment of MME in early 2014. The MME subsidy spending in 2014 reached KHR 193,189 million (0.3 percent of GDP) (Figure 2.45.b).

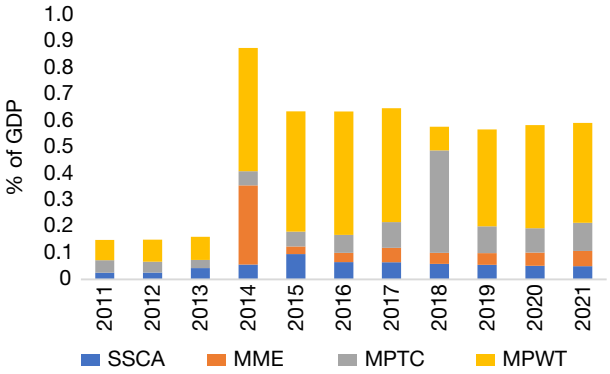
Government investment spending from domestic fund on infrastructure sectors increased from 0.8 percent of GDP in 2011 to 1 percent in 2021, driven by an increase in government spending on investment for MPWT and MME. However, there were a lot of variations in government investment spending on SSCA, MPWT, MME, and MPTC between 2011 and 2021 (Figure 2.45.c). DP-funded capital investment in infrastructure declined due to reduction in DP funded capital investment in MPWT and MME overall (Figure 2.45.d).

In addition to government spending on infrastructure, the efficiency of public private partnerships (PPP) could be explored. Cambodia has been looking to increasingly utilize PPP models for large infrastructure projects. The new PPP Law (2021), together with the related Standard Operating Procedures and Guidelines, is expected to help strengthen the institutional and legal framework around PPPs. To help support the development of PPPs, the RGC has also upgraded the PPP Unit of the Ministry of Economy and Finance to a General Department of PPPs. The new PPP law: clarifies institutional responsibilities in the different stages of the PPP project cycle (from identification, appraisal, preparation, and project approval through to implementation of the PPP contract), and sets out the types of investment incentives and state support—including direct fiscal payments, contingent liability guarantees, investment incentives, and in-kind contributions—that can potentially be made available to support PPP projects (PPP regulatory framework is shown in Box 2.4).

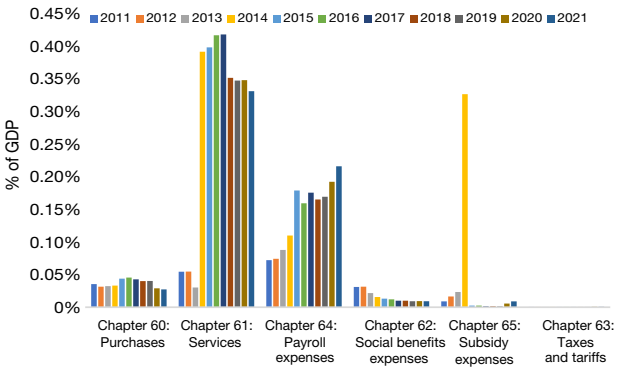
Few PPP projects outside of the energy sector have been successfully implemented to date.

Figure 2.45. Expenditure trend for infrastructure sectors, by line ministry (% of GDP) (2011-2021)

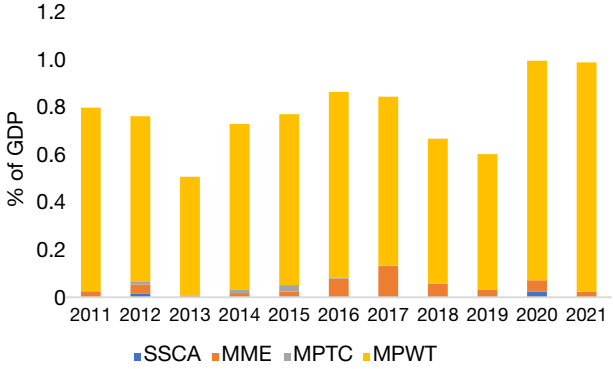
a. Reccurent spending in infrastructure sectors, by line ministry (% of GDP) (2011-2021)



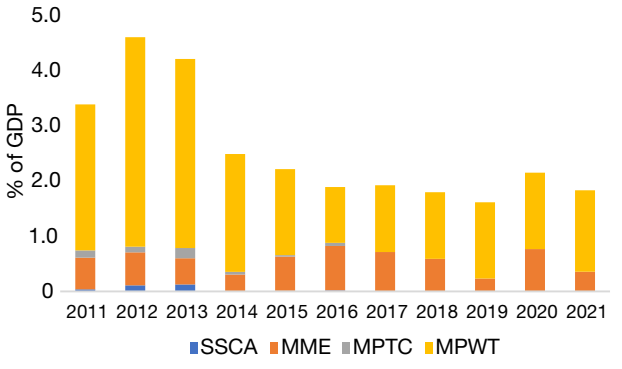
b. Recurrent spending in infrastructure sectors, by economic classification (% of GDP) (2011-2021)



c. Government capital spending in infrasructure sectors, by line ministry (% of GDP) (2011-2021)



d. DP-funded capital spending in infrastructure sectors, by line ministry (% of GDP) (2011-2021)



Sources: *Budget Settlement Law (2011-2021); World Bank staff estimates*

Box 2.4. Legal and regulatory framework for Public Private Partnership

Recognizing the importance of PPP in the development of infrastructure in Cambodia, the government has taken initiatives to develop law and regulations governing the PPP arrangements. The Law on concession, enacted in 2007, granted the Council for the Development of Cambodia (CDC) to review PPP investment proposal. However, the guiding process to review PPP projects were yet to be developed. In June 2016, the government adopted "Policy Paper on Public-Private Partnerships for Public Investment Project Management 2016 – 2020". It laid out framework for implementing PPPs. In November 2021, Law on Public Private Partnership was enacted to replace the 2007 Law on Concession for the implementation of PPP projects. SOP for implementing PPP projects was adopted in August 2022.

PPP is contractual arrangement whereby a public and private entities share risks, jointly allocate required capital and other resources to deliver an infrastructure service. In Cambodia PPP can be seen in the development of the infrastructure sector. PPP projects take five main forms of contractual arrangements: Services Contract, BOO/BOT, Concession and License.

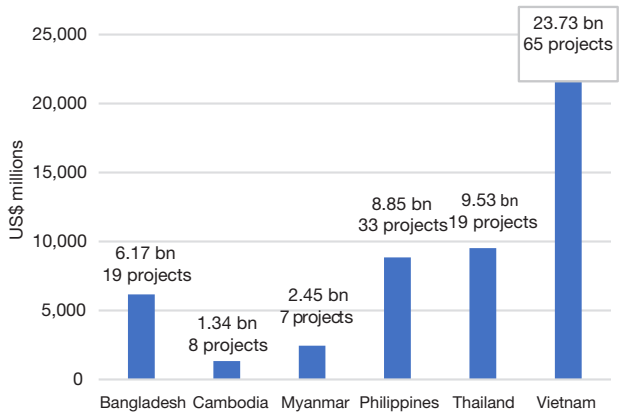
1. **Service Contract:** It refers to a contractual arrangement by which the government places upfront investment in the infrastructure; the private sector contractor provides designs and construction, and operates and maintains the facility.
2. **Build-Own-Operate (BOO):** Under BOO agreement, the private sector contractor financed infrastructure up-front investment by using its own resources, own and manage the infrastructure facilities and it received fixed annual payments from the government under availability payments. The government does not take ownership of assets at the end contract period.
3. **Build-Operate-Transfer (BOT):** Under BOT, private sector up-front investment is required. The private sector contractor is responsible for initial construction, upgrade or rehabilitation of infrastructure. The assets will be handled to the government party at the end of operations period.
4. **Concession:** It is a form of contract under which the private sector contractor is responsible for operate and maintain an already-built facilities. The private sector contractor generates revenues from third parties under user fees. Designed Build Lease (DBL) for water operators is one example of concession in which the water supply facilities were built by the government and they were leased to the private contractors to operate to deliver water services.
5. **License:** Under license, the government does not involve in any investment in infrastructure. Instead, a license is granted to private operators, which make investment, operate and maintain the facility in return for revenue collected from customers. Licensed private water operators have to comply with services requirements set out by government agencies.

Source: *World Bank staff based on Laws and regulations governing PPP projects in Cambodia.*

The World Bank's Private Participation in infrastructure (PPI) Database includes only 8 projects that had been closed in Cambodia between 2017 and 2022 (Figure 2.46) with a total investment cost of US$1.34 billion.[43] The number and volume of PPPs in Cambodia is relatively low compared with benchmark countries, including Thailand (19 projects at US$9.53 billion), Philippines (33 projects at US$8.85 billion) and Vietnam (65 projects at US$23.73 billion). One of the main reasons for this relatively small number of projects is that Cambodia has historically had a relatively weak enabling environment for PPPs in terms of project preparation, procurement, and managing unsolicited proposals when compared

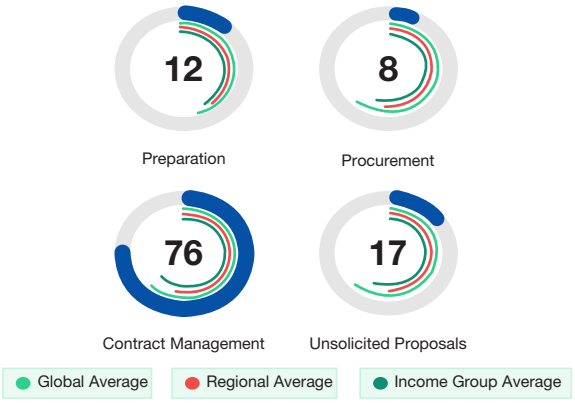
43 This data does not include the recently completed Phnom Penh - Sihanoukville Expressway project.

Figure 2.46. Number and investment costs of PPPs in Cambodia and selected countries (2017 – 2022)



Source: *Private Participation in Infrastructure (PIP) Database, (World Bank, 2022)*

Figure 2.47. Cambodia's PPP Performance (2020)



Source: *Benchmarking Infrastructure Development, (World Bank, 2020)*

to regional and income-level peers (Figure 2.47). It is expected that Cambodia's PPP benchmarking performance will improve with implementation of the new PPP Law.

While the new PPP Law and subordinate regulations have strengthened the PPP framework, some constraints remain in ensuring that PPPs in Cambodia are structured properly and provide value for money. Executing agencies have limited capacity and experience on PPP projects, which are usually complex and require specialized technical skills. Another constraint is the provision in the PPP Law that permits the widely used application of direct negotiation or solicitation of projects, thereby circumventing the use of competitive bidding to select projects. The RGC should ensure that the use of direct negotiation is strictly limited, and that competitive bidding is the primary method of procurement, which typically produces better value for money. In addition, the RGC must also develop and enforce a strong framework to manage PPP-related fiscal risks to ensure that fiscal risks are carefully assessed, approved, and managed throughout the lifecycle of a PPP project. The PPP Law assigns the responsibility of managing PPP related fiscal risks to MEF. It is understood that the General Department of Public-Private Partnerships (GDPPP) is currently drafting Fiscal Management Guidelines which will set the institutional framework and processes for managing fiscal risks. It will be critical that RCG ensures that the framework set out in these guidelines is strictly applied to ensure that fiscal risks are properly managed.

PPPs are not 'free', even when the public sector does not provide any direct or contingent financial support to a project. Some of planned large infrastructure PPPs in pipeline are expected to be financed through bilateral financing, without direct or contingent liabilities to the government. While the government may not have provided any direct or contingent financial support to the project, and even received a small equity stake at no cost, a PPP project is not 'free' as the end users must pay for the project through escalating tolls or tariffs over the term of the concession. Therefore, it is critical to carefully assess the technical and financial proposals (particularly in terms of the tariffs/tolls being charged and the tax/royalty exemptions being sought) to ensure that projects are providing 'value for money' to the public.

Trends in the roads sector

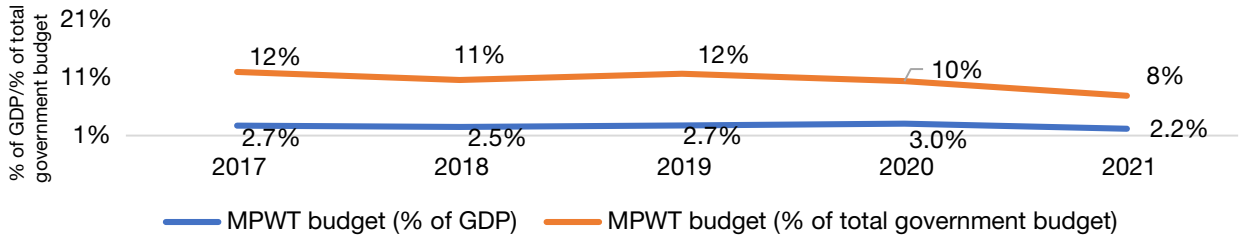
MPWT budget allocation as a share of total government budget has been on decline between 2017 and 2021. MPWT budget allocation reached 8 percent of total government budget in

2021, a gradual decline from 12 percent in 2017. However, its budget allocation as a share of GDP was stable at around 2.7 percent between 2017 and 2020, but that declined to 2.2 percent in 2021 (Figure 2.48).

MPWT overall budget allocation showed that recurrent funding as a share of total budget had stabilized, while government planned investment expenditures were on the decline, offset by increase in DP-funded capital allocation between 2018 and 2021 (Figure 2.49). The recurrent spending was driven by a rise in wage bill expenditure, which increased around 1.5 times between 2017 and 2021. With stable recurrent spending, this significant increase in wage bill has implication on road maintenance expenditures. Service expenses (Chapter 61) which covered road maintenance expenditures declined from 79.1 percent of total recurrent spending in 2017 to 71.4 percent in 2021 as payroll expenses rose (Figure 2.50).

Between 2017 and 2021, the MPWT recurrent budget was well executed, within 5 percent deviation. Government infrastructure investment (capital expenditure) in transport sector exceeded budgeted expenditures during the same period. Overspending in government investment in transport sector tended to increase, reaching 4.2 times of planned spending in 2021 from 1.2 times in 2017. This reflected weak expenditure planning. Routine maintenance expenditures were planned in budget under service expenses (Chapter 61). However, capital maintenance in transport sector was not reflected in budget planning. Within the execution

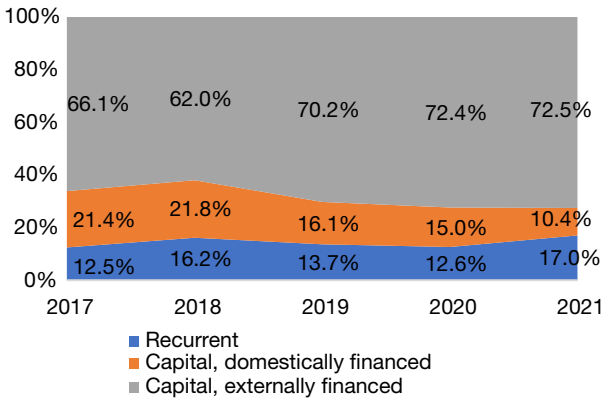
Figure 2.48. Trend of MPWT budget allocation (% of GDP and % of total government budget) (2017-2021)



Sources: *Budget Law (2017-2021); World Bank staff estimates*

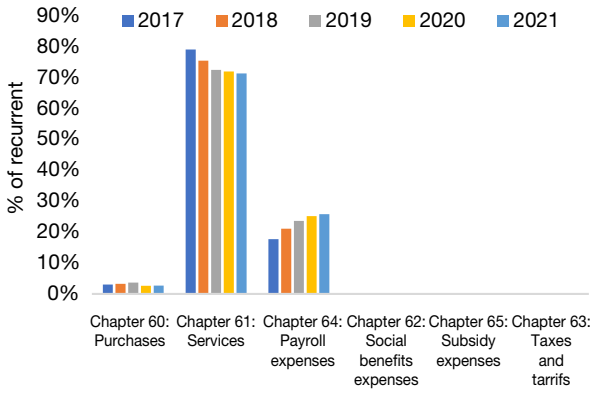
Note: *Budget allocation includes recurrent and capital-both domestically financed and externally financed.*

Figure 2.49. MPWT budget, by category (% of total)



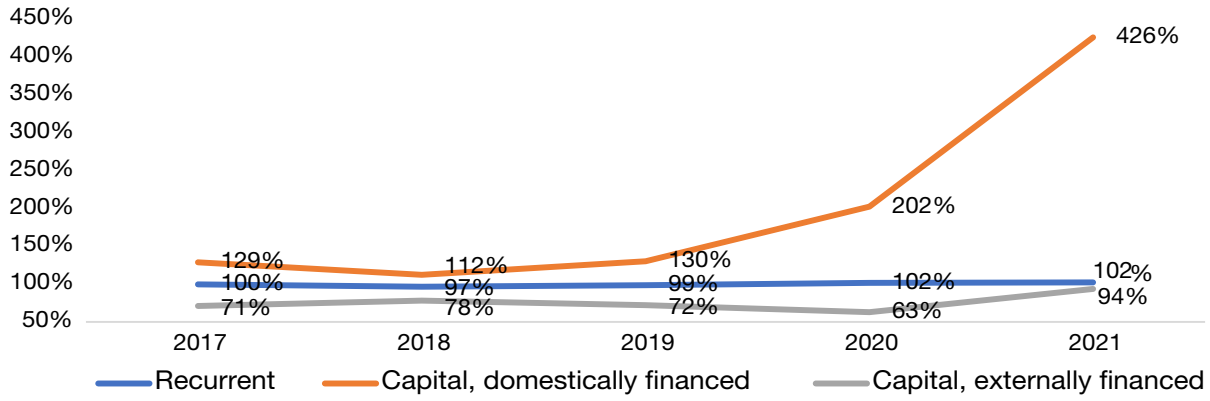
Sources: *Budget Law (2017-2021); World Bank staff estimates*

Figure 2.50. Spending by budget classification (% of recurrent)



Sources: *Budget Settlement Law (2017-2021; World Bank staff estimates*

Figure 2.51. MPWT budget outturns (% of approved budget, by budget type)



Sources: *Budget Law (2017-2021) and Budget Settlement Law (2017-2021); World Bank staff estimates*

Note: *Budget outturns over 100 percent of the approved budget reflect actual spending exceeding the planned budget (overspent); under 100 percent means actual spending was below the planned budget (underspent).*

process, this capital maintenance spending was captured under specific project spending. It should be properly embedded in PIP and made available in the budget documents.[44] Unlike government public investment, externally funded investment were consistently under-executed (Figure 2.51).

Cambodia spent 2.8 percent of GDP on infrastructure in 2021; however, the quality of infrastructure remains limited compared to regional peers. Cambodia scored 3.4 out of 7 and ranked 99 out of 137 countries on overall infrastructure quality in World Economic Forum's 2019 Global Competitiveness Index. Quality of roads, railroads and ports and air transport ranked respectively 99, 94, 81 and 106 (Table 2.3). 100 percent of the 2,254 Km national road network (1-digit)-connecting the country and its borders were paved, while 72 percent of national roads (2-digit roads comprising 5,007 km) were paved, and only 30 percent of provincial roads (3- and 4-digit roads comprising 9,031 km) paved.[45]

Despite investments in road improvement, which dominated MPWT spending, Cambodia's logistics performance declined (Figure 2.52).

Table 2.3. Quality of infrastructure (2018)

	Overall infrastructure		Roads		Railroads		Ports		Air transport		Electricity supply	
	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank
Vietnam	3.6	89	3.4	92	3.0	59	3.7	82	3.7	103	4.3	90
China	4.5	47	4.6	42	4.8	17	4.6	49	4.9	45	5.0	65
India	4.6	46	4.3	55	4.4	28	4.6	47	4.6	61	4.7	80
Cambodia	3.4	99	3.2	99	1.6	94	3.7	81	3.7	106	3.5	106
Thailand	4.1	67	4.3	59	2.6	72	4.3	63	5.2	39	5.2	57
Philippines	3.0	113	3.1	104	1.9	91	2.9	114	2.9	124	4.2	92
Indonesia	4.1	68	4.1	64	4.2	30	4.0	72	4.8	51	4.4	86

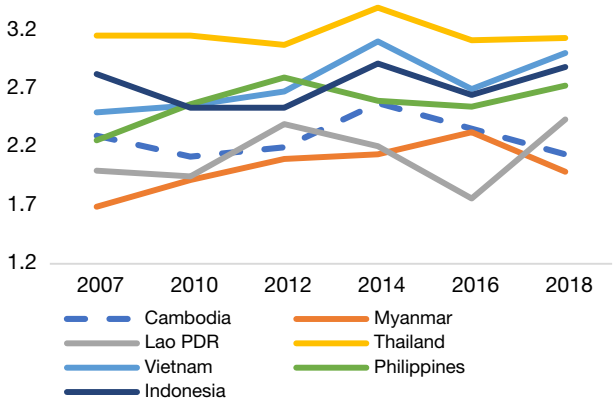
Source: *World Economic Forum Global Competitiveness Index (2019 report)*

Note: *Score 1-7 Best; Rank: Out of 137 countries*

44 Cambodia, Public Investment Management Assessment (PIMA), 2019

45 ADB, transport sector assessment (2019)

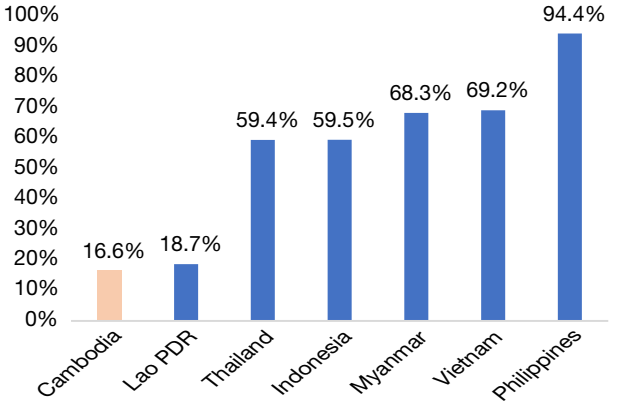
Figure 2.52. Logistics performance index: quality of trade and transport related infrastructure (2007-2018)



Sources: *World Bank, Logistic Performance Index (LPI) Surveys (extracted April 2023)*

Note: *LPI measures Logistics professionals' perception of country's quality of trade and transport related infrastructure (e.g. ports, railroads, roads, information technology), on a rating ranging from 1 (very low) to 5 (very high). Scores are averaged across all respondents. Respondents evaluate eight markets on six core dimensions on a scale from 1 (worst) to 5 (best).*

Figure 2.53. Paved roads as percentage of total road network (2015-2020)



Source: *International Road Federation (IRF) (extracted April 2023) and World Bank staff*

Paved roads as a share of total road networks in Cambodia remained the lowest in ASEAN between 2015 and 2020 (Figure 2.53). Similarly, Cambodia ranked lower than most ASEAN neighbors, except Myanmar, on the logistics performance index (Figure 2.52).

2.2.4. Public expenditure and outcomes: Administrative services & cross-sectoral programs

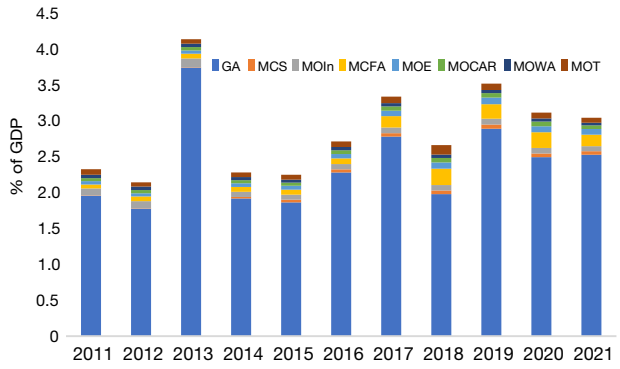
The NSDP planned to spend about 21 percent of the total budget for Services and Cross-sectoral Programs. The actual amount spent by all the agencies in this sector family—which is responsible for promoting gender equity, tourism, environment and conservation, community and social services, culture and the arts, and governance and administration—was slightly higher, with about 23 percent of the budget for the four sectors.

The cross-sectoral spending increased from 3.2 percent of GDP in 2011 to 5.3 percent in 2021. The spending on cross-sectoral programs significantly fluctuated, driven primarily by the fluctuation of recurrent budget. Recurrent spending for cross-sectoral programs increased from 2.3 percent of GDP in 2011, peaked 4.1 percent in 2013 and reached 3 percent in 2021. This was driven by spending fluctuation in General Administration (GA) sector (Figure 2.54.a). Government public investment spending was stable at around 0.6 percent of GDP between 2011 and 2018, and jumped to 1.8 percent, 2.2 percent and 2 percent respectively for 2019, 2020 and 2021, mainly driven by government capital spending for GA (Figure 2.54.b). DP-funded capital spending in cross sectors remarkably fluctuated. It peaked 0.5 percent of GDP in 2013, then dropped to 0.19 percent in 2021. The spending fluctuation is seen in spending key ministries including GA, MOE, MOT, and MOCAR etc. (Figure 2.54.c).

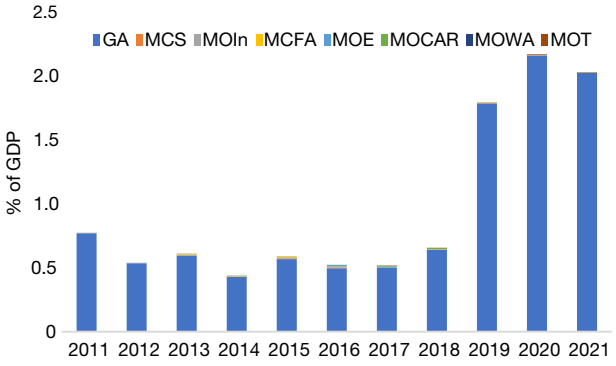
The Ministry of Civil Service (MCS) is responsible for all matters related to more than 200,000 government employees. The geographic distribution of civil servants among central line ministries varies by sector (Figure 2.55). Overall, the line offices of the central ministries at the District/Municipality/Khan (DMK) level absorb around 60 percent of total wage spending, with the remaining share split evenly between the central and provincial levels. Much of this reflects the sectors with large

Figure 2.54. Expenditure trend for services and cross sectors, by line ministry (% of GDP) (2011-2021)

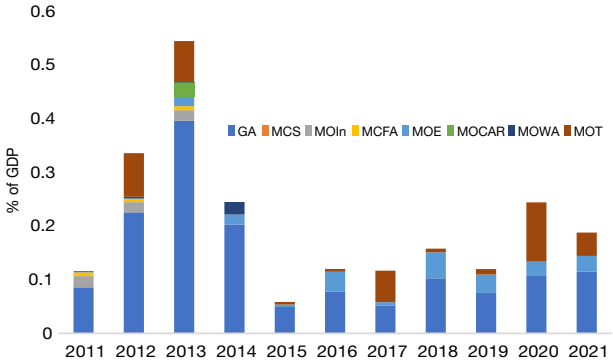
a. Reccurent spending in services and cross sectors, by line ministry (% of GDP) (2011-2021)



b. Government capital spending in services and cross sectors, by line ministry (% of GDP) (2011-2021)



c. DP-funded capital spending in services and cross sectors, by line ministry (% of GDP) (2011-2021)



Sources: *Budget Settlement Law (2011-2021); World Bank staff estimates*

cadres of front-line service providers, such as education and health, in which the subnational share of workers, and thus of the wage bill, is considerably higher (Figure 2.55). Education accounts for 69 percent of all subnational staff, and 81 percent of staff working at the DMK level (and along with health these two sectors account for more than nine out of ten workers at the DMK level). Smaller ministries, such as Land Management, Urban Planning and Construction, Environment, and Mines and Energy, are also relatively deconcentrated. On the flip side, the most centralized ministries are relatively large: Public Works and Transportation; Social Affairs and Veterans; and Rural Development.[46] Overall, over three-quarters of overall expenditures are executed at the central level in 2021 (Figure 2.56).

While the government increased salaries across-the-board for all civil servants, and spending rose to about 7 percent of GDP by 2022, worker performance was not linked to pay increases. International experience points to the importance of determining public sector wage policy as an integral part of an overall civil service reform, which includes human resource development and management. Annual across-the-board salary increases with limited reform in human resource development and management did not appear to have improved public service delivery. While the government has increased the average monthly pay per civil servant, administrative sectors benefited the most from the increase (Figure 2.57).

Regional comparison shows that Cambodia's public sector wage spending as a share of public expenditures is on the high side (Figure

46 MoSVY at the central level controls almost half of wage spending, but 97 percent of non-wage. However, this should be treated with caution, as it includes social security benefit and not operational budget.

Figure 2.55. Civil servants employed at different levels within selected line ministries; number and share of the total, 2020

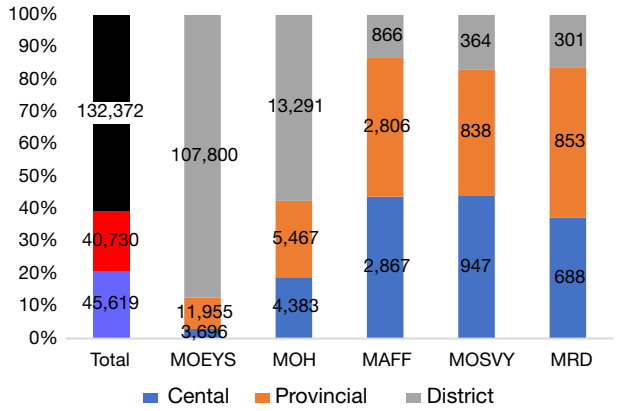
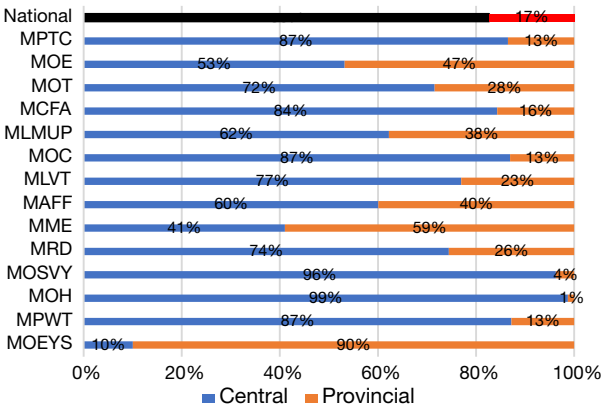


Figure 2.56. Central and provincial shares of line ministry recurrent spending, 2021



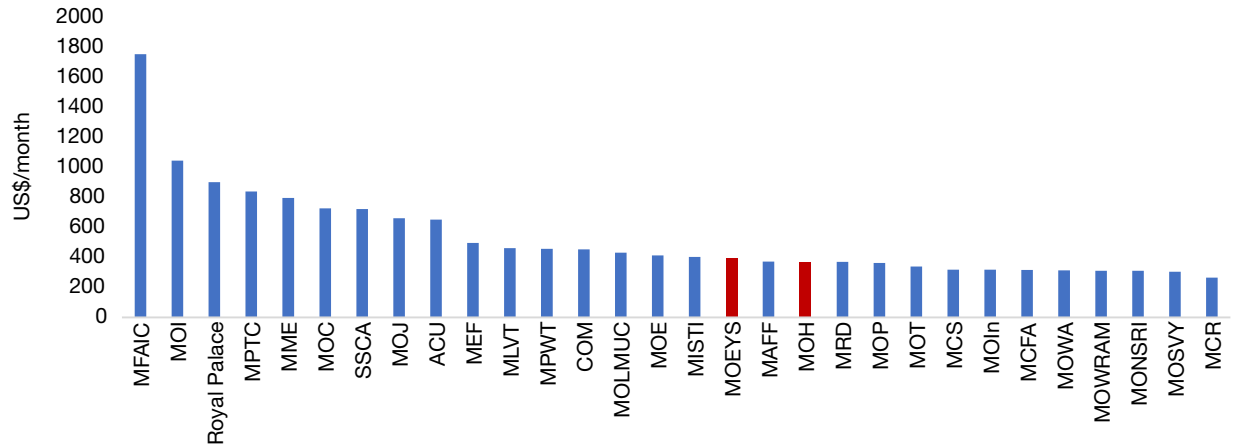
Sources: *MCS and MEF*

Note: *Recurrent spending includes wage and non-wage expenditures. Miscellaneous expenditures were integrated in Central spending at National level. MOH recurrent spending excludes Covid-19 expenditures.*

2.58). However, due to the challenges facing public administration reform, public sector wage increases were not accompanied by an improvement in public service delivery.

The public sector wage bill started to quicky increase in 2013 when the authorities targeted civil servants' minimum wage to reach at least KHR 1 million (US$250) a month by 2018. As a result, the total wage bill as a percentage of total government spending peaked at 37 percent in 2018, up from 21.1 percent in 2013, declined to 26 percent in 2021. Wages and compensation as a share of GDP rose to 8 percent in 2018, up from 4.3 percent during the same period. However, after the minimum wage target was met or exceeded, the wage bill increase moderated. As a share of total total spending, the wage bill declined to 31 percent (7.4 perent of GDP) in 2019 and 26 percent (7.2 percent of GDP) in 2021. To save budgetary resources for financing necessary public health expenditures to fight the spread of the corona virus, salary increase was frozen during the period 2020-21. While the increase has been reintroduced in 2023, rising demand requires a substantial increase in public outlays, which are projected to reach almost 30

Figure 2.57. Monthly average pay of Cambodian civilian civil servants, 2021

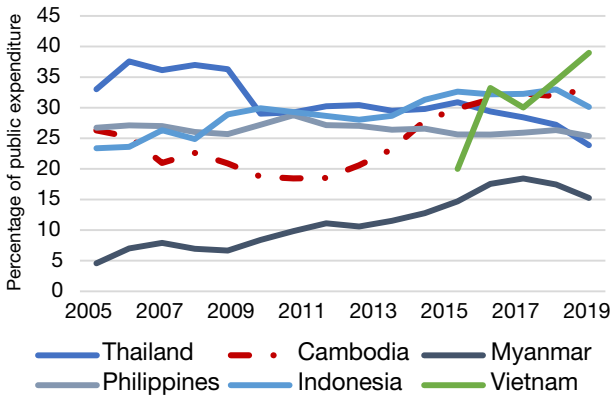


Sources: *Cambodian authorities (2021 Budget Settlement Law)*

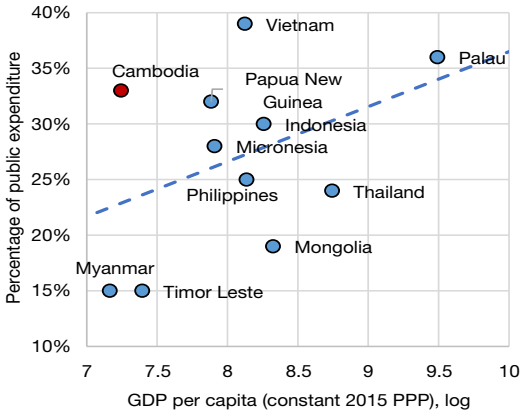
Note: *Actual spending under Chapter 64 for all ministries (except for MOH which is for 2020) and 2022 civilian civil servant statistics (MCS).*

Figure 2.58. The footprint of the public wage bill

a. Wage bill (as % of public expenditure) over time



b. Wage bill and GDP pc in the EAP region



Sources: *World Bank's Worldwide Bureaucracy Indicators based on IMF data*

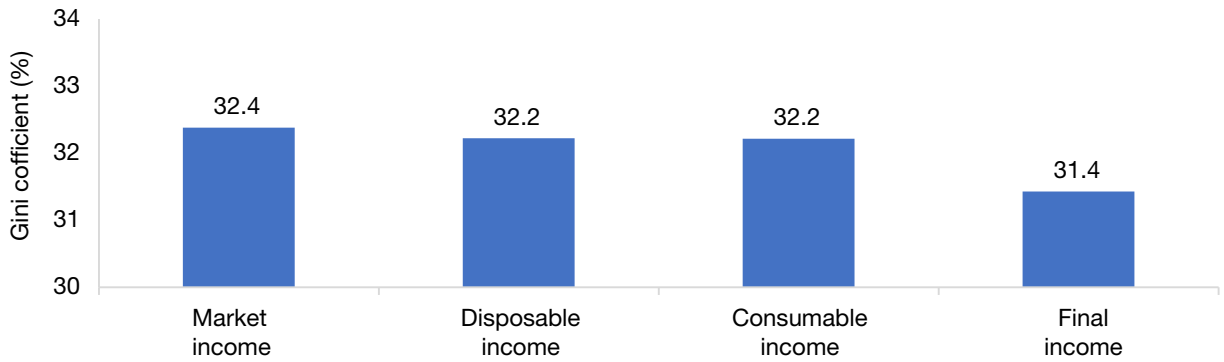
percent of GDP in 2023, up from 25.5 percent of GDP in 2020, reducing authorities' fiscal space for raising civil servants' wages much further.

2.3. Distributional impacts of fiscal policies

In Cambodia, the overall fiscal system somewhat reduces inequality. Bearing in mind the caveat that top income households are often underrepresented in household survey data—a common problem with most surveys, especially in developing countries—the fiscal system in Cambodia reduces the Gini coefficient by one percentage point. Inequality, as measured by the Gini coefficient, falls between Market Income and Final Income (Figure 2.59). Before any fiscal interventions, the Market Income Gini index is 32.4 percent. After considering direct taxes and direct transfers, the Gini index reduces slightly to 32.2 percent for Disposable Income. Indirect taxes and subsidies have limited effect, and their consideration leaves the Gini index for Consumable Income at 32.2 percent. "In-kind" transfers from health and education, on the other hand, have the largest effect on inequality with the Final Income Gini at 31.4 percent. This reflects the fact that in-kind transfers represent a significant share of pre-fiscal income and proportionally benefit lower-income households more than those at the upper end of the income distribution.

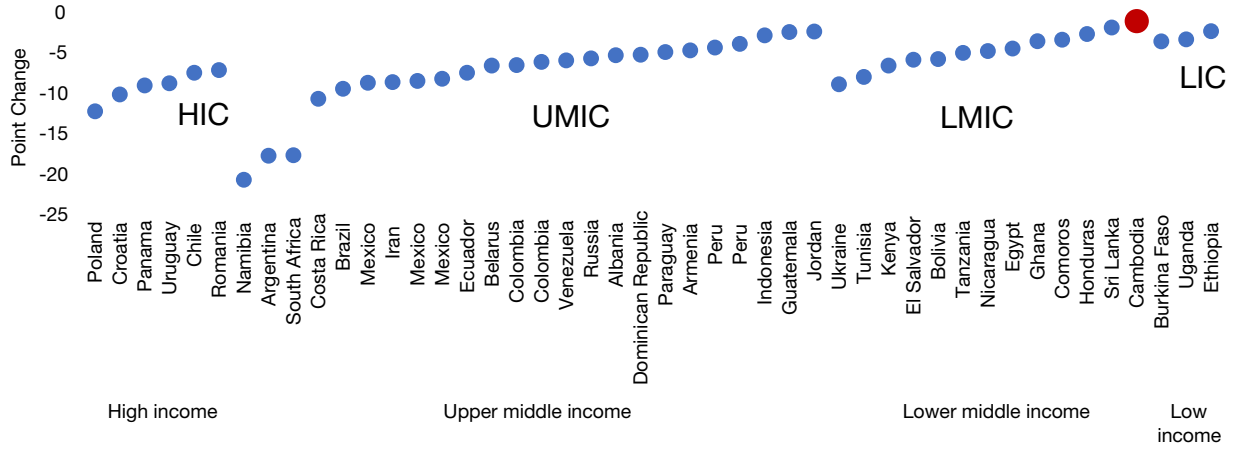
While Cambodia does reduce inequality through taxes and transfers, the degree of redistribution is small by international comparison. Figure 2.60 demonstrates that the redistributive effect of fiscal policy (including in-kind transfers) is lower

Figure 2.59. Gini Index before and after fiscal interventions in Cambodia



Sources: *Authors' calculations based on CSES (2019/20)*

Figure 2.60. Change in Gini after fiscal policy (Including in-kind transfers)



Sources: *CEQ and World Bank databases and World Bank calculations (see Rodriguez and Wai-Poi 2020)*

Note: *HIC = high-income country, UMIC = upper middle-income country, LMIC = lower middle-income country, LIC = low-income country.*

in Cambodia than in some lower-middle-income countries. Some lower-middle-income countries achieve inequality reduction of up to 9 percentage points from the pre-fiscal income. When in-kind transfers are excluded, the redistributive effect in Cambodia is even lower. This is because of the very low impact of direct transfers on inequality.

2.4. Strengthening public sector management for improved quality of public expenditure

The limited outcomes from public spending outlined in earlier sections are attributable to three main issues. First, there is limited budget management effectiveness as reflected in a weak link between planning and budgeting, and between spending and performance outcomes; in addition, the lack of budget discipline at sector level, limited usefulness of program structure for performance informed budgeting, and weak public investment management also point to its limited effectiveness. Second, human resource management remains weak as reflected in the absence of performance-based management while public sector pay is on average higher than private sector's salary. There is no human resource management information system to support performance-based management. Third, Cambodia remains highly centralized after 20 years of decentralization reform effort resulting in inadequate distribution of resources at front line public service providers. Each of the issue is explored in detail below.

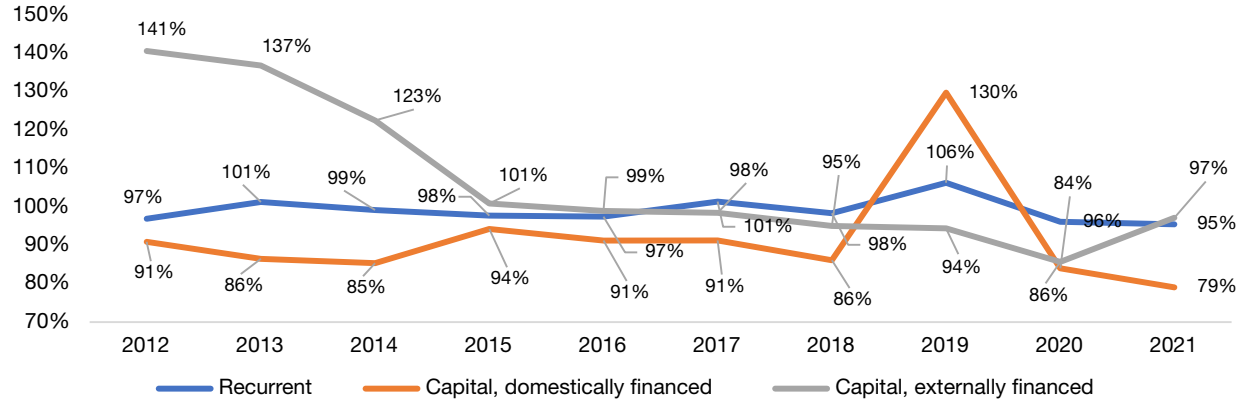
2.4.1. A need to strengthen strategic budget management

The aggregate annual domestic budget is generally credible. Budgeted amounts approved by the National Assembly are generally closer to the actual amounts spent for the total budget. The most recent PEFA assessment (2021) suggested a high level of budget credibility since expenditure outturn compared to approved budget for 2017, 2018, and 2019 was within +/- 5 percent: 97.9 percent in 2017, 99.4 percent in 2018, and 99.3 percent in 2019 (PEFA 2021). Expenditure outturns based on comparison between Budget Law and Budget Settlement Law was 91 percent in 2020 and 92 percent in 2021.[47] However, there is a need to link national development planning with budgeting to improve allocative efficiency.

Strengthening budget discipline can help to improve operational efficiency, and hence quality of expenditure. A closer look at the public expenditure patterns suggests a need for more attention to operational efficiency. In general, recurrent expenditure outturn is much closer to the

47 Budget Law and Budget Settlement Law 2020 and 2021

Figure 2.61. Overall budget outturn at national level (2011-2021)



Sources: *Budget Settlement Law (2012-2021); World Bank staff estimates*

Note: *Recurrent spending excludes Covid-19 expenditure*

approved budget; however, capital expenditures fluctuated significantly. There is a big difference between expenditure outturn for government and externally funded public investment projects. For government funded public investment programs, the budget execution rate has been 90 percent for all years, except in 2019 when the execution rate reached to 130 percent. For DP funded investments, the budget execution rate was above 100 percent between 2012 and 2016, however, the rate fell below 100 percent between 2017 and 2021 (Figure 2.61).

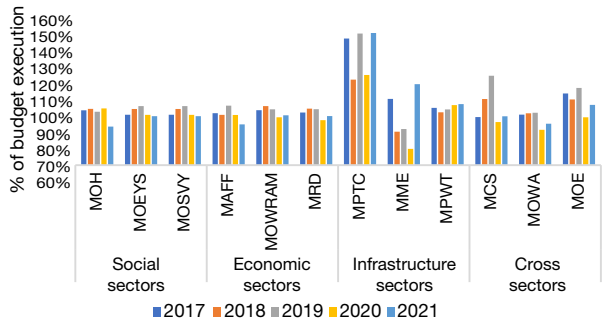
The budget and actual spending amount deviates substantially across ministries. In 2021, while the Ministry of Agriculture, Forestry and Fisheries under-executed its recurrent budget by 22 percent compared to budget plan, the Ministry of Mines and Energy overspent by 16 percent. Without taking into account Covid-19 expenditure, MOH recurrent expenditure outturn reached 87 percent of its budgeted level in 2021. MPTC recurrent budget outturn reached around 151 percent of total recurrent budget in the same year (Figure 2.62.a). In the economic and infrastructure sector, government capital investment tended to be over executed: 231 percent for MOWRAM, 166 percent for MRD, and 426 percent for MPWT in 2021 (Figure 2.62.b). Budget execution for DP funded capital allocation fluctuated significantly across sectors and line ministries (Figure 2.62.c).

Refining budget strategic planning linked with budgeting processes and realistic outcome targets can help to support performance-informed budgeting implementation. Strategic budget planning could be further improved to strengthen the linkage between policy and budgeting. Achieving performance goals in a Budget Strategic Plan (BSP) appears to be challenging across ministries. We demonstrate this point in Chapter 4 by providing a detailed analysis of the weaknesses in the performance matrix design and achievements against the indicators in the MAFF. Chapter 4 compares the 13 program-level yearly indicators (excluding the "final result" indicators) between the two most recent BSPs. The analysis demonstrates that the target values are unreasonable. The achievement of many of the performance indicator targets require substantially more budgetary resources than allocated to the MAFF.

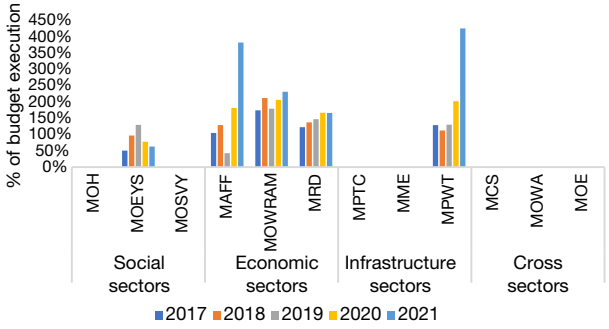
The program structure of ministries needs substantial changes to support performance-informed budgeting. The current program structure reflects the existing administrative structures and arrangements rather than capturing sector level outcomes. More importantly, all of the salary expenses for a ministry are often registered under a separate program, rather than distributing personnel costs across all programs. Therefore, expenditure by a program currently does not accurately capture all program costs, including personnel cost and capital

Figure 2.62. Overall budget outturn (2019-2021)

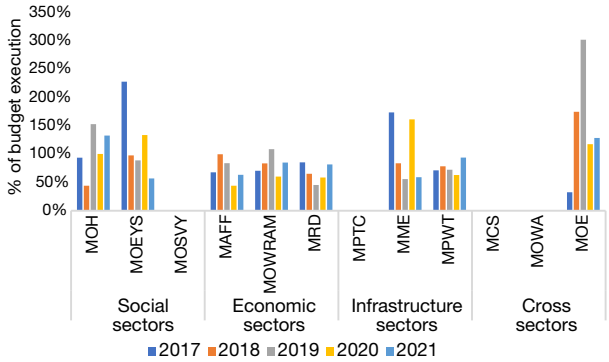
a. Reccurent budget outturn, by selected line ministry (% of total) (2017-2021)



b. Government capital budget outturn in selected line ministry (% of total) (2017-2021)



c. DP capital budget outturn in selected line ministry (% of total) (2017-2021)



Sources: *Budget Law (2017-2021) and Budget Settlement Law (2017-2021); World Bank staff estimates*

Note: *MOH recurrent spending excludes Covid-19 spending*

expenditure. In addition, achieving performance results from budget expenditure requires a result-based management system, where program managers have significant control over resources, results are accurately measured and reported, programs are evaluated, and managers are incentivized and held accountable by a performance-oriented human resource management system. Thus, current program structure does not support performance orientation. Having the right foundation for program-based budgeting is an important building block toward achieving performance accountability (see Box 2.5).

Cambodia's investment efficiency is below the average of emerging and developing Asian countries. Access to infrastructure in education, electricity, water supply and public health remained lower than in low-middle income developing countries. The capital budget is appropriated as lump sum and allocation to individual projects occurs only after the budget is approved, preventing coordination with the recurrent budget. Identifying individual projects and incorporating those in the budget preparation will improve the quality of budget planning and implementation.[48]

Implementation of DP investment projects remain a key challenge in sectors such as education, health and agriculture. Budget outturn for DP capital investment tended to fluctuate, with weaknesses in the planning and implementation of DP investment projects. There is a need for a more proactive role in coordinating with DPs in identifying, selecting and implementing the investment projects.

48 Public Investment Management Assessment (PIMA) 2019

Box 2.5. Program budgeting (PB)

Program budgeting reforms around the world typically intend to shift the focus of budgetary processes from the control of inputs to producing measurable results. It aspires to enable governments to deploy resources to priority areas and assess whether the resources have been translated into intended results. Linking resources with results can support in holding managers accountable for the delivery of specific targets and how the resources are deployed and used.

Successful implementation program budget requires that results are accurately measured and reported, programs are evaluated, all expenditures associated with the program including capital expenditure and personnel costs are accounted for, managers have discretion over resources they manage, and managers are incentivized and held accountable by a performance oriented human resource management system.

However, in many countries, PB implementation has faltered mainly due to the difficulty of combining the objectives of planning, management, and control in one budget system. In some countries, instead of providing more information to the government to manage its resources, program budgeting, as implemented, may have resulted in the implementation of more, rather than less, controls and a fragmentation of the budget, which is exactly counter to the aspirations of program budgeting.

Source: *World Bank (2022)*

Brumby,James A.; Hashim,Ali; Piattifuenfkirchen,Moritz Otto Maria Alfons. 2022. Introducing the New PPB: Pragmatic Program Budgeting: Overcoming Design Obstacles to Planning, Management, and Control (English). Equitable Growth, Finance and Institutions Insight Washington, D.C.: World Bank Group.

http://documents.worldbank.org/curated/en/601921643045774672/Introducing-the-New-PPB-Pragmatic-Program-Budgeting-Overcoming-Design-Obstacles-to-Planning-Management-and-Control

2.4.2. Linking performance to salary increase toward maximization of public expenditure quality

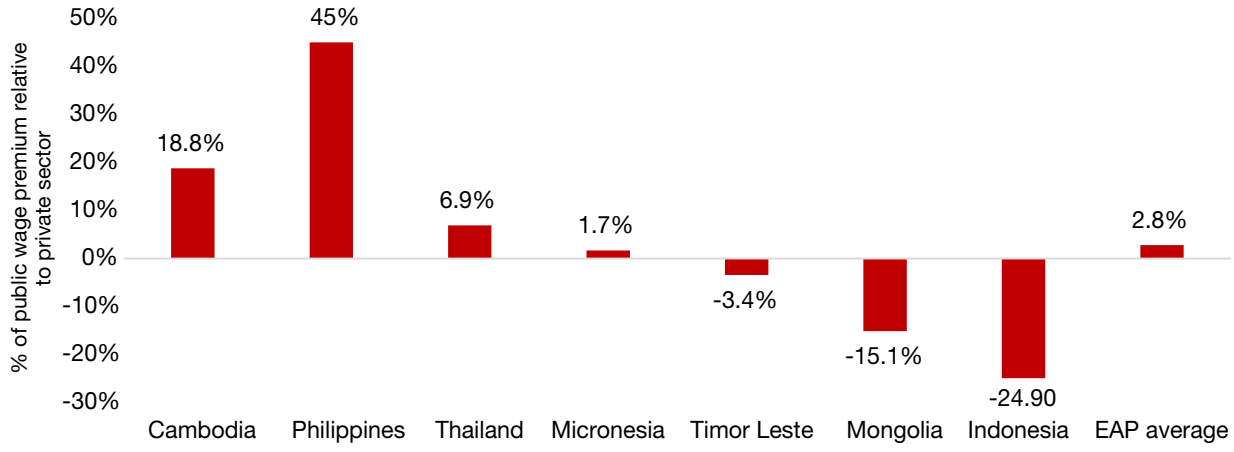
There is a need for introducing performance-based management to improve the quality of service from public spending. Salary increases across the board have not contributed to improved performance. Cambodia's public sector workers currently earn a higher salary compared to their private sector counterparts. Average monthly public sector pay is higher than private sector, reaching KHR 1.5 million in 2019, compared to KHR 1.25 million for private sector.[49] Cambodia's public sector wage premium relative to the private sector wage employees (even after accounting for observable characteristics such as experience, educational qualification, gender, and location) was 19 percent in 2019.[50] This positive wage premium experienced by public sector workers is higher than the regional average of 3 percent and is among the highest compared to all its peers, with only the Philippines higher (Figure 2.63). Furthermore, the results hold in the education and health sector, where the wage premium for working in the public sector is also positive and significant in the country (6 percent in healthcare and 17 percent in education).

Before 2019, the public sector in Cambodia used to pay a wage penalty over similar private sector workers. In the two decades up to 2019, the wage differentials between public and private sector workers have shown a big income gap in

49 While public sector wage levels are an important determinant of personnel motivation and of state capacity, they have important consequences for expenditure efficiency, fiscal sustainability, and equilibrium outcomes in the entire labor market. However, answering the question "does the public sector pay too much or too little" naturally requires an appropriate comparator. Comparing the wages of public and private sector workers is analytically useful given that the most likely outside option to employment in the public sector is the private sector.

50 These wage differentials do not take additional sources of compensation like allowances and in-kind transfers into account which are likely higher in the public sector. Therefore, if anything, these estimates may be underreporting the wage premia. However, the lack of such information on the household surveys affects the ability to perform this additional analysis.

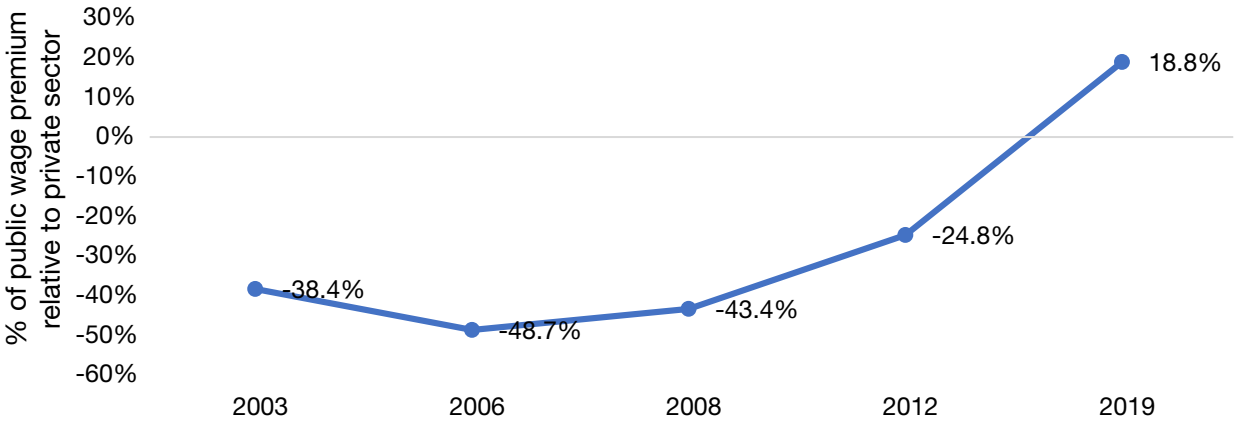
Figure 2.63. Public sector wage premium (compared to all private sector workers) (2019)



Source: *World Bank's Worldwide Bureaucracy Indicators*

favor of private sector employment, with a wage penalty for public sector workers ranging from 38 to 25 percent in the 2003-2012 period (Figure 2.64). During that period, because of low wages offered by the government (compared to those in the private sector), government jobs were unattractive to the newly graduated and other skilled workers. This led to problems among government employees, such as moonlighting, while some other young skilled workers left the government for the more generous private sector jobs, thereby adversely affecting government efficiency.[51] In the subsequent period, and despite fiscal constraints, the government has attempted to improve matters by applying across-the-board annual increases in basic salaries. This higher compensation of public sector workers gave room for a more competitive wage for the public workforce, resulting in a positive wage premium compared to their private sector counterparts, though with negative implications in terms of fiscal sustainability. Moreover, this higher premium may be due to the inability of the private sector to keep pace with wage growth in the public sector. The fact that these jobs pay significantly higher wages and provide more stable working conditions with better benefits could add distortions to the labor market by raising the reservation wages, which could then result in queuing and crowding-out effects in the private sector labor market.

Figure 2.64. Cambodia's public sector wage premium over time (2003-2019)



Source: *World Bank's Worldwide Bureaucracy Indicators*

51 Oudom (2012). Public-private wage differentials in Cambodia and its implication for Public Human Resource Management.

Figure 2.65. Wage premium by education level (compared to private formal workers) (2019)

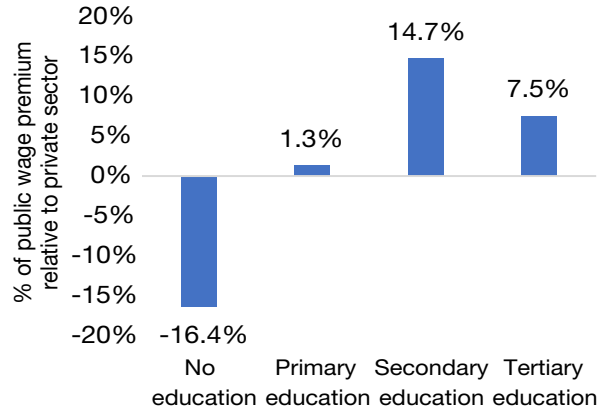
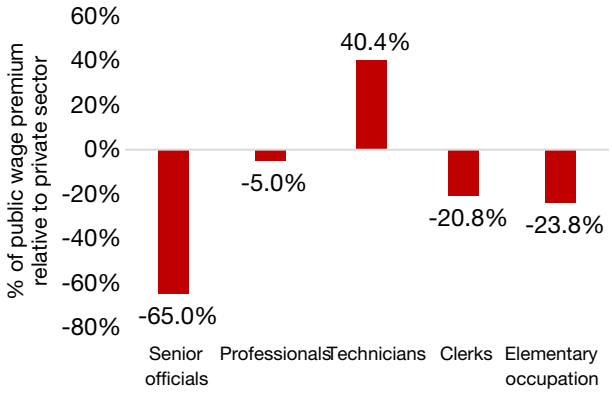


Figure 2.66. Public sector wage premium by occupational groups (compared to private formal workers) (2019)



Source: *World Bank's Worldwide Bureaucracy Indicators*

The difference in pay between the public and private sector varies by level of education. Public sector workers with tertiary education earn 7.5 percent more than their private sector counterparts. However, public sector workers with no education make 16.4 percent less than their private sector counterparts.[52] The wage gap between public and formal private sector workers is highest among workers with secondary education, at 14.7 percent in favor of public sector workers (Figure 2.65). A high wage premium among highly educated workers, together with a larger representation of these workers in the public sector relative to the private sector, suggests potential skilled labor shortages for the private sector with large implications for public sector wage bill sustainability.

Technical occupations enjoy a higher premium in the public sector than senior managerial occupations. In Cambodia, public sector technicians enjoy a wage premium of 40 percent compared to private formal workers, mainly driven by the high proportion of police officers and public sector administrative officers. All other occupations in the public sector pay a wage penalty and the highest penalty is observed among senior officials (65 percent), as seen in Figure 2.66. This is widely observed in other countries, where premiums are higher for entry-level civil servants than senior civil servants, which may be particularly disruptive to the overall labor market. Given these high premia among technicians, it will not be surprising to see a massive demand for these public sector jobs, with hundreds of applicants for each vacancy.

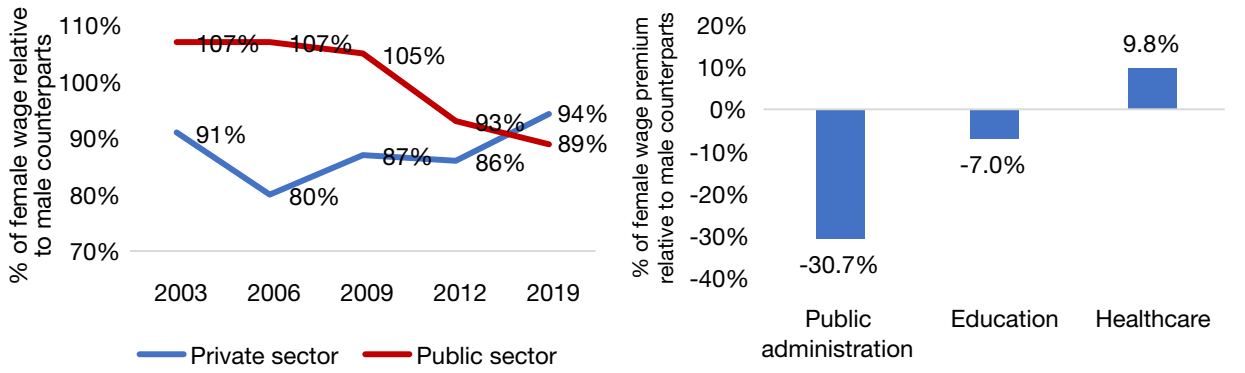
Female workers in the public sector suffer a significant gender wage gap in many segments of the public sector workforce. Globally, women often earn significantly less than men for doing the same work in both public and private sectors. In Cambodia, females earn 94 percent the wage of males in the private sector and 89 percent the wage of their male counterparts in the public sector and this wage gap observed in the public sector has increased over time (Figure 2.67.a). Moreover, women in Cambodia perform most tasks in the public sector education and healthcare sectors, but their participation is mostly confined to lower-paid occupations. However, women working in the education industry face a wage penalty of 7 percent compared to their male counterparts working similar jobs with similar hours (Figure 2.67.b), even after accounting for differences in age, educational qualifications, and location. In public administration, women experience a wage penalty of more than 30 percent. However, women in healthcare earn almost

52 This heterogeneity in the wage gaps by education level could be caused by many factors, and it is impossible to identify these factors without data from household surveys. It may stem from different productivity gaps in the public sector that vary across occupations, such as stronger union bargaining power of lower-skilled employees.

Figure 2.67. Gender wage gap in Cambodia

a. Female to male wage ratio by sector of employment

b. Public sector gender wage premium by industry (2019)



Source: *World Bank's Worldwide Bureaucracy Indicators*

10 percent more than men in the same industry. The wage penalty experienced by women is observed globally, however in Cambodia, the size of these penalties is higher. The average global gender wage penalty is 3 percent for education and 2 percent for public administration industries, respectively.

2.4.3. Adequacy in the distribution of resources across levels of government

The Cambodian public administration remains highly centralized, even 20 years after the initiation of the government's decentralization and deconcentration program. The lack of qualified technical and frontline personnel has been noted in rural Cambodia, while central offices are heavily staffed. In the irrigation sector, for example, each province has only about 25 staff, less than half than would be required to run a large irrigation scheme (40,000 ha or more). Inadequate staffing is used to explain the slow pace of deconcentration in the sector.

Similarly, within the healthcare sector, there are sharp disparities in outcomes between the richest and the poorest, and between urban and rural populations. The average distance to a health center in rural areas is high, and few doctors are available in rural public health centers. Overall, spending on healthcare in Cambodia is higher as a percentage of GDP than in neighboring countries; however, 60 percent of this expenditure is funded by out of pocket and the largest share of it goes to private providers (47 percent). The government's budget for health facilities per capita amounts to US$2.5 a year – inadequate to achieve Cambodia's targets for the sustainable development goals. However, 35 percent of government spending goes to administration costs – this is the highest in ASEAN, equal with the Lao PDR, and about the same as the amount of spending overall on public hospitals. Again, this may reflect a tendency to over-employ administrative staff in Phnom Penh, at the expense of severe shortages of trained technical or front-line staff in rural areas, where the need is greatest.

The relationship between national and subnational levels requires further clarification. For example, the central health ministry transfers budget to the provincial health ministry under the heading "support to provinces," and the provincial level ministry is supposed to allocate the money to different program headings. However, inconsistency in practices at provincial level undermines the comparability of different provincial reports and the ability of the central ministry to determine where money is being spent across the country.

In the irrigation sector, decentralization of functions has been very limited, because of the retention of 92 percent of overall spending at

the central level. This contributes to an imbalance in personnel: 50 percent of the ministry's staff are located in Phnom Penh, with the other 50 percent spread across 25 provinces. Often, the provincial level is contracted to carry out work for the center, but responsibility for planning the work and managing the finances is not devolved. The resources most often allocated directly to the provincial level are ad hoc funding for flood response. Technical guidelines as to what tasks constitute regular and cyclical operations and maintenance are needed to standardize operations in a way that would allow delegation of the full responsibility to provincial authorities.

2.5. Cambodia performance on anti-corruption

Corruption can have negative impact on public sector performance. It can reduce government revenue, create leakages in available resources that could be utilized for delivery of public goods, and reduce public expenditure efficiencies, resulting poor quality of infrastructure and public service delivery.[53] It is therefore useful to examine how Cambodia perform on anti-corruption work compared to its peers. Cambodia ranked 85 out of 120 countries on budget transparency score[54] in 2021. Figure 2.68 and Figure 2.69 show that budget transparency score for Cambodia has slightly improved to 33 out of 100 in 2021, up from 15 score in 2010. Despite the improvements, budget transparency score for Cambodia remained below the required sufficient transparency score (61). In 2021, Cambodia's budget transparency score was the lowest compared to ASEAN peers, except Myanmar. Cambodia's budget transparency score was about half of Indonesia's (70) and Philippines scores (68). Its score was lower than global average (45). Cambodia performed adequately on audit oversight (score 72 out of 100) but remains weak in terms of legislative oversight (score of 25 out of 100). Figure 2.70 shows that budget oversight by legislative and audit institution was limited, averaging oversight scores of 41 out of 100.

Cambodia scored low on index of public integrity compared to world average, countries of similar development level and regional average (Figure 2.71). Incidence of corruption is reported among 37 percent of public service users (Figure 2.72). According to transparency international, 40

Figure 2.68.Transparency in Cambodia compared to its peer countries (2021)

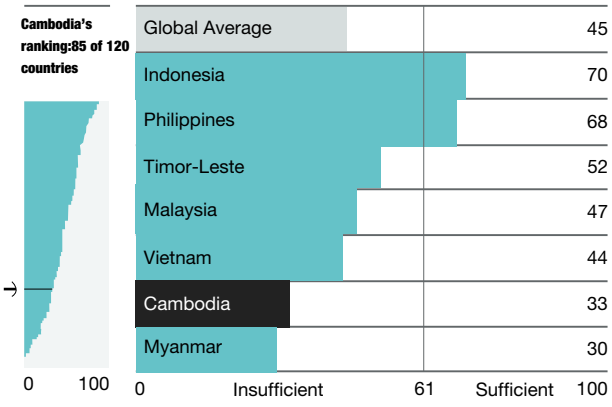
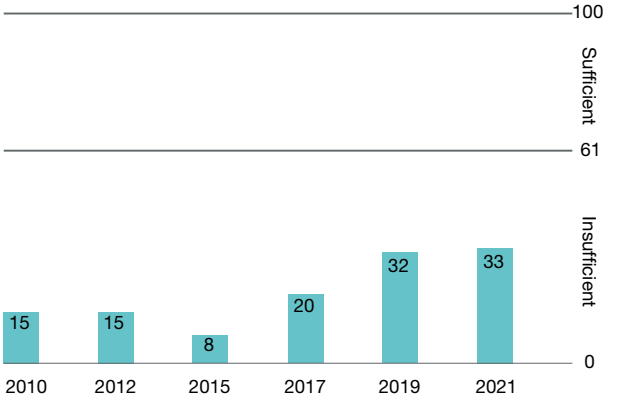


Figure 2.69. Transparency score for Cambodia over time (2010-2021)

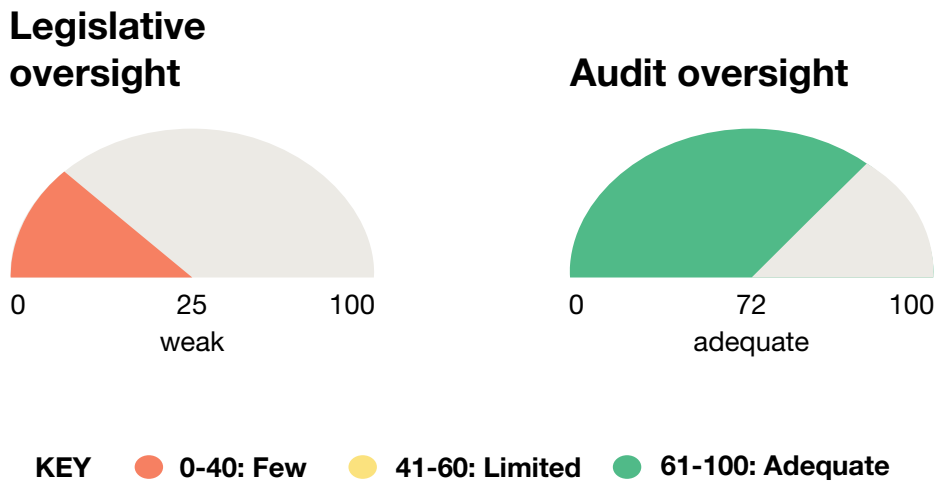


Source: *International Budget Partnership, Open budget survey (2021)*

53 International Monetary Fund, why worry about corruption? 1997

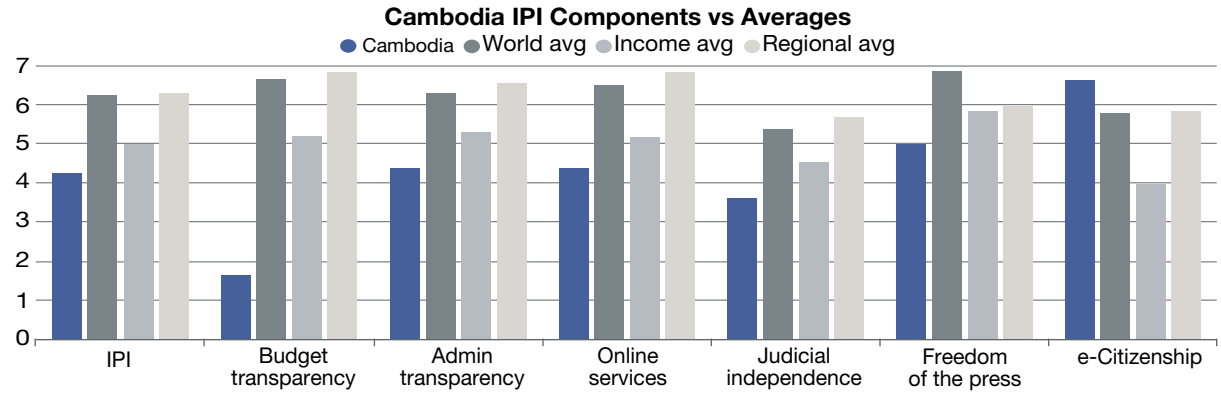
54 The Open Budget Survey (OBS) is the world' s only independent, comparative and fact-based research instrument that uses internationally accepted criteria to assess public access to central government budget information. The OBS measures public access to information on how the central government raises and spends public resources. 109 equally weighted indicators were used to score each country on a scale of 0 to 100. A transparency score of 61 or above indicates a country is likely publishing enough material to support informed public debate on the budget.

Figure 2.70. Budget oversight in Cambodia (2021)



Source: *International Budget Partnership, Open budget survey (2021)*

Figure 2.71. Index of public integrity for Cambodia (2020)



Source: *Index of Public Integrity (IPI)*

Note: *The IPI score is the mean of the six components scores, which result from the standardization and normalization of original source data to range between 1 and 10 using a min-max-transformation, with higher values representing better performance.*

For Budget Transparency, last value available is for 2019. For Online Services, last value available is for 2020. For Judicial Independence, last value available is for 2019. For the E-citizenship sub-components, last values available are also for 2020, and missing values in any of the sub-indicators were replaced with the latest available data point.

percent of public users paid bribes for IDs, followed by 38 percent bribes to police, 29 percent to utilities, 24 percent for public clinics and health centers, 18 percent in public schools. Fourteen percent of people surveyed perceived that police officials were involved in corruption, followed by judges and magistrates (11 percent), local government officials (9 percent), central government officials (8 percent) and member of parliament (6 percent) (Figure 2.73). Further strengthening Cambodia's performance on anti-corruption can help to improve performance of key public policies toward better public service delivery and equity from public spending.

2.6. Conclusion and recommendations

The Government has been able to enlarge fiscal space, maintain fiscal sustainability, and increase spending across the sectors in Cambodia, from 20.2 percent of GDP in 2011 to 27.9 percent in 2021. Thanks to improved domestic revenue, the government has been able to support civil service compensation reform and to finance COVID-19 relief packages. However, the economic contraction in 2020 combined with large spending on COVID-19-induced healthcare and social assistance

Figure 2.72. Percentage of public services users paid a bribe (2020)

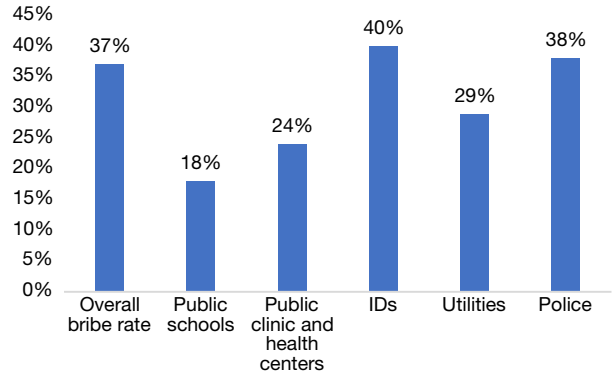
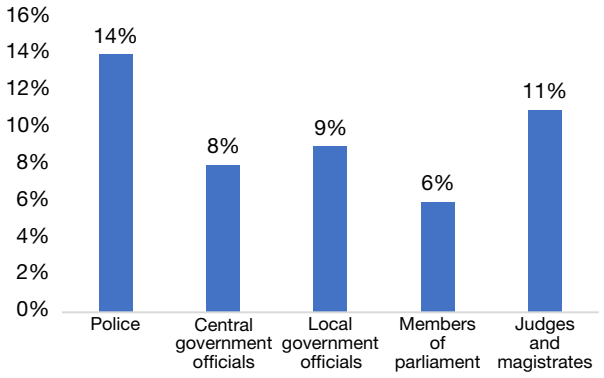


Figure 2.73. Percentage of people who think that people in these institutions involved in corruption (2020)



Source: *Transparency International (2020)*

led to a substantial increase in fiscal deficits and rising debt levels reaching 33.7 percent of GDP as of end-2022, from 28.1 percent of GDP in 2019.

Public spending quality, however, needs to be significantly improved. Increased spending was significantly driven by salary increases across board for government officials. The wage bill as a share of GDP nearly doubled over the last decade, an increase from 4.3 percent of GDP in 2011 to 7.2 percent in 2021. Without introduction of performance measurement, salary increases cannot ensure improved performance and hence, the quality of spending. Average monthly public sector pay is higher than private sector, reaching KHR 1.50 million in 2019, compared to KHR 1.25 million for private sector.

The social sector expenditure significantly increased from 4.3 percent of GDP in 2011 to 10.1 percent 2021 while the spending in other sectors were stable. Key social sectors including education and health saw substantial increases in budget allocations. The increase in spending is broadly in line with the government expenditure policy, which prioritized the social sector. Across the sectors, capital expenditures relied mainly on external funding. More domestic financing for capital budget is necessary as external funds for infrastructure have tended to decline. Improvement in public investment management is necessary to achieve quality from public spending.

The overall fiscal system somewhat reduces inequality. While Cambodia does reduce inequality through taxes and transfers, the degree of redistribution is small in international comparison. Further improvement in targeting poorer provinces, such as for the healthcare sector, can help to improve effectiveness of spending.

Although overall budget credibility is high, there is significant variation amongst ministries. The annual government's budget at aggregate level is credible with budgeted amounts approved by the National Assembly that are much closer to the actual amounts spent for the overall budget, typically coming within +/-5 percent except for 2020 and 2021; however, a closer look at ministry level suggested a substantial difference between budgeted recurrent and actual expenditure, for example 116 percent for MME and 151 percent for MPTC for 2021. In the economic and infrastructure sector, government capital investment tended to be over executed over the same period, around 383 percent for MAFF, 231 percent for MOWRAM, 166 percent for MRD and 426 percent for MPWT. This implies a need to strengthen budget planning.

Moving toward performance-informed budgeting requires further refinement of BSP and revisiting the current program budgeting structure. Expenditure by program currently does not capture all program costs including personnel

cost and capital expenditure, making it difficult to assess performance. BSP across ministries could be further strengthened to improve realism and ensure achievability of target set.

Improvements in human resource management and the introduction of performance-based management and strengthening accountability mechanisms could help to improve the quality of service delivery. For example, in the education sector, uneven distribution of teachers and inability to address teacher surpluses and shortages continue to impact quality education. Without an accountability framework in place, students learning outcomes deteriorated despite the significant increase in teacher salaries. This reinforces the findings and recommendations of the 2019 PER, which made three recommendations for education sector (i) improving program budgeting by delegating authority to budget managers, (ii) addressing uneven distribution of teachers, and (iii) enhancing student learning outcomes. While efforts have been made, there has been limited achievement in relations to these earlier recommendations (See Table 2.4).

Low utilization of public health facilities and preference for the private sector, which contributes to high out-of-pocket expenditure, reflects the general perception of quality of public health facilities and is impacting equity

Table 2.4. Summary of recommendations for improving education outcome from the 2019 PER

Areas of reform	Recommendations	What has been achieved and remaining challenges
Flexibility of school using funds	• Delegation of authority to budget managers to facilitate expenditure execution • Assign personnel costs to specific programs • Include DP-funded projects in the BSPs	MOEYS prepares BSP based on guidance from MEF. Three-year rolling PB is prepared. DP funded projects are included as part of BSP. **Challenge: (1) Budget managers have limited authority in expenditure execution; (2) personnel cost is capture under only Program 5 and not allocated in respective program.**
	Progress towards school-based management	School-based management has been introduced and gradually rolled out. **Challenge: Delegation of authority to school in managing resources has been limited.**
Addressing enrollment gap between rich and poor	Expand the coverage and funding of the current student grant programs to reduce the opportunity cost of schooling	Effort has been made to improve enrollment rate in primary school. **Challenge: There is still a gap between urban and rural areas in education enrollment, especially for secondary school between 2014 and 2021.**
Addressing uneven distribution of teachers	Reallocate teachers to nearby schools through monetary incentives and allowance for short distance travels	• Sub-decree # 102 dated 2002 set out one time allowance for redeployment; MOEYS' teacher norm was introduced in 2018. **Challenge: Shortages and surpluses of teachers continues to be a key challenge for schools in delivering education services.**
	Enforce student-teacher ratios	
Improving student learning outcomes	Increase parents' engagement in improving student learning outcomes	Effort has been made to strengthen teachers' accountability by engaging parents in improving student learning outcomes under school based management pilots. **Challenge: many public schools continue to experience limited accountability from teachers.**
	Enhancing quality of teaching and reducing teacher absence	

Sources: *PER (2019) and World Bank staff*

of outcomes. Major issues that have impact on improving technical efficiencies should be priorities to be addressed: (1) health services quality remained inadequate due to limited resources, specifically, in terms of the number of health professionals, diagnostics, and treatment; (2) inadequate capacity of the public health system to deal with diseases and illnesses; (3) investments on health infrastructure including technology and information system remained limited; and (4) inappropriate healthcare seeking behavior of the population, especially those in the rural/remote areas who delay seeking healthcare, and who engage in self-medication.[55]

Quality of infrastructure remains poor and Cambodia's logistics performance declined. Paved roads as a share of total road networks in Cambodia remained the lowest in ASEAN between 2015 and 2020. Similarly, Cambodia ranked lower than most ASEAN neighbors, except Myanmar, on the logistics performance index.

Strengthening PIM is necessary for improved quality of investment in infrastructure. Key recommendations in the 2019 PER pointed to the need for upgrading PIM upstream project appraisal (including upgrading PIM legal framework; strengthening project pre-appraisal and appraisal procedures and guidelines; strengthening independent review and oversight; upgrading project prioritization and budgeting procedure; and framing PPP upstream processes under a unified framework with PIM); strengthening PIM downstream project budget execution (including project implementation and procurement, establishing effective mechanism for monitoring project implementation, clear project adjustment procedure, and introduction of completion review and ex-post evaluation); and upgrading PIM database and build capacity. While progress has been made with regard to upstream process (as seen in the adoption of PIM Sub-decree and PIM reform strategy) and upgrading of PIM database with monthly report being transformed into shared database that automates production of consolidated monitoring report, required capacity for downstream implementation appeared limited. It is necessary to build required capacity for implementation in line with the guidelines (see Table 2.5).

This PFR recommends a number of key policy options considered the most important for improving the quality of public expenditures. Table 2.6 summarizes proposed policy options.

Table 2.5. Summary of recommendations on PIM from 2019 PER

Areas for PIM reform	Key recommendations	What has been achieved and remaining challenges
Strengthen PIM upstream project appraisal	Upgrade PIM strategy and planning with a PIM sub-decree	• Improved PIM legislation: PIM subdecree adopted; however, this sub-decree does not include climate change to support resilient infrastructures. • Public Investment Management System Reform Strategy (PIMSRS) 2019-2025 adopted. • **Fiscal risk statement developed as part of the MTFF document; however, MTFF is not yet formally adopted by Council of Ministers.**
	Strengthen project pre-appraisal and appraisal procedures and guidelines	• Standard criteria adopted in Sub-decree# 41 ANKr.BK provided guidelines on project rationality, economic and financial viability, project options, affordability principles, deliverability principle, and project implementation. • Public investment committee (PIC) has been formed to act as gatekeeper and harmonize all public investment sources. • **Ensuring the quality of project appraisal remain a challenge.**

55 National Voluntary Review 2019

Areas for PIM reform	Key recommendations	What has been achieved and remaining challenges
	Upgrade project prioritization and budgeting procedures	• Projections of project cost for major investment included in Public Investment Plan attached to budget document. • Mechanisms to give funding priority to ongoing domestically funded projects exist. • **Routine maintenance included in budget, but capital maintenance (infrastructure renovation, reconstructions and enlargements) is not included in any budget documents.**
	Frame the PPP upstream processes under a unified framework with PIM	• Law on Public Private Partnership adopted in 2021 and various guidelines. • Policy Paper on the Development of PPP Mechanism for Public Investment Project Management 2016-2020 issued in 2016. • **Limited PPP information in budget documents.**
Strengthen PIM downstream project/budget execution	Strengthen project implementation and procurement	• Projects are required by Law to adopt competitive and open procurement. • Required PIM guideline including for domestic fund have been adopted. • **No requirement for monitoring or for the independent review of complaints; lack of database to monitor key steps in the tender process.**
	Develop clear project adjustment procedures and guidance	• Several Line Ministries (LMs) have multi-year projections of capital spending in Budget Strategic Plan (BSP). • Capital funding are annually appropriated for domestically and externally financed project. • **There may be shifting in budget prioritization resulting in reduced capital investment.**
	Introduce completion review and ex-post evaluation	• Department of Investment (DI) verified domestically financed project completion and reported to MEF on monthly and quarterly basis. • **Some portfolio oversight has been conducted while ex post audits of individual projects not systematically required.**
Upgrade PIM database and build capacity	Build a PIM database (CAPEX) to register public investment projects and processes	• IT systems are being developed to support macro-fiscal statistics management, performance management, and asset registry; FMIS supports budget and treasury functions. • **Asset monitoring system is primarily used for controlling asset sales rather than as an input for decision making throughout the public investment management cycle.**

Sources: *World Bank's 2019 PER, PIMA (2019), PEFA (2022)*

Table 2.6. Summary of key selected policy options

Challenges	Short-term recommendations (1-2 years)	Medium-term recommendations (3-5 years)
Weak link between planning and budgeting	Formally adopting a medium term fiscal and expenditure framework to serve as the basis for development planning	Ensure full budget discipline across all line ministries
Absence of realistic target for program outcome	Setting realistic targets for program outcomes by establishing working groups in ministries to identify realistic targets and costing them out	Establishing robust M&E systems to monitor achievement of targets
Public expenditure not linked to outcome	Linking government spending with performance outcomes by: • Revisiting and refining BSP to define outcomes indicators and performance information that are realistic on the ground and comparable across reporting period • Allowing for program directors to have authority over resource allocation and be accountable for the performance outcomes • Reviewing and restructuring program budget across the sector to support linkage between budget allocation and performance outcomes	• Making sure that programs are adequately financed reflecting their costs • Fully implement performance-informed budgeting
Challenges in capital budget management and public investment management (PIM)	Further strengthen project pre-appraisal and selection Build capacity for selected key ministries involving large public investment	Build capacity for all ministries to implement PIM in line with the adopted PIM legislation and guidelines
Salary increase not contributed to improved performance	Adopt national program for public administration reform and • Improve HR management information across the government by upgrading the HRMIS • Introduce performance-based management for mid-management level (general department and department level) across all sectors and link salary increase to performance	Introduce performance-based management for all civil servants and link salary increase to performance
Inadequate resources (finance and human resources) at subnational levels to performed transferred functions and deliver services	• Review and appropriately cost transferred function and development of a concrete deconcentration plan for each service delivery ministry • Establishing an M&E framework to monitor progress of deconcentration plan toward improving service delivery at the subnational levels	• Adequate resources (finance and human resources) provided to subnational administrations to perform their functions • M&E framework implemented

3 MAXIMIZING EFFECTIVENESS OF PUBLIC HEALTH POLICY

3.1. Introduction

Decentralization of health service delivery, social health protection schemes, and distribution of resources at the facility level are among the key challenges for health service delivery in Cambodia. High out-of-pocket expenditures, persistent health inequities, and low utilization rate suggest rather limited effectiveness of public health policy.

3.2. Sectoral context

Cambodia Ministry of Health (MOH) implements its policies through three general directorates: (i) General Directorate for Health, (ii) General Directorate for Administration and Finance, and (iii) General Directorate for Inspection. In addition, since 2019, Decentralization and Deconcentration (D&D) reforms in the health sector have transferred service delivery and management functions to the provincial/capital administrations. Subsequently, responsibilities for overseeing health service delivery also fall under the jurisdiction of the provincial/capital administrations (Box 3.1).

In 2022, there was a total of 1,408 public sector health facilities, which account for less than 10 percent of the total health service providers across Cambodia, with the majority of health care providers being private sector. Between 2017 and 2022 the number of Health Centers (primary care level) increased from 1,190 to 1,288. Utilization rates for public health centers are quite low, with an average of 0.46 contacts per capita annually. Private health care providers, which include approximately 16,000 registered providers and 3,400 pharmacies, outnumber public health facilities by over tenfold, accounting for 16,185 facilities in 2022. Most privately registered health care providers are for-profit entities.

3.2.1. Health outcomes

Alongside sustained economic growth, Cambodia has seen steady improvements in health outcomes in recent decades. Between 2016 and 2020, Cambodia had achieved one out of 14 key health sector related Sustainable

Box 3.1. Decentralization and Deconcentration reforms in the healthcare sector

The 2001 Law on Commune and Sangkat Administrative Management provided the basis for decentralization and local-level democracy for public services (including health) in Cambodia, with local elections held in February 2002. In 2005 the Royal Government of Cambodia adopted the Strategic Framework of Decentralization and Deconcentration, setting out the government's vision and objectives for expanding the governance of public services to sub-national levels. In 2008, the MOH began adopting the D&D reform framework, with 38 ODs (for roles and responsibilities of operational districts (ODs) (see Annex to Chapter 3, Box A.3.1 for more detail) becoming Special Operating Agencies (SOAs) (see Annex to Chapter 3, Table A.3.3), with the aim of improving the quality of health services delivery at the subnational level.

In December 2019 Sub-decree #193, the "Assignment of Health Management Function and Health Service Delivery to the Capital and Provincial Administrations" was signed. The aim of the Sub-decree # 193 was to improve health service delivery by bringing decision making and responsibility for service management closer to end-users. This included 1) the transfer of responsibility from the MOH to capital and provincial level and a change from vertical administration and leadership to an integrated approach, with 2) elected capital and provincial councils responsible for priority and agenda setting, and preparing and implementation of annual budgets. The health functions transferred included management and service delivery functions of provincial health departments (PHD) and OD (Annex to Chapter 3, Table A.3.3); complementary package activities (CPA) (Annex to Chapter 3, Box A.3.3) services of provincial referral hospitals'; and minimum package of activities (MPA) (Annex to Chapter 3, Box A.3.3) services of health centers/health posts. In practices, provincial health budget is recorded separately from the provincial administration budget allocation.

Accountability framework: provincial/capital administrations supervise and are accountable for the performance of capital/provincial health care services and PHDs (under supervision of MOH). PHDs supervise and monitor the performance of provincial hospitals and ODs. ODs, in turn, supervise and monitor the performance of district referral hospitals and HC/HP.

Source: *Sub-decree # 193 dated December 4, 2019 on "The transfer of management functions and health services delivery to provincial/capital administration"*

Note: *MOH=Ministry of Health; MOI=Ministry of Interior; PHD=Provincial Health Department; OD=Operational Districts; MPA= Minimum Package of Activities; CPA=Complementary Package of Activities; HC=Health Center; HP=Health Post. Health budgets allocated to provincial administrations are based on health function transfer as part of the decentralization process.*

Development Goal 3 (SDG3)[56] indicators—preventing new HIV infections. Maternal, new-born and child mortality indicators are on track to be achieved.[57] Cambodia has improved health outcomes in some areas but continues to lag behind most other ASEAN countries. The country's health sector suffers from a lack of infrastructure, human resources (such as doctors and nurses) and other essential inputs for health service delivery. At the same time, Cambodia's economic transformation presents challenges for the health system through the increased morbidity and mortality from non-communicable disease and the dual burden of disease (communicable and non-communicable diseases) which is threatening to

56 SDG (Sustainable Development Goals) aims to end poverty, protect the planet and ensure that all people enjoy peace and prosperity. There are 17 SDGs. SDG3 aims to promote healthy life and well-being for all. Cambodia committed to achieve SDG 3 targets by 2030. In 2018, the government approved CSDG in which targeted indicators of SDG3 were set- including improving financial protection risks, maternal mortality, newborn and children mortality, ending epidemics, reducing mortality from non-communicable diseases and from traffic accidents, improving reproductive health etc.

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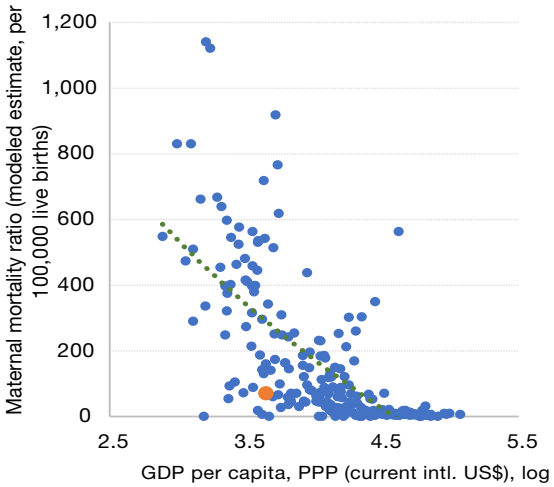
exacerbate poverty and exert an enormous financial cost to health care and society.

There have been positive gains in maternal and child health outcomes over the past two decades. Life expectancy from birth rose from 67.7 years in 2010 to peak at 70.7 years in 2019, before slightly declined to 69.6 years in 2021. Maternal mortality has decreased from 351 deaths per 100,000 live births in 2005 to 154 in 2021.[58] Childhood immunization coverage has expanded to cover 76 percent of children ages 12–23 months fully vaccinated in 2021 compared to 40 percent in 2000. The prevalence of contraceptive (any method) use among married women has increased steadily, from 24 percent in 2000 to 62 percent in 2021. Over this same period, the use of any modern method of family planning has climbed from 19 percent to 45 percent. These trends have contributed to a steep decline in infant and under-five mortality rates. Neonatal mortality has significantly decreased from 37 deaths per 1,000 live births to 8 in 2021. Infant mortality dropped from 95 deaths per 1,000 live births in 2000 to 12 in 2021; under-five mortality dropped from 124 deaths per 1,000 live births in 2000 to 16 in 2021. Additional discussion on health outcomes are presented in Annex to Chapter 3 Box A.3.2.

The maternal mortality rate is low, on par with wealthier countries (Figure 3.1). Coverage of antenatal care from skilled providers has significantly expanded over the last 15 years. The percentage of women who received antenatal care from skilled providers reached 99 percent in 2020, a significant increase from 69.3 percent in 2005. The percentage of births delivered by skilled providers doubled within this period, from 43.8 percent in 2005 to 90 percent in 2021, while the percentage of births delivered at a health facility increased from 21.5 percent in 2005 to 98 percent in 2020.

Cambodia remarkably narrowed the gap in access to maternal health care between the richest and poorest. The gap between the highest quintile (richest) of income and the lowest quintile (poorest) reduced for both antenatal care received from skilled providers and the number of births delivered by skilled providers between 2005 and 2015. In 2005, women in the top quintile (richest) had almost twice the chance to have antenatal care received from a skilled provider compared to those women in the lowest quintile (poorest). In 2015, approximately 9.9 out of 10 women in the top quintile received antenatal care from a skilled provider as opposed to 9 out of 10 women in the lowest quintile. In 2005, only 20 percent of women in the lowest quintile had a birth delivered by a skilled provider, as compared to 90 percent of women in the highest quintile. In 2020, this gap has almost disappeared, with 95 percent of women in the lowest quintile receiving a birth delivered by a skilled provider, relative to 100 percent of women in the highest quantile (Figure 3.2).

Figure 3.1. Maternal mortality ratio

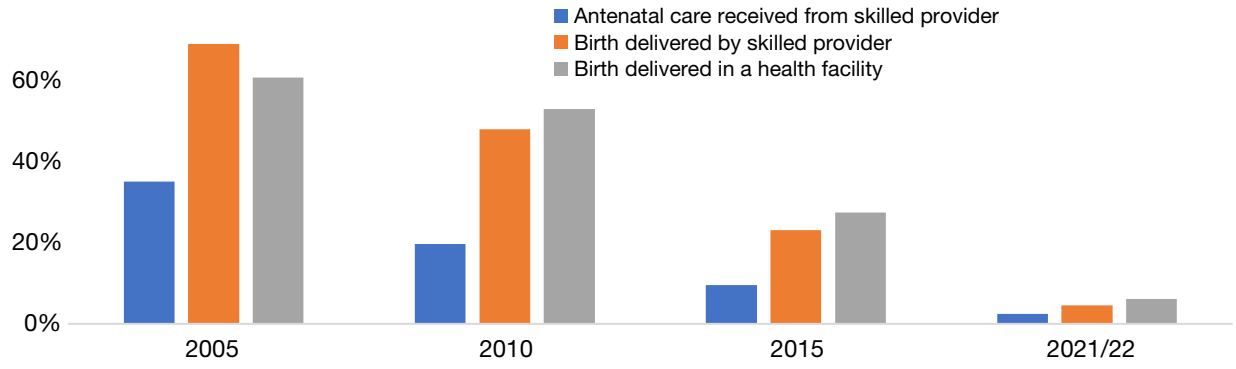


Source: *World Bank Development Indicators (2022)*

Life expectancy has steadily improved over the last two decades and reached relatively a high level compared to peers with similar incomes (Figure 3.3 and Figure 3.4). However, access to quality health care remains constrained, particularly for the poor and vulnerable groups, and this has deteriorated further due to COVID-19. Vaccination coverage (for all basic antigens) in 2021 ranged from

58 Cambodia Demographic and Health Survey (CDHS) 2021-22 Key Indicators Report, June 2022.

Figure 3.2. Access to maternal health services, gap between poorest and richest (2005-2021/22)



Sources: *CDHS (2005-2021/22) and World Bank staff estimates*

Note: *CDHS=Cambodia Demographic and Health Survey*

Skilled provider includes doctor, nurse, and midwife.

Data on antenatal care received from the skilled provider was not yet available in CDHS 2020 (selected indicators)

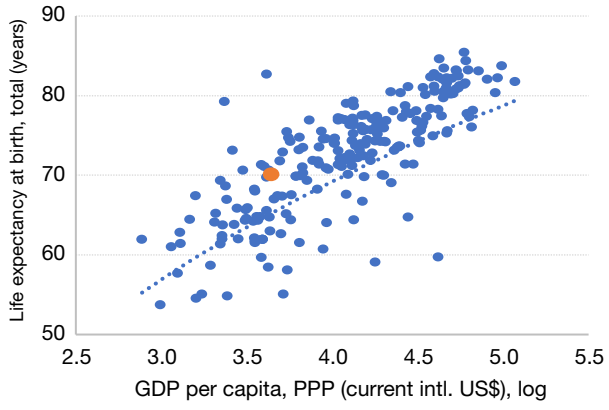
Gap=utilization rate of poorest -utilization rate of richest. The higher the figure means the wider the gap is.

65.6 percent among the poorest quintile to 79.6 percent among the highest, and similar comparisons are found for other key services such as treatment for childhood respiratory and diarrheal illnesses[59]. Communicable diseases combined with maternal, perinatal and nutritional deaths accounted for 26 percent of all deaths in the country in 2016.[60]

The low levels of qualified health professionals impact population health outcomes (Figure 3.5).

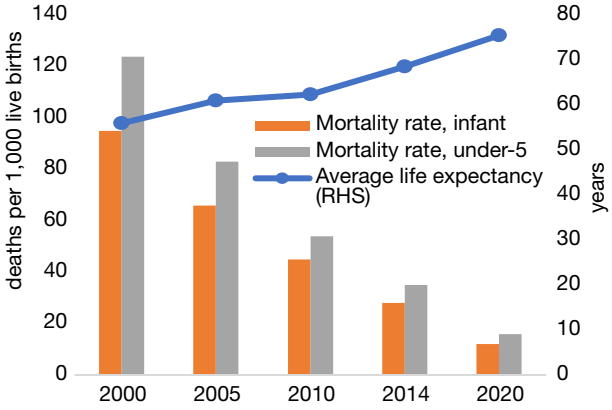
Cambodia lags behind other ASEAN countries in the number of qualified medical doctors per 10,000 population. In 2021, Cambodia had the lowest number of doctors per 10,000 population, four times lower than Vietnam and almost five times lower than Thailand. Cambodia has comparable rates for nurses and midwives per 10,000 population, with Lao PDR, Myanmar, and Vietnam but this remains much lower than other ASEAN countries.

Figure 3.3. Life expectancy relative to income (2020)



Source: *World Bank Development Indicators (2022)*

Figure 3.4. Cambodia improved life expectancy and mortality rates for both infants and children under-5



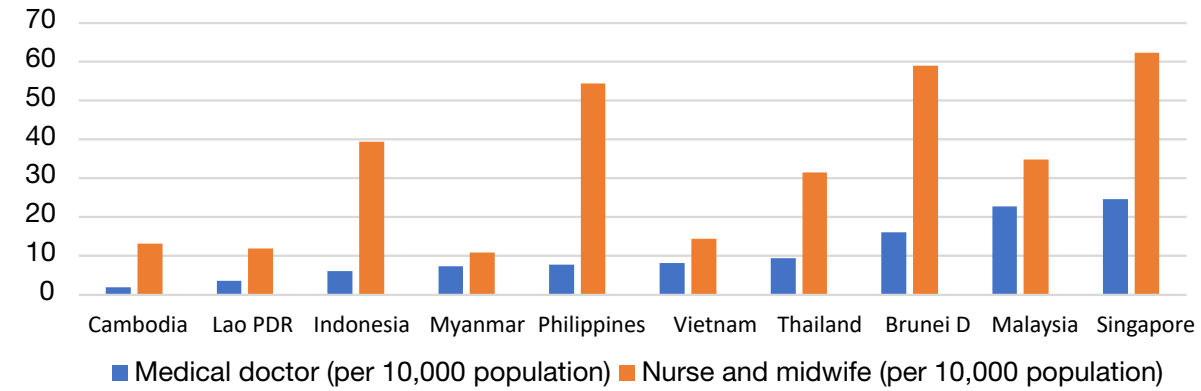
Sources: *CDHS and Cambodia population census*

Note: *RHS = Right-hand scale*

59 CDHS 2021-2022

60 World Health Organization (2018). Noncommunicable diseases country profiles 2018. World Health Organization. https://apps.who.int/iris/handle/10665/274512. License: CC BY-NC-SA 3.0 IGO

Figure 3.5. Density of doctors, nurses, and midwives in ASEAN countries



Sources: *MOH, WHO Global Health Observatory data depository (2022), and World Bank staff estimates*

Note: *MOH=Ministry of Health; WHO=World Health Organization*

Cambodia's medical doctor per 10,000 population and nurse and midwife per 10,000 population were compiled from MOH data taken from the 2021 annual report.

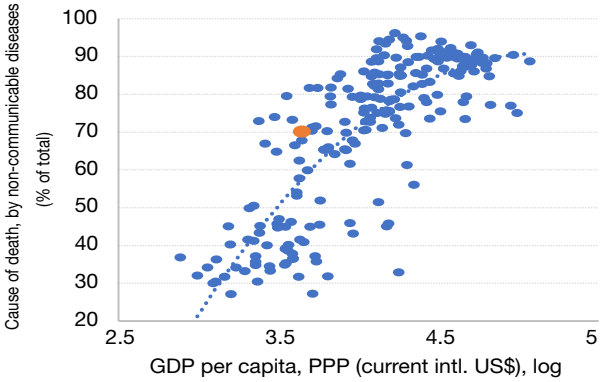
Deaths from non-communicable diseases are on the rise (Figure 3.6 and Figure 3.7). In many countries, as the socio-economic status improves, there is also an increase in non-communicable diseases due to lifestyle and environmental changes. Cambodia is no exception, with the pace of transformation presenting a challenge for the health system. However, the challenges associated with traditional infectious diseases and MCH problems continue to be significant, generating the "dual burden of disease" (Figure 3.7) that Cambodia will continue to experience in the near future (HFSA, 2020).

3.2.2. Health sector strategies and social health protection schemes.

The government implemented several policy initiatives aimed at expanding access to health services in the 1990s. Building on the experiences in the 1990s, a Sector-Wide Management (SwiM) approach was introduced in 2000 and mobilized

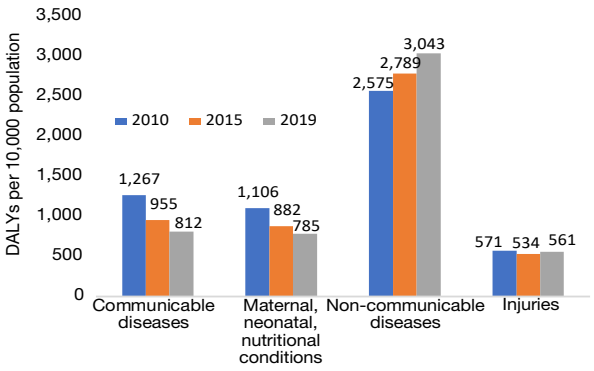
Figure 3.6. Deaths from non-communicable diseases are relatively high and on the rise

a. Cause of death, by non-communicable diseases (2019)



Source: *World Bank Development Indicators (2022)*

b. Cause of deaths (2010-2019)

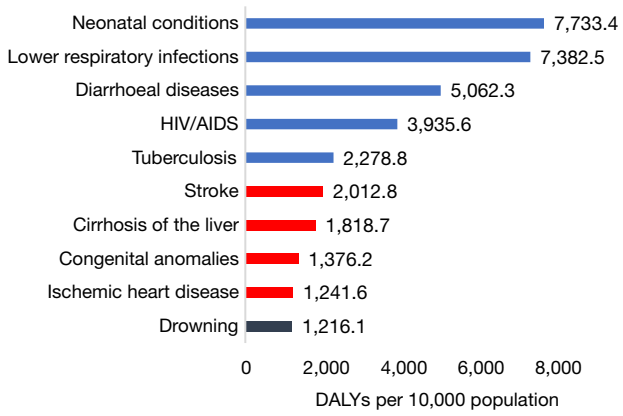


Source: *Global Burden of Disease Study (2019)*

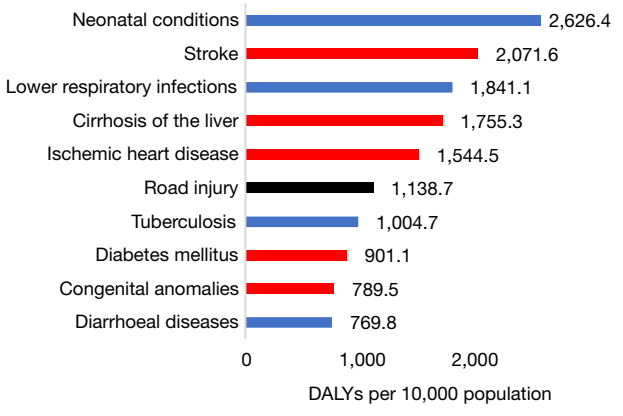
Note: *DALYs estimates the potential years lost due to premature death and includes equivalent years of healthy life lost due to poor health or disability; combines mortality and morbidity into one metric.*

Figure 3.7. Total burden of disease in Cambodia in DALYs Rate 2000 and 2019

a. Top ten cause of DALYs (2000)



b. Top ten cause of DALYs (2019)



Source: *Global Burden of Disease Study (2019)*

resources from the government and development partners (DPs) to address priority areas in the sector. In 1997, user fees for health services were introduced at public health facilities. The current guideline for the use of revenue from user fees notes that 60 percent of the revenues are allocated for incentives for health facility's staff, 39 percent for facility operating costs, and 1 percent going to the National Treasury. The Health Equity Fund (HEF) (Box 3.2) was introduced in 2000 to increase access to health services and financial health protection for the poor. By 2015, it covered all public health facilities in the country. The Health Strategic Plan (HSP) 2023-2030 prioritizes (i) improving the health of the general population, (ii) strengthening resilience and modernizing the health system, and (iii) strengthening governance and regulatory mechanisms.

While out-of-pocket spending remains high, Cambodia has taken important steps to expand social health protection (SHP) schemes (Table 3.1). Government programs to improve financial

Table 3.1. Enrollment in different social health protection schemes

Scheme	Year Est.	Contributory	Coverage (August 2023)
NSSF health insurance for private sector formal workers	2017	Yes	1,412,714
NSSF voluntary health insurance for self-employed	2023	Yes	40,000*
NSSF health insurance for public sector employees	2018	Yes	439,243
Health Equity Fund	2012	No	3,214,920*
Health Equity Fund for at-risk households	2023	No	1,096,000**
HEF extension for informal workers and special beneficiary categories	2018	Yes	96,259

Source: *Government data and authors' analysis*

**Approximate number as of September 2023*

*** Planned HEF expansion to "at-risk" households: approximately 311,000 "at-risk" households (1,096,000 individuals) were identified in late 2022 through targeting measures for Cash Transfer programs (Floods, High Inflation, and Newly Identified and will likely be enrolled in HEF in the near future.*

protection for health, such as the Health Equity Fund (HEF) and the National Social Security Fund (NSSF), have shown notable growth in recent years. As of end of 2022, SHP schemes in Cambodia covered around 38.7 percent of total population. The NSSF provides coverage for formal private and public sector employees. As of 2022, a total number of 3,023,949 people are covered under the NSSF schemes. In August 2023, the government introduced a health insurance scheme on a voluntary basis for dependents of NSSF members and self-employed. The government is looking to extend NSSF health insurance to certain uncovered population groups, such as farmers, university students, TVET trainees and migrants, etc., while the HEF covers health care costs for the poorest quintile of the country, with a coverage of approximately three million people with IDPoor. By 2022, HEF covered a total of 3,214,920 people. The government is extending HEF to at-risk households/near poor[61] of 1,834,801 in September 2023, bringing HEF coverage to 5 million people or 31 percent of the population (Table 3.2). While approximately a third of the Cambodian population is covered by a Social Health Insurance Program (SHP) program, health expenditures through such programs account for only 3 percent of total health expenditure.

HEF has been vital to improving access to health care and financial protection for the poor (Box 3.2). However, expanding the scheme's coverage to new groups (such as the near poor or children under two) will require additional resources. HEF-supported outpatient cases numbered 2,811,981 in 2021, with inpatient utilization reaching 206,817 cases in 2021, a 13 percent increase from 183,795 cases in 2018. However, expanding the scheme will demand resources. For example, the estimated cost (using HEF payment rate) for expanding HEF to cover all targeted beneficiaries (approximately 3.5 million people) between 2020 and 2025 is estimated at around US$66.4 million. The cost is projected to increase to US$87.9 million when applying the same payment rates as NSSF.[62]

Table 3.2. Access to social health protection

CSES Year	None	HEF	NSSF	Other	Total
2009*	Above 93.2%	-	-	-	-
2014 **	89.5%	9.4%	-	1.1%	100%
2019/20	75.2%	9.6%	14.6%	0.7%	100%
2023***	43.0%	31%	25.0%	1.0%	100%

Source: *Analysis of financial protection in Cambodia's health system using Cambodia Socioeconomic Survey data: 2009 – 2021. Phnom Penh: General Secretariat for the National Social Protection Council, Ministry of Economy and Finance Cambodia, and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH; 2023.*

**2009 CSES data does not unambiguously identify all the households that have access to some form of social health protection, but from the data, at least 93.2 percent of the population does not have access to social health protection (whether from a public initiative, community health insurance or private health insurance). Access to SHP is not included in the analysis of financial protection for CSES 2009.*

*** NSSF's health insurance commenced in 2016, there is no data for households with access to NSSF in the 2009 and 2014 datasets.*

*** 2023 access to social health protection is projected based on data from NSPC. HEF coverage is projected to reach 5 million (31 percent of population. NSFF health insurance coverage is projected to reach 4 million, an increase of 1 million.*

61 At risk households are those who are near-poor having at least one of vulnerabilities: either low level of per capita consumption as proxie by IDPoor, or household with at least one of the following health vulnerabilities: elderly, children under 2 years olds, all members under 18 years olds, or female single head of households.

62 Kolesar et al. Advancing Universal Health Coverage in in Cambodia, 2021.

The benefit package also needs to be revisited to address the evolving burden of disease and ensure service providers have sufficient resources to provide appropriate care. For example, the current HEF reimbursement rate for diabetes (KHR 4,000) would need to increase at least eightfold to cover the costs of supplying one month of medicine for diabetes patients (estimated at KHR 30,000) (Table 3.3). Due to the current reimbursement rate and resource constraints at the health facilities, HEF patients, who already face financial constraints to cover transportation costs, are often requested to return to facilities on a weekly basis to receive their treatment.

Cambodia has committed to advancing universal health coverage (UHC) which requires expanding population coverage under its social health protection schemes. The government has launched a process titled the "UHC Roadmap" that aims to improve social health protection and move towards universal health coverage in the country, which is expected to be approved in 2023. Envisioned intervention measures include (i) Expanding population coverage from existing schemes (NSSF & HEF); (ii) Improving service coverage through strengthening licensure, implementing accreditation systems, and practicing strategic purchasing; and (iii) Improving financial coverage through channeling out of pocket spending into coverage mechanisms.

The challenge for integrating all existing social protection schemes includes (i) establishing an administration and governance body to oversee a

Box 3.2. Health Equity Fund

HEF is a key health financing scheme introduced by the government in 2000, aimed to increase health financial protection for the poor. HEF purchases health care for the poor from public health facilities using a performance-based payment mechanism. Payment for HEF user fees is made directly by MOH to public health facilities. HEF covers all health facilities across the country. In 2021, HEF costs reached US$ 18.81 million, of which 68 percent was covered by MOH's budget.[63] HEF covered two beneficiary groups: (i) ID Poor pre-identified by the Ministry of Planning and (ii) Priority Access Card for a beneficiary group that do not have ID Poor cards but are post identified as poor eligible for as a HEF beneficiary. HEF covers 100 percent user fees for in-patient and out-patient care. The table below describes the services covered by HEF at health facility level.

	National hospitals &CPA1-3 hospitals		District hospitals		Health centers
	IPD	OPD	IPD	OPD	OPD
User fees	Yes	Yes	Yes	Yes	Yes
Transport reimbursement	Yes	Yes	Delivery of baby, attempted delivery, and post abortion care only	No	Delivery of baby, attempted delivery, and post abortion care only
Care taker food support	Yes	No	Delivery of baby, attempted delivery only	No	No
Funeral support	Yes	Yes	No	No	No

Source: *WB, Impact Evaluation of Service Delivery Grants to Quality of Health Care Delivery in Cambodia (2022)*

Note: *HEF=Health Equity Fund; IPD=Inpatient Department; OPD=Outpatient Department; Yes= services covered; No=services not covered.*

63 2021 MOH annual performance report

Table 3.3. Comparison of benefit packages and payment rate of HEF and NSSF

Description of benefit packages	HEF	NSSF
Health benefits	• For ID Poor, the benefits include outpatient and inpatient service fees, transport fees, and funeral contribution. • For informal workers, the health benefits cover only outpatient and inpatient service fees. • Services not covered by HEF: (i) cancer treatment by chemical stance, radioactive, and hormone (ii) organ transplantation (iv) beauty surgery (v) acupuncture, (vi) infertility treatment.	• In-patient and out-patient services, emergency services, medical assistant services, delivery pre-natal and post-natal care, rehabilitation services, transport of corpse.
Payment rates of selected services (KHR)	• General consultation: KHR 4,000 • Long-term birth control: KHR 20,000 • Inpatient treatments at CPA1: KHR 80,000 • Birth delivery, abortion/ miscarriage at CPA 1: KHR 80,000	• General consultation: KHR 6,000 • Long-term birth control: KHR 30,000 • Inpatient treatments at CPA1: KHR 100,000 • Birth delivery, abortion/ miscarriage at CPA 1: KHR 100,000

Source: *MOH and NSSF*

Note: *MOH=Ministry of Health; HEF= Health Equity Fund; NSSF=National Social Security Fund; KHR=Khmer Riel, CPA= Complementary package of activities*

unified health protection scheme, (ii) harmonizing health benefits packages of all health protection schemes; the benefits package and payment rates are different between HEF and NSSF (Table 3.3), and (iii) ensuring government sufficient budget to finance health care under the unified health scheme.

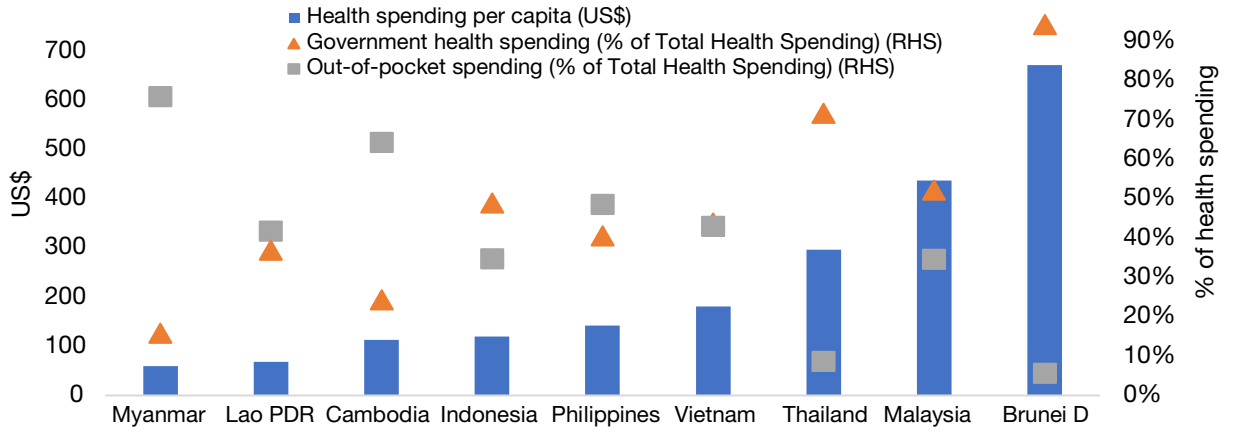
3.2.3. Highlighted health sector challenges

Despite notable improvements in some health outcomes, Cambodia's health system continues to face a number of challenges. First, the system is characterized by high out-of-pocket (OOP) payments due to low levels of public financing and a propensity for use of private sector healthcare providers. Second, inequities in healthcare outcomes still occur between rural and urban areas despite the narrowing in income differentials. Third, access and utilization rates for public health facilities, and the quality of those facilities, remains low. Overall, these challenges can be characterized by both demand and supply constraints which include financial resources, limited physical access to health facilities, inadequate pool of trained healthcare workers, and availability of medical equipment and medicine.

Challenge #1: High out-of-pocket expenditure

Cambodia's out-of-pocket spending is high compared to other ASEAN countries. In 2019, Cambodia's out-of-pocket spending as a percentage of total health spending was the second highest in ASEAN countries with Myanmar the highest. Globally, Cambodia ranks the 15th highest in the world. Out-of-pocket spending accounted for 64.4 percent of total health expenditures in Cambodia, in contrast with 8.7 percent in Thailand, 43 percent in Vietnam, 41.8 percent in Lao PDR, and 40 percent across other lower-middle income countries (Figure 3.8).

Figure 3.8. Cambodia's health spending and out-of-pocket expenditures as compared to other ASEAN countries (2019)



Sources: *WHO, Global Health Expenditure Database (2022)*

Note: *RHS= Right-hand scale; US$=United States Dollar*

Health spending per capita in Singapore accounted for US$ 2,633; government health spending as a share of Total Health Spending and Out-of-Pocket spending as a share of Total Health Spending represented 50.2 percent and 30.2 percent, respectively.

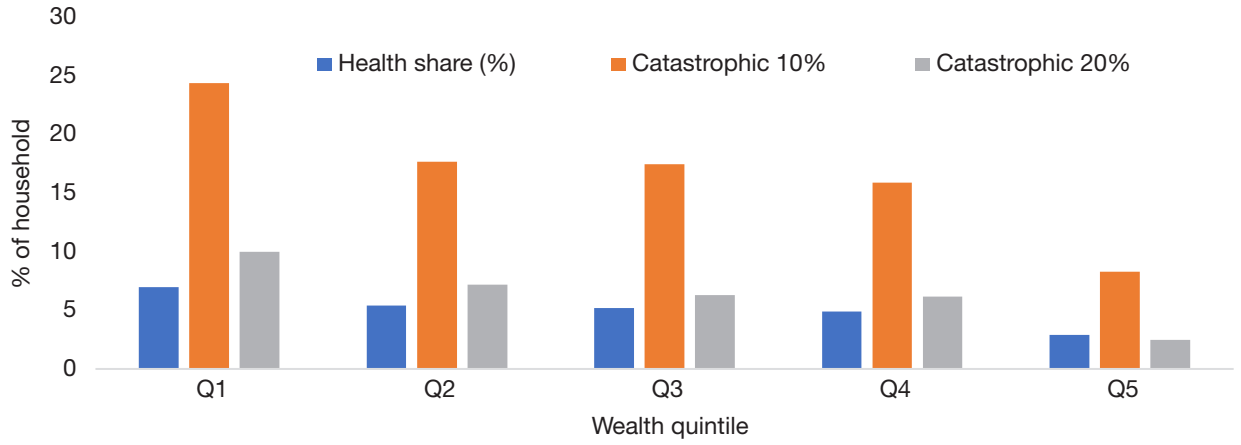
High out-of-pocket spending means the poor are more vulnerable to income shocks and are less likely to have access to health services. In 2013 the highest quintile of income (richest) spent 16 times more on healthcare than the lowest quintile (poorest), being more able to afford to pay for healthcare services owing to larger disposable non-food income.[64] Achieving universal health coverage will necessitate larger public resources (government and/or development partners funded) to expand health coverage to the poorer segments of the population. Most of OOP health expenditures in Cambodia are spent at the private health care providers.

The incidence of financial hardship is high in Cambodia, and concentrated towards the poorest, threatening progress towards achieving UHC and towards faster progress in poverty reduction. Two types of indicators are typically used to measure financial hardship due to large health spending: i) the incidence of catastrophic payments, or the share of the population spending more than a given share of their budget (10 percent or 20 percent) on health OOP, and ii) the rate of impoverishment due to OOP, or the share of the population pushed below, or further below the poverty line, because of health OOP. In Cambodia, close to 17 percent of the population spends 10 percent or more of their budget on health, and this includes over 6 percent spending 25 percent or more of their budget on health OOP. The incidence of catastrophic health payments is typically higher for the poorest households (24 percent for the first quintile against 8 percent for the richest 20 percent) (Figure 3.9).

Turning now to the effect of health expenditure on poverty, OOP contributes to pushing, on average, 4 percent of the population under the US$5.5 poverty line, and another 15 percent of the population already in poverty are pushed further below the poverty line. While catastrophic and impoverishing health expenditure capture two different dimensions of financial hardship, some households are exposed to both dimensions of financial hardship, especially among the poorest 20 percent of the population. One dimension through which we see important variations in the incidence and in the composition of financial hardship is the household demographic structure. Indeed, households with elderly members, especially

64 WHO, The Kingdom of Cambodia Health System Review (2015)

Figure 3.9. Expenditure on health and catastrophic health spending, by quintile (2019)



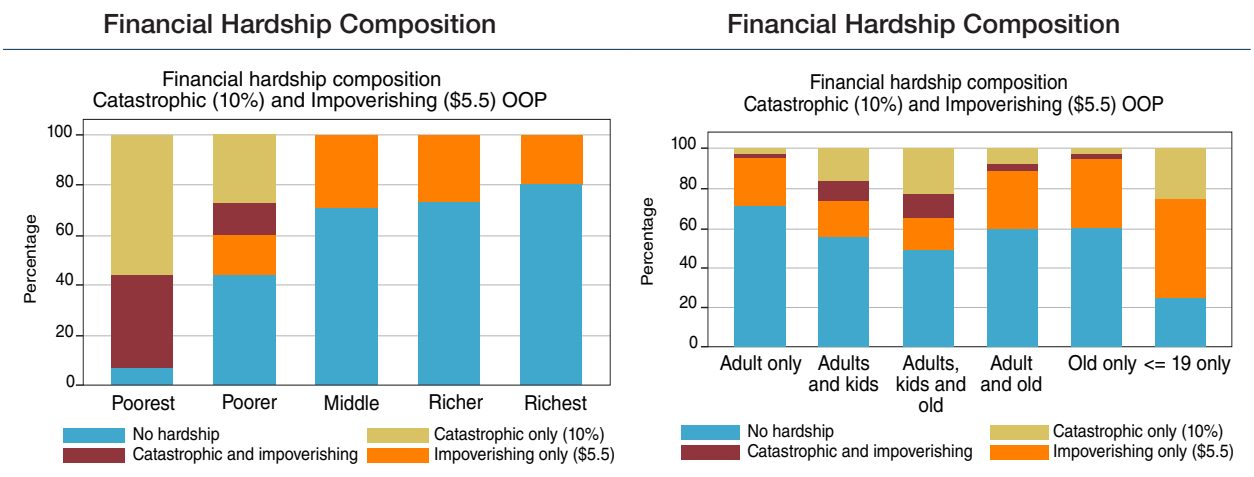
Sources: *CSES (2019); Authors' analysis*

Note: *Health share (percent) means out of pocket expenditure on health as a share of total expenditure; Catastrophic 10 percent means catastrophic health occurs when a household's out-of-pocket spending equal or exceed 10 percent of household's total consumption; Catastrophic 20 percent means catastrophic health occurs when a household's out-of-pocket spending equal or exceed 20 percent of total household consumption. Wealth quintiles are ranked from Q1 (poor) to Q5 (wealthy), based on ranges of mean household income and grouped into five categories with each quintile assigned to approximately 20 percent of the population.*

multigenerational households, are particularly exposed to financial hardship in Cambodia. The share of out-of-pocket spending of total consumption is highest amongst the poorest (7 percent). Catastrophic health expenditures were found to be relatively high at 16.8 percent at the 10 percent threshold and 6.5 percent at 20 percent threshold for the total sample, and even higher amongst the poorest quintile, with 24.4 percent at the 10 percent and 10 percent of respondents at 20 percent of total spending. In other words, in Cambodia, close to 17 percent of the population spends 10 percent or more of their budget on health (Figure 3.10).

Enrollment in existing social health protection schemes was found to have a limited impact on financial protection (Figure 3.11). The CSES 2019 also highlighted the level of coverage by insurance schemes across socio-economic quintiles. While the prevalence of ID Poor cards was higher in the poorer quintiles and use of NSSF card is higher in wealthier quintiles (Figure 3.12), the existence of ID Poor cards in the third and fourth quintiles was still notable (ranging from 5-10 percent of respondents) perhaps due to targeting issues of the ID Poor scheme. A comparison of reported health care needs, and out-of-pocket spending across ID Poor beneficiaries, and the general population (non-ID Poor), shows

Figure 3.10. Financial hardship composition, by quintile (left); by family structure (right)



Source: *CSES (2019)*

Source: *CSES (2019)*

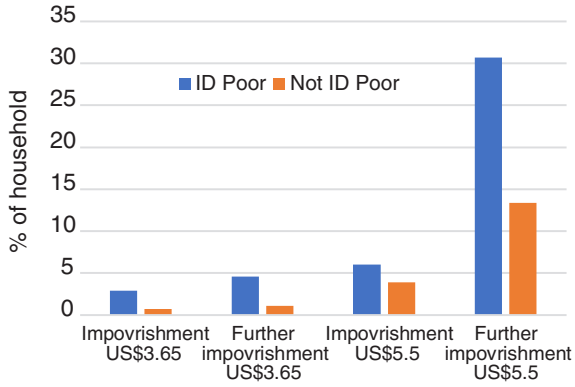
that while the reported use of health care was higher among ID Poor cardholders, the rate of out-of-pocket spending was the same for the two groups (around 64 percent of cases).

The ID Poor cards seem not to provide much financial protection, with similar prevalence of catastrophic spending across the ID Poor and non-ID Poor respondents. Among ID Poor card holders, 18 percent of respondents spent more than 10 percent of total consumption on health care while 16.6 percent did among non-ID Poor. At the 20 percent of spending threshold the distribution is similar with 8 percent of ID Poor card holders vs. 6.3 percent non-ID Poor. Finally, impoverishment rates remain high for ID Poor, but lower than Q1, with Q1 including almost 25 percent of ID Poor cardholders. Unfortunately, while HEF and NSSF schemes seem to have contributed to incentivizing service utilization among the covered population, the effectiveness of these schemes in providing protection from financial hardship due to health OOP seems limited.

Challenge #2: Inequity in health outcomes persist

Despite child mortality rates significantly declining over the last two decades the disparity in health outcomes across rural and urban areas and wealth quintiles remains a challenge. As noted in chapter 2, between 2005 and 2021, the rates of mortality for infants and children under-5 significantly declined in both urban and rural areas, however this decline was not equal. Rural areas continue to experience higher mortality rates for infants and children under five. Although there has been a decrease in mortality for infants and children under five, rates are still much higher among the poor. In 2021, infant mortality in the poorest quintile was 22 deaths per live 1,000 births compared to 6 per 1,000 in the richest quintile and mortality for children under 5 in the poorest quintile 21 per 1,000 live births comparted to 7 per 1,000 live births in the highest quintile.

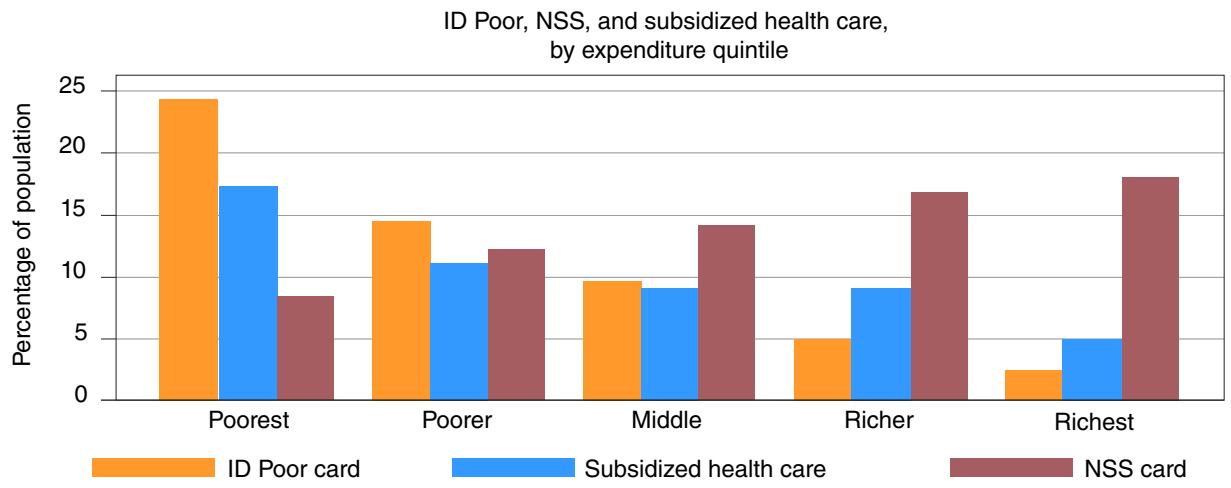
Figure 3.11. Impoverishment from health expenditures, ID Poor card holders and non-ID Poor holders (2019)



Sources: *CSES (2019); Authors' analysis*

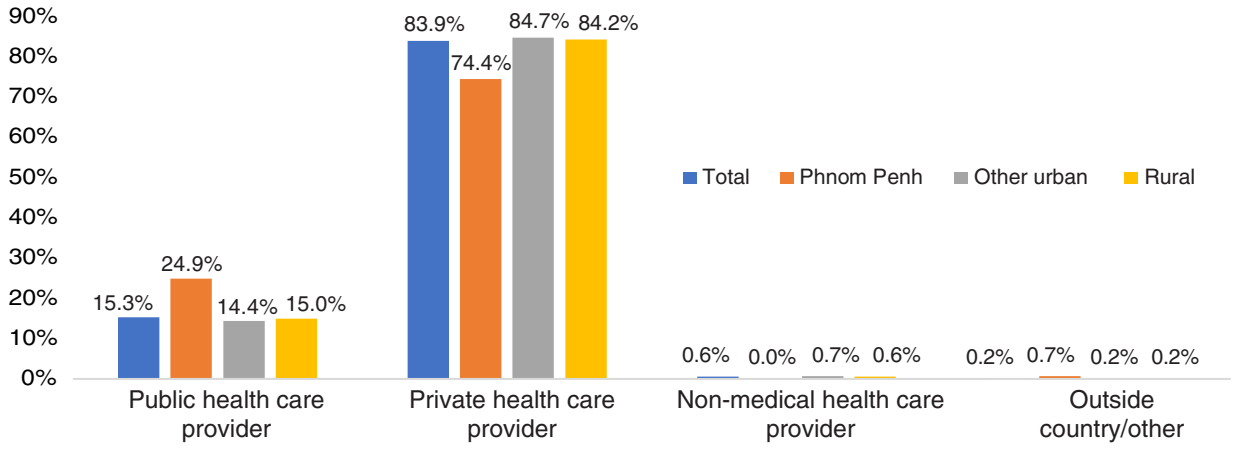
Note: *the share of households who are impoverished or further impoverished after out-of-pocket payments measured using a relative poverty line reflecting basic needs (food, housing, utilities). Analysis was conducted at the US$3.65/day and US$5.50/day poverty lines*

Figure 3.12. Existence of insurance cards by income quintile



Sources: *CSES (2019); Authors' analysis*

Figure 3.13. Percent distribution of household members who were ill or injured in the past 30 days and sought health care for the first treatment, by place of treatment, by urban and rural residents (2021)



Source: *CSES (2021)*

Note: *Public care includes national hospital, provincial hospital, district hospital, health center, health post, provincial or community based rehabilitation center, and other public service. Private care includes private hospital, private clinic, Private pharmacy, visit to home/office of trained health worker/nurses, visit to trained helath worker/nurses, other private medical service, shop selling drugs/ market. Non-medical health care includes Kru Khmer/magician, monk/religious leader, traditional birth attendant.*

Challenge #3: Limited utilization rate of public health facilities and challenges in quality of care

Utilization of health care services provided by public health facilities is still low. There is a preference to use private sector facilities[65] in both urban and rural areas, ranging from 74.4 percent in Phnom Penh to 84.2 percent in rural parts of the country, with around 25 percent of care seekers going to the public sector in Phnom Penh, 14.4 percent in other urban areas and 15 percent in rural areas (Figure 3.13).[66] Key factors that contribute to the limited utilization of public health services are described below.

Patients have limited physical access to health facilities. The distribution of health facilities may not always reflect the distribution and needs of the population. This can include the lack of specialist services in many areas, such as mental health or oncology, and physical access to services due to transportation costs. On average, the distance from a household to public health facilities is estimated at around 3.2 km, with one-way transport costs approximately KHR 3,614 (US$0.9); a relatively high and potentially prohibitive cost for poorer and rural communities.[67]

There is a low density of trained health workforce in rural areas. In 2022, on average there were 7.4 staff allocated per health center,[68] close to MOH guidelines of 8 to 11 staff per health center. However, according to the government's reports, 63 percent of health centers in rural areas and 35 percent of health centers in urban areas are understaffed. The geographical distribution of doctors across provinces is more heavily weighted in urban rather than rural areas, and with most doctors working in tertiary settings. There is a very low number of doctors working in health centers. While the national average ratio of doctors per health center is 1 to 5, the ratio is 1 to 6 for rural centers and 1 to 1 in urban areas (Figure

65 Private sector facilities include private health care provider and pharmacies. List of private health care providers and pharmacies is shown in Table A.3.2

66 CSES 2020

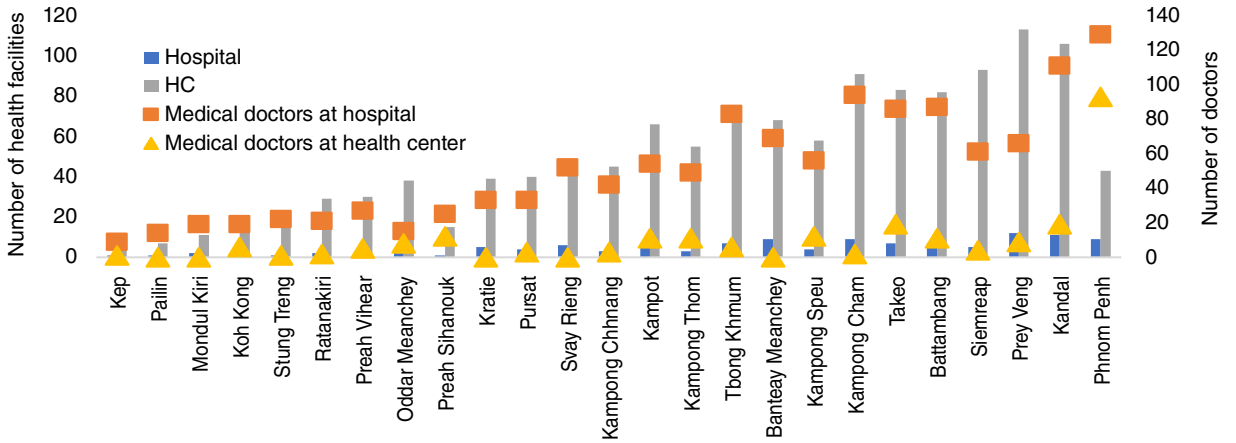
67 WB, Impact evaluation of service delivery grants to improve quality of health care delivery in Cambodia (2022)

68 In 2022, total staff at health center accounted for 9,483 while the number of health center reached 1,269.

3.14).[69] When health professionals are available, they may not possess adequate training or skills for different health needs. For example, there remain a limited number of public sector facilities offering screening and treatment for NCDs such as diabetes and hypertension (approximately 20 percent), largely due to gaps in training needs for health workers. In addition, some households in rural areas seek care from untrained/non-medical providers (8.6 percent of rural households versus 0.3 in Phnom Penh and 6.5 percent in other urban areas).[70] Private providers have similarly low competencies with only 54 percent of private providers having formal health training.[71] There have been multiple efforts by the government to improve the quality of pre-service training and education which aims to improve the quality of health professionals in Cambodia. Patient satisfaction has been reported to be higher in the private sector, with private healthcare providers providing better communication and more consistent healthcare services for patients.[72]

Basic medical equipment and essential medicines are not always available. There is a lack of routine data collected on the adequacy and quality of consumables and commodities that are essential to health service delivery, such as medical equipment and medicines. However, a survey of health workers found that less than half (41.9 percent in 2019) were satisfied with the availability of drugs at the facilities.[73] However, 71 percent of surveyed health workers showed strong satisfaction with the quality of drugs when they were available at the facilities. Issues of availability of medicines in public facilities contributes to high levels of out-of-pocket spending (81.4 percent of surveyed households in 2019) continue to bear out-of-pocket expenses on health care, with the key driver of costs being medicines. On average, households spent approximately KHR 33,436 (US$8.2) on medicines for a two-week treatment.[74] A similarly low rate of satisfaction was found around the availability of medical equipment, with only 47.7 percent of surveyed health workers expressing satisfaction with the condition and availability of health equipment at health care facilities.[75] This is compounded by a lack of medical equipment maintenance sites; and a limited capacity of health facilities to undertake

Figure 3.14. Health facilities and doctors at facilities by province (2022)



Sources: *MOH (2022) and World Bank staff estimates*

Note: *HC = Health Center*

69 MOH guideline suggests an allocation of at least one physician and one physician assistant per health center.

70 Cambodia Socio-Economic Survey 2019/2020

71 Cambodia Health Financing System (September 2020)

72 World Bank, Cambodia's Rural Health Markets Study and Quality of Care Study (2013)

73 World Bank, Impact Evaluation of Services Delivery Grants to Improve Quality of Health Care Delivery in Cambodia (2022)

74 Ibid.

75 Ibid.

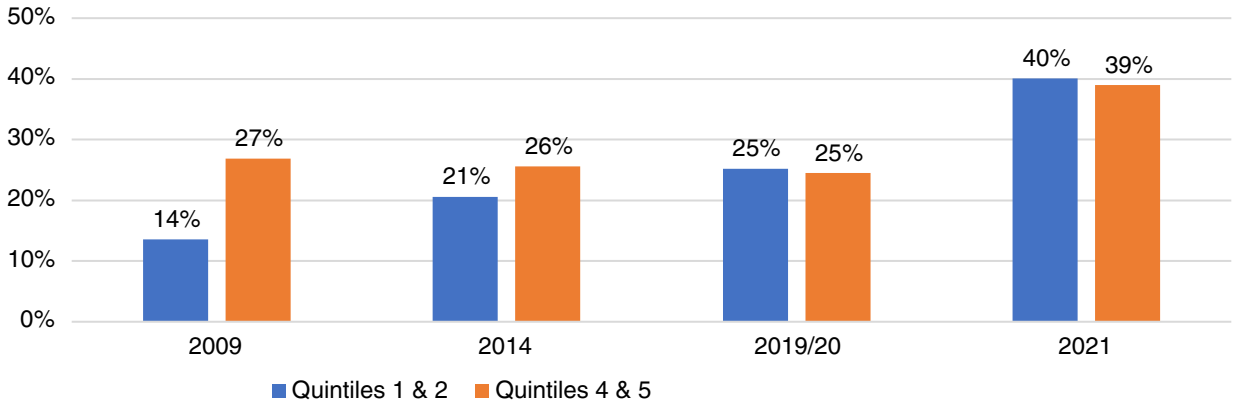
maintenance. The lack of maintenance at provincial hospitals means that without repair many of the donated medical equipment items are left unused.

The corollary of supply-side constraints is an adverse impact on the quality of health care provision. Between 2016 and 2019, health workers' advice for women to undertake laboratory standard tests during pregnancy, showed no improvement in a protocol-based vignette assessment. For instance, a low percentage of surveyed health workers recommended standard laboratory tests, such as HCG pregnancy tests (31 percent in 2019), Hgb hemoglobin tests (23 percent in 2019), urine tests for gestational diabetes (38.9 percent in 2019), tests for platelet counts (6.1 percent in 2019).[76] Only one in three patients is estimated to have been diagnosed correctly, using five basic vignettes tools, and only 82 percent of the correctly diagnosed cases were correctly prescribed medical treatment.

Cambodia's private health sector continues to grow rapidly and the propensity to use private providers, even among insurance enrollees, remains high. The use of private health care providers is of particular concern for financial protection. This is because private services are paid through OOP on a fee-for-service basis and for the most part do not participate in the existing social health protection schemes (HEF and NSSF). This creates provider incentives for over-servicing. Consequently, the use of private health providers is often associated with higher levels of OOP. While HEF enrollees are entitled to receive free care in public health facilities, currently private providers are excluded from the program's benefit package. On the other hand, NSSF beneficiaries are entitled to the use of public health facilities and a selection of over 120 private health facilities. The use of private pharmacies has grown dramatically over the past decade, particularly among poorer households, where use increased from 14 percent in 2009 to 40 percent in 2021, surpassing wealthier households of which only 39 percent used private pharmacies in 2021 (Figure 3.15).

Implementation of the HEF and NSSF health insurance schemes should have the effect of increasing the utilization of public health facilities for their target populations. Increased use of private health services is likely to result in an increase in OOP and less financial protection, even in the face of financial protection mechanisms that have been introduced. Figure 3.16 below shows the proportion of the population that used different types of health services for the years under assessment. Based on the results, there was an initial increase in the use of public health facilities from 2009 to 2014.

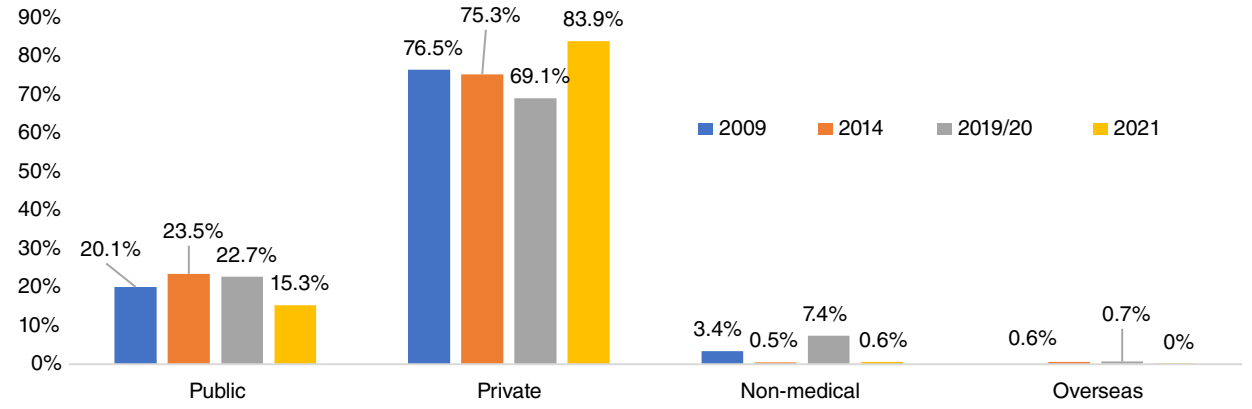
Figure 3.15. Use of private pharmacies for wealthier and poorer quintiles



Sources: *Analysis of financial protection in Cambodia's health system using Cambodia Socioeconomic Survey data: 2009 – 2021. Phnom Penh: General Secretariat for the National Social Protection Council, Ministry of Economy and Finance Cambodia, and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH; 2023.*

76 World Bank, Impact Evaluation of Service delivery grants to improve quality of health care delivery in Cambodia (April 2022)

Figure 3.16. Type of health care provider consulted first



Sources: *CSES (2009-2021)*

Note: *Public care includes national hospital, provincial hospital, district hospital, health center, health post, provincial or community-based rehabilitation center, and other public service. Private care includes private hospital, private clinic, Private pharmacy, visit to home/office of trained health worker/nurses, visit to trained health worker/nurses, other private medical service, shop selling drugs/ market. Non-medical health care includes Kru Khmer/magician, monk/religious leader, traditional birth attendant.*

Thereafter, the proportion of those that first sought health care in the public sector declined, followed by a clear trend of increasing use of private health care providers as the first point of contact in the health system for all income groups. Even those from households with access to HEF and NSSF, between 2009 and 2021, there was a reduction in the likelihood of seeking care from a public healthcare provider. This is contrary to expectations given that the HEF (and to some degree, the NSSF), should promote and increase the use of public health facilities.

3.3. Health sector financing

3.3.1. Total health sector spending

Cambodia is striving to achieve UHC target and improve its health service delivery. Both additional budget allocation and spending efficiency are required for a number of reasons. First, Cambodia relied heavily on OOP spending to finance health care. OOP accounted for around 60 percent of Total Health Expenditure (THE) while countries of similar development level have an average OOP spending of around 30 percent. Second, government spending on health per capita and as a share of total government spending remains relatively low. Albeit slightly fluctuated, government spending on health as share of total government spending over the last decades was around 6 percent and remained stagnant. Against the backdrop of low government expenditure and high OOP spending, Cambodia relied on DPs to finance its health care need. However, DP funding was on the decline. Third, Cambodia's health system is facing challenges to finance dual diseases burden-communicable diseases and non-communicable diseases. Addressing all these needs will require an expansion of funding. Despite some improvements in SHP, only approximately a third of population is covered by SHI. However, the social health protection schemes seemed have no impact on reducing OOP spending since most of OOP are spent on private health care providers. Improving spending efficiency is vital for improved service delivery. There is a need to improve resource allocation, both budget and human resources. Efficiency of health facility operations and social health protection schemes need to be strengthened.

Cambodia's spending on health care as a share of total government spending is relatively low. Despite being a priority sector, the government budget allocation on MOH as share of total government budget over the last five years slightly decreased from 8.6 percent in 2017 to 7 percent in 2020, before it picked up to 8.9 percent in 2021. Cambodia spent relatively low levels of government funds on health in both per capita terms and as a share of the government budget, both lower

than nearly all nations in the region. This means the remaining expenditure is financed by external financing and out-of-pocket spending.

The health system of Cambodia relies to an extent on external (development partners) funding, which is likely to decrease. Traditionally, financing from development partners for health has been allocated largely as earmarked funds for disease-specific national programs such as malaria control or the HIV/AIDS programs. However, under the Health Equity Improvement Project (H-EQIP), in 2021 development partners in Cambodia contributed 32 percent of the finances required to fund the HEF while the government funded the remaining 68 percent. Data from the 5-year Cambodia National Health Account 2012–16 indicates that development partners' funding for health is around US$200 million or 17 percent of current health expenditure (CHE). With the continuing growth of Cambodia's economy and maturation to middle-income status, it is expected that many development partners will reduce or withdraw their health sector funding support. Global health initiatives, such as the Global Fund or GAVI, the vaccine alliance, have already requested increased government co-financing.

Over the last decade, external funding for communicable diseases such as HIV/AIDS, tuberculosis, and malaria was 46 percent, representing the largest share of total external funding.[77] Programs for child and new born, reproductive and mental health took up the second largest share of external funding (32 percent). This was followed by health system strengthening (11 percent), other infectious diseases (2.4 percent), NCDs (1 percent), and 'other' at 10 percent of total external funding (Figure 3.17). Despite its importance for health sector financing, external funding has been on the decline. Between 2008 and 2018, external funding as a share of GDP dropped from 1 to 0.42 percent. Similarly, external funding as a share of the overall government health expenditure fell from 96.4 percent to 33 percent (Figure 3.18).

The spending on health system administration stood at 15 percent, nearly as high as the spending absorbed by national hospitals (16 percent) (Figure 3.19). Increasing resources are spent on both infectious and non-communicable diseases (Figure 3.20). Spending on non-communicable diseases has nearly doubled between 2013 and 2019, from US$18 to US$34 per capita. During the same

Figure 3.17. Share of total external funding by health focus area (2008-2018)

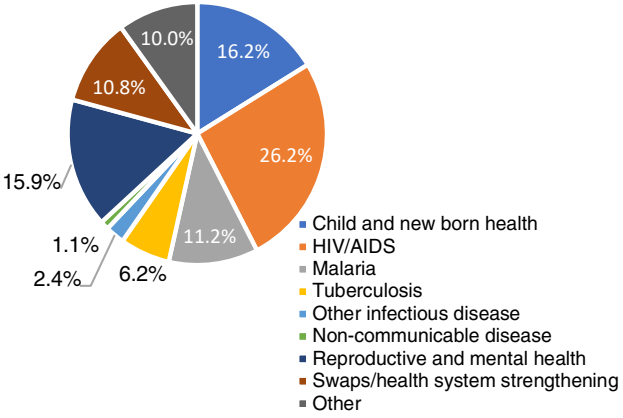
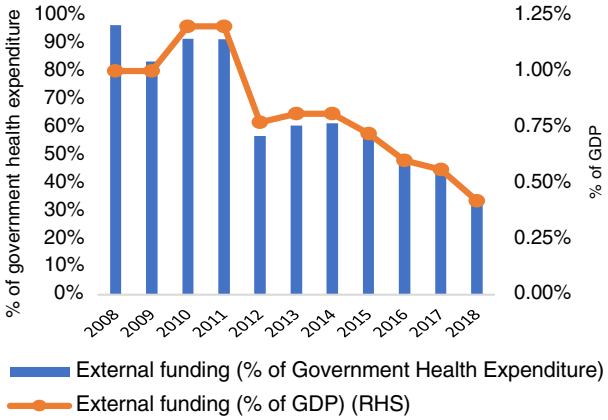


Figure 3.18. Total external funding percent of GDP and percent of government health expenditure (2008-2018)

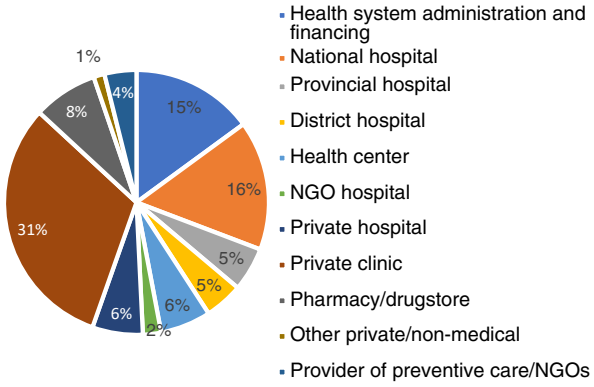


Sources: *IHME, Financing Global Health Database, (extracted January 9, 2023)*

Note: *Government health spending refers to healthcare that is derived from domestic sources. Government spending includes spending on public health system infrastructure and government-provided social health insurance.*

77 External funding for health forms part of total health expenditure; however, that external funding for health does not include expenditures on health infrastructure.

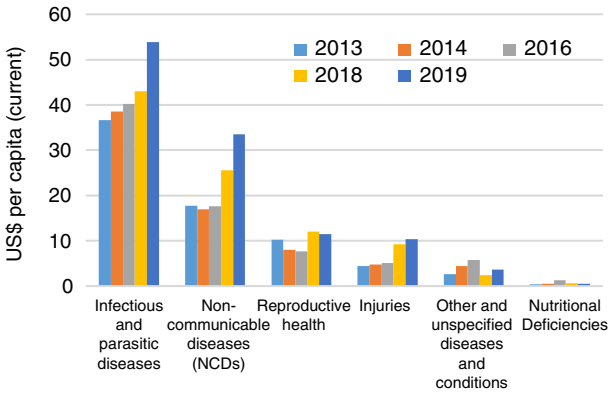
Figure 3.19. Largest share of total health expenditure was spent on private healthcare providers



Sources: *WHO, Global Health Expenditures (2022), National Health Account (2019), and World Bank staff estimates*

Note: *WHO= World Health Organization; NGO=Non-government Organization*

Figure 3.20. Current health expenditure by diseases and conditions, in current US$ per capita, 2013-2019



Source: *Global Burden of Disease Study (2019)*

period, spending on infectious diseases increased from US$37 to US$54 per capita. This is consistent with the "dual burden of disease", associated with the continued prevalence of infectious diseases and rise in non-communicable diseases resulting lifestyle and environmental changes as Cambodia climbs the income ladder.

3.3.2. Public health spending by the MOH

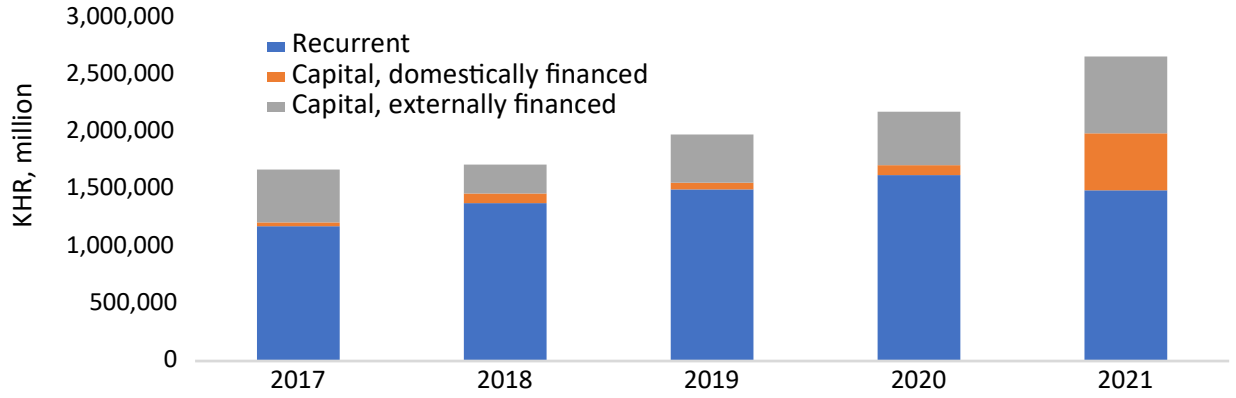
Data availability is a constraint to efficiency analysis. It is, for example, difficult to assess the extent to which externally financed projects are able to address the gaps in access to physical infrastructure. Data on domestic spending obscures, for example, through the design of program budgets, the degree to which public spending addresses supply-side, service quality, and equity challenges in the sector. However, preliminary analysis of available data suggests that while spending is pro-poor, it is not progressive and that resource allocation across provinces may not be addressing regional disparities.

Budget allocations to healthcare have increased in response to COVID-19, following decreases between 2017 and 2020. Prior to the COVID-19 outbreak, MOH budget allocations gradually decreased, from 8.6 percent in 2017 to 7 percent of the total government budget in 2020. In response to the pandemic, public resources allocated to MOH increased by 58 percent, from KHR 1,729,987 million (1.9 percent of GDP) in 2017 to KHR 2,724,907 million (2.5 percent of GDP) in 2021. The government allocated a higher budget to MOH in 2021 as part of its plan to respond to the COVID-19 pandemic.[78]

Health infrastructure is primarily financed by development partners. Spending by externally funded capital declined to the lowest level in the last five years at 15 percent of total MOH spending in 2018 and that consistently increased to reach 28 percent in 2021. DP-financed capital spending accounts for the dominant share of total capital spending. The MOH capital spending has represented a small share of the total MOH spending, except in 2021 when capital investment reached 18 percent of its spending. This spike is explained as part of the broader COVID-19 response. This increased capital spending was meant to cover health infrastructure as well as other expenses related to COVID-19

78 Significant health sector COVID spending was also conducted outside of MOH budget.

Figure 3.21. MOH spending, by category (KHR, million) (2017-2021)



Sources: *Budget Settlement Law (2017-2021); World Bank staff estimates*

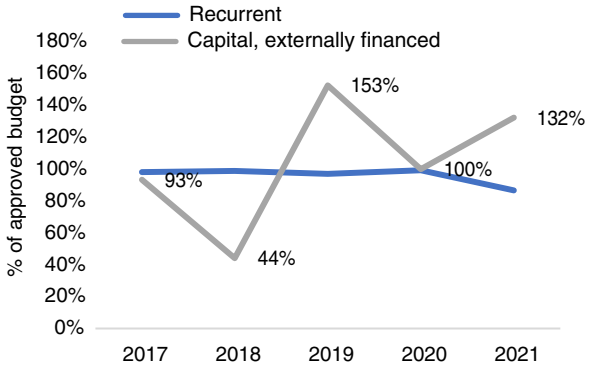
Note: *MOH=Ministry of Health; KHR= Khmer Riel.*

Recurrent expenditure excludes Covid-19 spending in 2020 and 2021 and included estimated wage bill at provincial level in 2021. Capital expenditures budget is used to acquire infrastructure fixed assets such as hospitals or health center buildings.

(Figure 3.21). Reliance on donor financing for capital spending has implications on the sustainability of the provision of health infrastructure and services, as external financing is expected to decline as Cambodia becomes richer. Against the backdrop of low levels of government spending, this raises critical policy questions related to domestic financing for both the continued provision of health infrastructure as well as the resources to operate and maintain it.

Externally funded capital investments are less predictable relative to recurrent and domestically financed capital spending. While the aggregate level of recurrent spending broadly mirrors the amounts planned in the budget (Annex to Chapter 3, Table A.3.5 reveals detailed recurrent budget outturn), donor-financed capital spending fluctuates between over and under-spending relative to what was budgeted for between 2018 and 2020 (Figure 3.22). Two reasons are considered to explain this. First, budgeting for capital spending can be overly optimistic and includes funds that are yet to be committed by donors. Second, DPs' funding disbursement can be delayed due to procedural misalignment with government processes, including different procedural timelines across the project cycle. Domestically financed investment was not presented in the Budget Law; however, it is reflected in MOH's in-year capital budget appropriation between 2017-2021.

Figure 3.22. MOH budget out turns (percent of approved budget by budget type)



Sources: *Budget Law (2017-2021) and Budget Settlement Law (2017-2021); World Bank staff estimates*

Note: *Budget outturns over 100 percent of the approved budget reflect actual spending exceeding the planned budget (overspent); under 100 percent means actual spending was below the planned budget (underspent).*

The recurrent spending excluded Covid-19 expenditures.

Expenditure by functions

The increase in government spending in nominal terms between 2016 and 2019 was driven by spending on curative care and health system administration.[79] Over the period, there was a 33 percent increase in spending on administration,

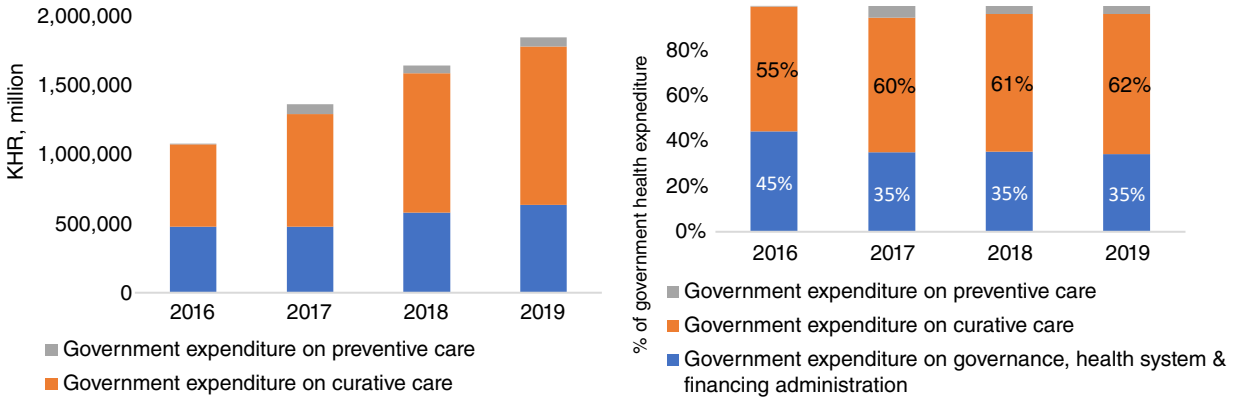
79 Nominal figures are PPP adjusted

while spending on curative care rose by 92 percent. This has resulted in a shift in the composition of government health expenditure, with curative care accounting for a larger share. In 2019, spending on curative care represented 61.9 percent of total government health expenditure, up from 55.2 percent in 2016. Meanwhile, the proportion of expenditure on health system administration decreased from 44.5 to 34.6 percent during the same period (Figure 3.23).

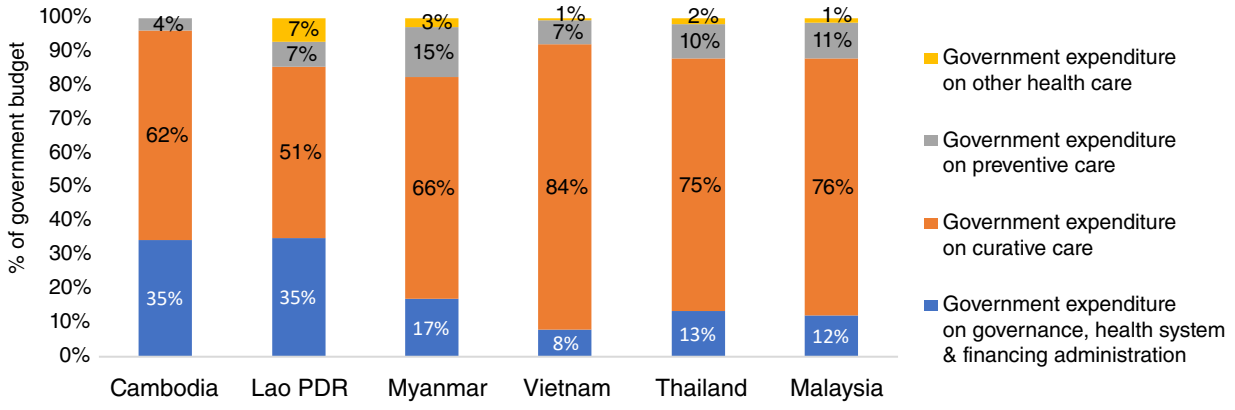
Spending on health system administration remains high compared to ASEAN countries, while spending on health service delivery (particularly preventive care) remains very low as a total share of public expenditures.[80] As noted in Chapter 2, in 2019, Cambodia's spending on health system administration as a share of government health expenditures (35 percent), was twice as high as in Myanmar, more than four times higher than in Vietnam, and nearly three times higher than in Thailand and Malaysia. On the other hand, as a share of government health expenditures, Cambodia's public spending on curative care (61.9 percent) is only second lowest to Lao PDR, and lower

Figure 3.23. MOH spending on health administration gradually reduced, but its share of total government expenditure remained higher than its peer countries in ASEAN

Cambodia's health spending by health care functions (left) and percent of government spending (right) (2016-2019)



Cambodia's health spending as compared to its peer countries in ASEAN, by health care functions, (percent of government health expenditure) (2019)



Sources: *WHO-Global Health Expenditure (2022) and World Bank staff estimates*

Note: *MOH=Ministry of Health*

Government health expenditures from 2016 to 2019 (graph a) are PPP-adjusted nominal values.

Other healthcare includes rehabilitative care, long-term healthcare, ancillary services, medical goods, and other healthcare services.

80 Further examination may be necessary given some challenges in budget classification in Cambodia.

than Myanmar, Vietnam, Thailand, and Malaysia (65.5 percent, 84.4 percent, 74.6 percent, 75.9 percent respectively). When expenditure on preventive care is measured as a share of government health expenditure, Cambodia was the lowest. The share of government spending on preventative care is the lowest among comparator countries.

There should be a transition towards higher prioritization for preventive care, including the introduction of policies to increase targeted prevention measures where health spending is high and institutionalization of incentives for people to seek preventive services. This could be achieved by introducing some form of capitation in the provider payment mechanisms. Transitioning from line item and performance payment (Service Delivery Grant-SDGs[81]) to a form of blended capitation with performance payment could help to improve the allocative efficiency of public expenditure on health and the equity of public spending in health. This could also be a way of improving technical efficiency by increasing the providers incentives to focus on preventive versus curative service delivery at Provincial Health Department- PHD or Operational District-OD level (for description of PHD and OD, see Annex to Chapter 3, Box A.3.1). Finally, introducing this type of provider payment modality could also be a way to gradually crowd out OOP (at least the portion directed to public facilities).

Expenditure by economic classification

MOH spending appear well-balanced between wage and non-wage expenditures. The nominal wage bill increased by around a third (or 6 percent annually) between 2017 and 2021, reaching KHR 522,135 million (0.47 percent of GDP) in 2021 from KHR 396,566 million (0.44 percent of GDP) (Figure 3.24). Wage-related spending accounted for around 30 percent of total spending in 2021. The increase in the wage bill was driven by salary increases as the total number of MOH staff remained constant until 2020. For instance, in 2020, the annual starting salary for a doctor increased from KHR 12 million in 2007 to KHR 16.3 million due to changes in base salary and functional allowances (Figure 3.25).

Figure 3.24. MOH spending, by economic function (2017-2021)

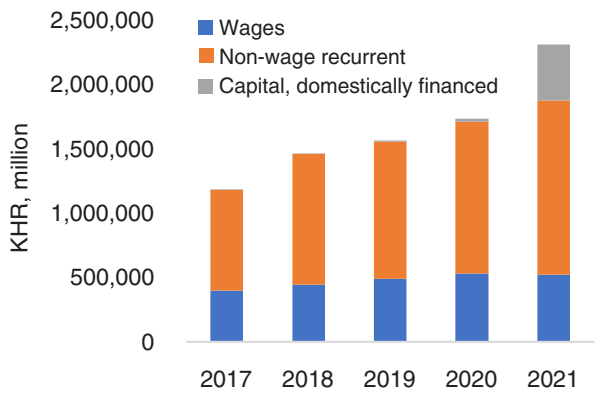
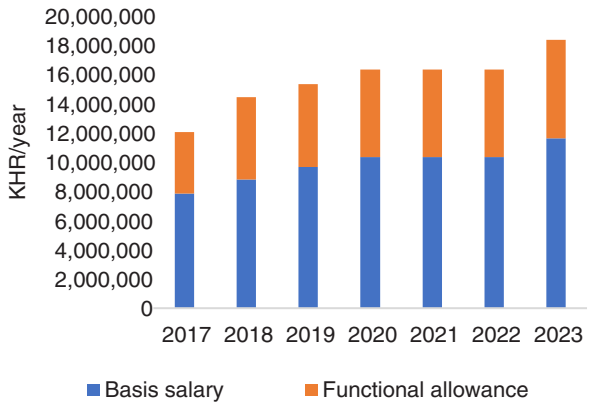


Figure 3.25. Starting salary for doctors (KHR/year) (2017-2023)



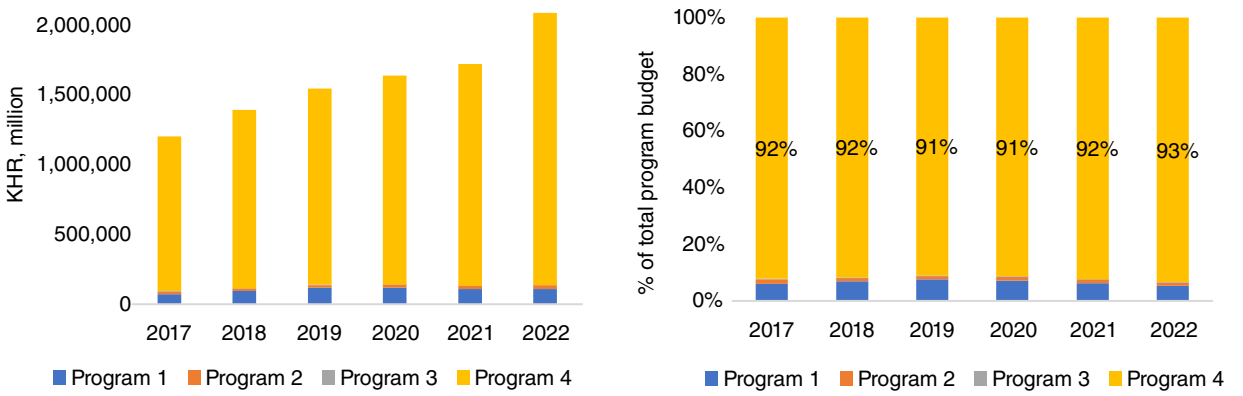
Sources: *MEF and World Bank staff estimates*

Note: *MOH=Ministry of Health; MEF=Ministry of Economy and Finance; KHR=Khmer Riel; RHS=Right Hand Scale. Data on MOH staff and a starting salary for doctors in 2022 and 2023 are projections by World Bank staff. It is assumed that the number of staff will increase by one percent from 2022 to 2023. Salaries and allowances are paid from the MOH budget. Basis salary is determined by a civil service rank. Each doctor is appointed at a particular civil servant rank in accordance with criteria set out by a royal decree. Doctors also receive a functional allowance which is determined by their positions and their education levels.*

81 Service Delivery Grant-SDG refers to payment from the government to health centers, or hospitals as a form of fixed lumpsum grant or performance-based payment.

Figure 3.26. Program 4 (Strengthen Health System) dominated MOH program budget allocation

Program-based budgets, by program in million KHR (left) and percent of total (right) (2017-2022)



Source: *MEF*

Note: *MEF=Ministry of Economy and Finance; KHR=Khmer Riel*

Program 1=Reproductive, Youth, Maternal, Newborn and Child Health and Nutrition; Program 2=Communicable disease control; Program 3=non-communicable disease control and other public health issues; Program 4=Strengthen Health System

Expenditure by program

Program 4 (Strengthening of Health System) dominates the program budget, raising questions about the program design and allocative efficiency. Since 2017, budget allocation for Program 4 consistently accounted for over 91 percent of the total program budget (Figure 3.26). Other programs account for a minor share of expenditure. In 2022, 5.3 percent was allocated to Program 1 (Reproductive, Youth, Maternal, Newborn, and Child Health and Nutrition), 1.3 percent was allocated to Program 2 (Communicable disease control), and 0.07 percent was allocated to Program 3 (Non-communicable disease). However, this does not reflect the true program costs. The large share of spending in Program 4 is inflated by the consolidation of all the wage expenses. This pattern is also observed in other ministries, where wage expenses are not linked to a given program that staff are meant to support, but is rather grouped into one program – often along with other administrative expenses. This suggests weaknesses in program design with few resources appropriated to the programs or in the budgeting and accounting systems that are unable to reflect the actual level of resources flowing to achieve objectives under the first three Programs.

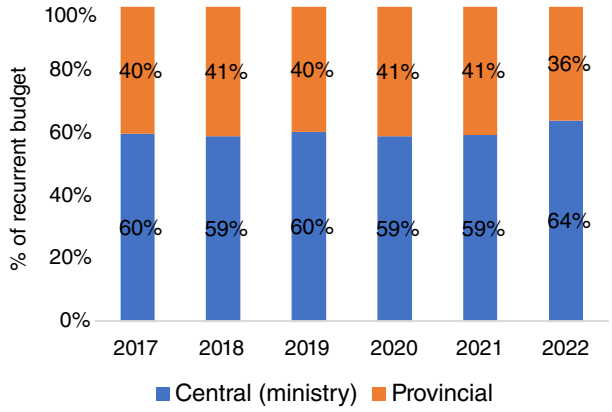
Expenditure at the provincial level

Provincial budgets account for a third of total MOH spending and are dominated by payroll. MOH recurrent spending at the provincial level increased from 0.5 percent of GDP in 2017 to 0.6 percent in 2020 and declined to 0.5 percent in 2021. These consistently account for over a third (around 0.6 percent of GDP) of the total subnational spending during the same period. Provincial spending are dominated by staff salaries with the wage bill (Chapter 64). The wage bill in the provinces increased by 33 percent between 2017 and 2021—from 0.3 percent of GDP to 0.4 percent of GDP—and accounted for over two-thirds (79 percent) of the total MOH recurrent spending at the provincial level (Figure 3.27). At the program level, they predominantly focus on programs to address non-communicable disease control (Program 3) and broader health system strengthening (Program 4) (Figure 3.28). However, as indicated earlier, the inability to track expenses across programs may not provide the true program cost.

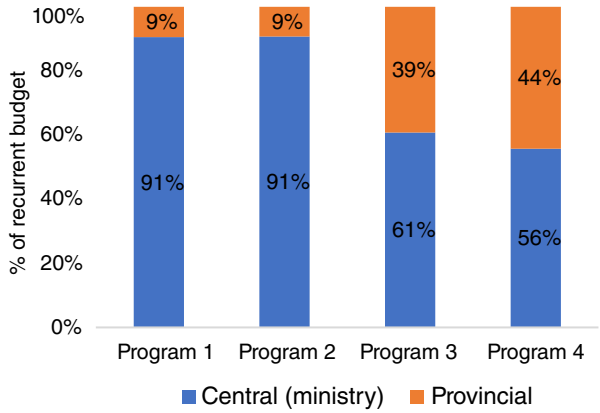
Expenditure at the provincial level reflects staffing and population size. Figure 3.29 illustrates a close association between the distribution of health facility staff and the corresponding spending

Figure 3.27. Program budgets are centralized

Recurrent budget, by level of administration (percent of total) (2017-2022)



Program budget, by program across level of administration (percent of total) (2020)

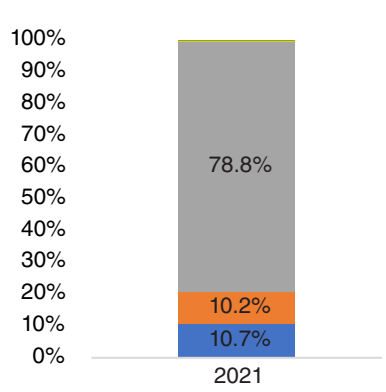


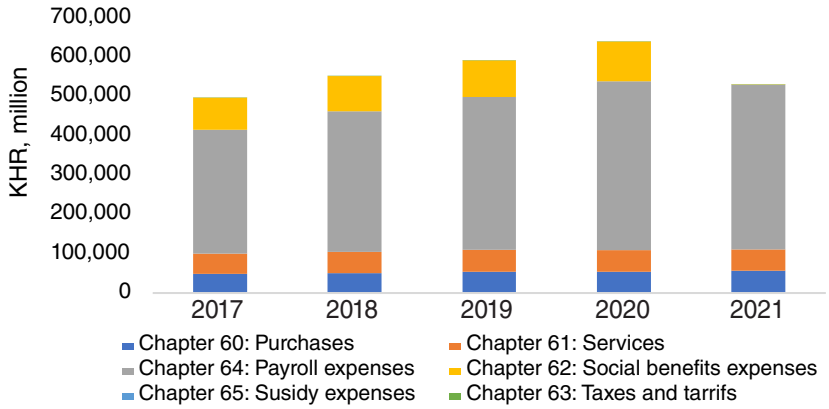
Sources: *MEF and World Bank staff estimates*

Note: *Central includes MOH ministerial administration, national hospital and national center.*

Program 1=Reproductive, Youth, Maternal, Newborn and Child Health and Nutrition; Program 2=Communicable disease control; Program 3=non-communicable disease control and other public health issues; Program 4=Strengthen Health System

Figure 3.28. MOH spending at provincial level (2017-2021), by economic classification (percent of total; left) (KHR, million; right)





Sources: *MEF and World Bank staff estimates*

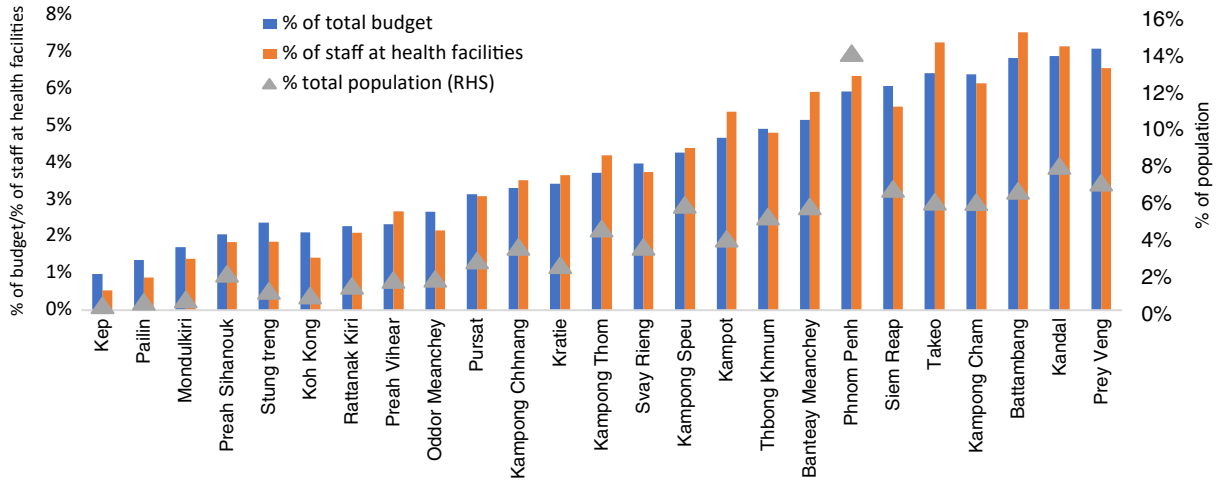
Note: *MEF=Ministry of Economy and Finance; KHR=Khmer Riel*

across the provinces. This finding is expected, as a significant portion of spending is allocated towards salaries, which would be expected to be higher in provinces with a larger number of health workers. Staffing decisions in turn reflect the population size of a given province with more doctors working in more populous provinces (Figure 3.30). Consequently, a positive correlation is observed between population size and the share of budget that is allocated to a province (Figure 3.31).

Data availability limits an efficiency assessment

of targeting public resources, however, aggregate analyses suggest budget allocations across provinces may not be addressing regional disparities. The evaluation of targeting quality is hindered by data availability constraints, which prevent the inclusion of more up-to-date health outcome data—as well as data at the DMK and CS levels—to evaluate the equity of access within provinces. However, correlations across 25 provinces between the size of the recurrent budget against poverty levels and health outcomes suggest that government resources may not be effectively

Figure 3.29. Recurrent spending (percent of total) 2021 vs distribution of staff at health facilities (2022) vs distribution of population (2020) by province



Sources: *MEF, MOH (2022), CSES (2019/20) and World Bank staff estimates*

Note: *MEF=Ministry of Economy and Finance; MOH=Ministry of Health; CSES=Cambodia Socio-Economic Survey; RHS=Right-Hand Scale*

The staff at health facilities do not include those at the newly established hospital such as Prek Prasab referral hospital, Sambo referral hospital, and Thbong Khmum provincial referral hospital. The budget allocation at the provincial level covers PHD, OD and health facilities in the provinces; that excludes budget allocation for regional health training centers in the provinces.

Figure 3.30. Medical doctors in provinces vs population in provinces (2019)

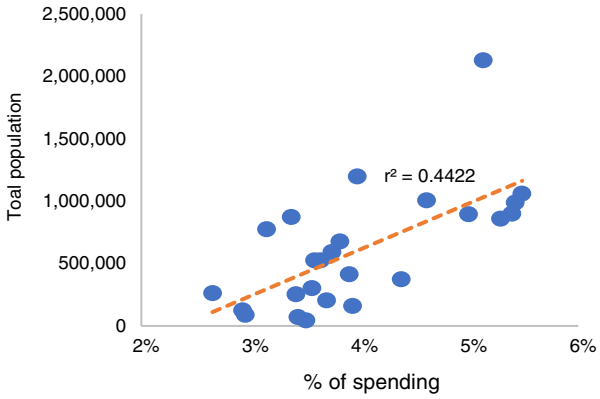
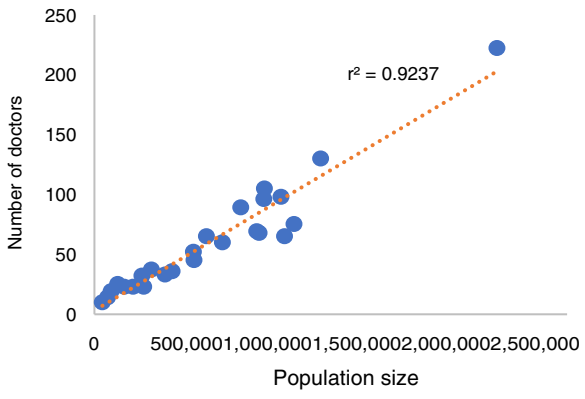


Figure 3.31. Recurrent spending in provinces (% of total) vs population in provinces (2019)



Sources: *MEF, General Population Census (2019) and World Bank staff estimates*

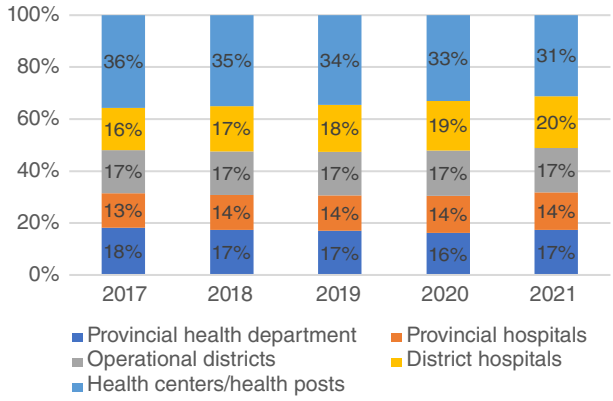
targeting some of the poorer provinces. Nonetheless, without more detailed data on the functional level of spending and within-province targeting, the analysis cannot determine whether the level of spending targets the different needs across provinces. Furthermore, the analysis presents only a partial view of spending that excludes spending by the central-level ministry as well as capital investments, which are critical to addressing sector challenges.

3.3.3. Efficiency and equity of health spending

When looking at the distribution of MOH expenditures by level of health facility/health administration, most of the resources flow to health centers, albeit with variations across provinces.[82] Figure 3.32 illustrates facility-level

82 This includes government budget expenditures allocated to provinces through PHD. It does not include insurance and user fees. Main expenditures for PHD are purchases and services. For hospital and HC, main expenditures are salaries and social benefits expenses.

Figure 3.32. Spending by level of health facilities (2017-2021)

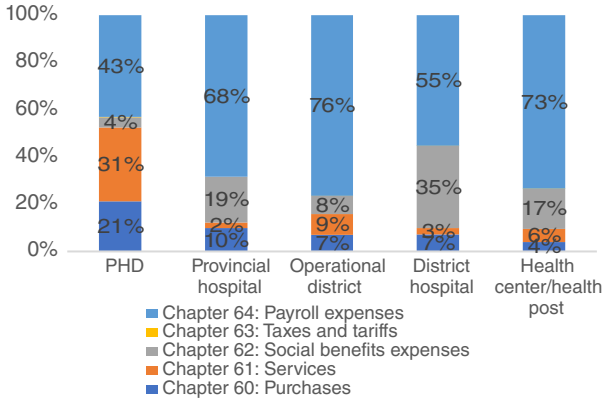


Source: *MOH (2022)*

Note: *PHD=Provincial health department, OD=Operational district, HC=Health center*

In Preah Sihanouk province, OD is embedded in PHD. Only one hospital exists in the province.

Figure 3.33. Spending in provinces, by economic classification, by level of health facilities (2021)



Source: *MOH (2022)*

Note: *PHD=Provincial health department, OD=Operational district, HC=Health center*

In Preah Sihanouk province, OD is embedded in PHD. Only one hospital exists in the province.

spending across a sample of 17 provinces.[83] On average, spending on health centers and health posts has declined from 36 percent to 31 percent as a share of general spending in the provinces, but still accounts for the largest share of MOH resources. There are, however, variations across provinces. For example, in 2021 Kandal and Preah Sihanouk provinces spent 41 percent and 46 percent on health centers, respectively, while spending on health centers in Battambang has been considerably lower despite the high number of health facilities in the province. For provincial health departments, the main expenditure includes purchases and services, represented respectively 21 percent and 31 percent, while wages accounted for only 43 percent. In hospitals, wages accounted for around two-thirds of total expenditures (Figure 3.33). The second biggest expenditure item is on social benefits. For health centers, wages were the major expenditures, accounting for 73 percent of total expenditures, followed by social benefit expenses (17 percent), services (6 percent) and purchases (4 percent).

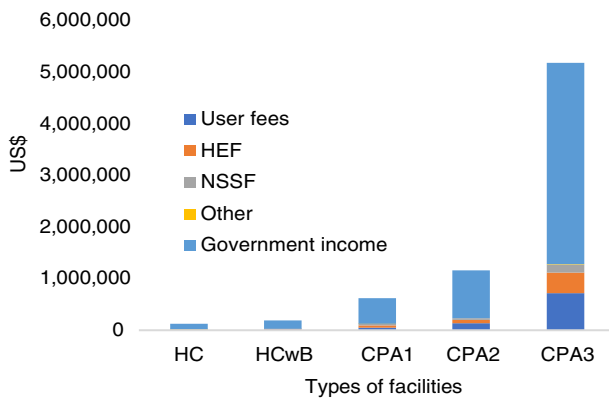
Income from patient fees remains a relatively small source of financing for all types of facilities. Costing data from a representative sample of 60 facilities in 2019[84] provides insights. First, revenue from patients is a small fraction relative to government transfers, ranging from 11 percent at health centers to 25 percent at CPA3 hospitals (Figure 3.34). A further breakdown shows that CPA1 hospitals were also the least dependent on user fees as a share of patient revenue, with the largest source being HEF payments. Health centers' patient revenue was largely from user fees, followed by NSSF at normal health centers and HEF at health centers with beds. With regards to categories of income, contributions or transfers from the government, direct cash transfers such as fixed lump sum grants (FLSG) and performance-based grants (PBG), were introduced to provide additional flexible financing for providers to improve the quality of care and overall functioning of facilities, and are a small fraction of transfers from government ranging from 2-10 percent for FLSG and 1-4 percent for PBG of

83 Spending at health facility level in the 17 provinces, including Banteay Meanchey, Kampong Cham, Kampong Chhnang, Kampong Speu, Kampong Thom, Kandal, Koh Kong, Kratie, Phnom Penh, Prey Veng, Preah Sihanouk, Steung Treng, Svay Rieng, Takeo, Oddar Meanchey, Pailin, and Tboung Khmum.

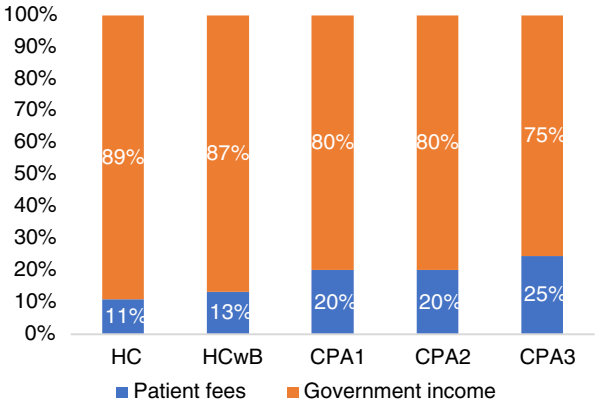
84 Source: NIPH, 2021; GIZ estimates from the second round of health services costing study: results from 60 public health facilities (unpublished)

Figure 3.34. Sources of financing by facility level, 2019

Sources of income, by type of facilities (US$) (2019)



Sources of income, by type of facilities (percent of total) (2019)

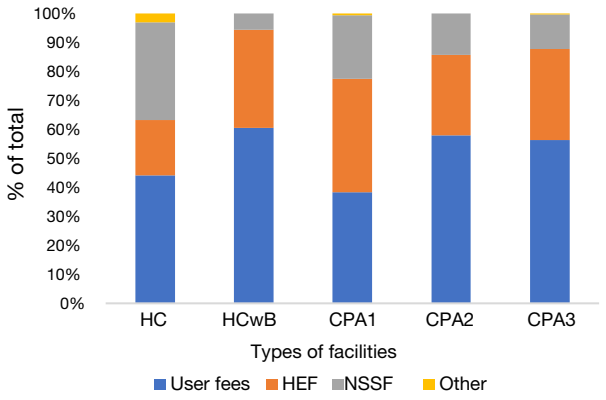


Sources: *GIZ (2021); GIZ estimates from the second round of health services costing study: results from 60 public health facilities (unpublished)*

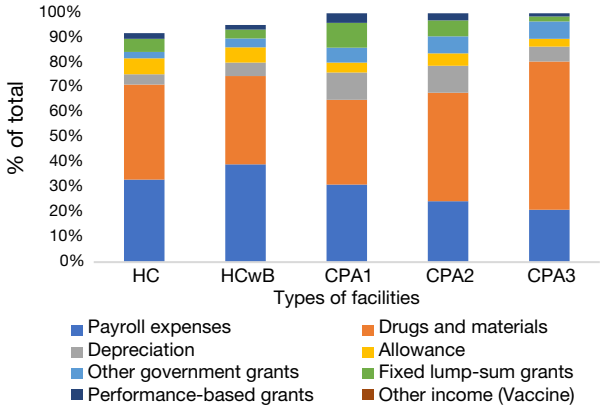
Note: *HC=Health center; HCwB= Health center with beds; CPA= Complementary Package of Activities*

Figure 3.35. Breakdown sources of income by types of facilities (2019)

Patient fees income, by type of facilities (% of total) (2019)



Government budget income, by type of facilities (% of total) (2019)



Sources: *GIZ (2021); GIZ estimates from the second round of health services costing study: results from 60 public health facilities (unpublished)*

Note: *HC=Health center; HCwB= Health center with beds; CPA= Complementary Package of Activities*

government transfers, respectively. Grants had the highest proportion in CPA1 hospitals. Drugs and materials, followed by salaries and wages, had the highest proportion across all types of facilities (Figure 3.34 and Figure 3.35).

There has been a growing demand for public health facilities to better manage the financial resources entrusted to them so as to enable them to have credible financial data to make informed decisions to improve service delivery. A proper accounting system not only allows HEFs to get complete financial reports, but also to improve the efficiency of their operations by reducing waste or unnecessary expenditures, and by doing better planning for all available resources.

Health facilities are accountable for a variety of funds. These include user fees, HEF, Service Delivery Grants (SDG) (Annex to Chapter 3, Table A.3.3) which is comprised of PBG and FLSGs, funds claimed NSSF, and the Government's funds for the Budget Entity-entitled Provincial Referral Hospital's (PRH) operations. Some other operating expenditures

Box 3.3. Strengthening financial management at health facilities under HEQIP

During the implementation of the Health Equity and Quality Improvement Project (H-EQIP, 2017-2023), the SDG manual accounting system was put into practice. The system incorporates necessary accounting controls and allows for production of the statement of receipts, expenditure and fund balance in accordance with the cash basis of accounting for all SDG funds. Although health facilities (HF) are commitmented to use this system, a majority of them are unable to do so due to an inadequate training and support. The application of this system will be further strengthened in HEQIP Phase 2 which began in 2022.

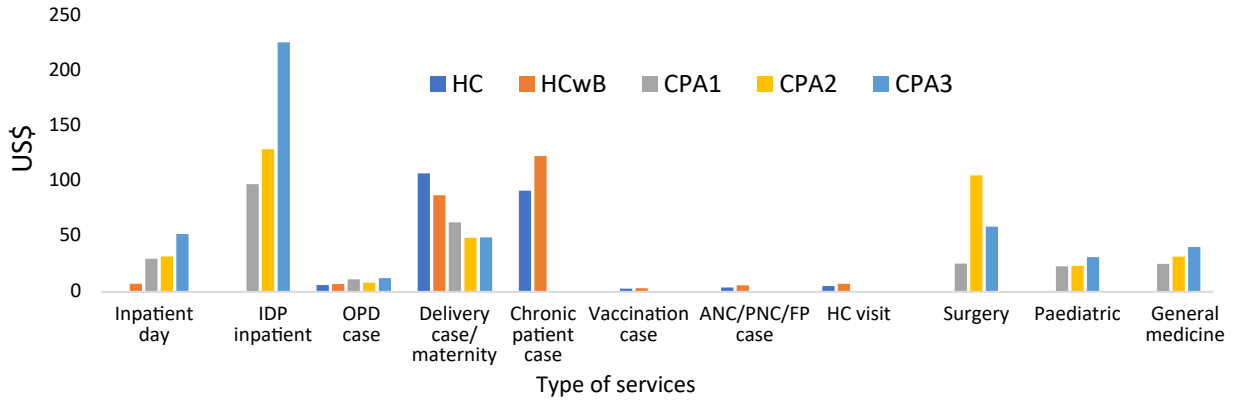
The introduction of the SDG manual accounting system is a steppingstone to equip health facilities with some basic knowledge on financial controls and consolidated financial reports of the SDG funds. This system can be subsequently built upon to further integrate the HFs' other fund sources to enable a production of the consolidated financial reports that present comprehensive receipts, expenditures and financial positions. Inherently, the more fund sources are added to the manual system, the more complicated it may be for HFs to implement. It is, therefore, suggested that a simple web-based accounting application adopting a cash basis of accounting be developed in the future for timely and reliable reports of financial resources.

Source: *Authors*

such as delivery fees, on-duty allowances, food for inpatients, medicine, vaccine, and equipment are directly paid for or provided by PHD/MOH. Staff salaries, and related staff's functional allowances and others are paid directly by the government. The current systems used to manage those financial resources are disaggregated and in a manual approach (Box 3.3). Each fund source is generally managed in the form of a cash book and report on expenditures, which are mostly paid in cash and supported by approved vouchers and invoices/receipts. The fundamental accounting controls such as monthly cash count and reconciliation, monthly bank reconciliation, and general ledger are not regularly carried out. Due to the nature of a separated type of systems and practices, the complete consolidated receipts, expenditures, and fund balance statement for all fund sources cannot be produced in a timely and accurate manner. Hence, it is not possible for HF's management and the Provincial Administration to view the entire picture of the financial operations and situation.

Unit costs to deliver health services vary by level of care (Figure 3.36). First, for services like inpatient care, the costs rise as anticipated from health centers with beds to the three levels of hospitals (health centers without beds do not offer inpatient care). By far the highest unit costs per service for health centers are for chronic diseases (NCDs) such as diabetes and hypertension, and birth deliveries, which may primarily be due to the low volume of deliveries and NCD care at the primary care level. Services such as birth delivery were found to be less costly per unit at the hospital level, and when looking from the quality of care angle, the quality and comprehensiveness of care are better due to more qualified professionals, better equipment, and staff with more hands-on experience in providing care due to greater volumes of patients. For NCD care, given screening and treatment is largely provided by the private sector and is a relatively new services for government health centers (particularly in 2019 when the data was collected), the low volume is largely driving the unit costs. As more health centers expand screening and treatment in the coming years, as the government invests in its NCD control program at the primary care level, greater efficiencies will be achieved.

Figure 3.36. Unit costs for health centers (in US$ 2019 values)



Sources: *GIZ (2021); GIZ estimates from the second round of health services costing study: results from 60 public health facilities (unpublished)*

Note: *HC=Health center; HCwB= Health center with beds; CPA= Complementary Package of Activities*

Inpatient day means inpatient cot per day; IDP inpatient means inpatient cost per case.

3.4. Summary of key findings

While progress can be seen in some health outcomes, increasing health spending together with improving spending efficiency should be given priority to achieve better health outcomes and increase equitable access to healthcare. First, Cambodia spent less on health as a share of total government spending compared to its neighboring countries. High OOP (around 60 percent) as share of total health expenditure remains a key constraint for Cambodia to achieve UHC. OOP is not an efficient financing channel for health because it prevents risk sharing, and it is also not equitable as it imposes a relatively higher welfare burden on the poorest. Although the government put in place social protection schemes including HEF and NSSF, OOP spending does not decline. Second, there is a need for the government to improve the quality of spending to ensure that the spending on health will translate into better health service delivery and improved equitable access to health. Further, continuous increases in government staff salary in the coming years, and increasing the burden of communicable and non-communicable diseases will exert expenditure pressure for the sector. Below are several recommended measures to improve allocative and technical efficiencies of spending.

Several inefficiencies are observed in Cambodia's health sector, starting with the implementation of program-based budgeting. The objectives behind the transition to program-based, output-focused budgeting is meant to focus on the delivery of services and targeted results, rather than just inputs, including the services to be delivered by ministries. In practice, program-based budgets in Cambodia allocate funds according to specific activities, and these allocations are aggregated to create budget lines. However, the link between budget lines and programs is constrained. For example, government budget spending, like for salaries, that are common to more than one program, are often grouped into a single (often the largest) program. This lack of a clear allocation methodology complicates efforts to isolate program costs and assess their contribution to the overall budget. Introducing some form of capitation payment at primary care level, could add more clarity/transparency to public health expenditure allocation and would contribute to a gradual transition towards the establishment of mixed provider payment mechanisms. A transition to capitation payment would however need to be accompanied by measures aiming at strengthening the capacity to manage funds at the frontline level, and at reinforcing the digital infrastructure to facilitate population empanelment.

There are notable disparities in access and availability of health services across the country. The review of health outcomes and funding in the report sections has shown that access to health care is generally pro-poor but not sufficiently progressive, and differs across socioeconomic status. Distribution of health resources is more equitable on per capita basis, but likely fails to address gaps in quality. Aggregate data suggests that poorer provinces with the worse health outcomes appear to receive fewer resources, however, further analysis is required depending on data availability.

The inadequate availability of the healthcare workforce, medicines, and equipment reduces the technical efficiency of healthcare spending. These inefficiencies refer to the extent to which government resources and inputs are able to influence health outcomes. Problems of allocative efficiencies described earlier are interrelated. Nonetheless, these are important to highlight as international experience provides several potential entry points to tackle technical efficiency challenges.

Public capital spending on key public health programs is almost entirely financed by external partners. The reliance on external funding is a concern for the sustainability of infrastructure programs, and potentially raises issues in harmonization and overall efficiency – external spending fell outside of the report's scope due to data limitations. Spending priorities do not give sufficient importance to public health programs with high potential effectiveness and emerging challenges like non-communicable diseases. To more effectively address the country's public health objectives and challenges described in this report, the RGC needs to better prioritize the health sector in its budget by increasing domestic financing to the sector and dedicating resources to the health centers, which provide primary health care for most of the population in the rural areas. As primary healthcare is the first contact with the health system, available resources should be increased to reduce gaps in the availability of affordable, quality, safe and effective health services across geographical locations, particularly in rural areas. Core inputs seen as necessary for health service delivery include financial resources, competent healthcare staff, adequate physical facilities and equipment, and essential medicines and supplies.

3.5. Recommendations

Increasing government health spending through expanding beneficiary of financial protection schemes

To achieve the UHC target, it is important to increase health coverage by building on existing social health protection (SHP) schemes. The social health insurance coverage is estimated to reach 57 percent of the total target population in 2023, with HEF covering 31 percent, NSSF covering 25 percent, and other 1 percent.[85] Building on these achievements, efforts should be made to expand tax-financed non-contributory coverage to the non-poor informal sector.[86] The expansion could target the currently uncovered first to third wealth quintiles and those 250,000 households identified in late 2022 as "near poor". A "HEF Plus" package that includes a slightly expanded benefit package may be more appropriate. The package could be fully subsidized or with co-payment options for non-poor (some revenue generation), but could possibly increase challenges in enforcement.

Increase government health expenditure for HEF service payments, including for current enrollees, and to expand population coverage. This could be through aligning HEF payment rates

85 Ibid

86 (1) Yazbeck et al 2019 The Case Against Labor-Tax-Financed Social Health Insurance For Low- And Low-Middle-Income Countries; (2) Yazbeck et al 2021 Making Health Insurance Pro-poor: Lessons from 20 Developing Countries (https://www.healthaffairs.org/doi/10.1377/hlthaff.2019.00874) https://www.tandfonline.com/doi/full/10.1080/23288604.2021.1917092); (3) Yazbeck et al 2023 Addiction to a bad idea, especially in low- and middle-income countries: Contributory health insurance (https://pubmed.ncbi.nlm.nih.gov/36822716/)

with NSSF rates to optimize the incentive for increased service provision and eliminate the 2-tier system where currently payment rates are much lower for HEF than NSSF for the majority of services. NSSF coverage should be expanded to dependents and household members of enrollees.

The current UHC Roadmap agenda put forward by the Government of Cambodia represents a unique opportunity to strategically think about the most effective ways to enroll the missing middle population (informal non-poor sector), as well as to revisit the benefit packages included in current SHP schemes in order to improve the protection of these schemes regarding financial hardship. There is a need to establish a mechanism to regularly review, harmonize, and update the benefit packages of social health protection schemes to ensure an integrated service delivery model. In the face of the current demand confronting the sector, the regulation and contracting modalities for private sector providers will be an important element of future health financing reforms in Cambodia.

Reducing out-of-pocket expenditure

Shift from heavy reliance on OOP spending to increasing public spending on health and applying it more efficiently. Overall, the volume of funding invested in the health sector in Cambodia is on par with what other countries are spending at similar income levels, but the remaining challenge in terms of health financing transition will be to shift the health financing composition from a model heavily dominated by health OOP spending to a health financing scheme where prepayments in the form of increased public funding or increased social health insurance contributions are the principal financing channel. In the face of the current demand faced by the sector, the regulation and contracting modalities for private sector providers will be an important element of future health financing reforms in Cambodia.

The shift away from OOP spending to tax-financed health financing should be accompanied by robust population coverage policies and targeting to reduce the financial hardship on households, especially among the poor and vulnerable. There should be a particular focus on reducing OOP related to medical products and outpatient care through tangible benefit packages, bridging the gap between what is on paper and what is available at the point of service delivery. This should be combined with strengthened regulatory measures for procurement and the pricing of medicines.

Rebalance resource allocation towards primary health care, with focus on poorer provinces with lagging health outcomes. Address technical inefficiencies by revamping training programs to address gaps in the workforce, further enhancing coaching, mentorship and supportive supervision approaches while continuing to expand and update in-service training opportunities.

Increasing allocative and operational efficiency

Strengthening performance-informed budgeting through improved program budget structure. The current program budget structure for MOH is not responsive to performance-informed budgeting. Making staff more responsive can be accomplished by restructuring the program and allowing program managers to have authority over the resources needed to deliver results.

Developing methodology and budgeting tools to isolate and allocate program costs to individual programs. The government would benefit from re-evaluating program design and seeking to prioritize resources for emerging challenges. Strengthen monitoring and evaluation systems by applying more consistent and realistic performance matrices that include quality-related metrics. Measurement is the key to accountability and improvement, but available measures typically do not capture many of the processes and outcomes that matter most to people.

Improving access to quality drugs at affordable prices. Setting the right prices for quality medicines should be the foundation for service delivery, whether through public or private avenues for procurement, distribution and supply.

Harness the private sector as part of the health service delivery system. Harnessing the private sector is a must for Cambodia's UHC objectives; expanding coverage of financial protection schemes without engaging the private sector will not go far. Contracting of private providers has been successful elsewhere with proper regulatory measures and incentives in place. Purchasing delivery of essential services by engaging private providers can be an effective 'regulatory approach' to modify provider behavior. Several tools exist that Cambodia could use to tap in to private health sector capacities to improve supply side readiness of the health system. As coverage of social health protection schemes expands, there will be a need to ensure that quality services, medicines and medical commodities are available to respond to the growing demands from the population to access essential health services they will be entitled to through health benefit packages under the different schemes. A few areas for exploration are presented below in Figure 3.37.

Table 3.4 presents summary of recommendation for health chapter.

Figure 3.37. Tools of government for private sector engagement for UHC in Cambodia

Large and rapidly growing private sector

- Strengthen *public-private dialogue*
- *Legal, regulatory, financial* arrangements to harness both public and private sector capacity in health system

Licensing procedures for private health facilities

- *Minimum standards* for private sector provide new opportunity
- Link licensing with reporting and regulatory requirements

Untapped potential for private provider contracting

- Unique opportunity of new PCA and *SHI-power of single purchaser* for prices and benefit package in both public & private sector
- Strategic "*contracting in*" models can strengthen public health facilities (e.g., diagnostics)

Lack of sufficient legislation and regulation on accreditation

- Move forward on pending *"Law on Administration of Health Services"* for national accreditation body

Insufficient access to essential medicines in public sector

- Models to expand SHP benefit packages to include supply from private sector/ pharmacies

Insufficiencies in procurement practices and price setting for pharmaceuticals

- Price regulations for procurement, distribution and retail

Dual practice

- Revisit regulation and incentives
- Model performance framework, task shifting and technology innovation

Table 3.4. Options to improve health outcomes and increase health equitable access

Challenges	Options	
	Short-term recommendations (1-2 years)	**Medium-term recommendations (3-5 years)**
Reducing out of pocket expenditure through expanding beneficiaries of financial protection schemes	Increase health coverage by building on existing social health protection (SHP) schemes • Efforts should be made to expand tax-financed non-contributory coverage to the non-poor informal sector • Introduce co-payment options for non-poor (some revenue generation)	Revisit the benefit packages included in current SHP schemes in order to improve the protection of these schemes regarding financial hardship Harness the private sector as part of the health service delivery system • Contracting of private providers has been successful elsewhere with proper regulatory measures and incentives in place • Purchasing delivery of essential services by engaging private providers can be an effective 'regulatory approach' to modify provider behavior • Ensure that quality services, medicines and medical commodities are available to respond to the growing demands of the population through effective private sector engagement frameworks and models
	Increase government health expenditure for HEF service payments, including for current enrollees and to expand population coverage • Align HEF payment rates with NSSF rates to optimize the incentive for increased service provision • Expand to dependents and household members of enrollees	
Improving spending efficiency	Rebalance resource allocation towards primary health care, with focus on poorer provinces with lagging health outcomes • Address technical inefficiencies by revamping training programs to address gaps in the workforce • Enhance coaching, mentorship and supportive supervision approaches while continuing to expand and update in-service training opportunities	The shift away from OOP spending to tax-financed health financing should be accompanied by robust population coverage policies and targeting to reduce the financial hardship on households, especially among the poor and vulnerable • Focus on reducing OOP related to medical products and outpatient care through tangible SHP benefit packages • Bridge the gap between what is on paper and what is available at the point of service delivery to reduce risks of unanticipated health expenditures for SHP beneficiaries • Strengthen regulatory measures for procurement and the pricing of medicines to improve availability, affordability, and quality
Strengthening performance-informed budgeting	Improve program budget structure. • Restructure the current Program Budgets • Allow program managers to have more authority over the resources needed to deliver results	Incorporate performance information into budget formulation and negotiation processes
	Develop methodology and budgeting tools to isolate and allocate program costs to individual programs Strengthen monitoring and evaluation systems by applying more consistent and realistic performance metrics	

4 STRENGTHENING PERFORMANCE ORIENTATION OF PUBLIC SPENDING TO BOOST PRODUCTIVITY IN AGRICULTURE

4.1. Introduction

The agricultural sector continues to play an important role in Cambodia's economic and social development and provides a major source of employment and income, particularly for the rural poor, with 35 percent of the labor force employed in agriculture. The sector contributes approximately 22 percent to the country's GDP.

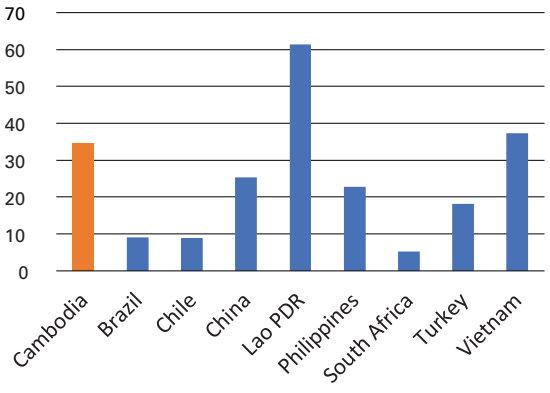
Multiple public sector organizations are active in the agriculture sector but the government's budget for this sector is managed by three ministries. The Ministry of Agriculture, Forestry, and Fisheries (MAFF) is the key institution responsible for the regulation and promotion of agriculture production and in 2020 accounted for almost a quarter of the budget allocation in the sector. The Ministry of Water Resources and Meteorology (MOWRAM) oversees the development of irrigation systems and coordinates with the MAFF through the Technical Working Group on Agriculture and Water (TWG-AW).[87] Other ministries with important roles related to agriculture and rural development include the Ministry of Rural Development (MRD)—responsible for rural roads—and the Ministry of Commerce (MOC)—responsible for business and trade promotion.

4.2. Sectoral context

Agriculture was the only sector that showed real annual positive growth—albeit at the slower pace of 0.6 percent—during the COVID-19 pandemic. In 2020, the economy contracted by 3.1 percent which marked the end of annual growth over the past two decades. However, the agriculture sector was less affected by the pandemic-induced

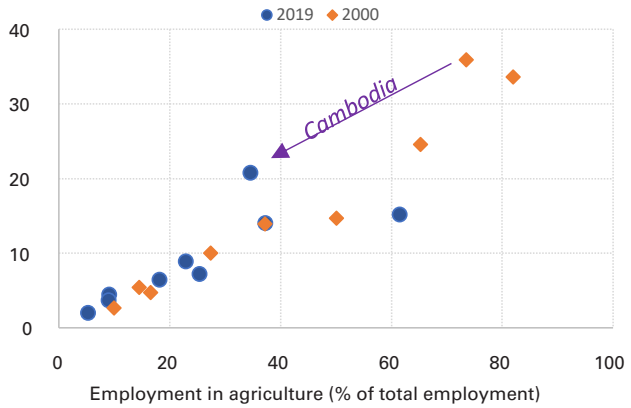
87 The TWG-AW was established in 2004 to serve as a coordinating body and dialogue mechanism for agriculture and water resource management and is co-chaired by MAFF and MOWRAM with the support of a secretariat and coordinated by FAO and IFAD. The TWG-AW brings together government, development partners and civil society representatives to support the attainment of the National Development Goals set out in the Rectangular Strategy, the NSDP and the reform programs associated with the sector.

Figure 4.1. Employment in agriculture (% of total employment, 2019)



Sources: *WDI; WB staff estimates*

Figure 4.2. Evolution of agriculture's share of GDP and employment in selected countries (2000-2019)



Sources: *WDI; WB staff estimates*

Note: *Countries include Cambodia, Brazil, Chile, China, Lao PDR, Philippines, South Africa, Turkey, and Vietnam.*

slowdown than the rest of the economy. Other sectors which provide employment opportunities to the population was affected significantly. The services sector, for example, saw the sharpest decline of 6.5 percent, driven primarily by the collapse of the tourism sector.

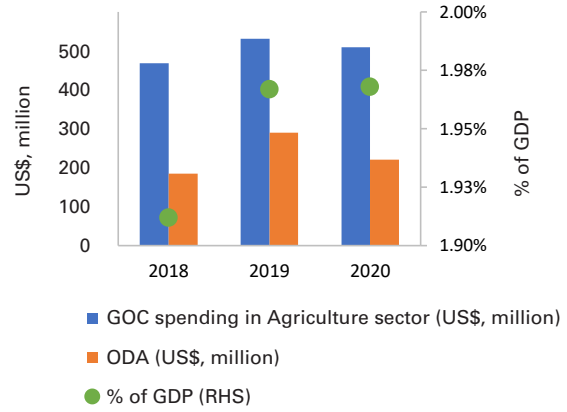
Agriculture is one of the largest sources of employment, accounting for 35 percent of employment (Figure 4.1), with the larger share of employment amongst women (37 percent of female employment in agriculture versus 32 percent for men).[88] More than 5 million people (out of Cambodia's 16.6 million) depend on agriculture and fishing for their livelihood, income, and food security. The share of agriculture in total employment has decreased from 73 percent in 2000, mirroring a common trend during the structural transformation of the economy. Overall, agriculture's contribution to Cambodia's GDP also declined from 36 percent to 21 percent during the same period (Figure 4.2). Similar declines are also observed in Vietnam (from 25 percent to 15 percent), and Lao PDR (34 percent to 16 percent) during the same period. However, the pandemic may have paused the shift of employment out of agriculture. At the beginning of the pandemic, in May 2020, nearly two-thirds of job switchers changed sectors, most commonly leaving the service sector to enter the agricultural sector. Workers continued to shift into agriculture during most of 2020 and early 2021 (World Bank, forthcoming),[89] potentially contributing to a larger share of employment in agriculture.

While Cambodia has been able to raise agricultural productivity in line with its regional neighbors, the sector faces challenges in remaining competitive in export markets. The farmgate prices of agricultural products in Cambodia continue to be competitive; however, the cost of electricity for agro-processing enterprises, the logistics and shipping costs for agricultural product exports are not as competitive. In addition, the sector faces risks to growth and discrete challenges posed by climate change and labor shortages due to both demand- and supply-side factors. Enabling agricultural policy and pro-growth public expenditures in the sector will be critical in stimulating further agricultural productivity growth and promoting a vibrant rural economy.

88 When expanding the definition of agriculture employment, 50 percent of the population above 18 years old have their primary occupation in the farming, livestock, fisheries or forestry.

89 EAP Covid-19 report.

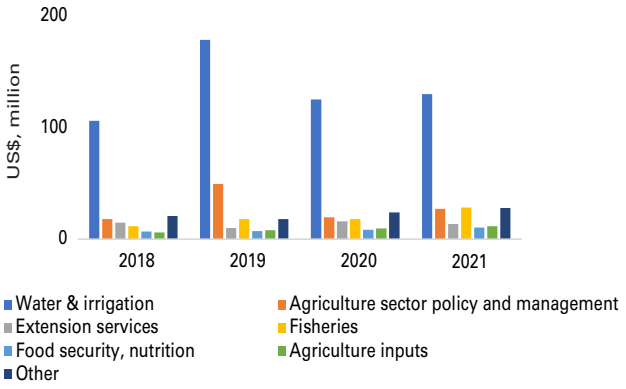
Figure 4.3. Public spending in the agriculture sector, (US$ million and % of GDP)



Sources: *MEF; WB staff estimates*

Note: *RHS = Right-hand scale*

Figure 4.4. ODA in Agriculture sector (US$ million actuals)



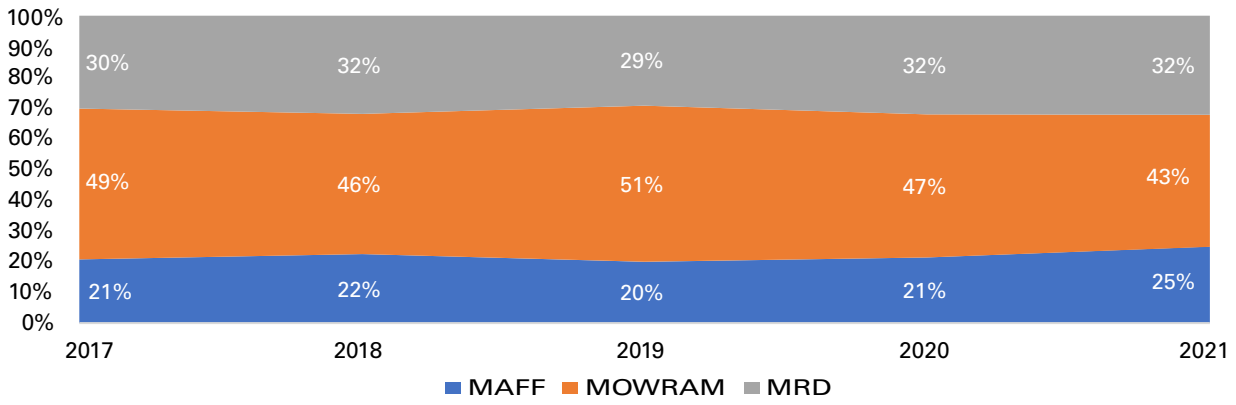
Sources: *Development partner reporting; WB Staff estimates*

4.3. Agriculture public expenditure

Combining both MAFF and MOWRAM, Cambodia spends around 8 percent of the total government budget on agriculture, while the average spending by the EAP and ASEAN countries was around 7 percent and 4 percent respectively between 2016 and 2020. Development partners provide between US$200 million to US$300 million each year to the agriculture sector (Figure 4.3 and Figure 4.4). Reliance on external financing creates a considerable degree of budgetary fragmentation, creating challenges to translating public expenditures into outcomes. It also means that PFM reforms may have limited reach in strengthening budget effectiveness since the large shares of externally funded resources are not directly impacted by reformed processes and systems.

MAFF, MOWRAM, and MRD are three ministries most directly relevant to agriculture sector. MOWRAM spending accounted for the biggest share of the sector, from 49 percent of the sector spending in 2017 to a peak of 51 percent in 2019 before declining to 43 percent in 2021. MRD is the second biggest of the sector in terms spending. Its spending accounted for around a third of the sector, followed by MAFF spending (around one fourth of the sector spending) (Figure 4.5). More than half of ODA resources fund water and irrigation under the

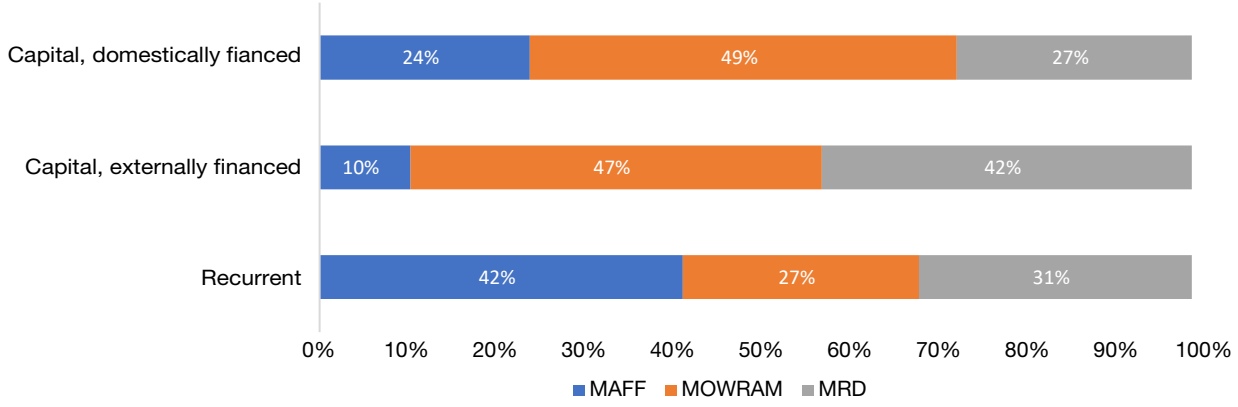
Figure 4.5. Agriculture sector spending (domestically financed and DP-financed), % of sector by ministry



Sources: *Budget Settlement Law (2017-2021); World Bank staff estimates*

Note: *MAFF = Ministry of Agriculture, Forestry, and Fisheries; MOWRAM = Ministry of Water Resources and Meteorology; MRD = Ministry of Rural Development*

Figure 4.6. Spending by source in 2021 (% of total spending for Agriculture sector)



Sources: *Budget Settlement Law (2021); World Bank staff estimates*

Note: *MAFF = Ministry of Agriculture, Forestry, and Fisheries; MOWRAM = Ministry of Water Resources and Meteorology; MRD = Ministry of Rural Development*

mandate of MOWRAM, which is by far the largest ODA expenditure. In 2021, less than 20 percent of ODA was channeled through MAFF; these funds paid for extension services for productivity improvement, food security and nutrition, fisheries, agriculture sector policy and management, climate-resilient practices, and food safety.

MAFF accounts for 42 percent of the recurrent spending in the sector (Figure 4.6). MOWRAM's domestically financed capital spending took up almost half (49 percent) of government investment spending for the sector in 2021, followed by MRD 27 percent and MAFF 24 percent. DP financed capital spending for MOWRAM was higher at 47 percent, while MRD slightly lower that 42 percent, and MAFF at 10 percent. The interconnected nature of the institutional mandates poses challenges to coordinating activities across three ministries. For example, MAFF's mandate in the development sector is superseded by capital expenditure undertaken by MRD for the development of the adequate road infrastructure. Coordination among these institutions is vital to boosting productivity and effective service provision.

MAFF's mandate provides it with a wide platform to lead agriculture policy. The ministry is made up of four major departments: i) General Directorate of Agriculture, ii) General Directorate of Animal Health and Production, iii) Fisheries Administration, and iv) Forestry Administration. The first three are reviewed as part of this analysis. The mandate of MAFF is defined in a sub-decree[90] on the organization and functioning of the ministry.[91] This covers both the policy-guiding role as well as the implementation of activities for broader agricultural development. The ministry's functions and duties are defined as the following:

- enhancement and implementation of agricultural development policy in order to improve the standard of living;
- participation in the formulation of land reform and land use policy;
- orientation and planning for the development of all agricultural sectors;
- coordination of the monitoring and evaluation of the implementation of policies and activities for agricultural development;

90 Dated 07 April 2000

91 As stated in a sub-decree on organization and functioning of the Ministry, MOWRAM has functions dealing with inland water resources, which includes defining policy and plans on water development, developing required legislation and regulations concerning the water resource sectors; setting short-, medium- and long-term targets for the exploitation and development of water resources and for conservation purposes to meet the national need and community livelihoods, rehabilitating major irrigation infrastructure to provide enough water for agriculture, daily consumption of humans and animals and tourism, and constructing flood control and polders to protect agricultural land and public property. It is logical for MOWRAM and MAFF to work closely together to carry out such activities. The two ministries would benefit from more collaborative work.

- monitoring the development of the natural resources of the agricultural sector and facilitating the exploitation of natural resources to meet the needs of the country, while having respect for ecosystems;
- defining regulations on the management, preservation of natural resources of the agricultural sector, and monitoring of implementation; and
- providing training for agricultural development to increase the level of technical knowledge and understanding.

4.4. Public spending in agriculture by MAFF

MAFF's nominal spending has remained relatively constant around 0.3 percent of GDP between 2017 and 2021. Increases in wage spending have been offset by reductions in domestically financed capital spending (Figure 4.7). Between 2017 and 2021, recurrent spending increased by 9 percent during the period, driven by growth in payroll expense (and a rise in wage) from KHR 103,141 million (0.11 percent of GDP) in 2017 to KHR 149,678 million (0.14 percent of GDP) in 2020 and slightly declined to KHR 125,929 million (0.11 percent of GDP) in 2021. Wages now take a larger share of domestic resources, accounting for half of total MAFF spending in 2020 and declined to 43 percent in 2021 (Figure 4.8). The domestic capital spending has decreased from 20 percent of total spending in 2017 to 2 percent in 2019, before reaching 21 percent in 2021. The increase of domestic capital spending was driven by a rise in investment subsidies from DPs. Most capital-intensive agriculture-related spending[92] is implemented by other ministries, such as MOWRAM and MRD. Rising labor costs have the potential to crimp the fiscal space available for the provision of key agricultural services and MAFF's key objective of promotion of agriculture production.

4.4.1. Expenditure by program

Budget allocation that aims to boost productivity and crop diversification decreased between 2017 and 2021. However, assessing the true program cost is constrained by difficulties in allocating and tracking wage expenses across programs. Program 5 "Increasing effectiveness of supporting services and human resource development" dominates the program-based structure, accounting for more than two-thirds MAFF's total (Figure 4.9 and Figure 4.10). This is explained by the inclusion of payroll expenses (75-80 percent of program's total, Chapter 64) that include all staffing costs for the other 4 programs. Grouping all salary expenses under Program 5 underestimates the true expense of each of the other programs.

Figure 4.7. MAFF spending, economic composition by chapter (KHR, million)

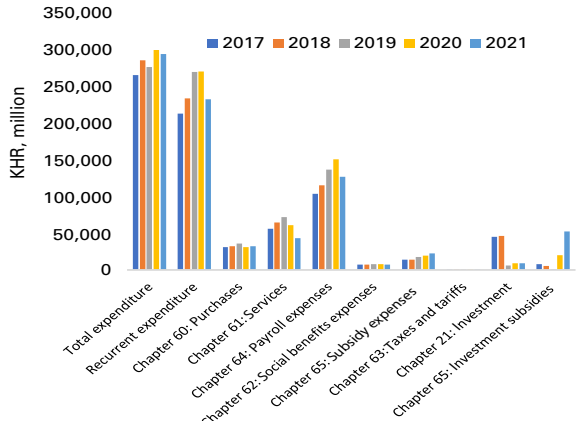
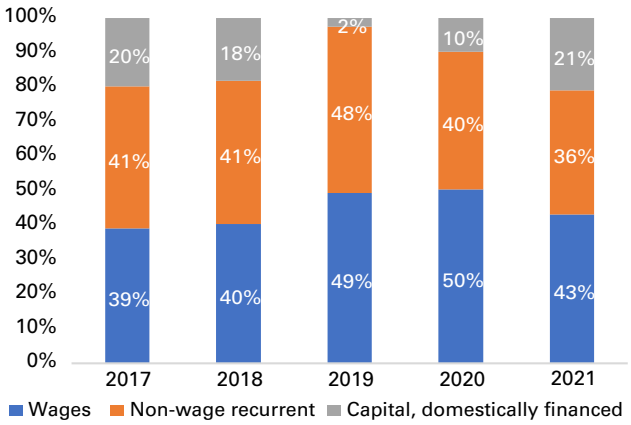


Figure 4.8. Economic composition of MAFF spending (% of total domestic spending)



Sources: *Budget Settlement Law (2017-2021); World Bank staff estimates*

92 Externally financed resources (from development partners) are increasingly important to MAFF but are not included in the analysis due to data constraints

Figure 4.9. Program-based budget, by program (KHR, million)

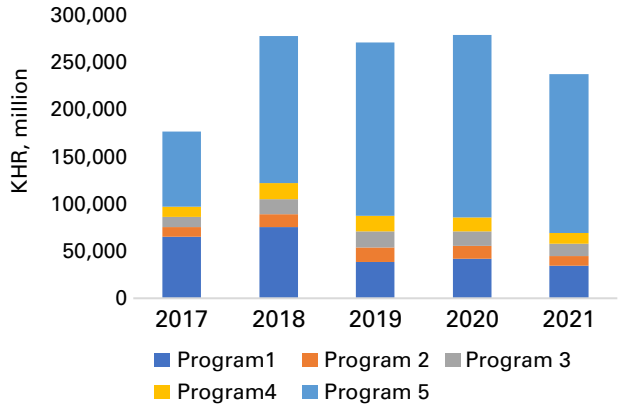
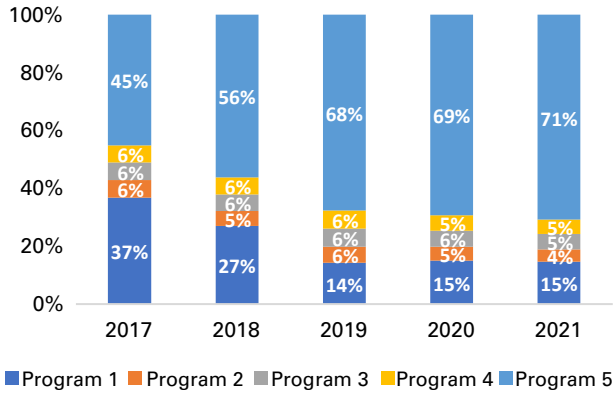


Figure 4.10. Program-based budget, by program (% of total, excluding externally financed projects)



Sources: *MAFF; World Bank staff estimates*

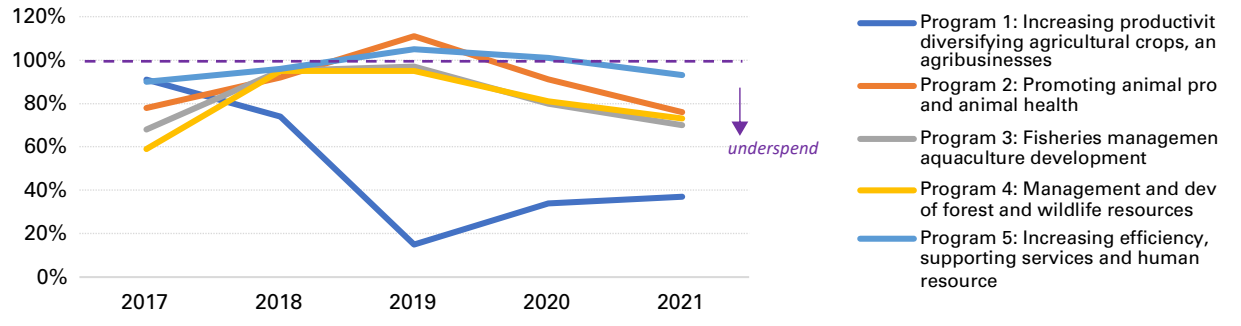
Notes: *The five programs are: Program 1: Increasing productivity, diversifying agricultural crops, and agribusinesses; Program 2: Promoting animal production and animal health; Program 3: Fisheries management and aquaculture development; Program 4: Management and development of forest and wildlife resources; Program 5: Increasing efficiency, supporting services and human resources*

Annual budget outturns under programs at the central level are considerably lower than budgeted amounts, particularly for productivity-increasing objectives under Program 1 (Figure 4.11). Comparing the allocation in the budget law, spending under Program 1 accounted for 15 percent, 34 percent, and 37 percent of budgets in 2019, 2020, and 2021, respectively. Programs 2, 3, and 4 perform better but are still underspent at about 80 percent of their program budget allocations in 2021. This is likely explained by the austerity measures following the COVID-19 pandemic, which saw a large budget reallocation to fund vaccination and treatment of patients. Combined with declining allocations to Program 1, weak budget execution limits the ministry's capacity to contribute to boosting productivity and crop diversification. These execution challenges are not observed at the Provincial level.

4.4.2. Central vs provincial level expenditures

Provincial-level budgets account for over a third of MAFF's total and are also dominated by human resource (HR)-related expense under Program 5 (Figure 4.12 & Figure 4.13). The 25 provincial units (Provincial Department of Agriculture Forestry and Fisheries – PDAFFs) follow the same 5 programs and are responsible for covering payroll expenses. Despite taking about a third of total resources, provincial offices account for nearly half of Program 5. In 2020, Program 5 accounted for 82

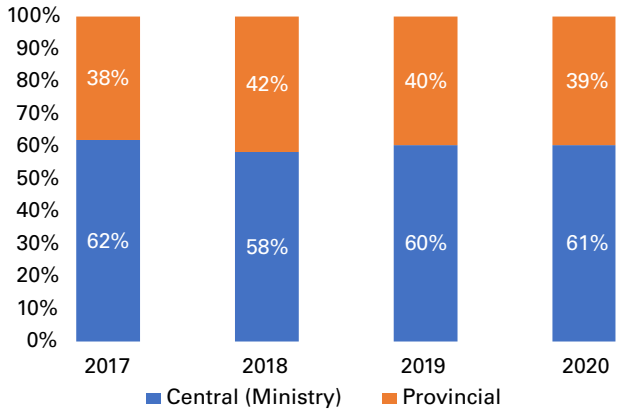
Figure 4.11. Program budget outturns



Source: Budget law, MEF; WB staff estimates

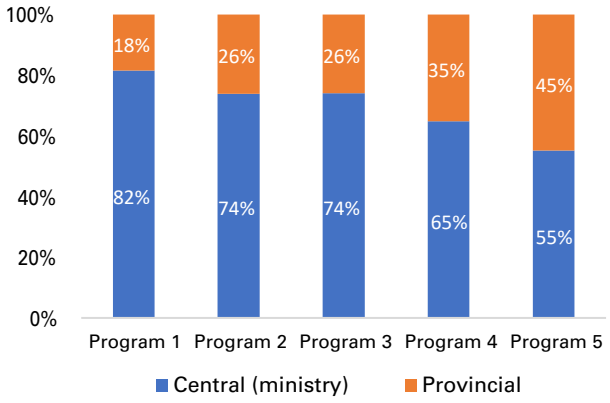
Sources: *Budget law, MEF; WB staff estimates*

Figure 4.12. MAFF recurrent spending, by level of administration (% of total) (2017-2020)



Sources: *Budget Settlement Law (2017-2021); World Bank staff estimates*

Figure 4.13. Program budget, by program across level of administration, (% of total) 2020



Sources: MEF; World Bank staff estimates

percent of the provincial-level budget with the other four programs taking up 7 percent, 3 percent, 4 percent, and 4 percent respectively. Data availability limits the analysis of provincial-level spending (see World Bank 2021, "Cambodia intergovernmental fiscal architecture" for the summary of decentralization reforms and challenges).[93]

The wage bill split between the center and provinces reflects staffing across the levels of administration. In 2019, MAFF's wage bill at the center accounted for 47 percent of its total with 41 percent attributed to the provincial offices (Figure 4.15). This roughly aligns with staffing across the levels of administration, with 44 percent employed by the center and 43 percent working in provincial offices. MAFF's deconcentration of its staff and wage bill is comparable to the MRD but more centralized than other agencies such as education and health (Figure 4.14).

Budget allocations to the provincial level appear relatively equitable, however, data availability limits the assessment of the quality of targeting. A positive correlation between the size of the recurrent budget in a given province

Figure 4.14. Civil servants in selected LMs By administrative level (2020)

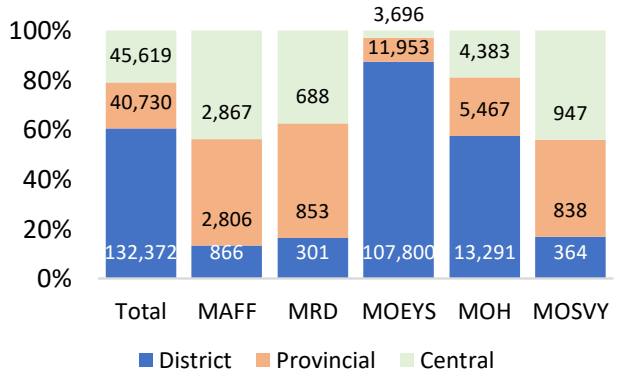
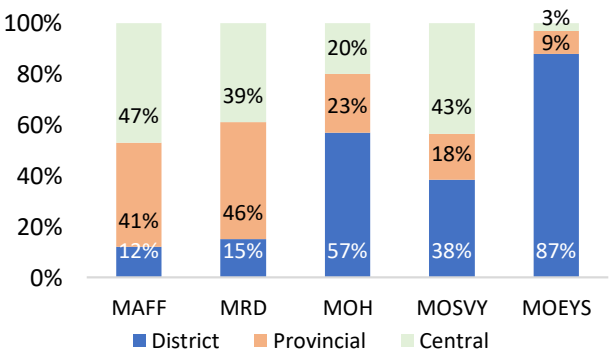


Figure 4.15. Wage allocations in selected LMs By administrative level (% of LM total, 2019)



Sources: *Cambodian authorities; World Bank staff estimates (World Bank 2022)*

Note: *MAFF = ministry of agriculture, forestry, and fisheries; MRD = ministry of rural development; MOEYS = ministry of education, youth, and sports; MOH = ministry of health; MOSVY = ministry of social affairs, veterans, and youth rehabilitation; LM = line ministry*

93 https://documents1.worldbank.org/curated/en/099440003152223052/pdf/P168407082902104a0b28a0d00b4ec6625f.pdf

Figure 4.16. Recurrent budgets and poverty levels in provinces

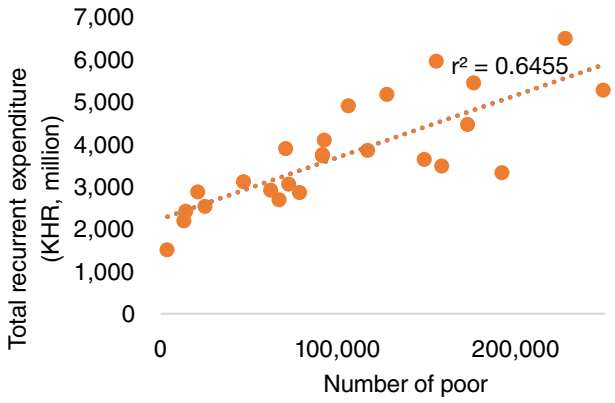
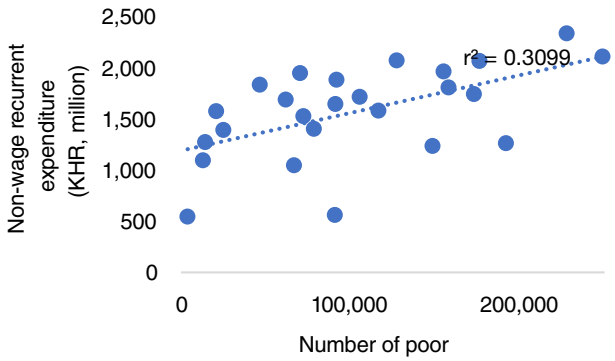


Figure 4.17. Recurrent non-wage budgets and poverty levels in provinces



Sources: *MAFF; World Bank staff estimates*

Table 4.1. Functional composition of MAFF recurrent spending

Selected functional categories of MAFF	(KHR, million)				(% of recurrent expenditure)			
	2015	2016	2018	2019	2015	2016	2018	2019
Provincial programs under Program 5	44,033	56,965	83,136	89,476	29.3%	30.3%	35.8%	33.4%
Planning and management capacity	37,322	43,667	80,448	104,436	24.8%	23.2%	34.6%	39.0%
Human resources development	18,952	28,615	59,780	66,661	12.6%	15.2%	25.7%	24.9%
Education	8,649	11,431	7,600	10,043	5.8%	6.1%	3.3%	3.7%
Production support to fisheries	1,627	2,226	16,675	17,579	1.1%	1.2%	7.2%	6.6%
Production support to other products	6,840	7,113	10,909	11,334	4.6%	3.8%	4.7%	4.2%
Research (by CARDI and other entities)	6,464	7,632	9,310	10,289	4.3%	4.1%	4.0%	3.8%
Inspection services (law enforcement and internal audits)	6,464	6,454	8,960	8,720	4.3%	3.4%	3.9%	3.3%
Extension and farmer organizations (for crops, aquaculture, and livestock)	3,437	4,888	7,014	7,430	2.3%	2.6%	3.0%	2.8%
Animal health services	4,108	4,453	7,056	7,046	2.7%	2.4%	3.0%	2.6%
Rubber programs	3,969	4,420	3,386	4,071	2.6%	2.4%	1.5%	1.5%
SPS and laboratories	2,776	3,197	2,356	2,435	1.8%	1.7%	1.0%	0.9%
Agro-industry department	2,361	2,954	1,906	1,957	1.6%	1.6%	0.8%	0.7%
Rice production development	2,095	2,599	1,597	1,519	1.4%	1.4%	0.7%	0.6%
Horticulture (subsidiary and industrial crops)	1,200	1,412	1,468	1,575	0.8%	0.8%	0.6%	0.6%
Total recurrent expenditure	**150,297**	**188,026**	**232,345**	**267,988**	**100%**	**100%**	**100%**	**100%**

Sources: *Cambodian authorities; WB staff estimates*

Notes: *CARDI = Cambodian Agricultural Research and Development Institute*

and its number of poor (Figure 4.16) suggests that the budget does target at least some of the poorer provinces. However, this correlation weakens when salary is excluded (Figure 4.17). This could indicate that the deployment of staff may be calibrated with the needs across provinces (as proxied by poverty levels) but isn't necessarily translated to the level of service provision through non-wage operational expenditure. Nonetheless, without more detailed data (functional level of spending and within-province targeting), the analysis cannot determine whether the level of spending targets the different needs across provinces. Furthermore, the analysis presents only a partial view of MAFF spending that excludes spending by the central-level ministry as well as capital investments, which are critical to addressing sector challenges, boosting productivity, access to markets, and strengthening climate resiliency.

4.4.3. Expenditure by functional classification

Spending on activities promoting agricultural diversification is low and falling (Table 4.1). Looking at the functional breakdown of spending (across all programs), nearly a third of the MAFF recurrent budget has gone toward provincial programs, consistent with the aim of increasing the decentralization of essential services. Spending on core public goods through education, research, inspection services, laboratories, and extension declined from 18 percent to 15 percent of recurrent spending between 2015 and 2019. Spending on increasing productivity through the support of different products and extension services as well as agro-industry development is likely inadequate to meet the sector's objectives. Spending on animal support (2.6 percent of recurrent in 2019) and horticultural products (0.6 percent of recurrent in 2019) remain small despite the challenges in boosting domestic production and competitiveness. As highlighted in the Bank's previous analysis of the sector, the growing demand for higher-value foods has mainly been met by imports from Vietnam, Thailand, and elsewhere.

4.5. Public financial management

The Royal Government of Cambodia (RGC) developed and launched a public financial management reform program (PFMRP) with a detailed and sequenced action plan in 2004. The PFMRP is a sector-wide tiered (multi-stage or multi-platform) approach that aims to instill high standards of management and accountability in the mobilization of resources and ensure their effective and efficient use. Piloting of program budgeting was introduced to 10 LMs in 2015 and expanded to 39 LMs/institutions[94] in 2018, with the aim to gradually strengthen accountability and the availability of performance and outcome information enroute to the planned implementation of full performance budgeting. The experience of MAFF's PB implementation showed that the current practices are not responsive to performance informed budgeting.

4.5.1. BSP and program budget implementation challenges limit effectiveness of budget management

Strategic guidance and structure

MAFF's program budget structure is organized along its administrative architecture (Annex to Chapter 4, Table A.4.1). On the one hand, designing programs on the basis of administrative factors rather than program logic may be limiting in operationalizing the budget towards policy objectives. On the other hand, a program structure that allows one spending unit or department to draw funding from multiple programs and subprograms can complicate accountability and becomes difficult to manage in the nascent stages of performance-oriented reforms. A practical approach would seek a balance between organizing programs along with the desired policy objectives and recognizing the need for stable administrative structures to implement the agency

94 PEFA 2021

budget each year. As such, MAFF's current program budget design is pragmatic at this stage in the reform in that it allows a clearer chain of accountability and data flow, but it could be changed with maturity of reforms.

The structure is impractical in identifying available funding for climate adaptation. It is impossible to identify climate-related spending under the current budget program architecture.[95] The current program structure could potentially incorporate climate-related budget allocations, however, there currently isn't a defined methodology to enable MAFF to tag climate spending. Climate adaptation funding could target government activities such as providing farmers with information about climate change and addressing market failures where information is not available.

BSP[96] is not utilized for budget appropriations. At the aggregate level, BSP follows the exact five program structures. There are, however, differences in expenditure reporting that obscure the comparison between the planning under the BSP and the approved budgets that relate to the PB. The differences are rooted in the processes for budget negotiations and appropriations that are largely divorced from the planning efforts of the BSP. The differences between BSP and annual budgets diminish the usefulness of the former as a budget document where comparisons between the approved annual budget and the BSP are impractical.

MAFF PB fragmentation across the provincial level weakens the quality of planning. The 25 PDAFFs follow the same program structure, however, there are particularities in how programs are coded in practice for each level of administration. At MAFF's national level PB, the provincial spending is presented as separate subprograms under each of the five programs, despite both levels of administration nominally working towards achieving the same program objectives. In practice, provincial activities relating to MAFF subprograms are nested under the provincial-specific subprogram which creates a clearer separation between programs implemented at the central level and provincial levels. The 25 PDAFFs follow the standard template provided by the MAFF. There are, however, challenges with the quality of data and consistency of information such as the definition of indicators, activity clusters, budget breakdown, and use of supporting data which varies significantly from one province to another. Some evidence suggests that not all PDAFFs use the same coding for each of their activity clusters. This fragmentation means there remains a significant challenge to systematically link provincial activities to strategic plans.

Budgeting and planning

Introduction of the BSP has strengthened the articulation of ministry policy ambitions and expenditure planning; however, it is not yet operationalized in the budget. BSP can act as a valuable multi-year planning tool that already has a strong degree of ownership from the ministry during its preparation. However, several layers of fragmentation and weaknesses in its content limit its operational value. This is at least in part a result of interrelated challenges, some of which stem from the broader budgetary fragmentation in Cambodia that are not unique to the agriculture sector. The end result is that the contents of the BSP currently have weak linkages to annual PBs. For MAFF, it also means that investing greater effort and ministry resources into the BSP process will not substantively impact subsequent annual PB allocations. Figure 4.18 illustrates some of these challenges:

1. **Weak link between the BSP and annual budget discussions/ negotiations.** Annual budget negotiations tend to focus on controlling total amounts and incremental changes to economic expense categories rather than on programmatic logic (program classification, subprograms,

95 Climate-related spending could be reflected in donor-funded projects, which are beyond the scope of this analysis.

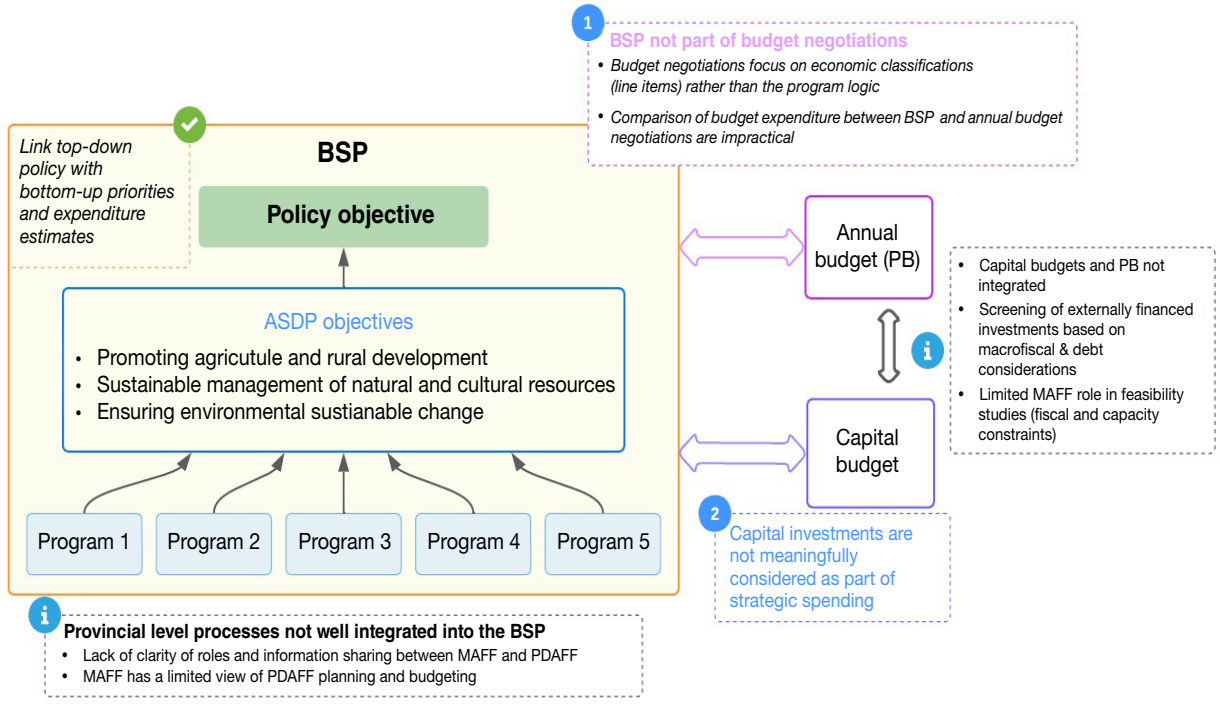
96 BSP provides a platform to align MAFF's strategic planning with PB and support the transition toward performance orientation. BSPs have been issued annually covering a rolling three-year period.

activities, outputs, indicators). This means that the efforts to strengthen program-based strategic planning and costing through BSP by the ministry are not yet integrated into the processes that shape the annual budget and ultimately have little impact on annual PB allocations. The resource envelope proposed by the MAFF tends to exceed the MEF-issued ceilings. BSP does not include an explanation for the additional resources and whether they are requested for ongoing programs or new policy priorities.

2. A key level of fragmentation is the **absence of capital expenditure during the planning stage.** Externally financed capital projects are not included in the BSP and largely sit outside of MAFF's annual budget processes. Screening of externally financed investments/capital projects is based on macro-fiscal and debt framework considerations. This helps support more prudent debt management but can contribute to a less robust alignment with sector and ministry objectives. Proposed projects that pass the initial screening undergo feasibility studies to support the final selection decision. These feasibility studies are largely outside of MAFF's reach (fiscal and capacity constraints), driving a further distance between capital investments and ministerial planning and budgeting processes. Furthermore, the misalignment between timing when decisions for capital investments are made and planning processes mean that key decisions for approval and funding to projects and ministries are made after the deadlines for LM planning processes. Consequently, capital spending (and by extension the associated recurrent costs) are not meaningfully integrated into annual strategic planning through the BSP.

The disconnect between BSP and annual budget is reflected in the large gaps between MAFF budget allocations, actual spending, and the BSP amounts (Figure 4.18). Programs 1 to 4 get allocated less than 50 percent of the amounts proposed in the BSP. On other hand, program 5 is allocated 152 percent of the amount stated in the BSP. This can be at least partly explained by the

Figure 4.18. BSP and budget planning



Source: *Authors*

Note: *ASDP = agriculture sector development program; BSP = budget strategic plan; MAFF = ministry of agriculture, forestry, and fisheries; PDAFF = provincial department of agriculture, forestry, and fisheries; PB = program budget.*

Table 4.2. Budget strategic plan, annual budget and actual spending of MAFF (KHR, million)

Program	Budget Strategic Plan						Budget Strategic Plan			
	State budget	DP budget	Other	Capital budget	Projects with no financing	Total	Law	Actual	Law as % of BSP	Actual as % of BSP
					2020					
Program 1	134,933		170	86,517	86,517	135,103	37,991	33,960	28%	25%
Program 2	123,897			104,000	104,000	123,897	14,491	13,118	12%	11%
Program 3	22,733	9,280		9,280		32,013	15,044	12,073	47%	38%
Program 4	22,340	6,690		6,690	5,852	29,030	12,799	10,407	44%	36%
Program 5	53,530	11,225	4,142			68,897	104,749	105,875	152%	154%
					2021					
Program 1	135,585		170	86,011	86,011	135,755	43,553	28,249	32%	21%
Program 2	27,897			8,000	8,000	27,897	13,152	9,932	47%	36%
Program 3	23,985	11,880		11,880		35,865	13,838	9,635	39%	27%
Program 4	24,484	6,014		6,014	5,648	30,498	10,278	7,465	34%	24%
Program 5	54,784	10,805	4,338			69,927	99,456	92,685	142%	133%

Source: *MAFF Budget Strategic Plan (2022-2024) and data provided by MAFF*

difference in accounting for wages between the BSP and program-based budget structure (described above). Equally important, there is an even larger divergence between BSP and actual spending, confirming the execution challenges documented in the previous section. The disconnect ultimately contributes to implementation inefficiencies that manifest themselves through these budgetary deviations. MAFF officials point to the persistent issue of the disconnect between BSP and annual budgeting, especially for capital or investment expenditure. One key reason for large deviations with the BSP is the lack of financing for capital projects, which largely rely on development partners. In 2020 and 2021, programs 1 and 2 have proposed capital investment projects without available resources (i.e. placed in the "no financing" category in Table 4.2). Excluding these projects, the disconnect between planning and actual spending would diminish, aligning to nearly 80 percent of the BSP amounts for programs 1 and 2 but would still be less than 50 percent for programs 3 and 4.

Performance

Despite the inclusion of performance metrics in the BSP, performance monitoring is not sufficiently structured to inform the budget or assess budget effectiveness. Inclusion of performance information and indicators in the BSP is an important step toward the reform objectives of performance-informed budgeting and enhanced accountability for results. However, weaknesses in the design of indicators and inconsistency in reporting performance information weaken the operational value of BSP's performance monitoring.

Performance matrix design is not tailored to budget resourcing and is difficult to administer. Most of the indicators are a mix of inputs, outputs and outcomes (Table 4.3). At one extreme, several indicators track inputs like the number of civil servants trained. On the other, the indicators are not reflective of a reasonable reach of MAFF's budgetary resources in areas where outcomes are

Table 4.3. BSP performance reporting structure and examples

Main purpose policy and programs	Year Indicators / Targets				Final result	
	Indicators	Most recent implemented year	Current year	Next year and beyond	Indicators	Goal
Program 1	1) Gross agri-cultural product (million tons)	29.9	31.5	33.1	Growth of all types of crop production (%)	5%
Subprogram 1.2	Amount of local vegetable supply (%)	70	78	80	*{Subprogram targets do not include "final result" indicators}*	
Subprogram 5.3	Number of local and foreign-trained officers	3,000	3,000	3,000		
…						

Source: *adapted from BSP (2022-2024)*

not easily attributable to MAFF's fiscal policy. For example, two of the program-level indicators target the export of agricultural products (million tons and growth of exports). MAFF's relatively small budget is unlikely to wield a direct and significant influence in expanding export volumes. Similarly, reaching the target is not directly attributable to MAFF, but likely an outcome of the broader macroeconomic context, changes to the regulatory environment, and broader investments in the sector. Furthermore, the sheer number of indicators may stretch the ministry's capacity. The two most recent BSPs (2020-22 and 2022-24) include over 90 indicators across MAFF's five programs. This creates a strain on a meaningful integration of performance metrics into the budget process, with scarce resources used to undertake reporting functions across the many indicators that could instead focus on the design of better-tailored targets, improved monitoring over a smaller list of indicators, and integration of performance information into the BSP and budget proposals.

Performance information is not consistently presented. The performance targets are broken down into two tables covering program-level and subprogram-level objectives. Program-level metrics are typically reported as targets for a given year and as final result indicators (Table 4.3). The targets across the two types of indicators are not always reported using the same metrics (e.g., million tons vs. percent), with the former reported against a baseline, for example, a comparison to the most recently implemented year. Reporting for the final result indicators does not always include a baseline or a reference period. Similarly, units of measure are not consistent across indicators. For example, both meters and hectares are used as targets for the coverage of an area. One notable positive change has been the time coverage of the performance indicators in the BSP. The performance matrix for the 2020-22 BSP included future targets for only one year into the future, despite the BSP's three-year perspective. This has since changed for the 2022-24 BSP, which includes yearly targets for each year covered by the BSP (up until 2024). The final result targets, however, do not indicate whether the targets are meant to be met by the end of the BSP period or whether they are targets for average annual performance.

Performance indicators are not easily comparable between years and BSPs. Many indicators change between BSPs. Most of the program-level indicators remained the same, with five changes out of 25 indicators between the two most recent BSPs. Overall, across over 90 indicators, nearly 40 percent have been changed. While the performance of indicators that remain from one BSP

Table 4.4. BSP performance reporting for program-level objectives

Main purpose politics and programs	2020 BSP Indicators	2020 (target, BSP 2020)	2022 BSP Indicators	2020 (actual, BSP 2022)
Program 1: Increasing productivity, diversifying agriculture and agribusiness	1) Gross agricultural product (million tons)	31.5	1) Gross agricultural product (million tons)	29.9
	2) Ratio (%) of crop diversification	64.5	2) Ratio (%) of crop diversification	63.4
	3) Export of agricultural products (million tons)	6.3	3) Export of agricultural products (million tons)	5.8
Program 2: Promoting animal production and health	1) Gross meat product Increase (thousand tons)	325	1) Gross meat product Increase (thousand tons)	256
	2) Increased rate of commercial breeding (%)	20.7	2) Increased rate of commercial breeding (%)	35
	3) The rate of raising cattle has increased.	23	3) Reduce the rate of animal diseases to (%)	2.8
Program 3: Fisheries resource management and aquaculture development	1. Natural catch (thousand tons)	600	1. Natural catch (thousand tons)	600
	2. Aquaculture ratio relative to total catch (%)	36	2. Aquaculture ratio relative to total catch (%)	36
Program 4: Management and development of forest and wildlife resources	1. Public and private plantation area (hectares)	20,000	1. Quantity of trees harvested (cubic meters)	225
	2. Community forestry income rate is increasing	20	2. Community forestry income rate is increasing	12
Program 5: Increasing effectiveness of supporting services and human resource development	1. Activity ratio (%) for program budget	95	1. Activity ratio (%) for program budget	88
	2. Percentage of students who get a job or create a new business after graduation (%)	95	2. Percentage of students who get a job or create a new business after graduation (%)	94
	3. Effectiveness ratio of auditee improvement recommendations (%)	75	3. Effectiveness ratio of auditee improvement recommendations (%)	57

Source: *adapted from BSP (2022-2024)*

to another can be cross-referenced across BSPs (for the last year implemented only), it is impossible to determine whether a target has been met for indicators that have been dropped. Furthermore, the BSP does not comment on whether its own targets have been met nor provides a summary, such as the number of indicators met within a given program. Consequently, this makes the performance measurement process hard to manage and holds little operational value in informing budget decisions.

Table 4.4 illustrates some of the weaknesses in performance matrix design and achievement against the indicators. It compares the 13 program-level yearly indicators (excluding the "final result" indicators) between the two most recent BSPs. Two of the 13 program-level indicators have changed, therefore, comparison could only be made for the remaining 11. Only three of these remaining indicators have been met. Relatively better performance is observed across subprogram indicators, where 28 indicators have been met out of 58 that could be directly measured between the BSPs. Importantly, the table affirms the challenges of outcome attribution when many of the performance indicator targets are not within reasonable reach of MAFF's budgetary resources.

Performance information is not used in budget negotiations, but BSP experience with performance metrics provides a platform to build toward performance-informed budgeting. Performance information is also not used during budget preparation and implementation. At present, budget negotiations in MEF include unstructured references to the performance information. The current reform efforts to introduce a PIB framework provide an opportunity to structure the procedures and methods that guide the design, monitoring and reporting of performance information within the BSP, and help address the weaknesses pointed out above. Critically, implementation of any performance framework would require strengthened administrative capacity. MAFF officials have pointed to limited administrative and technical capacity in the design and implementation of performance frameworks. Any introduction of performance-related guidelines should seek to ensure that the capacity to design, monitor, report, and evaluate performance information is enhanced within the MEF responsible agencies.

The internal audit currently plays a very limited role in performance. The role and responsibilities of internal audit staff are not clearly defined. Strengthening the internal control framework could strengthen the role of audits in monitoring performance, the quality and credibility of such audits are essential to safeguard the integrity of budget processes. Currently, MAFF audit reports by the National Audit Authority are not publicly available. Further analysis is required to identify constraints to effective internal audit.

Implementation

MAFF's pilot of PB emphasizes the tension in budgeting choices for Cambodia's control systems. Transition to PB highlights the choice between traditional budgeting focus on input controls with flexibility in outputs and greater flexibility on the input side with stricter expectations in output. In many countries, this choice can be followed by a perceived tension between controlling expenditure on the one hand and letting managers manage on the other. Over the long term, the objectives of performance accountability assume that managers have reasonable discretion over the use of the resources provided, without which it would be impractical to hold managers to account.

Implementation of Cambodia's budget commitment and virement rules contribute to the unpredictability of funds and contain the transition towards greater flexibility for budgetary inputs. The virement rules leave little discretion to the line ministries and line managers to move funds within the ministry budget. Some evidence suggests that virements between sub-accounts could take as long as two quarters. This disincentivizes line managers from applying for virement during budget execution of a given program. Similar cumbersome

and lengthy processes are observed in the release of funds for program activities. Consequently, these create budget execution rigidities that can lead to expenditure delays and discounting of unforeseen program needs, which can be particularly costly in the agriculture sector due to the higher time sensitivity of some expenditure items. Deepening performance-informed budgeting reforms with existing virement rules risks overwhelming MAFF and other LMs with additional reporting without meaningful gains in budget effectiveness and service delivery. The misalignment between the PB budgets and line-item controls could have costly results, with resources being overconsumed by some spending units and under-consumed by other units, with consequences for delivery and performance objectives. Ultimately, program managers have little discretion over funds at the program level, thus impacting their ability to deliver on program objectives. Attempts to hold program managers to account would necessarily need to re-visit the balance of control.

Tender processes can last for months, introducing unpredictability of fund flow, and reducing time to execute programs, which are time-sensitive to seasonality, thereby impacting the agricultural sector. Funds remaining unspent at the end of the fiscal year are surrendered. These delays could be explained by the misinterpretation of existing regulations and/or lengthy approvals for the procurement process and budget requests – both cited as reasons for delayed disbursement of funds, impacting implementation and budget credibility.[97] Specifics around the rules and functions guiding the procurement process and release of funds fall outside of the report's scope but could warrant further examination. A detailed business process review of procurement-related approvals across MAFF and MEF would help identify the bottlenecks (whether misinterpretation of procedures or the processes themselves) and actions that could be taken to reduce the time taken up by approval processes. Business process review in payment processes by MEF can serve as an example to approach the issue.

Misalignment between development partner and government rules and budget calendars compounds the issue. The unpredictability of external funds owing to different, and sometimes complex, sets of rules complicate the implementation of projects. This is particularly important in agriculture and for MAFF, given the overwhelming share of capital projects funded by development partners and the declining outturns in externally financed projects, as illustrated in the previous section.

4.6. Recommendations

The introduction of the Budget Strategic Plan (BSP) and the piloting of Program Budgeting (PB) are important strategic steps under the Government's PFMRP to improve the quality of public spending. MAFF's experience with the reforms demonstrates that these steps have helped strengthen elements of the planning process, but are yet to be integrated into budgeting and budget management processes. Some of the key recommendations are in line with earlier PER's recommendations, which have been partially implemented (see Box 4.1).

To support successful implementation of the performance-informed budgeting (PIB) under the PFMRP toward improving spending outcomes, it will be necessary to (i) strengthen of BSP content; (ii) align BSP documentation and processes with the annual budget and externally funded projects; and (iii) integrate BSP and program logic into negotiations, appropriation, monitoring, and evaluation, and the legal framework (Table 4.5).

97 A large number of activities across ministries means that it can take the budget controller several months to complete the process of allocating at this level (sometimes referred to as "loading the budget"). Experience suggests that during the period while this work is being done, line managers are either starved of actual funding or operate on unpredictable interim releases. This can have an adverse effect on program and subprogram service delivery (World Bank 2016)

Box 4.1. Agriculture in the 2019 Public Expenditure Review

This box summarizes key findings and recommendations related to agriculture and irrigation in the previous Public Expenditure Review for Cambodia (World Bank, 2019). The previous PER focused on drivers of inclusive growth nurtured through the provision of core public goods and provided policy options aimed at orientating spending towards these broader goals. The PER recommended to:

Continue consolidating the number of BSP subprograms and improving alignment with national priorities, while systematically collecting and monitoring performance data (partially implemented). The process of strengthening the BPS and program budgeting process is ongoing, and many improvements have been made. For MAFF, and the agricultural sector more broadly, challenges remain in the inclusion of external donor financing into PFM systems and reforms. The performance matrix has been strengthened with the regular collection and reporting on indicators. However, gaps remain, not least unrealistic and unclear outcome indicators. The design of the performance matrix and its operational value throughout the budgeting cycle could be improved.

Enhance strategic engagement and coordination among sector actors by revamping the TWGAW (partially implemented). Coordination has been strengthened between public sector actors through the inter-ministerial committees, however, more could be done including through the efforts to prioritize and integrate potential DP pipeline projects into budget planning. The Technical Working Group on Agriculture and Water (TWGAW) would be the natural forum for discussion.

Undertake an institutional assessment of current capabilities and future resource needs in inspection services, plant and animal health, and water usage (not implemented). An institutional assessment of capabilities has not been undertaken since the previous PER.

Elaborate on a national agricultural research strategy addressing research priorities as well as institutional and financing matters (not implemented). There is low level of spending on research and education. Horticulture Development Policy, which includes research priorities, has been drafted with the assistance of the USAID Project but remains to be finalized and adopted by MAFF.

Undertake regular project unit-cost analysis, combining the information with that in the CISIS (on condition of schemes), and use it to support informed decision-making (not implemented). Projects are formulated by development partners with close consultations with MAFF and MEF responsible units.

Source: *2019 Public Expenditure Review for Cambodia; World Bank staff*

Table 4.5. Options to strengthen budget management in agriculture

Challenge	Options	
	Short-term recommendations (1-2 years)	Medium-term recommendations (3-5 years)
PB design challenges and weak link between BSP and the PB. Budget negotiations do not follow the program logic	Improve design of PB, focusing on better costing, while aligning PB with BSP. For example: • Improve realism of BSP outcome indicators • Review and refine PB structure to capture all relevant expenditure associated with specific program including personnel cost and capital expenditure	Further strengthen PB design by linking it with BSP to deliver agriculture policy objectives, administrative or support services which are prioritized Align BSP to the formally adopted MTBF and MTFF Explicit costing of new proposed subprograms, activities, policy initiatives, capital investments, and required funding to continue with existing activities. This could include expenditures related to risks such as climate events
	• Develop guidelines to clarify the roles and responsibilities of PDAFFs in the development of the MAFF BSP; strengthen information-sharing protocols between PDAFFs to MAFF at the center	
Weak LM involvement in capital budget planning	Consider adjusting timelines of project screening and selection processes to inform MAFF's planning functions and development of the BSP. This may involve moving capital budget planning forward and earlier determination of ministry-level indicative capital budget allocations	Pilot an indicative ministry-level annual capital budget envelopes over a 3-year medium-term horizon for MAFF (or another prioritized LM). Align timing with the preparation of the BSP (issuance of circular)
	Strengthen agriculture-specific sector-wide cross-ministry coordination of externally funded capital projects in the three key sector ministries through the recently formed Inter-Ministerial Committees (IMCs)	
Complex and impractical performance matrix	Reduce and simplify the number of performance indicators (e.g., 5-15 key indicators). Balance indicators between outputs and outcomes	Align with the Sectoral Climate Change Strategic Plan (SCCSP) and strategic objectives of the Cambodia Climate Change Strategic Plan (CCCSP), the performance matrix could include 1 (or) 2 climate change indicators
	Encourage consistency in the indicators from one BSP to another	
	MAFF to conduct a comprehensive annual review of performance against output and outcome targets as reported in the BSP. This could be complemented by the development of a mechanism to utilize the results as input in the subsequent BSP	
	Re-design performance indicators to reflect more realistic and verifiable targets that correspond to available resources	

Challenge	Options	
	Short-term recommendations (1-2 years)	Medium-term recommendations (3-5 years)
	Build capacity on the design, monitoring, reporting, and use of performance metrics (not limited to MAFF)	
Strict virement rules and lengthy budget release	MEF and MAFF to jointly conduct business process review(s) and improvement for budget commitment and procurement process	Annual budget appropriations on a program basis. At the spending unit levels, funds should not, as far as possible, be allocated by activity or line-item basis; instead, spending units should preferably operate on a "global budget" with the flexibility to allocate funds across activities and line items where necessary The budget execution stage should support the use of resources consistent with the budget presentation passed by the legislature. Mechanism needs to be devised to provide direct access to approved budgetary resources in the TSA supported by FMIS
	Delegation of authority to support managerial flexibility in budget execution – i.e., discretion over virements between some expenditure items during implementation, particularly those under the same subprogram. Spending units would report on the use of funds to the subprograms. Subprogram managers would report upward on program execution. MAFF to prepare the procurement plan in advance and adjust timelines for the necessary documentation along with the procurement calendar	
Internal control, performance audit, and oversight	Strengthen MAFF Internal Audit and Inspection Teams' capacity, roles, and responsibilities for effective internal budget control and focus on performance including deliveries of prioritized agriculture policy objectives, administrative or support services	Develop and implement Internal control framework roadmap. Annually publish the MAFF audit report which includes performance audit, targeted under Stage 4/Platform 4 of the PFMRP

5 IMPROVING CAPITAL BUDGET MANAGEMENT FOR IMPROVED IRRIGATION AND WATER RESOURCES MANAGEMENT

5.1. Introduction

Irrigation and water management are essential to promoting agricultural productivity in Cambodia. Improved water resource management and access to water service, which are a precondition for switching from rain-fed to irrigated agriculture, can raise rice yields by up to 125 percent.[98] The total arable land area in Cambodia currently is about 4.5 million hectares (ha) of which 4 million ha are used for seasonal crops, mostly rice, and 0.5 million ha are under permanent crops (rubber, fruit trees, commercial woodland). In 2016, a total of 1.5 million ha were irrigated, 1.1 million ha in the wet season and 0.5 million ha in the dry season.

Improved irrigation and water resource management can also provide opportunities for diversification to different crops other than rice. Cambodia needs to embrace a structural transformation of the sector from one based on traditional agriculture to modern agricultural practices. As a part of such transformation, Cambodia needs to go beyond rice to focus on other high value crops such as maize, cassava, mung beans, mango, cashew, pepper, and vegetables.[99]

More effective budget management could facilitate such a transformation by increasing irrigation services' and water resource's contribution to the agriculture sector and beyond. Irrigation and water resource management absorbed a major share of total expenditure for the agriculture sector. However, there are major challenges in front of effective budget management in the sector:

- Coordination challenges between MOWRAM and MAFF, including the lack of clear delineation of roles and responsibilities between the two ministries, and duplication of effort reduce the efficiency of funding allocation.

98 (ADB, 2014) (JICA, 2009). It is also recognized also that, in addition to good water management, modern farming practices are an important determinant of productivity (World Bank, 2015). Cambodia needs to introduce modern farming practices, such as controlled irrigation, machinery, improved seeds, and chemical fertilizers to achieve higher yields.

99 See for instance (Gelotti & Sin, 2016)

- The lack of linkages between planning and budgeting creates challenges in the implementation of program budgeting.
- Limited planning practices and poor quality of medium-term investment estimates are key challenges for expenditure execution.
- Limited deconcentration within MOWRAM has resulted in limited availability of financial and human resource at the subnational levels for frontline service delivery.

5.2. Sectoral context

Shortcomings in irrigation infrastructure limit agriculture productivity and crop export potential. Reliance on rainfed agriculture, limited diversified crops to meet broader market demands, and higher export and electricity costs compared to neighboring countries limit the full potential of agriculture land use and productivity.[100]

Variable water availability has been a key challenge to the irrigation sector development in Cambodia. Although Cambodia has abundant water resources, its availability is highly variable both temporally and spatially. In the wet season, there is ample water, though supplementary irrigation may be required to avoid crop moisture deficits between rainfall events. In the dry season, many rivers and streams dry up, especially in the northwest of the country, unless there are storage reservoirs in the upper catchments.[101]

Much of the public investment in irrigation has been to rehabilitate and maintain the old schemes built during the 1970s. The majority of irrigation schemes that were built during the period of civil unrest were created by constructing 1-2 meter high earth bunds across the predominantly flat slope areas. These structures enabled water to be stored during the wet season for supplementary irrigation and facilitated recessional cultivation at the end of the wet season. However, they were poorly designed and incomplete, and could only provide irrigation for a small dry season crop area at best.

A majority of the current functional schemes are either medium or small size. As of 2022, there are 2,355 irrigation schemes in Cambodia categorized as small (50 to <200 ha), medium (200 to 5,000 ha) and large (>5,000 ha). Among these, 1,131 (48 percent) are small, 1,171 (50 percent) are medium, and the other 53 (2 percent) are large.[102] These schemes altogether cover an annual irrigated area of over 1.5 million ha, about 498,200 ha by large schemes (32 percent), 931,900 ha by medium (60 percent), and 131,290 ha (8 percent) by small-scale schemes.[103]

Climate change is a key factor affecting the irrigation and water resource management sector. It intensifies storms and extends the number of consecutive dry days during both dry and wet seasons. Existing data indicate that Cambodia will experience a generally wetter climate with longer dry periods in the future. During the dry season, the potential impact of climate change will likely exacerbate water scarcity for certain parts of the country. During the wet season and across the country, it is projected that more severe, frequent, and longer-duration flooding will occur, especially in the Mekong Delta areas.[104]

5.2.1. Irrigation and water resource management sectoral policy

Policy-making for irrigation is complicated by the many agencies involved and by the inadequacy and ineffectiveness in the distribution of responsibilities across levels of government. MOWRAM has been the lead agency for implementing policies, but the division of labor

100 (RGC, 2019)

101 (MOWRAM, 2019)

102 Data provided by MOWRAM (2023), Cambodia Irrigation Scheme Information System (CISIS) database

103 (MOWRAM/AFD, 2016)

104 (MOWRAM, 2019)

among the different tiers within the ministry needs more clarity. More importantly, there is no systematic coordination between MOWRAM at the provincial level with other relevant agencies.

The RGC has a comprehensive range of policies on developing the irrigation sector to better support agricultural development. In the medium- and long-term development strategies, such as the RS4 and the NSDP (2019-2023), priorities are given to promoting crop diversification, increasing the number of operational irrigation schemes, constructing storage reservoirs, enhancing standards for and quality of irrigation infrastructure, improving the effectiveness of investment, strengthening government institutions involved in irrigation, solidifying the operations and maintenance (O&M) of irrigation systems, and supporting farmer participation in O&M of irrigation schemes.[105]

These policy objectives and strategies have been translated into programs of the ministry. MOWRAM's program structures, which have remained unchanged since 2019, are presented in the BSP and annual program budget. There are five programs, each with a specific objective and divided into subprograms.[106] In addition, since 2020, the ministry has introduced functional classification according to IMF Government Financial Statistics (GFS), matching each to the relevant subprogram.

The primary governmental stakeholders engaged in the irrigation sector are MOWRAM and the Ministry of Agriculture, Forestry and Fisheries (MAFF). MOWRAM has responsibility for the irrigation water supply while MAFF has responsibility for assisting farmers in making the best use of water. To facilitate better co-ordination between the two ministries, the government established the Technical Working Group on Agriculture and Water (TWGAW), with co-chairs from each of the two ministries and participation from development partners. Various sub-committees have been set up under the TWG, including one related to irrigation management.[107]

MOWRAM has adopted several key policies and strategies, including the National Water Resource Policy (2004), MOWRAM's five-year Strategic Development Plan 2019-2023, the Strategic Framework for the Irrigation Sector (2017), and the National Water Resources Management and Sustainable Irrigation Road Map and Investment Program 2019-2033 (2019). These policies refer to the RS4 and the NSDP (2019-2023), and MOWRAM's legal mandate[108] to justify their focus and priorities. In line with the government's program-based budgeting approach, these policies, particularly MOWRAM's 5-year Strategic Development Plan 2019-2023, have also been used to guide the 3-year Project Investment Plan (PIP) and Budget Strategic Plan (BSP), which in turn determine annual budget formulation.

The five-year Strategic Water Resource Development Plan (2019-2023) sets out five strategic areas. These are 1) improving administrative management and human resource development, 2) managing and developing water resources, including sustainable irrigation, 3) managing floods and droughts, 4) managing data on water resources and meteorology, and 5) preservation and conservation of water resources. For each strategic area and sub-areas, specific indicators, and targets (mostly in output terms) were identified for each year (Table 5.1). There has been strong emphasis on O&M and rehabilitation of irrigation schemes and less on overall water resource management; this is reflected in expenditure analysis in the next section.

105 (RGC, 2019) (RGC, 2019)

106 P1. Management and development of water resources, P2. Management of flood and drought, P3. Preservation and conservation of water resources; P4. Management of data on water resource and meteorology; P5. General administration

107 (World Bank, 2017)

108 It is based on Sub-decree # 58 dated 30 June 1999.

Table 5.1. Key indicators and targets for 2019-2023 of MOWRAM

No.	Strategic areas and indicators	Unit	Targets	Notes
1	**Improving administrative management and human resource development**			
	• No. of staff trained	No.	3,000	In & outside country
	• No. of workshops & training	No.	150	In-country
2	**Managing and developing water resources, including sustainable irrigation services**			
	• Increased irrigated areas for rice	ha	150,000	Dry and rainy seasons
	• Increased irrigated areas for other crops	ha	2,500	
	• Established functioning FWUC	No.	35	From 548 in 2018
3	**Managing floods and droughts**			
	• Reduced and prevented floods	ha	None	
	• Reduced and prevented salt seawater intrusion	ha	None	
	• Prevented rice farming from floods and droughts	ha	450,000	Dry and rainy season
	• Constructed pumping stations	No.	25	
	• Repaired pumping stations	No.	45	
	• Repaired water pumps	No.	90	
4	**Managing data on water resources and meteorology**			
	• Installed water resource monitoring stations	No.	85	From 44 in 2018
	• Repaired water resource monitoring stations	No.	60	
	• Installed water quality monitoring stations	No.	5	From 19 in 2018
	• Installed hydrological and meteorological (Hydromel) stations	No.	25	From 65 in 2018
	• Repaired hydrological and meteorological (Hydromel) stations	No.	60	
5	**Preserving and conserving water resources**			
	• Drafting and amendment of sub-decrees and other regulations relating to water resource management,			Various legal documents
	• Enforcement of implementation of endorsed legal documents			

Source: *MOWRAM (2019)*

Note: *No.=Number; ha= Hectare.*

5.2.2. Institutional context

MOWRAM's administrative structure is organized around departments for implementing the strategic plan. At the national level, there is the General Department of Administration, responsible for finance issues, the General Department of Technical Affairs, the Tonle Sap Authority, and the Cambodia National Mekong Committee (CNMC). At the provincial level, there are Provincial Departments of Water Resources and Management (PDWRAM). The PDWRAM are responsible for monitoring water resources and supporting the management of water infrastructure. A typical PDWRAM has a few technical offices and no representation at the lower DMK level. The offices under PDWRAM include 1) Office of Administration and Personnel, 2) Office of Irrigated Agriculture, 3) Office of Water Resource Management and Conservation, 4) Office of Meteorology, and 5) Office of Water Supply and Sanitation. It is common that each office has just one or two staff members.[109]

109 This is based PDWRAM BSPs for various years.

Sustainable Farmer Water User Communities (FWUCs) are integral parts of the institutional setup for the irrigation sector. In 2015, the Government adopted a Sub-decree and guidelines that set out principles, objectives, and activities for achieving sustainable FWUCs. This includes activities for establishing new FWUCs and strengthening established FWUCs at the national, sub-national, and FWUC levels. FWUC budget request guidelines are also included to assist FWUCs in sourcing funds from MOWRAM's annual FWUC budget to support the establishment and strengthening (e.g., training) of FWUCs.

Sub-national administrations (SNAs) are supposed to play critical role in water resource management and irrigation O&M. In 2019, the Government took a significant step in transferring various tasks to the newly integrated DMK administrations.[110] SNAs at all three levels have also contributed part of their budget to the irrigation sector operations. SNAs have been playing important roles in supporting the FWUCs and working with private sector to deliver irrigation O&M and water supply services. Despite the transfer of O&M functions, budget allocation for O&M at sub-national agencies and/or community organizations remain very limited. MOWRAM has made little progress in transferring functions and resources to SNAs.

5.3. Public expenditure in irrigation and water resource

Financing for irrigation and water resources comes from both the national budget and external financing. There is a heavy reliance on external financing, which accounts more than half of total MOWRAM spending. Overall spending declined in 2019 and 2021 due to a reduction in DP-financed capital spending. Government domestic investment remained flat at 0.3 percent of GDP between 2017 and 2021. DP-funded capital spending declined from 0.6 percent of GDP in 2017 to 0.5 percent of GDP in 2021 (Figure 5.1 and Figure 5.2).

Domestically financed investment expenditure deviate substantially from original budget (Figure 5.3). MOWRAM experiences sizeable fluctuations in budget execution because of in-year budget adjustments. Every year MEF allocates part of the unallocated budget to MOWRAM to meet 'emergency needs' to repair irrigation schemes affected by annual floods. This in-year budget increase applies mainly to the investment expenditure budget (Chapter 21). A large but unpredictable amount of budget allocated during the in-year implementation can undermine allocative efficiency because it does not fully follow the due process of budget allocation stages and the decisions tend to be made under time constraint.

Figure 5.1. Trends of MOWRAM's spending (% of GDP) (2017-2021)

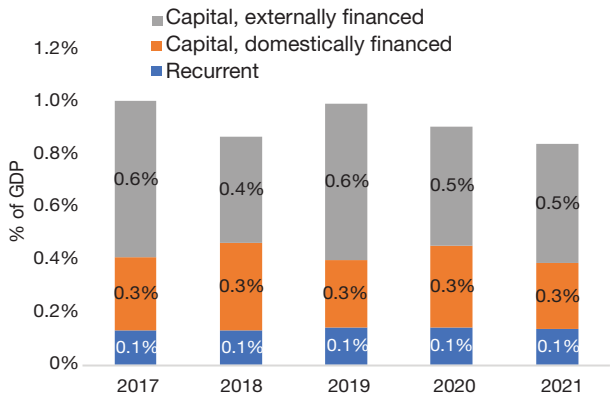
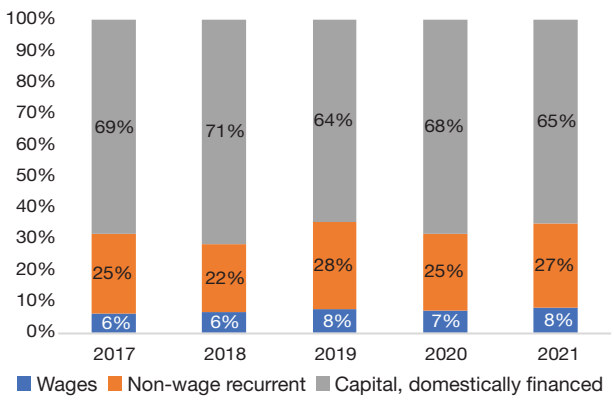


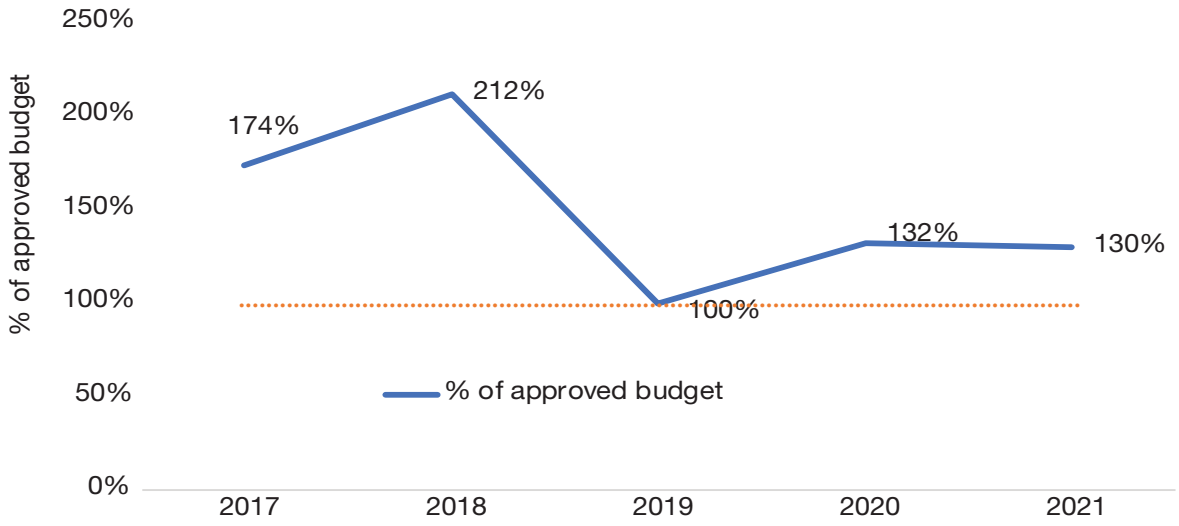
Figure 5.2. Economic composition MOWRAM's spending (% of total) (2017-2021)



Sources: *Budget Settlement Law (2017-2021); World Bank staff estimates*

110 (RGC, 2019)

Figure 5.3. Expenditure outturns compared to original investment expenditure budget (Chapter 21) (2017-2021)

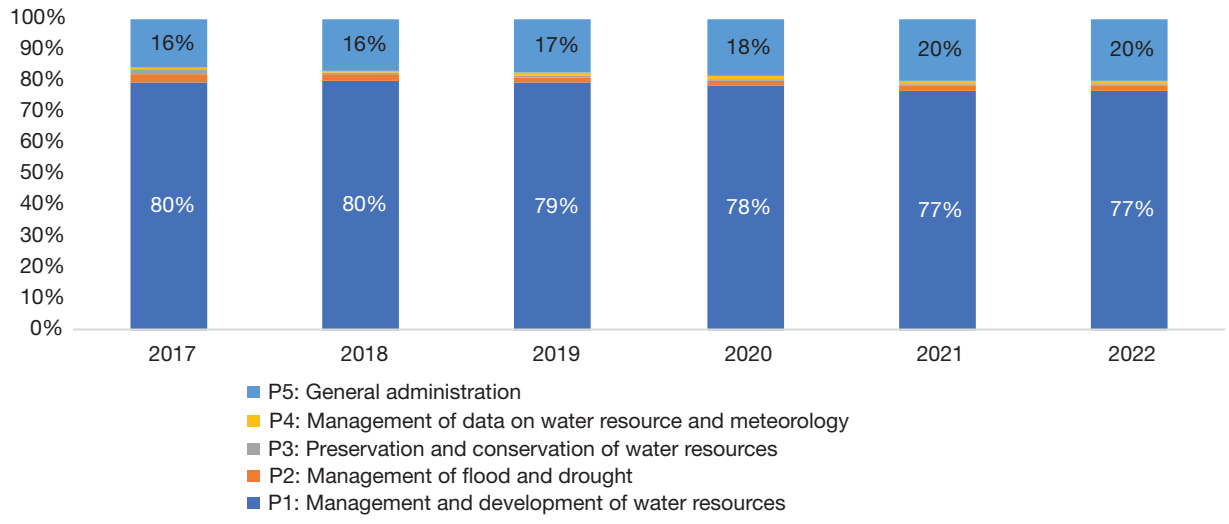


Sources: *Budget Law (2017-2021) and Budget Settlement Law (2017-2021); World Bank staff estimates*

A large share of the MOWRAM expenditure was for the irrigation sector and a limited amount was spent on water resource management. Among the five programs, Program 1 has received the highest budget, followed by Program 5. Program 1 absorbed over 75 percent of the total budget in the last five years and spent under seven sub-programs, six of which are under the central control of MOWRAM (Figure 5.4). The largest of them are the irrigation scheme rehabilitation and O&M sub-programs. Program 1 also covers activities to establish and support FWUC, but the FWUC portion is small and managed mainly by the central ministry. Programs 2, 3, and 4, which are more concerned with water management receive a small amount of the budget. About 15 percent to 20 percent of the budget has gone to Program 5. As Cambodia has persistently suffered from the problem of too much water during rainy seasons and too little water during dry seasons, more attention on water management is necessary.

At the subprogram level (SP), rehabilitation of large-scale irrigation schemes (SP1.2), a

Figure 5.4. MOWRAM budget by programs (2017-2022)



Source: *MEF (2023)*

Table 5.2. Budget by key subprograms

Strategic areas and indicators	2017	2018	2019	2020	2021	2022
SP1.1: Irrigation O&M	20%	19%	23%	23%	27%	27%
SP1.2: Irrigation rehabilitation and construction	55%	54%	50%	49%	43%	43%
SP1.3: Establishment of FWUC	0%	0%	0%	0%	0%	0%
SP1.4: Managing FWUC sustainably (it was SP3.2 in 2017)	2%	3%	3%	3%	3%	3%
SP1.7: Irrigation O&M by PDRAM	3%	3%	3%	3%	4%	4%
SP2.1: Intervention to help pump water during drought and natural disaster	1%	1%	1%	1%	1%	1%
SP2.2: Construct, O&M on mobile pumps and pumping stations	0%	0%	0%	0%	0%	0%
SP2.3: Flood, and drought management by PDRAM	1%	0%	0%	0%	0%	0%
SP3.1/3.2: Preservation and conservation of water resources	0%	1%	1%	1%	1%	1%

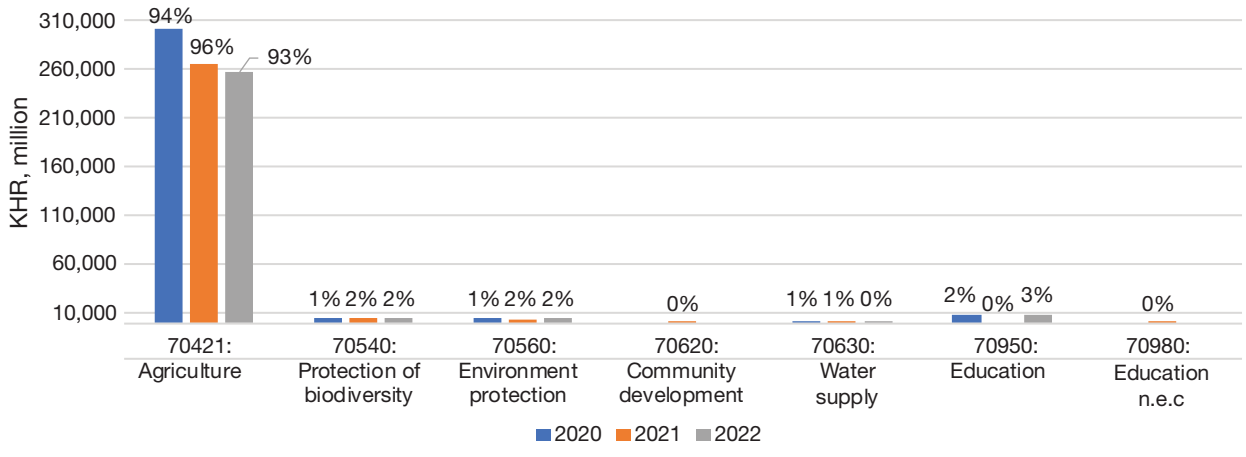
Source: *MOWRAM (2019)*

technical task under the responsibility of the Department of Engineering within MOWRAM has received the largest share in the previous years (Table 5.2). The next biggest subprogram is O&M of irrigation schemes (SP1.1), which is also the responsibility of the Department of Agriculture Irrigation at the central level. The third biggest is SP1.7, which is the O&M budget for irrigation schemes (medium and small) is the responsibility of PDWRAM.

In terms of functions, nearly all of MOWRAM's budget (93 percent) is used for agriculture (Figure 5.5). The cooperation between MOWRAM and MAFF at both the national and subnational levels is critical for achieving allocative efficiency. As such, it is essential that MOWRAM and MAFF function in close coordination at both the policy and institutional levels.

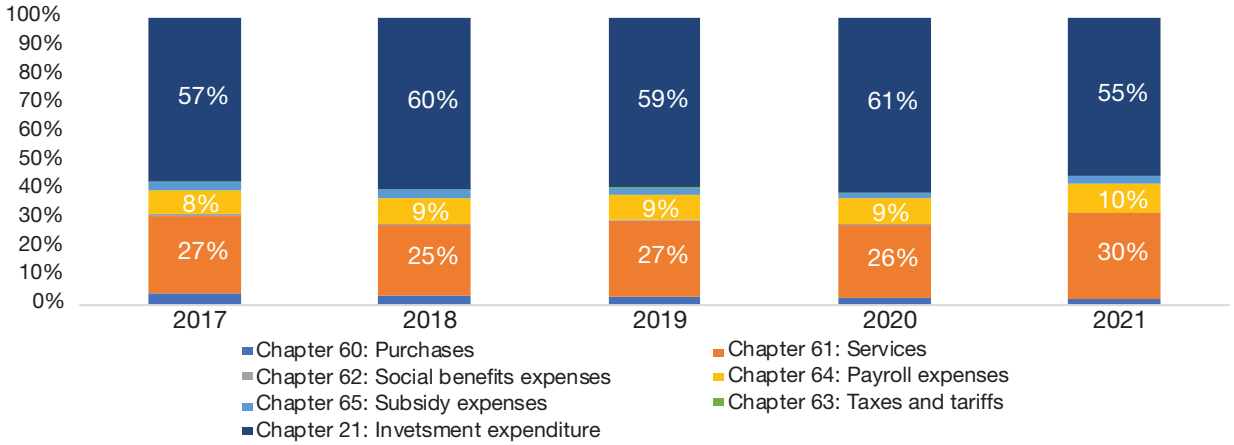
The largest expenditure item is investment expenditure (Chapter 21), which is used for rehabilitating large-scale irrigation schemes, currently managed under the central Ministry (General

Figure 5.5. MOWRAM budget by functions (KHR, million)



Source: *MEF (2023)*

Figure 5.6. MOWRAM spending by economic classification (% of total) (2017-2021)



Sources: *Budget Settlement Law (2017-2021); World Bank staff estimates*

Department of Engineering). Irrigation O&M captured under service expenses (Chapter 61) comes second, followed by personnel expenditure (Chapter 64) (Figure 5.6).

Effective O&M is critical to ensuring the continued functioning of irrigation schemes. The Government has ensured that MOWRAM takes on O&M jobs for newly completed schemes and has them budgeted under service expenses (Chapter 61). At the same time, it has also allocated part of the national budget for investment expenditure (Chapter 21) to rehabilitate irrigation schemes if the cost is less than US$3 million. Between 2017 and 2020, government investment (Chapter 21) as a share of total domestic spending slightly increased from 57 percent to 61 percent. Wage bill and O&M were stable during the same period. However, in 2021, wage bill and O&M respectively increased to 10 percent and 30 percent. This was offset by a decline in government investment (Chapter 21), reaching 55 percent in 2021 (Figure 5.6).

5.3.1. Central versus PDWRAM expenditure allocation

Central level expenditure has taken up the largest share of total MOWRAM's budget.[111] This is mainly

Figure 5.7. Central vs PDWRAM spending (KHR, million) (2017-2021)

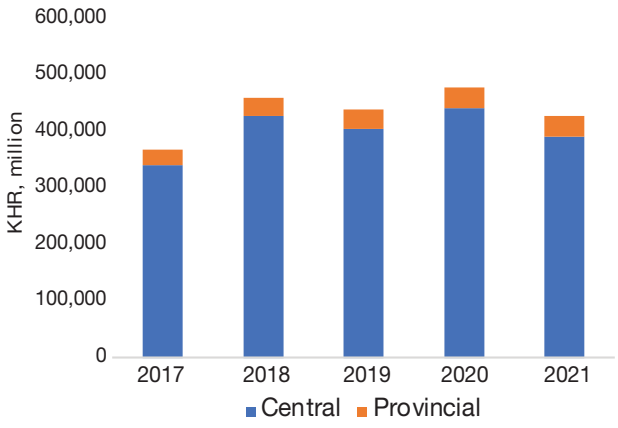
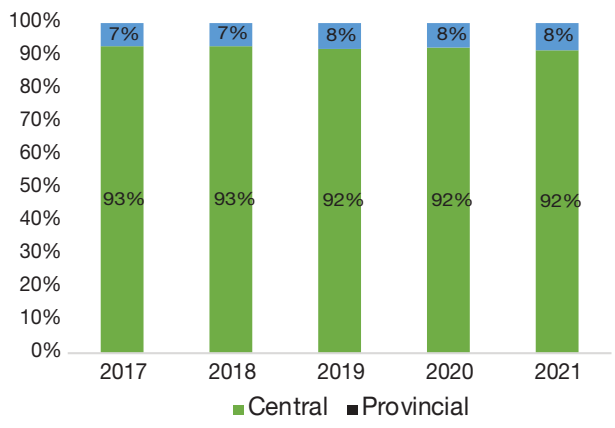


Figure 5.8. Central vs PDWRAM spending (% of total) (2017-2021)

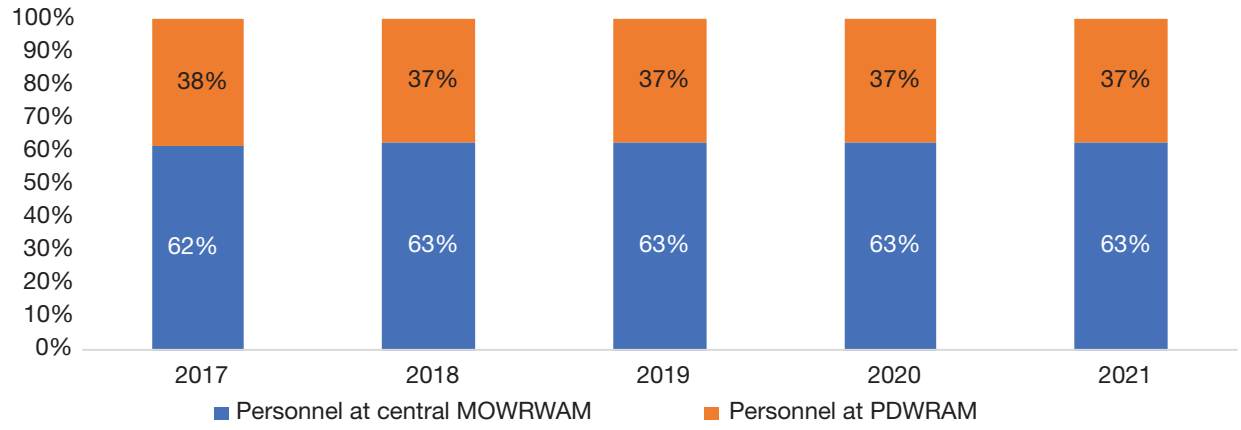


Sources: *Budget Settlement Law (2017-2021); World Bank staff estimates*

Note: *Capital spending integrated in central spending*

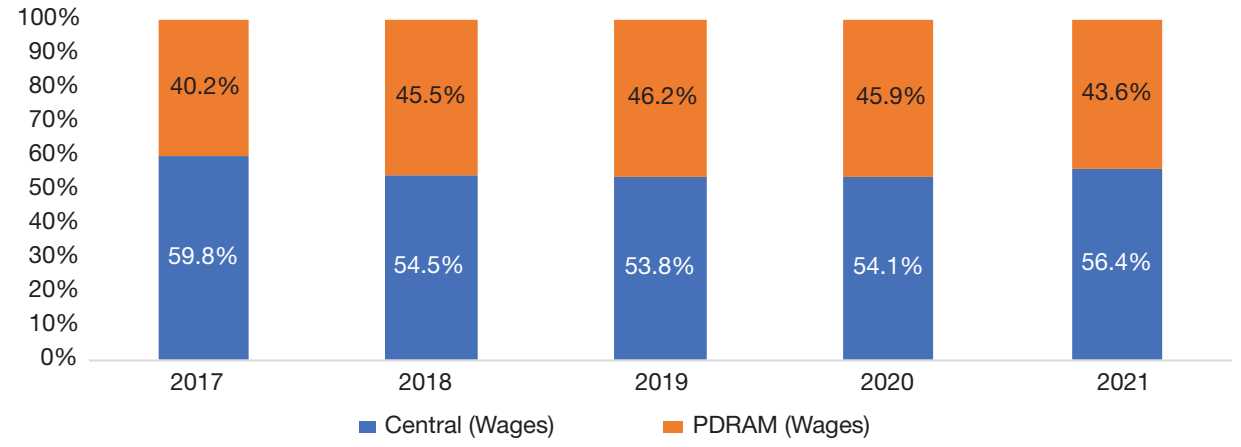
111 The Department of Engineering plays the most important role as a force account to implement newly designed and rehabilitation irrigation projects. The provincial level has very limited capital and human resources for the time being.

Figure 5.9. Central vs PDWRAM personnel number (2017-2021)



Source: *MOWRAM (2023)*

Figure 5.10. Central vs PDARAM spending – Wage expenditure (% of total) (2017-2021)



Sources: *Budget Settlement Law (2017-2021); World Bank staff estimates*

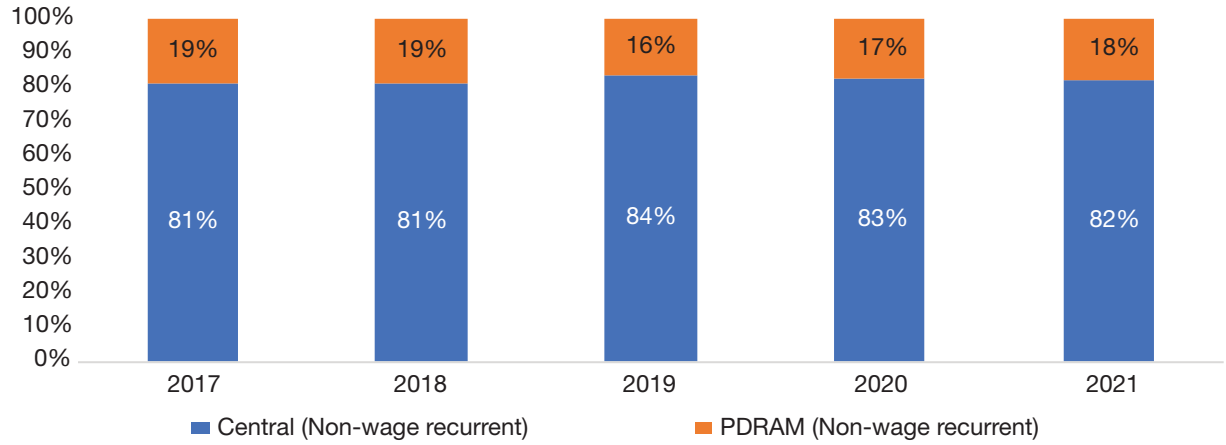
because of investment expenditure (Chapter 21), which is managed at the central level and has the largest chunk of the total MOWRAM spending. MOWRAM's central spending slightly declined from 93 percent of MOWRAM spending in 2017 to 92 percent 2022, while PDWRAM spending marginally increased from 7 percent of total MOWRAM spending in 2017 to 8 percent in 2022 (Figure 5.7 and Figure 5.8).

Within the recurrent budget, the central level also accounts for a significantly larger share. For example, the central level accounted for over 50 percent of the wage bill between 2017 and 2022, primarily because it controls over 60 percent of the total of over 1,400 staff members in the ministry, with the rest spread across 25 PDWRAMs (Figure 5.9).

The shortage of staff at the PDWRAM level is significant. Based on a 2017 assessment, each PDWRAM has around 25 staff on average. For a large irrigation scheme (e.g., a 40,000-ha scheme), a minimum of 62 staff is estimated as being required, more than double the average staff number of a PDWRAM, and that is for only one scheme.[112] Scaling up to the provincial level, Siem Reap's PDWRAM could potentially require over 200 staff, but has only 40 staff, of which 33 are permanent, and the other seven are contracted. Only 18 of these staff have irrigation scheme O&M responsibilities. This shortage

112 (World Bank, 2017)

Figure 5.11. Central vs PDRAM spending – Non-wage recurrent spending (% of total) (2017-2021)



Sources: *Budget Settlement Law (2017-2021); World Bank staff estimates*

of staff at PDWRAM has been recognized but has yet been resolved.[113] More than 50 percent of wage expenses are at central level (Figure 5.10).

The vast majority of non-wage spending has also been at the central level (Figure 5.11). The central level controls more than 80 percent of the total non-wage recurrent spending. This has resulted largely from the fact that the central level controls most of service expenses (Chapter 61) intended for O&M activities.

5.3.2. Expenditure in selected subprograms and priority areas

Irrigation rehabilitation and construction

Rehabilitation of large-scale irrigation schemes (over US$5 million) rely more on external-funds, whereas the national budget focuses more on medium-scale rehabilitation (US$1-3 million). The ministry's Department of Irrigated Agriculture is responsible for the O&M of large-scale irrigation schemes after they are completed, while PDWRAMs oversee the O&M of smaller-scale schemes. This division of labor, while understood among key stakeholders, is not put into writing as a reference. Therefore, it creates uncertainty on roles and responsibilities, especially for PDWRAM.

The irrigation rehabilitation budget is registered under investment expenditure (Chapter 21) and is placed under the Department of Engineering (Table 5.3). In addition, there are some resources under purchase and service expenses (Chapter 60 and Chapter 61), but these are small amounts. The department is directly involved in the whole process of planning and implementing projects funded by

Table 5.3. Budget allocation for irrigation rehabilitation (KHR, million)

		2017	2018	2019	2020	2021	2022
SP1.2: Irrigation rehabilitation and construction – MOWRAM	**Total**	**145,342**	**155,127**	**158,161**	**158,336**	**120,077**	**120,057**
	Chapter 21: Investment expenditure	145,000	155,000	158,028	158,203	120,000	120,000
	Chapter 60: Purchases	24	9	15	15	12	11
	Chapter 61: Services	318	118	118	118	66	46

Source: *MOWRAM (2023)*

113 (World Bank, 2017)

Table 5.4. Budget allocation for irrigation O&M, by level of administration (KHR, million)

		2017	2018	2019	2020	2021	2022
SP1.1: Irrigation O&M – MOWRAM	**Total**	**53,073**	**54,593**	**73,108**	**74,110**	**74,068**	**74,056**
	Chapter 60: Purchases	24	44	59	59	32	26
	Chapter 61: Services	53,049	54,549	73,049	74,051	74,036	74,030
SP1.7: Irrigation O&M – PDRAM	**Total**	**8,532**	**9,794**	**10,015**	**10,453**	**10,352**	**10,795**
	Chapter 60: Purchases	22	22	20	22	13	24
	Chapter 61: Services	8,510	9,772	9,995	10,431	10,339	10,771

Source: *MOWRAM (2023)*

Table 5.5. Budget allocation for establishment and support to FWUC (KHR, million)

		2017	2018	2019	2020	2021	2022
SP1.3: Establishment of FWUC by central MOWRAM	**Total**	**38**	**47**	**60**	**60**	**43**	**38**
	Chapter 60: Purchases	4	5	18	18	16	15
	Chapter 61: Services	35	42	42	42	28	23
SP1.4: Managing FWUC sustainably by central MOWRAM	**Total**	**4,088**	**7,579**	**9,081**	**8,081**	**8,041**	**8,026**
	Chapter 60: Purchases	5	3	5	5	3	2
	Chapter 61: Services	4,084	7,576	9,076	8,076	8,038	8,024
Total		**4,126**	**7,626**	**9,141**	**8,141**	**8,084**	**8,064**

Source: *MOWRAM (2023)*

investment expenditure (Chapter 21). In most cases, PDWRAMs only provide a 'coordination role' in irrigation rehabilitation projects.

Irrigation O&M

The budget for O&M is split between the MOWRAM and PDRAMs (Table 5.4). Nearly all of the O&M is registered under service expenses (Chapter 61) for both the central level and PDWRAMs. The service expenses (Chapter 61) budget under the central level is about six to seven times that of the service expenses (Chapter 61) budget for all 25 PDWRAMs combined.

PDWRAMs have acted as 'contractors' for MOWRAM for some of the O&M work. The working arrangement is that MOWRAM directly

Table 5.6. Activities and budget under establishment of FWUC (SP1.3) and managing FWUC (SP1.4) (KHR, million)

	2021	2022
60021: Office supplies	3	2
61103: Meeting	2	1
6112: Domestic mission	36	23
61055: Irrigation O&M	8,000	8,000
Total	8,041	8,026

Source: *MOWRAM (2023)*

Table 5.7. Budget allocation for emergency responses (KHR, million)

		2017	2018	2019	2020	2021	2022
SP2.1: Intervention to help pump water during drought and natural disaster by central MOWRAM	**Total**	**3,850**	**3,750**	**3,750**	**3,750**	**2,245**	**1,682**
	Chapter 60: Purchases	3,800	3,700	3,700	3,700	2,221	1,666
	Chapter 61: Services	50	50	50	50	25	16
SP2.2: Construct, O&M of mobile pumps and pumping stations by central MOWRAM	**Total**	**850**	**850**	**845**	**841**	**816**	**807**
	Chapter 61: Services	850	850	845	841	816	807
SP2.3: Flood and drought management by PDRAM	**Total**	**2,143**	**1,333**	**1,254**	**1,144**	**1,173**	**1,075**
	Chapter 60: Purchases	54	54	54	55	43	43
	Chapter 61: Services	110	99	76	85	87	69
	Chapter 62: Social benfits expenses	1,979	1,181	1,124	1,004	1,043	963

Source: *MOWRAM (2023)*

implements the O&M work for large scale schemes and the cyclical O&M of medium schemes. For the regular O&M of medium and small schemes, however, PDWRAMs are brought in and get paid as contractors. Such division of labor is not always clear-cut and is subject to negotiation on a case-by-case basis.

Support to FWUC

Although FWUCs are community-based organizations, the budget relating to FWUC has been allocated to the central level (Table 5.5). There are two related subprograms: SP1.3 which focuses only on establishment of FWUCs, and SP1.4, which is about supporting FWUCs to perform their jobs, a big part of which is to ensure regular O&M of irrigation schemes. Much of the budget for the FWUC is to provide O&M funding for mostly small and medium irrigation schemes (as shown in the Table 5.6). The establishment of FWUC (under SP1.3) takes only a small amount of budget, mostly to cover cost of office supplies, meetings, and mission.

Emergency responses

The emergency responses are covered by both the central level and PDWRAMs. For the central level, the main corresponding budget item is purchase expenses (Chapter 60), which involves procuring petroleum to be distributed to PDWRAMs to fuel water pumps for farmers (Table 5.7). The central level also uses a large amount of service expenses (Chapter 61) funds for the construction and O&M of mobile pumps and pumping stations. For PDWRAMs, the main budget item is social benefits expenses (Chapter 62), which is spent

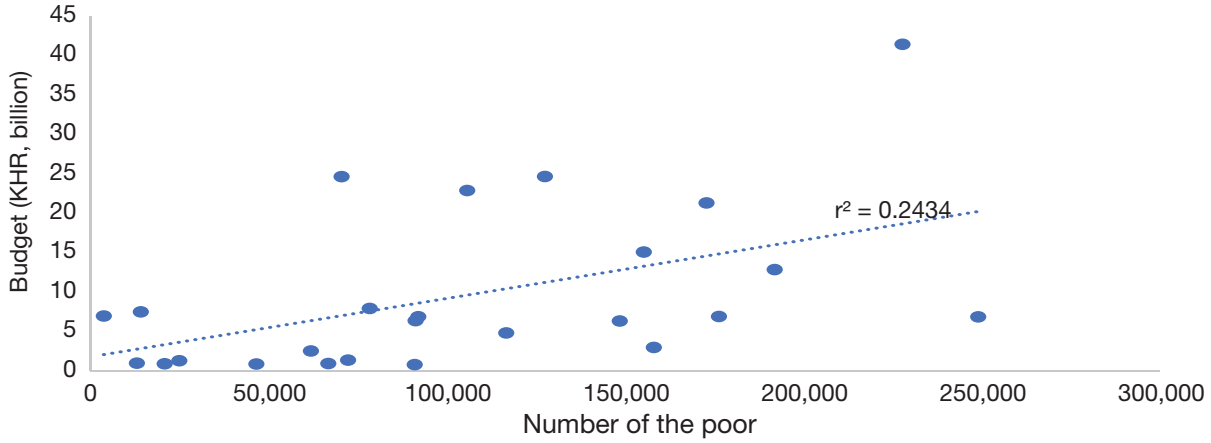
Table 5.8. Reported outputs relating to rice versus other crops

Reported outputs in irrigation coverage	2019	2020	2021
Increase in irrigated areas for rainy season rice (ha)	19,432	17,902	15,601
Increase in irrigated areas for dry season rice (ha)	9,057	10,060	6,987
Other crops (ha)	412	535	1,261
Other crops (as % of total)	1.4%	1.9%	5.3%

Source: *MOWRAM annual report (2019-2021)*

Note: *ha=Hectare*

Figure 5.12. Irrigation investment budget 2019 and poverty level in 2019/20



Sources: *Authors' estimation based on figures from MOWRAM annual reports and CSES (2019/20)*

to support travel expenses for PDWRAM officials and purchasing of various items needed to provide support to farmers.

5.3.3. Outcomes from public investment

Most MOWRAM's investment in irrigation benefited rice cultivation (Table 5.8). While rice has been the priority in the last decade, the Government's intention to diversify agricultural crops to include other high value crops and export markets suggests that the irrigation sector too needs to adjust its priorities.

Recent irrigation budget allocations to the provincial level seem relatively equitable. Using irrigation-related expenditure under investment expenditure (Chapter 21) and service expenses (Chapter 61) (which is by far the largest), Figure 5.12 below suggests that the poorer the province, the higher the budget allocated for it (r^2 = 0.2434). This result is in line with what was found for the recurrent non-wage budgets of MAFF and poverty levels at the provincial levels.[114]

5.4. Budget management

5.4.1. Program budget structure

MOWRAM, similar to MAFF and other ministries, has adopted long- and medium-term policies to help guide its annual budget allocation. It has also implemented program-based budgeting (PB), with five programs divided into subprograms and activity clusters. It has adopted the 5-Year Strategic Plan for Water Management and the Meteorology Sector (2019-2023) and the 3-year rolling Budget Strategic Plan (BSP) to guide its annual budget allocation by programs and subprograms. One key challenge in budget management is that wages (Chapter 64) have not been assigned to each program but are subsumed under one program (Program 5 – General administration), similar to MAFF. This limitation has prevented a comprehensive capture of expenditure by programs and subprograms.

5.4.2. High in year allocation for investment budget for emergency expenses

There is a high in-year budget allocation for investment for emergency expenses that occur regularly. Investment expenditure (Chapter 21) budget comes from two sources: the budget allocated to MWRAM in the annual budget law and the budget allocated in-year from the 'unallocated budget line' under the MEF. For both sources, the budget is managed and implemented by the Department of Engineering under MOWRAM. MEF, through the Inter-Ministerial Committee on Investment Projects, has played active roles in the

114 See Agriculture Section for more detailed information on the MAFF budget allocation and poverty.

Table 5.9. Budget execution rate for the central MOWRAM

Chapter	2017	2018	2019	2020	2021
Overall	146.8%	173.9%	99.5%	118.2%	116.6%
Chapter 60: Purchases	94.8%	95.8%	94.8%	62.1%	72.1%
Chapter 61: Services	98.9%	99.4%	99.2%	95.4%	95.8%
Chapter 64: Payroll expenses	97.7%	103.3%	98.6%	97.2%	99.9%
Chapter 21: Investment expenditure	174.0%	212.2%	99.9%	131.9%	130.2%

Source: *MEF*

Table 5.10. Budget execution rate for PDRAM

Chapter	2017	2018	2019	2020	2021
Overall	96.6%	104.7%	98.5%	95.9%	95.6%
Chapter 60: Purchases	95.3%	97.4%	97.5%	88.6%	95.7%
Chapter 61: Services	97.6%	97.8%	98.5%	96.0%	97.6%
Chapter 64: Payroll expenses	95.8%	116.8%	98.7%	98.0%	93.5%
Chapter 62: Social benefits expenses	98.7%	97.9%	99.7%	96.1%	99.5%

Source: *MEF*

execution of investment expenditure (Chapter 21). The engagement by PDWRAM is said to be limited – mostly in the form of 'coordination' during project feasibility study and project implementation. The high over-execution rates have been due mainly to the in-year budget allocation to MOWRAM from the 'Unallocated budget' line item under MEF as an emergency response budget. Given the frequency of natural disaster as a result of climate change, it is useful to improve planning for contingency.

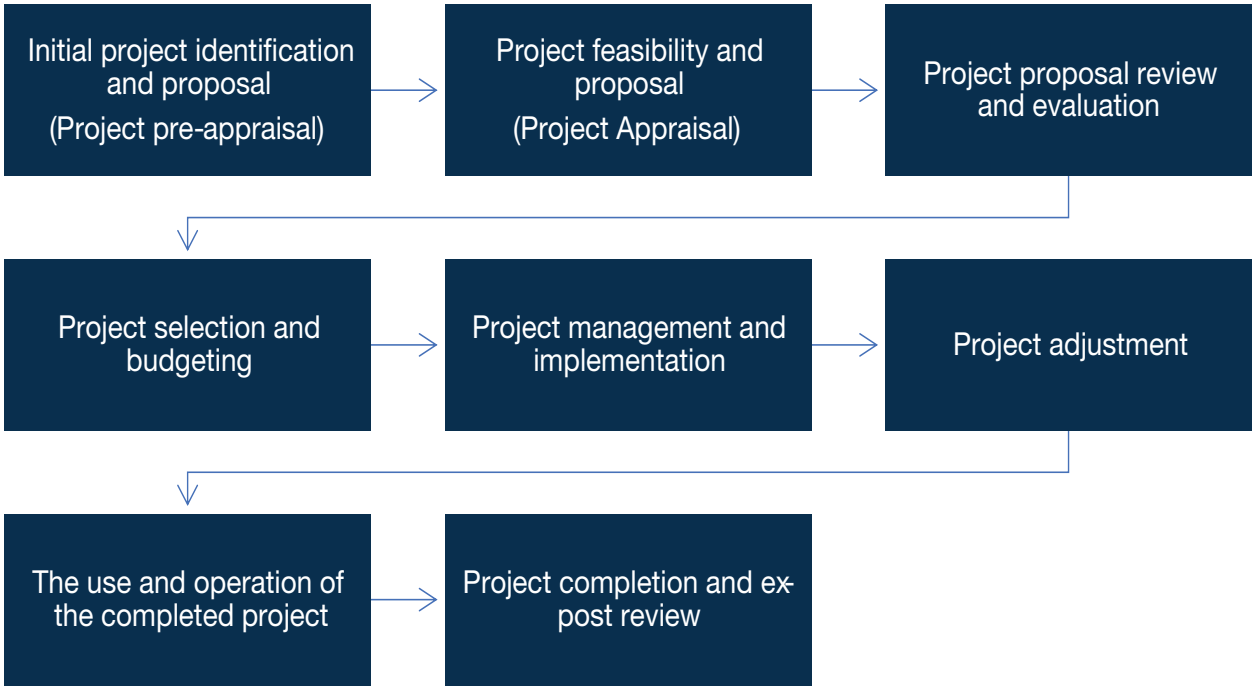
There is a smooth execution of most budget line items, except for investment expenditure (Chapter 21) (Table 5.9). Overall, at both the central ministry and PDWRAM, service and payroll expenses (Chapter 61 and Chapter 64) have been executed mostly according to plan (Table 5.10). This was the case even during the COVID-19 pandemic – an indication that the Government gave priority to the welfare of civil servants during the crisis. Purchase expenses (Chapter 60) was the most affected during the COVID-19 period, especially for the central level (with only 62 percent and 72 percent executed rates for 2020 and 2021, respectively).

Given its significance, formal processes should be in place to guide the allocation and execution of the investment expenditure (Chapter 21) budget from the unallocated budget. For MOWRAM, the main cause leading to the need for such in-year budget allocations is the damages inflicted on irrigation schemes by floods or droughts. As the events occur annually, to some extent, predictably, the expected damage and cost could be planned in budget. The possibility of such planning reduces the proportion of the emergency-based in-year budget allocation and execution and, thus, increase overall budget allocation and operational efficiency.

5.4.3. Management of investment budget

The execution of the budget law based on investment expenditure (Chapter 21) has followed a more systematic process. The process is stipulated in the Standard Operation Procedure (SOP) for the Implementation of a National

Figure 5.13. The key steps in the PIM process



Source: *MEF (2022)*

Funded Investment Project (2022)[115] and MEF's Prakas # 207 on the procedures for implementing investment budgets from the national budget.[116] The 2022 SOP outlines eight steps for the PIM cycle (Figure 5.13). Partly because it is only recent, it does not provide needed details on some of the key steps. Management of investment budget could be improved for some of the steps, grouped into 1) project and budget preparation phase, 2) project and budget implementation, and 3) project monitoring, ex-post review and asset management phase.

Project and budget preparation

Better integration of the investment budget at the planning stage is needed. International experiences suggest that investment budgets are best accounted for in medium-term budgeting and in the program-based budgeting process. For the MOWRAM case, progress has been made on both fronts. Since 2021, the capital budget has been included in the BSP and integrated into respective programs and subprograms. Two specific areas deserve more attention. The first is the quality of the medium-term estimate of capital budget needs for the ministry. Both the methodology and the data used for such estimation exercises need to be continuously improved. The second area in need of attention is the integration between capital and associated recurrent budget, especially O&M. Planning for the O&M budget should be included in the long-term economic life of the projects.

Inclusion and integration of O&M with the capital budget is needed for a functioning PIM system. Poor integration often leads to the planned benefits of investment not being realized in full because of a shortage of funding for operating expenses or maintenance prematurely ending an asset's planned operating life.[117] International experience also suggests that such shortages are particularly problematic where a large share of public investment is planned and financed by donors, and inadequate attention is paid to the financial operation and maintenance through domestic financial resources.[118]

115 (MEF, 2022)
116 (MEF, 2022)
117 (World Bank, 2020)
118 (World Bank, 2020)

Table 5.11. Number of investment projects by types of procurement methods used

Procurement methods used	2017	2018	2019	2020	2021
Bids by international competition	0	0	0	0	0
Bids by domestic competition	2	0	2	4	0
Price consulting	0	0	0	0	0
Price surveys	0	0	0	0	0
Separate procurement (i.e., internal)	34	52	34	35	38
Total	**36**	**52**	**36**	**39**	**38**

Source: *MOWRAM*

Project and budget implementation

There has been a noticeable improvement in the execution of investment expenditure (Chapter 21). MEF Prakas # 207 dated 26 February 2019 provides clear guidance on how the capital budget should be managed in tandem with the overall project implementation cycles. The fact that the capital budget has been prepared on time to be reviewed and approved at the same time as the current budget has allowed for sufficient time for project implementation during the fiscal year. The timeliness element has been particularly important for irrigation projects because it means they can be implemented with minimum disruption from the rainy season, which usually starts in May or June.

One main area for improvement is public procurement of the investment expenditure (Chapter 21) projects. MOWRAM has been implementing key reform tasks relating to public procurement. However, a large majority of investment expenditure (Chapter 21) projects (and other procurement works as well) have not been done through bids by international competition, bids by domestic competition, price consulting, or price surveys. Instead, most of them have been done via 'separate procurement' which basically means giving them to a general department or a department within MOWRAM to implement as contractors (Table 5.11).

Project monitoring, ex-post review and asset management

Guidelines have been put in place to ensure regular monitoring of project implementation. In the case of investment expenditure (Chapter 21), these are provided in the MEF's Prakas # 207 on procedure of public investment and the newly adopted SOP on investment project implementation. For service expenses (Chapter 61) on irrigation, these provisions are found in the recently adopted Prakas on irrigation O&M. Requirements on monitoring and reporting are also found in the regular annual budget implementation circular issued by the MEF. This study also reviewed MOWRAM activity reports from previous years and makes note of the rich information being reported on the activities performed and outputs produced.

The main gap in the current system is the lack of information on the impacts resulting from the investment and spending. There is necessity for such impact evaluation information to support budget management effectiveness since a lot of resources have already been spent on rehabilitation and O&M of irrigation schemes in the past decade. While much information on the outputs has been produced (Table 5.12), there is virtually no information on the quality of impacts that have been achieved.

Figure 5.14 and Figure 5.15 **show that agriculture land without irrigation facilities remained high at 54 percent of total agricultural land, despite declining from 62 percent in 2015.** Irrigated areas of agricultural land increased from 38 percent of total agricultural land in 2015 to 46 percent in 2021, driven by irrigation during wet seasons. Irrigated areas of agricultural land during the dry season remained low and tended to decline over the last five years, while

Table 5.12. Outputs reported from investment expenditure (Chapter 21)

	2019	2020	2021
No. of projects	38	34	28
No. of provinces	16	16	16
Budget spent (KHR, million)	166,842	153,829	122,844
Increase in irrigated areas for rainy season (ha)	19,432	17,902	15,601
Increase in irrigated areas for dry season (ha)	9,057	10,060	6,987
Other crops (ha)	412	535	1,261
Ensuring sustainability for rainy season (ha)	27,355	10,372	9,090
Ensuring sustainability for dry season (ha)	4,185	2,819	1,090

Source: *MOWRAM annual report (2019-2021)*

Note: *ha = Hectare*

Irrigated areas of agricultural land for both seasons slightly increased during the same period.

Information is also lacking on irrigation schemes as assets to be managed. Asset management is one key area in the standard PIM process and is mentioned in the PIMSRS and other legal documents in Cambodia. A key part of asset management is to have an asset register. For MOWRAM, and other ministries in the government, asset registration has been done with the use of the SARMIS (State Asset Registration Management Information System). Despite progress, however, the current rules do not require irrigation schemes to be included in the asset register.

The information on irrigation schemes in Cambodia has been kept in a separate database, not yet a part of the asset register. As mentioned earlier, Cambodia has over 2,500 irrigation schemes, categorized as small, medium, and large. Information about these schemes has been collected and updated in a system called Cambodia Irrigation Scheme Information System (CISIS). CISIS has not been made publicly available, and it is not clear what detailed information is available and whether it is the same kind of information that an asset register should have.

5.5. Summary of key findings

A large share of the MOWRAM expenditure

Figure 5.14. Agricultural land, by irrigation facilities (000 hectare) (2014-2021)

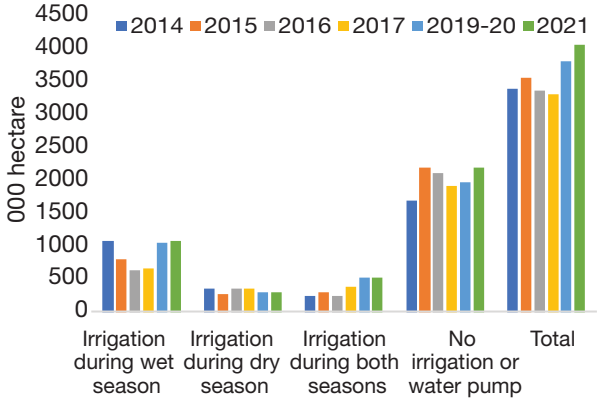
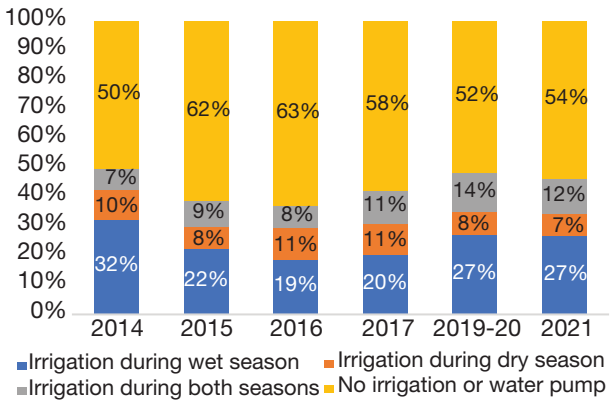


Figure 5.15. Agricultural land, by irrigation facilities (% of total) (2014-2021)



Sources: *CSES (2014-2021) and World Bank staff estimates*

has been allocated to the irrigation sector, leaving a small percentage for water resource management. External funding, on the other hand, focuses on both irrigation and water management.

There is a high in-year budget allocation for investment expenditure (Chapter 21) for MOWRAM. The in-year additional budget allocation can range from 0 percent to 100 percent of the investment expenditure (Chapter 21) allocation to MOWRAM in the Budget Law. Such a large but unpredictable amount of extra budget allocated during in-year implementation can undermine allocative efficiency because it undermines the comprehensiveness of the due process of budget formulation.

By function, the overwhelming majority of the MOWRAM budget has been spent on 'agriculture.' This suggests the importance of coordination between MOWRAM and MAFF at both national and provincial levels. Such coordination has been limited, especially at the provincial level.

One key systematic challenge is the consistently limited budget allocated to PDWRAM. The problem of severe staff shortages at the PDWRAM level has been brought to the forefront by the data analysis. The limited de-concentration, if not addressed adequately, can systematically constrain the ability of MOWRAM to respond to local needs, especially on irrigation O&M, support to FWUC, and emergency responses.

The operational efficiency of investment expenditure (Chapter 21) also depends on the quality of the PIM. In the case of MOWRAM, limited planning practices, data, and regulatory constraints have undermined the quality of the project pre-appraisal phase. Also limited are the quality of the medium-term estimate of capital budget needs for the Ministry and the integration between capital and recurrent funding, especially O&M.

The execution of the capital budget, while improving, still faces specific technical challenges in particular the limited practice of open bidding in public procurement.

Irrigation expenditure allocations to the provincial level is relatively equitable. Using irrigation-related expenditure under investment expenditure and service expenses (Chapter 21 and Chapter 61) (which is by far the largest), available data suggests that the poorer the province, the higher the budget that had been allocated to it.

5.6. Recommendations

Allocative efficiency can be enhanced as budget allocation is further aligned with policy objectives. Given that the government is placing more focus on rice and other high value crops, MOWRAM, through its existing program and subprogram structure, should adjust its budget allocation to reflect these changing policy priorities.

It is expected that irrigation will still be a priority of the government. However, in that priority, more attention should be given to irrigation scheme O&M as opposed to rehabilitation and construction. To identify the optimal balance between the two investments, however, more data and analysis are needed.

Allocative efficiency can be ensured if the different financing sources complement one another. For this to happen, the first step is to have comprehensive data on those different financing sources and how the budget has been allocated. It is therefore recommended that MOWRAM, MEF and other relevant partners support a comprehensive sectoral financing mapping study, covering not only state budget, but also development partners, SNAs and the private sector.

The limited de-concentration within MOWRAM should be systematically addressed. The breakdown of roles and responsibilities between the center and the local governments should follow international practices where the central level focuses more on setting policies, technical

standards, technical support, M&E, and data works, and the lower levels focus on implementation and are accountable to the higher level for results. There are various technical guidelines, standards, and M&E that need to be developed. The central MOWRAM should focus on those and less on actual implementation. In addition, the question of personnel deployment and decentralization needs to be addressed as a matter of urgency.

The function transfer to the DMK administration should be accelerated in accordance with the Sub-decrees # 182, 183, and 184 (2019). Certain key functions to be transferred, such as small-scale irrigation scheme O&M and support to FWUCs, are appropriate for SNAs, given that some SNAs have already performed them as their de facto functions.

Significant public resources (domestic and external) have been invested in irrigation projects, but much of the available data on results is at output level. Therefore, it is recommended that the Government consider conducting an impact assessment on the spending of investment expenditure (Chapter 21) to generate new lessons learned.

Improving PIM could help to improve operational efficiency. Going forward for irrigation and water resources, key areas that require improvement include project pre-appraisal and selection, and open bidding procurement. Experiences from other countries suggested that strategic sourcing methodology for procurement has yielded substantial saving and improved efficiency on goods and service spending. Another important aspect of investment budget management is to improve the forecast of 'flood damage repair' needs in order to reduce the ad-hoc /in-year budget from the 'unallocated budget.' Short-term and medium-term recommendations are presented below in Table 5.13.

Table 5.13. Recommendations for irrigation sector

Challenges	Options	
	Short-term recommendations (1-2 years)	Medium-term recommendations (3-5 years)
Capital budget planning and management	Improving coordination between MOWRAM and MAFF on strategic water and agriculture development to ensure effective expenditure and coordination	Conduct an impact assessment on the investment expenditure (Chapter 21)
	Improve the forecasting, planning and management of emergency response interventions such as flood and drought events which could reduce the ad-hoc / in-year budget from the 'unallocated budget'	
	Integrate irrigation scheme inventory in state asset registry	
Weak implementation of Public Investment Management	Key areas that require improvement include the project appraisal, and implementation of procedure for open bidding procurement.	
	Optimizing uses of built infrastructure to provide active service delivery to respond to the needs and for economic outcomes	
Limited de-concentration within MOWRAM and decentralization	Clarifying the roles and responsibilities of MOWRAM and PDWRAM. • Central level MOWRAM focuses more on setting policies, technical standards, technical support, M&E, and data works • The sub-national levels focus on implementation, service operations, operation and maintenance and are accountable for results • Adequate personnel and technical staff deployment at PDWRAM	Develop a comprehensive roadmap for sectoral financing covering not only state budget, but also development partners, SNAs and the private sector
	Accelerating the function transfer to the DMK administration • Transfer the roles on small-scale irrigation scheme O&M and provide technical and financial supports to FWUCs to strengthen their operational functions to ensure sustainable operation management of the schemes and better service delivery	

6 KEY LESSONS ON SUBNATIONAL PFM BASED ON CASE STUDY OF PREAH SIHANOUK PROVINCE

6.1. Introduction

Subnational administration plays an important role in public service delivery. Preah Sihanouk province is chosen as a case study province to provide insight into how public finance (both revenue and expenditure) is managed at the subnational level. With a population of 223,286 in 2021, Preah Sihanouk province is a coastal province with a high level of economic potential in the service and tourism sectors. The international port allows Preah Sihanouk province to welcome international trade connections and tourism. Given its economic potential, the government plans to transform Preah Sihanouk province into a multi-purpose economic zone. Economically, Preah Sihanouk province is one of the most vibrant provinces in the country. The province has experienced impressive economic growth, leading to a continuous increase in per capita income and a steady decrease in the poverty rate, from 12.7 percent in 2015 to 3.3 percent in 2019. The main economic engines are industry, service sector, and agriculture, which respectively accounts for 51 percent, 30 percent, and 19 percent of the province GDP.

6.1.1. Development financing and budget allocation to Preah Sihanouk province

The key public sector agencies operating at the sub-national level include the SNAs and line ministries' departments/agencies (hereafter referred to as line departments). The number of SNAs in the province includes: a provincial administration, three districts, two municipalities, 23 communes, and six sangkats. In addition, there are 22 line departments (LD) and three public administration establishments (PAE) present, namely, electricity and water supply utilities, and a public sector training center. These public sector agencies have their own budgets and participate in the joint planning exercise to develop the 3-year rolling investment program (3y-IP) and the Budget Strategic Plan (BSP).

Preah Sihanouk province is among the top provinces in terms of total budget. In 2019, it stood at 4th place in term of SNA total budget, coming after Phnom Penh, Kandal, and Siem Reap (Figure 6.1). Its ranking comes third (after Phnom Penh and Kep) if SNA budget per capita is considered (Figure 6.2).

Figure 6.1. SNA total budget in 2019 (KHR, million)

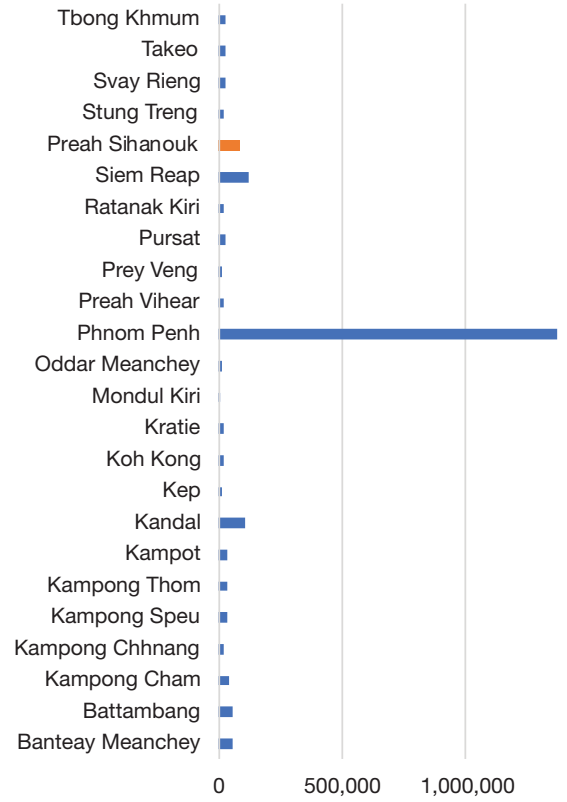
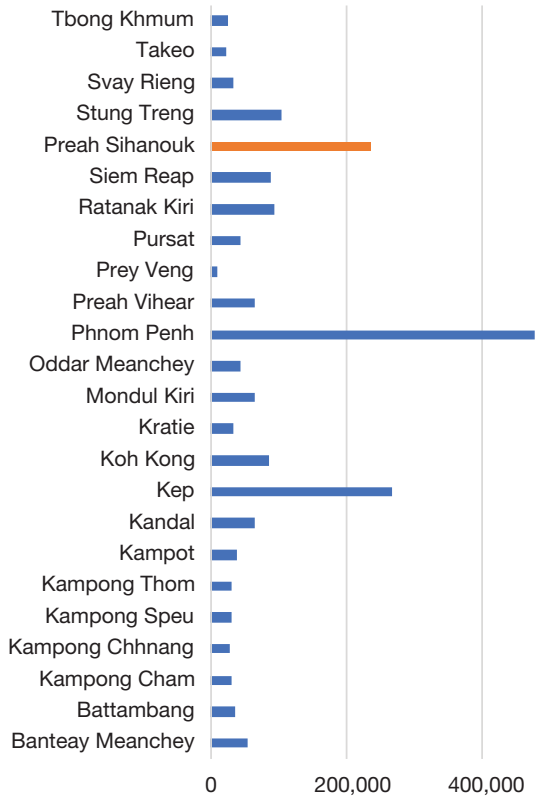


Figure 6.2. SNA budget per capita in 2019 (KHR)

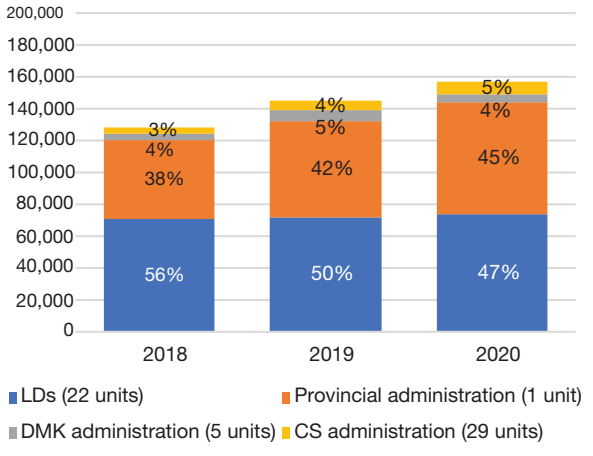


Source: *MEF, GDSNAF (2022)*

The provincial administration has a substantial amount of budget, accounting for 45 percent of total government budget allocated to both SNAs and LDs in Preah Sihanouk province in 2020 (Figure 6.3). It is important to note that the provincial administration budget does not include that of the line departments and agencies.

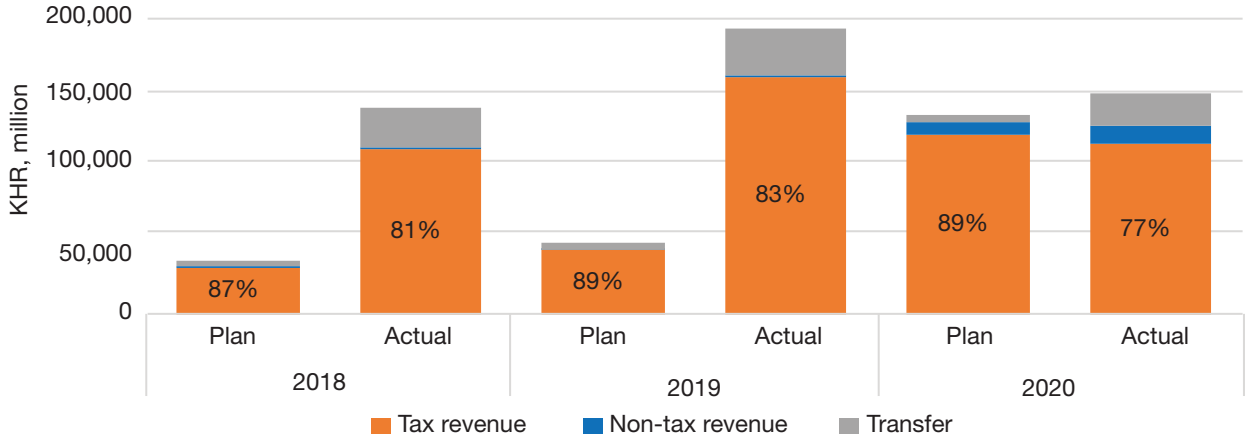
Information on the public investment program of the LMs in Preah Sihanouk province is not available—an important weakness in the planning process. Two types of new investment projects are initiated every year: 1) those funded by development partners, most of which are included in the Public Investment Program (PIP), and 2) those funded by state capital budget which are monitored by the Department of Investment of the General Department of Budget under the MEF. At the national level, information about the donor-funded projects is available on the website of the MOP, but the information about the state-funded investment projects is not publicly available. At the provincial level, however, the information on both types of investment projects is neither available nor recorded by the provincial administration despite the significant size of these projects.

Figure 6.3. Proportion of executed budget of SNAs and LDs in Preah Sihanouk province



Source: *MEF, GDNT (2022)*

Figure 6.4. Preah Sihanouk province revenue (including transfer), planned and actual (2018-2020)



Source: *MEF, GDNT (2022)*

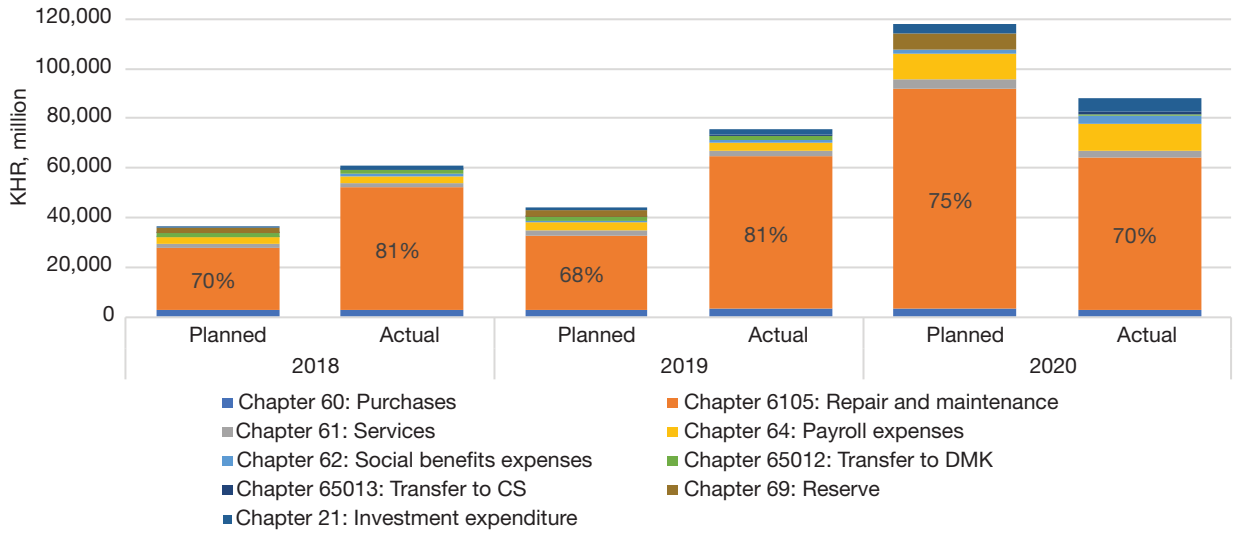
6.2. The provincial administration

6.2.1. Budget allocation and expenditure outlook

Provincial administration revenues come mostly from taxes (Figure 6.4). Tax revenues account for more than 80 percent of the total revenue for all three years. In 2018 and 2019, the administration planned only a small amount of non-tax revenue, however, this was substantially increased in 2020 by about 20 times compared to 2019. Furthermore, in 2018, the actual revenue was 384 percent higher than the plan, and in 2019 it was 401 percent higher before going down to 111 percent in 2020, mostly because of the COVID-19 pandemic.

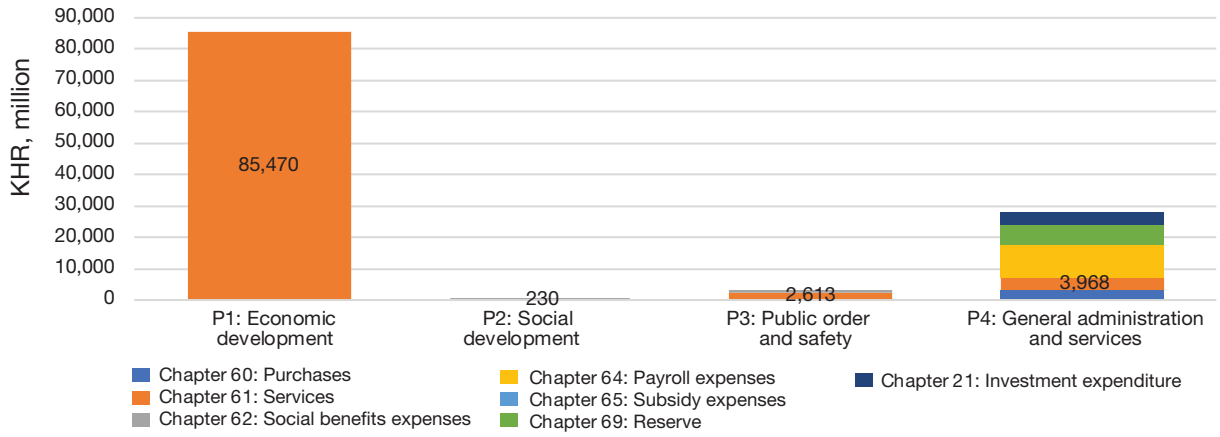
There is a high level of repair and maintenance expenditures. More than 70 percent of the Preah Sihanouk provincial administration budget has been spent on the repair and maintenance of infrastructure, mostly roads in municipal areas (Figure 6.5). Road maintenance was considered money worth spending, given the poor road condition after the floods of 2019 and the need for road rehabilitation to support tourism and facilitate travel in the province. However, the high percentage of spending by the provincial administration on road repairs in municipal areas

Figure 6.5. Preah Sihanouk province expenditure, planned and actual (2018-2020)



Source: *MEF, GDNT (2022)*

Figure 6.6. Budget allocation by programs for 2020 (KHR, million)



Source: *MEF, GDNT (2022)*

raises questions related to the potential duplication of roles between provincial and DMK levels. There is also a high variation between the planned and actual expenditures of around 170 percent in 2018 and 2019, but this dropped to only 75 percent due to the impact of COVID-19 related restrictions.

The percentage of actual personnel expenditure (Chapter 64) in the budget increased noticeably from 4 percent in 2019 to 12 percent in 2020 because of incentive sharing payment (under the account 6403), which provincial administration made to its own staff and those seconded from line departments to work in the One Window Service Unit (OWSU).[119] Despite the increase, the overall percentage of personnel expenditure (Chapter 64) is only a small proportion of the total budget (Figure 6.6).[120] The shares of these other budget chapters (besides the repair and maintenance) in total were similar in 2018 and 2019.

The program budget data, while useful in showing where the money was allocated, is not yet helpful to assess allocative efficiency.[121] Out of the KHR 117,867 million, about 73 percent was spent on economic development (Program 1), virtually all of which is for road repair and maintenance in the municipal areas. Additionally, personnel expenditures are not captured in every program. For instance, all personnel expenditure (Chapter 64) were captured under General Administration Program (Program 4) (Figure 6.6).

6.2.2. Development planning, spatial planning, budget strategic planning, and allocative efficiency

Despite the current legal and regulatory framework and the progress over the years, the current planning process at Sub-national administration (SNA) is not adequately efficient for budget allocation purposes. SNAs, including provincial administrations, are required to prepare various local planning documents, following specific rules and calendar. However, the plans of different entities at SNAs are not yet fully integrated. SNA plans and line department plans are also not yet aligned, and spatial planning has not been given sufficient attention. Efforts are being made to improve the current planning process, but more attention is needed to improve data availability, management, sharing, and use for SNA planning purposes.

119 OWSO is operated by two groups of staff: front office mainly SNA officials, who directly interact with citizens and back office staff, who processes different requests. These second group includes secondment staff from line departments that are not part of SNA. The OWSO generate revenues from user fee. Part of this user fees is used as additional incentive for staff in OWSO.

120 Actual expenditure for personnel cost at provincial administration would appear to be even smaller if incentive sharing with staff of line department at OWSU was not captured under provincial budget.

121 The program budgeting exercise began in Preah Sihanouk province fairly recently and only one year of data is available (2020).

SNA development and spatial planning

The provincial three-year implementation plan (3y-IP) includes the development projects of line departments, but very little information is available on national-level projects. The review of the 2020 and 2021 3y-IP provides a list of various projects to be funded by deconcentrated line departments. However, not much information is available on major projects managed by national line ministries (including those funded by development partners). This implies that a large part of development interventions in the province are not included in the 3y-IP. Given that most line ministry projects tend to be large in scope, the lack of information about them is a major weakness in subnational planning. In contrast, line department projects focus more on minor scale repair, maintenance, and operations.

The information in the 3y-IP is also limited when it comes to investment and financing by NGOs and the private sector. The Preah Sihanouk provincial administration has not been able to keep track of all the critical data on these investment and financing sources and this limitation is reflected in the 3y-IP. There is information about only the projects with available financing from the provincial administration and line departments, and none from NGOs or the private sector. This lack of data reflects the current situation where central ministries still hold much authority over investment approval and licensing, as well as the operation of NGOs. When it comes to interacting with these non-state actors, the provincial administration is mainly limited to a coordinating role, which is yet to be clarified.

Spatial planning has been more advanced in Preah Sihanouk province compared to other provinces, although some challenges remain. SNAs in Preah Sihanouk province have made good progress with sub-national spatial planning in accordance with the relevant policy and regulations.[122] As of 2021, the Preah Sihanouk provincial administration, the Sihanoukville municipal administration, and seven communes and sangkats are known to have developed spatial planning, while the others are in the process of preparing one.[123] The challenge is that SNAs need to have a better understanding of how to link their socio-economic planning (i.e., the 5y-DP and 3y-IP) more explicitly and systematically with their land-use planning.

Limited effectiveness in data storage, sharing, and use has increasingly become a key challenge in the current SNA planning exercise. In preparing the 3y-IP, the current guidelines[124] project the production and use of a wide range of data. There is a Planning Working Group established to coordinate the planning process. The group's main task is to collect and compile data from various SNAs and provincial line departments and coordinate the planning exercises among these agencies. In practice,[125] the workload falls on the Provincial Department of Planning (PDP) and the Planning and Investment Unit of the provincial administration. The PDP, as the permanent member of the Planning Working Group, possesses and stores much of the data, but it also needs to get data from line departments and SNAs. The practice of data sharing and data storage has so far not been systematic. Data are kept in MS Word or Excel format on various computers, vulnerable to data loss, unauthorized changes, or clerical errors.

Budget Strategic Planning (BSP)

The Preah Sihanouk provincial administration has followed the BSP preparation process, but many challenges remain at the implementation level. The administration started preparing the BSP in 2020 by following all the guidelines and program structure discussed above. However, in

122 RGC (2011)

123 Interview with the Preah Sihanouk Provincial Department of Land Management, Urban Planning, and Construction (March 2022)

124 Please see MOI and MOP (2020), MOI (2017)

125 For instance, the Planning Working Group for the preparation of the 3y-IP for 2021-2023 has 53 members.

actual implementation, it faced several constraints. The first challenge is the level of awareness of the new guidelines among technical staff. Second is the challenge of collecting data from DMK and CS administrations, line departments, NGOs, and other stakeholders to fill in the template. Consequently, as of 2021, the provincial BSP has only data relating to the provincial administration.

Besides the SNA capacity and implementation challenges, a number of gaps in the current process are identified. To integrate all the SNA 3y-IP into the CP BSP, three structural consistencies need to be addressed:

1) The timeframe by which the two planning actions are carried out. The timeline for preparing the 3y-IP was already adjusted per the ministerial Prakas PK #0149 (2020) so that necessary information from the 3y-IP of all SNAs is ready by the end of March to be included in the annual BSP preparation process.

2) The inconsistent sectoral classification under the 3y-IP and the BSP, especially for P3 and P4.[126]

3) The inconsistency in the budgetary scope of the two planning tools. The 3y-IP covers mostly development or investment, whereas the BSP covers all types of expenditure categories, both recurrent and capital.

6.2.3. Revenue forecasting and management

Inaccurate revenue forecasts from both tax and non-tax revenue (NTR) sources is impacting both allocative efficiency and operational efficiency. Inaccurate forecasting limits the ability to plan and utilize available resources efficiently.

Tax revenue forecast and management

The provincial tax branch in Preah Sihanouk province collects and manages the tax revenue in its role as a subordinate of the national General Department of Taxation (GDT) and in accordance with the relevant rules and regulations. The tax branch office is not under the supervision of the provincial administration, although two agencies are expected to work together to ensure effective tax collection. According to the MEF annual circular, the provincial administration needs to also appoint a statistical official in charge of collecting and updating data relating to tax collection and collaborating with tax officials when required.[127]

Preah Sihanouk provincial administration prepares its revenue forecast following the legal provisions in the 2011 SNA finance law and other regulations, including the MEF's annual circular. For the planned tax revenue (N+1), the plan needs to be based on the following considerations: 1) actual performance in the previous year (N-1), 2) actual and expected performance in the current year (N), 3) estimated economic performance in the next year, 4) any expected changes resulting from the changes in tax rate and tax bases, and 5) expected improvement in tax administration. The tax revenue planning needs to also refer to the broader macro-economic forecast and the Revenue Mobilization Strategy (RMS).

In practice, tax revenue forecasting has been done with unclear methodology and limited inputs from the provincial administration. Two limitations were identified. First, there was no clear data or strategy to assist the forecasting exercise, except for the last year's actual collection performance (consideration #1 above).[128] Second,

126 In the BSP, P3 is "Public Safety and Order," but in the 3y-IP, it is "Land Use, Environment, Disaster Management, and Climate Change'; in the BSP, P4 is 'General administration', but in 3y-IP, it is "Public order and general administration."

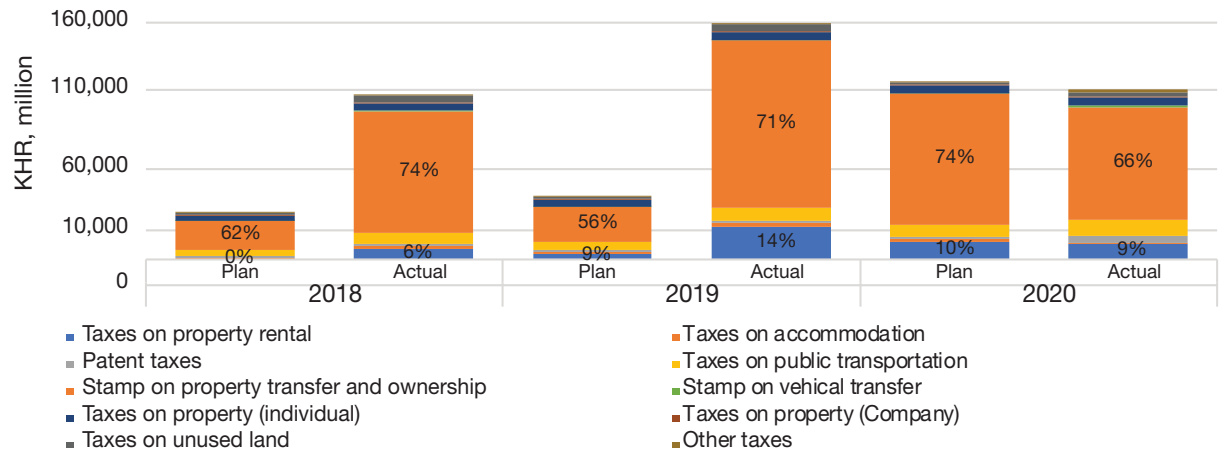
127 The interviews also suggest that the tax branch needs to submit a regular (either weekly or every two weeks) summary table report on the tax collection to the provincial administration. The interviewed tax officials also claimed that the provincial governor could also ask for clarification or justifications for, say, lower than expected tax collection, and the tax branch would provide the answers. In reality, it is not clear how vigorous such accountability arrangements have been, given the still centralized arrangement of tax administration in Cambodia.

128 Due to data limitations, the other considerations (from #2 to #5) were largely subjective.

the roles and accountability line between the provincial administration and the GDT branch have not been clearly provided or understood. As a result, the approved tax forecast for the province was decided mainly by the suggestion of the GDT and the GDP at the national level.

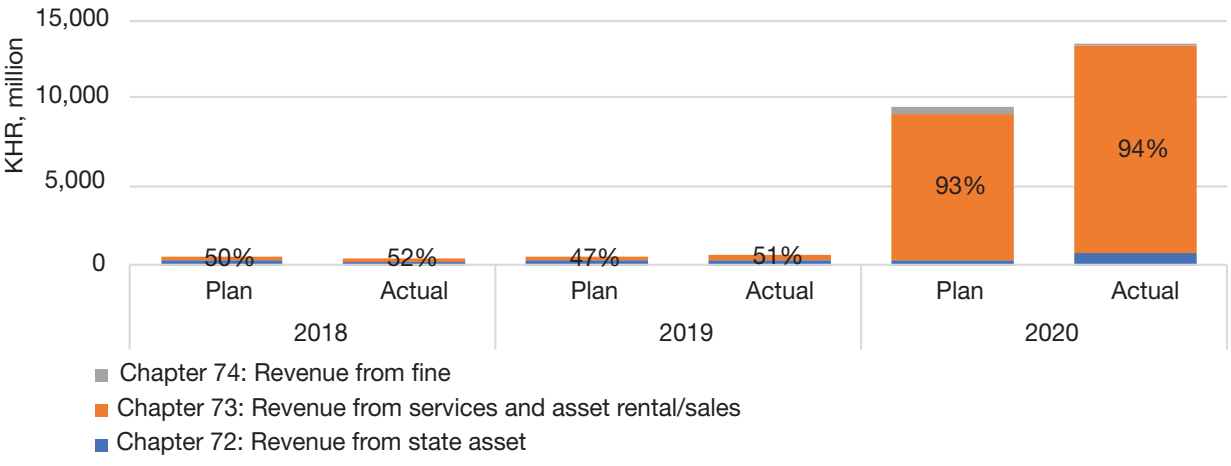
A large share of tax revenue of Preah Sihanouk provincial administration comes from real estate sales and rentals. The largest revenue item is the stamp tax on property transfer and ownership, which accounted for 74 percent of total revenues in 2018, 71 percent in 2019, and 66 percent in 2020 (Figure 6.7). The next largest item is the tax on property rental, which accounted for 6 percent of total revenues in 2018, 14 percent in 2019, and 9 percent in 2020. It should be noted also that there is a huge variation between the planned and actual revenues for these two revenue handles. The variation was over 400 percent in 2018 and 2019 for the stamp tax on property, and above 550 percent for tax on property rental in 2019. Other tax items such as stamp tax on legal documents and tax on unused land already show higher variation between plan and actual, but their shares in the overall tax are small. Such a high variation between planned and actual revenue suggested limited revenue forecasting capability.

Figure 6.7. Tax revenue by composition – plan and actual (2018-2020)



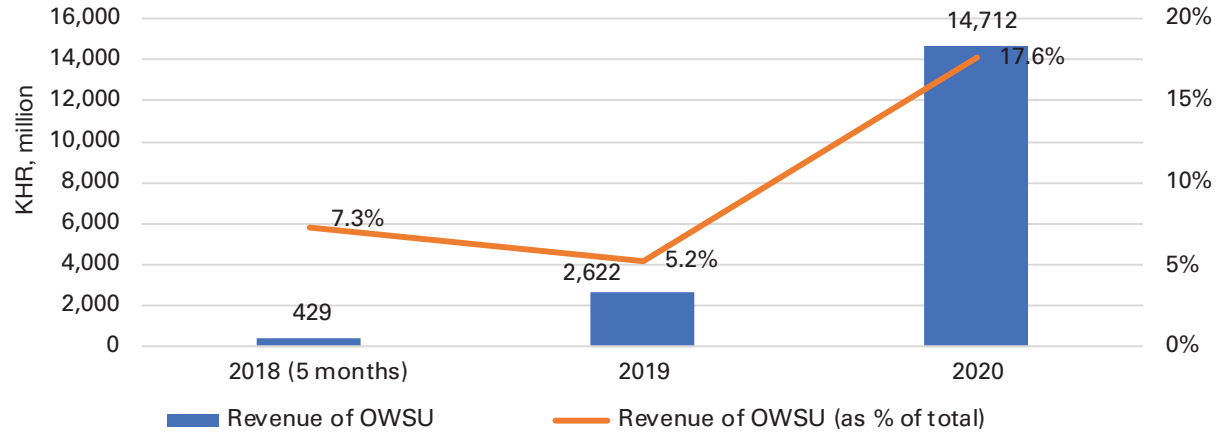
Source: *MOI (2021)*

Figure 6.8. NTR of Preah Sihanouk province by composition, plan vs actual (KHR, million) (2018-2020)



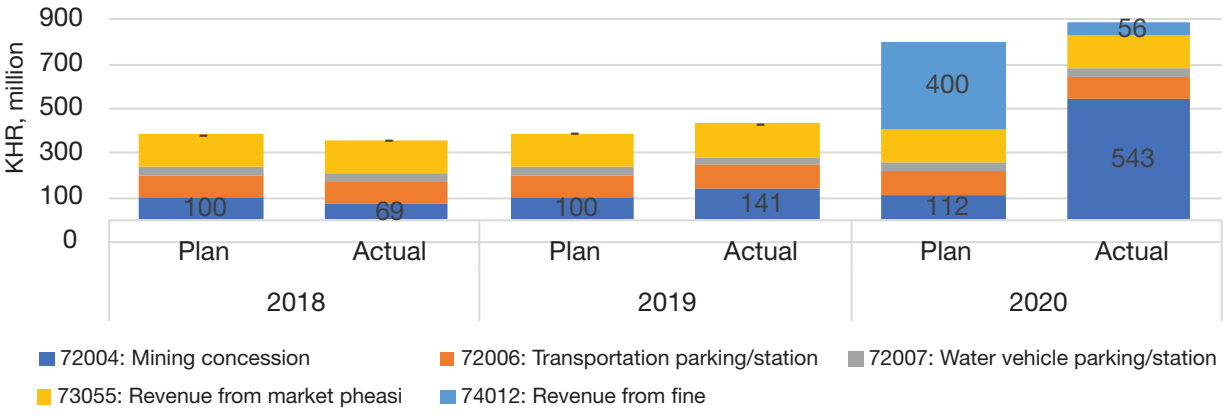
Source: *MOI (2021)*

Figure 6.9. Revenue of Preah Sihanouk province OWSU as % of national total (KHR, million) (2018-2020)



Sources: *MOI (2021) data on OWSU revenue*

Figure 6.10. Other NTR items besides OWSU fee (KHR, million) plan and actual (2018-220)



Source: *MEF, GDNT (2022)*

Non-tax revenue planning and management

The non-tax revenue (NTR)[129] of the Preah Sihanouk provincial administration significantly increased in 2020 due to the sharp increase in fees from administrative services (Chapter 73), especially those provided via OWSU (Figure 6.8 and Figure 6.9). The OWSU was introduced in late 2018, but it became fully operational only in 2020. That explained the sharp increase in revenue (as illustrated in the diagram) starting from that year. But it was also due to better administration and more demand for certain services, especially land registration and construction permits. As illustrated in Figure 6.9, the share of the revenue from Preah Sihanouk province OWSU compared to the total national OWSU income increased from just about 5.23 percent in 2018 to almost 17.63 percent in 2020.

While revenue from OWSU is significant, those from state assets and fines should also be given more attention. The main revenue items include 1) transportation parking/station, 2) market pheasi[130], 3) mining concession royalty, and 4) revenue from fines. The first two items are planned and collected based on contracts and thus have been stable, with slight variation between plan and actual.

129 Preah Sihanouk provincial administration plans and collects NTR from public service fees, state assets, and fines.

130 The revenue refers to the fee that the provincial administration receives from a private company for its business rights to manage a market (mostly on matters relating to hygiene and security) and receive regular fees from market venders.

The royalty from mining concessions shows a significant variation between plan and actual (Figure 6.10). It was under-executed by about 30 percent in 2018, and over-executed by about 40 percent in 2019, but the execution rate went up to more than 500 percent in 2020. The revenue from fines was not planned until 2020, and the execution was well below 20 percent due to COVID-19 and challenges in enforcing the fines.

There are three related areas for improving NTR management. The first is the need to improve the system, process, and capacity of those in charge of managing the revenue. The second is to continue transferring more NTR functions from line ministries to provincial administration and do so in a more coherent manner. As relevant capacity at the SNA improves, the third aspect, the government could consider transferring some of the NTR to the DMK level.

On the first point, different areas need to be improved regarding the NTR management at the provincial administration. The first is the regulatory framework and establishing a system to update procedures governing the management of NTR handles. The administration needs to follow through with the provisions of various laws and regulations on NTR management, including Sub-decree #25 (2020) and various Prakas concerning the operation of the OWSU and incentive sharing. The NTR management at the SNA level relates closely to the functional delegation process from line ministries, officials at the provincial administration (especially those in the OWSU) need to continuously update the procedures governing the management of NTR handles as new Prakas from line ministries come out, making changes to the fees and/or procedures on how a service can be applied and processed.

The NTR collection, recording process and implementation have been improved, but more needs to be done. One noticeable progress in this regard is using the NRMIS at the provincial administration level (not just at the OWSU). This new system is broadly appreciated but more capacity building and technical assistance support (in the form of a help desk) is needed. In addition, management of NTR would benefit from (1) clarification on how the NRMIS can be linked to the management information system (MIS) that the MOI has set up for OWSU to record the number of services and fees at OWSU, (2) reviewing the current regulation and estimate of collected revenue that can be kept at OWSU, and (3) clarification/reviews of recording of NTR made via e-payment (For instance, a part of service fees for vehicle registration is made through the banking system to the MPWT accounts, although the OWSU is the one that provides the services).

More NTR functions should be considered for transfer from line ministries to the SNAs. Significant NTR sources have already been transferred from line ministries and line departments to the provincial administration (a large part is to the OWSU). However, the overall NTR revenue sources at the provincial level are still limited compared to NTR at the national level. While a careful review is needed before more NTR functions can be transferred, there are some obvious candidates to consider for transfer in the short term. One example is the revenue from the penalty on fishery offenses (sub-account 74012) which is currently collected by the provincial line department; the collected cash is then physically transported to the Ministry in Phnom Penh.

The transfer process should also be systematic to minimize disruptions at the implementation level. One example identified by the study is how NTR is collected and managed from a local soil/dirt extraction business. For this NTR, two functions are involved: 1) issuance of a business license to businesses (NTR from public service fees), and 2) collecting royalty from businesses (NTR from state assets). Currently, the first function is already transferred from the Ministry of Mine and Energy (MME) to the DMK level, but the second function is kept under the line department. To ensure proper collection of the royalty, the line department relies on the licensing information from the DMK level. In practice, the SNAs do not update line departments about new licenses, thus leading to lower royalty

revenue collection. While it is reasonable to suggest 'better coordination and reporting between the two agencies' as a solution, it might be more effective to transfer the two related functions to the SNAs and make them responsible for the collection of revenue.

The vertical imbalance between the provincial and DMK level also needs to be addressed. While the increase in NTR for the provincial administration is a positive development, there are opportunities to further transfer additional revenues to the DMK level, where more service delivery functions are expected to be transferred and where own-resource revenue collection has been minimal. Before 2020, the NTR of the provincial level was comparable to the DMK level, but since 2020, with more revenues assigned to the OWSU, the gap has become much wider (Figure 6.11). The planned NTR of the province was about ten times that of the DMK level, and the actual is about 14 times.

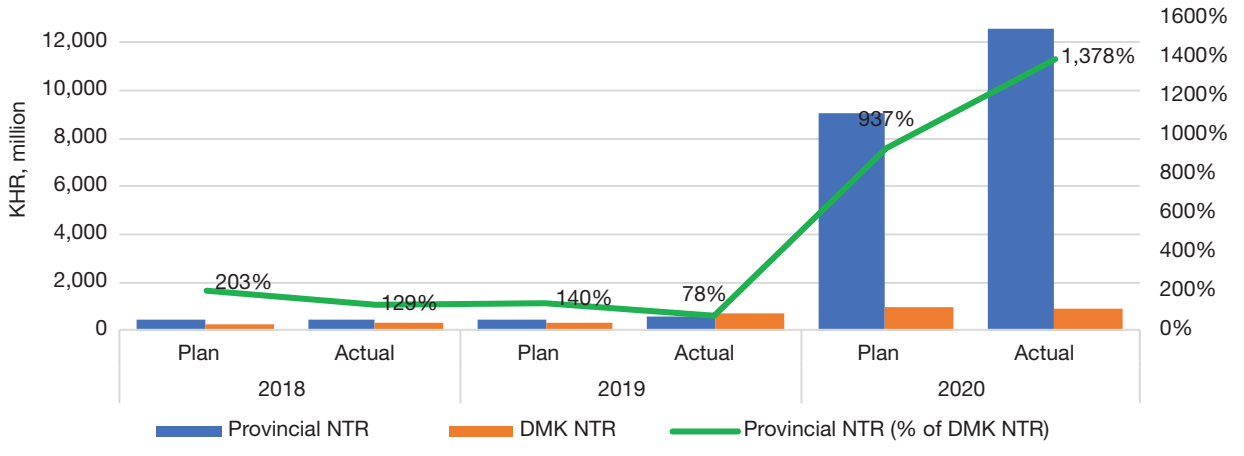
The MEF has issued a Prakas on the transferring of NTR from the national to the sub-national level. While the details are to be finalized, a few key points are noted. First, the Prakas seeks to make an explicit linkage between functional transfer and NTR transfer by making clear that when the function is transferred, any associated revenue would also be transferred. Second, the Prakas should provide instructions for the transferring line ministries. For instance, it should require that all the transferring line ministries drop the already transferred functions and NTR items from their own NTR list of services and fees, which implies that many relevant inter-ministerial Prakas on NTR need to be revised. Third, the Prakas should cover not only NTR from public services, but from state assets and fines/penalty as well.

In the NP2, both short- and long-term strategies are set out for improving the NTR of SNA. For the short term, the priority is to build on the success of the OWSU, including the legal framework, service delivery systems (including e-services), management system (including e-administration in the form of MIS), and feedback mechanisms (including e-feedback). For the long-term, the reform of SNA NTR needs to be coordinated with the development and implementation of the 10-year Blueprint for Non-Tax Revenue (2021-2030) that MEF has been working on. To ensure smooth coordination, decentralization aspects should be integrated throughout the critical aspects of NTR management, including the legal framework, budget management and reporting, e-governance, and human resource development. As such, the National Committee for Subnational Democratic Development Secretariat (NCDD-S) needs to engage in the development of the Blueprint as much as possible.

State asset management

State asset management for SNAs, including at the provincial level, is subject to a number of

Figure 6.11. Provincial NTR versus DMK NTR (2018-2020)



Source: *MOI (2021) data*

Table 6.1. State asset information compiled by PDEF (2021)

Agencies	Unit	Asset values	2021
Line departments/agencies	32	KHR 7,870 million	Out of the 244 asset units reported, only 116 (48%) have ownership titles.
Provincial administration	1	KHR 2,891 million	Out of the 29 asset units reported, only 16 (55%) have ownership titles
DMK administrations	5	KHR 105 million	Out of the 13 asset units reported, only 5 (38%) have ownership titles
CS administrations	29	KHR 10,874 million	Out of the 323 asset units reported, only 152 (47%) have ownership titles

Source: *Preah Sihanouk province, PDEF (2022)*

key laws and regulations. These include the Public Finance Law (2008), the Organic Law (2008), the SNA Finance Law (2011), the Sub-decree #66 (2017), and, more recently, the State Asset Law (2020). MEF's Circular #007 (2014) is another important regulatory reference on state asset management. According to these laws and regulations, there are three layers of authority in state asset management: (i) a controlling authority (CA); (ii) managing authorities (MAs); and (iii) utilizing authorities (UAs). The MEF is a CA, which is responsible for regulating, monitoring, and inspecting all levels of authorities. MAs refer to line ministries, institutions, SNAs, other qualified public entities, etc. MAs can have many UAs; UAs are reporting to MAs, and MAs are reporting to CA.

Assets of an SNA include the state assets that are transferred to the administrations and the assets that it acquires on its own. The assets that are transferred to SNAs are the assets that the SNAs can manage, utilize and generate revenues from. SNAs maintain and protect these assets that the state transferred to them, and they have no right to sell or transfer ownership and transfer the utilization without the agreement from MOI and the approval from MEF.[131] There are four types of state assets: i) lands and buildings, ii) technical and industrial equipment, iii) vehicles and machinery, and iv) office equipment and furniture.

Preah Sihanouk provincial administration is the managing authority (MA) over its state assets. The Circular #007 (2014) requires SNAs to prepare ownership certificates for all state immovable properties in their inventories and list them in their inventory book. For the concession agreements on every type of state property, SNAs must update them annually before the end of the first quarter of each fiscal year and send them to the PDEF, which is the deconcentrated arm acting on behalf of the MEF as the CA. This updating process involves two types of documents, namely a five-year inventory book and an annually updated inventory list. The Preah Sihanouk provincial administration has maintained a register of its assets, which are recognized at their acquisition cost or fair value. However, officials recognized that the register only has partial information on the assets' usage, value, location, and age.

The PDEF, acting as the CA on behalf of the MEF, compiles the annual asset registry from all MA, SNAs, line departments, and agencies. In the 2020 annual inventory list made available to the World Bank team by the Preah Sihanouk province PDEF, all necessary information was included. The Table 6.1 summarizes the key data from the inventory list. Asset management at SNA is a relatively new practice, and therefore requires more long-term support.

The completeness and reliability of the current asset registration process is limited. As presented earlier, relevant rules and regulations are followed when asset inventory is prepared. However,

131 Article 254-255 of the Organic Law (2008)

Table 6.2. Percentage and timing of budget execution (2018-2020)

Procurement methods used	2018		2019		2020	
	executed (% of total)	executed (% of Q4)	executed (% of total)	executed (% of Q4)	executed (% of total)	executed (% of Q4)
Total	**373%**	**90%**	**171%**	**40%**	**75%**	**78%**
Chapter 60: Purchases	104%	54%	124%	45%	89%	41%
Chapter 61: Services	191%	80%	196%	41%	69%	81%
Chapter 6105: Repair and maintenance	195%	81%	205%	41%	70%	82%
Chapter 64: Payroll expenses	103%	27%	105%	26%	102%	75%
Chapter 62: Social benefits expenses	316%	88%	151%	76%	253%	82%
Chapter 65012: Transfer to DMK	100%	79%	128%	9%	100%	60%
Chapter 65013: Transfer to CS	100%	100%	100%	11%	100%	100%
Chapter 21: Capital investment	434%	81%	178%	100%	136%	74%

Source: *MEF, FMIS (2022)*

there are questions about the completeness and reliability of information (e.g., if the current asset classification fully covers all types of assets that should be covered, if the valuation is appropriate). There is a need for more information on the use of the assets and the revenue generated from them. This is even more relevant given that SNAs, including Preah Sihanouk province, are being asked to identify new potential NTR. Preah Sihanouk provincial administration has not had a centralized database system for collating key details on state property management information. However, the MEF's plan to roll out the State Property Inventory Management Information System (SARMIS) to C/P administration is expected to help address this challenge.

For Preah Sihanouk province, limited legal ownership over land coupled with land conflicts is an immediate and sensitive issue. This is partly a reflection of the overall limitation regarding titling of land in the country and partly because of the high land price speculation in Preah Sihanouk province. There are still many cases where a public institution (including SNAs) could not move ahead with having their land titles approved because there are still many land conflicts involved. Addressing these conflicts requires intervention from both the provincial and national levels.

6.2.4. Overall expenditure execution

Despite the introduction of the program-based budget, the expenditure execution rules still focus on the budget line items. The budget implementation circular emphasizes the need to spend, for instance, personnel, petty advance, and procurement budgets according to specific rules and regulations. It also emphasizes the rules around budget virement and the spending of budget reserve (Chapter 69).

During 2018 - 2020, a few positive points are observed in the expenditure execution at the provincial level. First, there has been smooth execution of key budget Chapters, including personnel (Chapter 64), purchase of goods (Chapter 60), services (Chapter 61) (excluding infrastructure repair and maintenance (Chapter 6105), and others. Second, the on-time approval of the procurement plan (i.e., before the budget starts) has also been helpful in minimizing procurement and spending delay. Third, the transfer of the shared tax revenue from the provincial administration to the DMK (Sub-account 65012) and CS (Sub-account 65013) level have not met any major challenges. These are reflected in the percentage of annual budget

execution for each budget chapter and the percent of budget executed in the last quarter, as presented in Table 6.2. However, there is persistent over-execution or under-execution for the "investment" budget, which was understood at SNA as 'infrastructure repair and maintenance' (Account 6105), capital budget (mainly Chapter 21), and projects (either infrastructure or non-infrastructure) funded by development partners.

6.2.5. Management of investment projects

In the current process, repair and maintenance and new capital investment are treated the same from the budget execution perspective. There are no clear criteria to distinguish the two, except a general understanding that new investment is when completely new infrastructure is built, whereas repair and maintenance is an investment done on an existing project. With this definition, for Preah Sihanouk provincial administration, any work on road, irrigation, water system, etc., is considered as 'repair and maintenance' because most of the work is done on locations that used to have a similar project before.[132] New capital investment, on the other hand, tends to be associated with new building construction (e.g., offices, schools, hospitals). Therefore, a repair and maintenance (Chapter 6105) or new capital investment (Chapter 21) is referred to as "investment projects".

Preah Sihanouk provincial administration established the required rules and regulations

Box 6.1. Key rules and regulations for investment projects at provincial levels

1- **The preparation and approval of a Capital/provincial project** is guided by the 2014 Guideline on CP Project Preparation Manual. This over 200-page document provides details on how a CP project is defined and prepared, including the setup of a project preparation committee, identification of technical people, land and environment impact assessment, project cost estimation, local contributions, project operation and maintenance, and various templates that a CP administration needs to use. It is important to note that, according to the manual, all the CP project plans need to go through two main technical and legal reviews: 1) by relevant provincial line departments, and 2) by the Ministry of Interior (MOI), General Department of Administration.

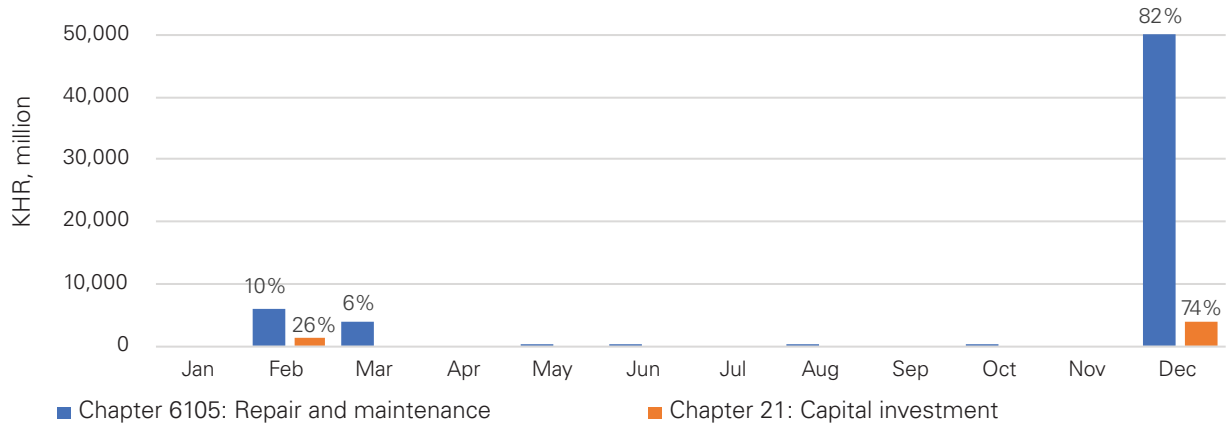
2- **Public procurement covers procurement planning, implementation,** and payment. According to the SNA-BSRS and the MEF annual circular, the provincial administration needs to prepare its annual procurement plan and have it approved by the start of the budget year. As of now, a provincial administration is given authority to manage a project procurement if it is under KHR 500 million. For those of higher value, additional approval from the General Department of Public Procurement (GDPP) in Phnom Penh is needed. However, to support further fiscal decentralization, the project value threshold will be further increased, and the administration will be given more authority over the procurement process. A budget spent through the procurement process is also subject to slightly different rules regarding payment, especially relating to the submission of supporting documents.

3- **How an investment budget execution fits within the broader annual planning and budgeting process and calendar** is guided by two particular rules: the procurement plan, including investment projects, approved before the start of a budget year; and all budgets, including the investment, which need to be executed by the year-end.

Sources: *World Bank staff compilations based on various law and regulations*

132 For the same types of projects conducted by CS, they are classified under investment expenditure (Chapter 21), not repair and maintenance (Chapter 6105).

Figure 6.12. Monthly execution rate of repair and maintenance (Chapter 6105) and investment expenditure (Chapter 21) in 2020



Source: *MEF, FMIS (2022)*

(Box 6.1), but key challenges remain. The administration reportedly followed the 2014 CP Project Preparation Manual and had their project plans approved by both technical line departments and the MOI. They have also managed to prepare and have its procurement plan approved by the time each budget year starts. However, for repair and maintenance (Chapter 6105) and investment expenditure (Chapter 21), there have been significant variations in execution as compared to the planned budget, which implies high unpredictability of the budget itself. In addition, there was a significantly high percentage of budget execution in the last quarter and the last month of the fiscal year, which suggests inefficiencies in the execution process. For instance, 82 percent of repair and maintenance (Chapter 6105) and 74 percent of investment expenditure (Chapter 21) were executed in December 2020 (Figure 6.12).

A combination of three factors has contributed to the higher execution rate and high payment percentage in the last quarter. First, overall planning and common practices push more spending toward year end. It is common for the Preah Sihanouk provincial administration to request additional budget credit late in the year. According to the MEF's Guideline of PB implementation for SNA (2017), an SNA can ask for in-year budget virement and supplemental budget starting from the second semester/ third quarter. For the period of 2018 -2020, a large part of the supplemental requests had been for investment projects -both repair and maintenance (Chapter 6105) and investment expenditure (Chapter 21). Supplemental requests were usually made in September or even October of each year, a time when the provincial administration could make a reasonable estimate on how much extra tax revenue they can collect compared to the tax collection plan.

Second, the severe under-forecast of tax revenue undermines the tax revenue plan's credibility and results in high additional budget requests late in the year. According to the 2017 Guideline on PB Implementation, a provincial administration can request a supplemental budget when it becomes clear that its revenue performance will exceed the planned amount. However, the guideline does not provide detailed guidance, except to say that the MEF will examine such requests accordingly. In the case of Preah Sihanouk province, as indicated earlier, the administration started to get a rough estimate of tax revenue over collection around September or October. Better information about revenues is the basis for the additional spending request. The late request means late approval and, in turn, a rush to finish the projects by the year-end. The resulting time constraint has hypothetically undermined proper public procurement and project execution.

Third, delay in procurement process impacts budget execution of investment projects. The over-threshold procurement projects (Table 6.3)

Table 6.3. Procurement thresholds for SNA

SNAs	Maximum procurement values
Provincial administration	KHR 500 million
Capital administration	KHR 800 million
DMK administration	KHR 100 million

Source: *MEF (2019)*

mean longer time is needed not only for procurement but also for payment, resulting in delays in budget execution toward year end. The procurement process in such cases needs approval from the provincial administration, the PDEF, and the GDPP of MEF in Phnom Penh. Similar steps also apply when a contractor seeks verification of the project deliverables for payment. Because of the time involved, in many cases contractors chose not to claim the first payment but waited to receive the final and 100 percent payment at year-end. This practice has systematically created a high budget execution rate in the last month of each fiscal year. In 2020, for instance, nine out of the eleven investment project procurements that the Preah Sihanouk provincial administration had were considered over-threshold, according to the criteria in the table below.

A new Guideline for SNA Public Investment Management (PIM) has been drafted. The main idea is to align public investment at SNAs with the national strategy on PIM reform and the new sub-decree #41 on PIM. It may take more time for the new guideline to be approved, partly because of the need to agree on the definition, scope, and value thresholds of what constitutes 'investment' and 'SNA investment projects' (as opposed to national investment projects). Additionally, there are other ongoing legal and policy changes with relation to SNA planning and budgeting, and it is critical that the new PIM guideline be consistent with those new changes.

6.2.6. Expenditure arrears

In Cambodia, the Government needs to pay a financial obligation within 60 days of receipts of payment request at the General Department of National Treasury or it would be considered as an arrear.[133] For Preah Sihanouk provincial administration, no payment arrears were reported for recurrent expenditures following the above definition. Salary, utility, and goods and services purchased through direct payment (not procurement) were reportedly done on time. For all non-procurement spending, reported times for payment processing are in line with the data provided by the FMIS which shows that, on average, the number of days taken from the date a payment order is signed by provincial administration to payment made by the treasury was about 7.5 days for 2019 budget year and about 10.5 days for 2020 (Table 6.4).

The extent of the expenditure arrears for the spending made through procurement could

Table 6.4. Number of days between payment orders and payments (non-procurement)

Budget years	# of transactions	# of days from payment orders signed by provincial administration to payment made by the treasury		
		Average #	Min #	Max #
2019	151	7.5 days	0	70
2020	132	10.5 days	0	59

Source: *MEF, FMIS (2022)*

133 Please see, for instance, RGC (2020)

not be identified. This is because of a number of specific reasons. First, for procurement spending, the rules as indicated in the MEF Circular #006 (2016) explicitly indicate that an 'invoice' is not a required supporting document to be submitted for payment processing. Instead, for the Provincial Treasury, when calculating the number of days taken for a payment to be processed, the date of the "payment order" (not of an invoice) submitted from a spending agency is used to compare with the date of actual payment. The payment order date is not the same as the invoice date. Therefore, the difference between payment order and invoice date cannot be verified as contractors are not required to submit invoices.

Second, the 'goods/service receipt' date is not helpful either. The Circular #006 (2016) requires that 'goods/service receipt' be included in the payment request documentation. However, at least for the investment budget - including repair and maintenance (Chapter 6105) and investment expenditure (Chapter 21) (which accounts for well over 70 percent of total provincial administration), as discussed earlier, the procedures for 'goods/services receipt' verification have not been strictly followed.

Third, invoice date and payment order date are used interchangeably in the FMIS entries. One of the inconsistencies is that while there is an entry column titled 'invoice date' in the system, in practice, the entered data is sometimes a 'payment order' date, if there is no invoice required.

6.2.7. Transparency and oversight

Reporting, recording, and FMIS

The roll-out of FMIS is still new to Preah Sihanouk provincial administration. Up until 2022, the Provincial Department of Economy and Finance (PDEF) helped enter financial information to FMIS for the provincial administration. Since 2022, per MEF's instruction No. 002, the FMIS is rolled out to all CP administrations, covering four main functions, namely: budget allocation (BA), purchases (PO), account payable (AP), and account receivable (AR). For the DMK and CS level, in 2022, an FMIS Portal (Generation 1) is also rolled out in 2022 but focuses only on selected districts and communes.

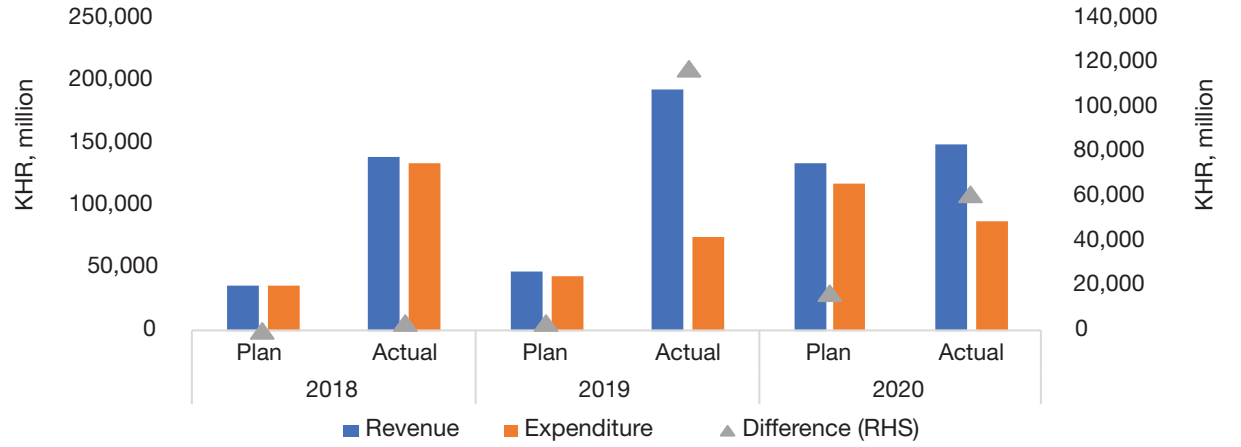
All seven budget classifications were included in the FMIS system design, but not all of them have been used. Since the adoption of the program-based budget, program classification has been used along with the economic classification. However, the functional classification has not been used. Other specific FMIS system-related issues that were raised include a request to have a better synchronization between FMIS and NRMIS and a request for people who work on account receivable and account payable in FMIS to have access to the system.

The Preah Sihanouk provincial administration has since 2021 started using the NRMIS to record non-tax revenue. Preah Sihanouk province officials appreciate having this new system, but they need more capacity building, technical support and guidance on how the NRMIS is linked and complements the MIS of the MOI. They also seek to better understand how the NRMIS will be connected with the FMIS. Other specific NRMIS system-related problems that were raised include how to make the printing from the system easier and reviewing or removing specific data entries in the NRMIS which does not exist in the paper-based process.

There are four specific issues relating to the financial recording that should be addressed in the short term. First, there is a recorded difference between revenue and spending, for both plan and actual. According to the 2011 SNA budget law (Article 18), the budget of SNAs needs to be prepared by showing the balance between revenue and expenditure. For Preah Sihanouk province, the planned budget shows recorded balance for 2018 (i.e., the proposed revenue and expenditure are equal), but not in 2019 and 2020 (Figure 6.13).

Second, more clarification is needed on the recording of the surplus. According to Article 41 of the 2020 Budget Law, the budget surplus needs to be transferred back to the national level into the 'SNA Fund.' However, the details on how exactly the

Figure 6.13. Recorded revenue and expenditure difference, plan and actual (2018-2020)



Source: *MEF, FMIS (2022)*

Note: *RHS = Right-hand scale*

transfer shall be made, what recording is done, and how the SNA Fund is allocated back for the following year's budget are not provided.

The third is the recording of transfers from the national level. Currently, the transfer is recorded under Chapter 75, with three main accounts mainly in use: 1) Account #75011 for transfer from national level, 2) Account #7502 for transfer from other SNAs, and 3) Account #7508 for transfer from other sources. As fiscal decentralization progressed, different types of transfers were used, including unconditional transfer, conditional transfer, and budgeting for performing delegated functions. The current chart of accounts is not sufficient to differentiate these different transfer mechanisms and thus cannot generate needed disaggregate data for analyzing budget allocation and execution in an intergovernmental setting.

The fourth issue is the use of specific accounts and sub-accounts to record certain transactions. The study did not exhaustively focus on this issue, but did identify one example wherein the use of certain accounts might not reflect the nature of the recorded transactions. The example is the use of Sub-account #6403 (reward) to record incentive sharing that Preah Sihanouk provincial administration made to the staff of line departments who help provide the services through OWSU. The use of this account can be misleading because they are not for the administration's own personnel, but for the purchase of external services, in which case, it should be recorded under service expenses (Chapter 61) (not payroll expenses-Chapter 64). Although this is just one example, the study recommends that the budget recording be thoroughly reviewed to ensure that the current chart of accounts can accommodate the more complicated budget transactions arising from more fiscal transfers to SNAs.

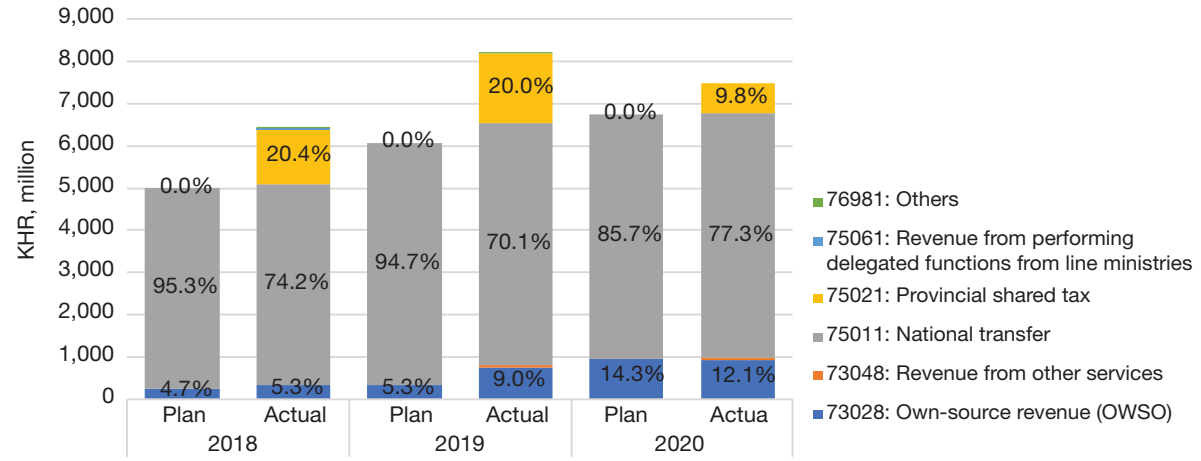
6.3. The district and municipality administrations

6.3.1. Overall revenue and expenditure at the DMK level

Like other DMKs in the country, the DMK administrations in Preah Sihanouk province rely heavily on the budget transfer from the national level and provincial level. From 2018 to 2020, the national transfer, which accounts for more than 70 percent of total actual revenue, has steadily increased, although at a lower rate in 2020 (Figure 6.14). The transfer from the provinces, which was set at 4 percent of the collected tax revenue of the province, also increased between 2018 and 2019 but dropped in 2020. The provincial shared tax was not included in the planned budget of the DMK, but was treated as additional budget credit during the year, and therefore, is shown only in the actual budget execution column. The revenue from service fees generated by the DMK OWSO also increased steadily, although at a lower rate in 2020.

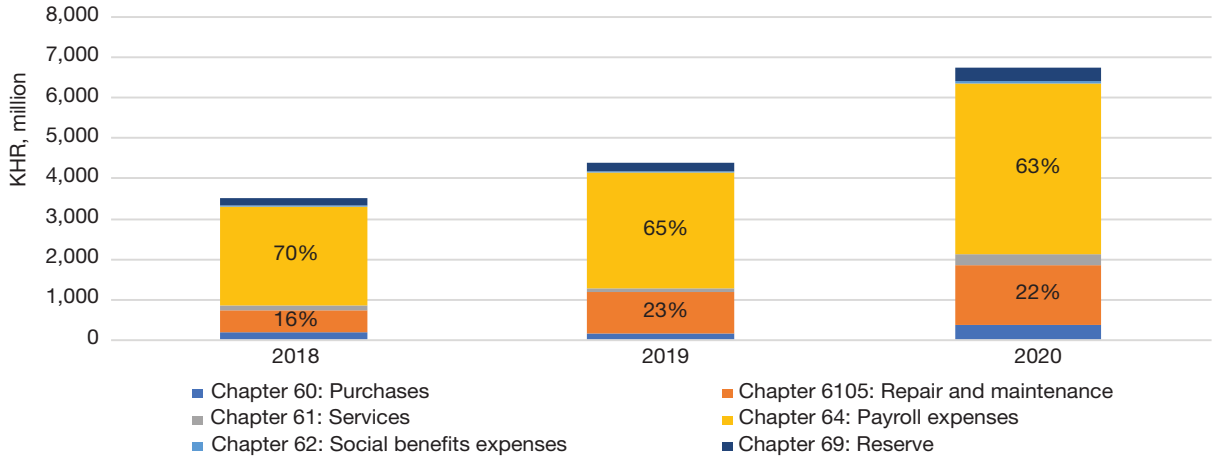
On the expenditure side, a large proportion of

Figure 6.14. Revenue of the Preah Sihanouk province DMK (including transfer), plan and actual (2018-2020)



Source: *MOI (2021) data*

Figure 6.15. Expenditure of the Preah Sihanouk province DMK by economic classification (2018-2020)



Source: *MEF, GDNT*

the Preah Sihanouk province DMK budget has been spent on salary (Chapter 64), leaving about 20 percent on infrastructure (mostly road) repair and maintenance (Figure 6.15). This is a common pattern, not just in Preah Sihanouk province.[134] With the small overall budget and large wage share, there has not been much room for development activities. Sihanoukville municipality officials suggested that during the COVID-19 pandemic, they had also spent some of the budgets for COVID-19 prevention and intervention activities, but had only a small amount for social benefits expenses (Chapter 62).

Despite some increases, DMK budget remains small and is impacting the quantity and quality of service delivery. Since 2019, the DMK level has gone through significant reforms, with the organizational restructuring and integration and the transfer of 55 functions and about 20,000 staff (country-wide). In Preah Sihanouk province, the DMK administrations have not yet been able to fully operationalize the new roles and responsibilities.

6.3.2. Specific gaps and limitations on service delivery at the DMK level

Key policy gaps and capacity issues are impacting the implementation of the 2019 functional transfer and, therefore, a vision for service delivery improvement has not yet

134 World Bank (2022)

materialized. First, there had not been the necessary decisions to classify the 55 functions (and their sub-functions) into obligatory versus permissive functions, and determine the relevant funding mechanisms for each. Related to this point, it was also found that no costing had been done to identify the amount of budget needed to perform the functions. Without such information, the discussion on the amount of budget to transfer had referred mainly to the budget that line ministries and their provincial departments had allocated and spent to perform the functions before they were transferred.

Second, the roles and partnerships with the private sector in delivering essential services have not been adequately explored. There seems to be an expectation among local level officials and certain advocacy groups that the DMK needs to have much more funding from the national level to actually 'provide' the services assigned to them. This expectation partly reflects an assumption that the DMK will actually provide those services themselves. As illustrated through the cases of clean water and solid waste management below, however, the DMK do not necessarily need to provide the services themselves, but can instead play coordinating, regulating, and supporting roles in partnership with the private sectors to ensure the services are delivered (Box 6.2).

Third, DMK officials are aware of the changes; however, their detailed understanding of how they should perform those functions varies. For those in education, health, and solid waste management where decentralization had been more advanced, the officials in charge tend to have better awareness of the reform. However, in other sectors such as agriculture and water resource management, the level of understanding is lower. Regardless of sectors, DMK officials normally requested more clarity on how they should perform their daily operations under the new working arrangements. Those operational aspects include 1) regular administration, such as the process for approving everyday administrative paperwork, permission and the use of

Box 6.2. Roles and engagements of private sector in DM service delivery

Existing policy and legal frameworks expect DMK administrations to collaborate with the private sector and civil society organizations (CSO) in service delivery. According to the NP-SNDD Phase 2 (Component 5), the collaboration with the private sector can take the following forms:

- A company/CSO with a contract from the SNA to deliver services, funded from the budget of SNA,
- A company or CSO providing fee-based services under an agreement with the SNA (the benefits are financed from the fees revenue, not from the SNA budget), or
- A public-private partnership in which the SNA is the owner of assets used by a firm to deliver services; for example, a waste disposal site is owned by the SNA but operated by a private firm.

The NP-SNDD Phase 2 expects the partnership with the private sector and CSOs to be delivered through a number of actions. These include 1) registry of local businesses or enterprises, 2) developing and implementing appropriate models of partnership with the private sector (including PPP), and 3) developing and implementing a framework for contracting-out of public services. Specific steps are proposed for each of the main actions, but more needs to be learned, especially when developing the mentioned models and frameworks.

The engagement from the private sector with DMK is supposed to be systematic and regular. At the DMK level, according to sub-decree #182 and #184, the engagement is expected to happen through the existing participatory planning process and/or specific mechanisms and instructions created by each DMK. The sub-decrees also mention that DMK administrations need to hold regular meetings with the private sector and CSOs to identify and solve the problems of local people. In reality, the inclusion of non-state actor financing and investment in the local plans has been minimal and uneven.

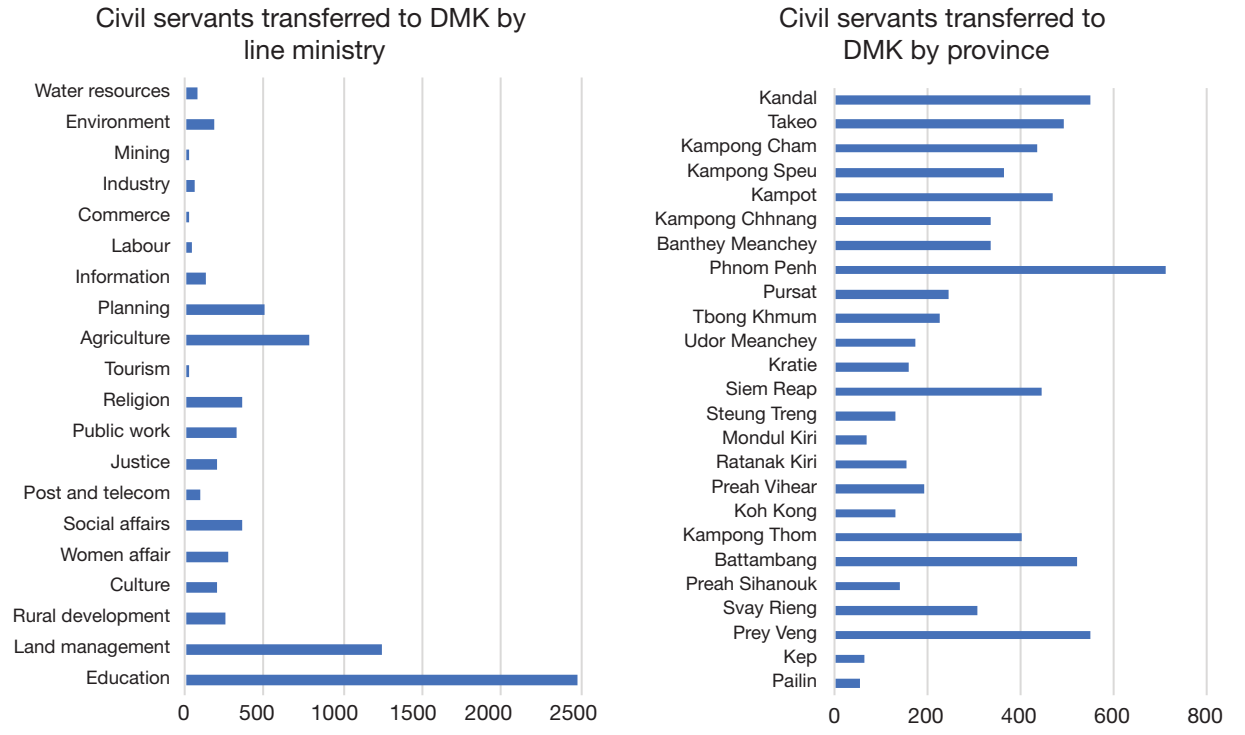
Sources: *World Bank staff compilations based on laws and regulations*

budget for travel and mission, the process of getting permission to work with NGO partners, reporting on staffing matters, and the use of budget funds for hiring contract staff; 2) the estimated additional cost that should be covered to deliver the newly transferred functions and the public financial management processes that accompany these transfers; and 3) the human resource management functions (e.g., reporting lines, performance management) within the revised DMK administrative structure (e.g., among district technical officials, the DMK BoG/councils and line departments at the CP level). These points were also raised in the recent study by the World Bank.[135]

Fourth, personnel shortage is still a concern despite the recent transfer. According to the progress report by NCDD-S, almost 20,000 staff members were transferred to the DMK in January 2020, the bulk of which were from MOI and MOEYS. For other ministries such as tourism, mining, commerce, and labor, the number of staff members transferred was less than 50 in the whole country (with more than 200 DMK). Province-wide, the number of personnel transferred seems to correlate with the number of DMK and less with economic activities. For instance, Preah Sihanouk province, despite its economic significance, gets only 137 civil servants transferred from line ministries, a number similar to or lower than that of Steung Treng, Kratie, Udor Meanchey, and Koh Kong (Figure 6.16).

Fifth, the working relationship between the DMK and line departments requires improved coordination to support local service delivery. There are four systematic challenges that need to be addressed. The first relates to the adequacy and consistency of decentralization rules and regulations on the one hand and sectoral rules and regulations on the other. As illustrated in the case of urban water supply below, while the function of managing private water operators was already transferred to the DMK, the concerned line ministry still relies on its 2014 Prakas to regulate the services. The second is the lack of personnel (and capacity) to be in charge of certain services. The third is the fact that the 2019 functional transfer has not been reflected into the regular planning and budgeting exercises of concerned line departments. The last challenge is

Figure 6.16. Personnel transfer to DMK by ministry and province (2020)



Source: *NCDD-S (2021)*

135 World Bank (2022)

the inconsistency in the use of data for planning and M&E purposes by the DMK administrations versus the line departments.

6.4. The commune/sangkat administrations

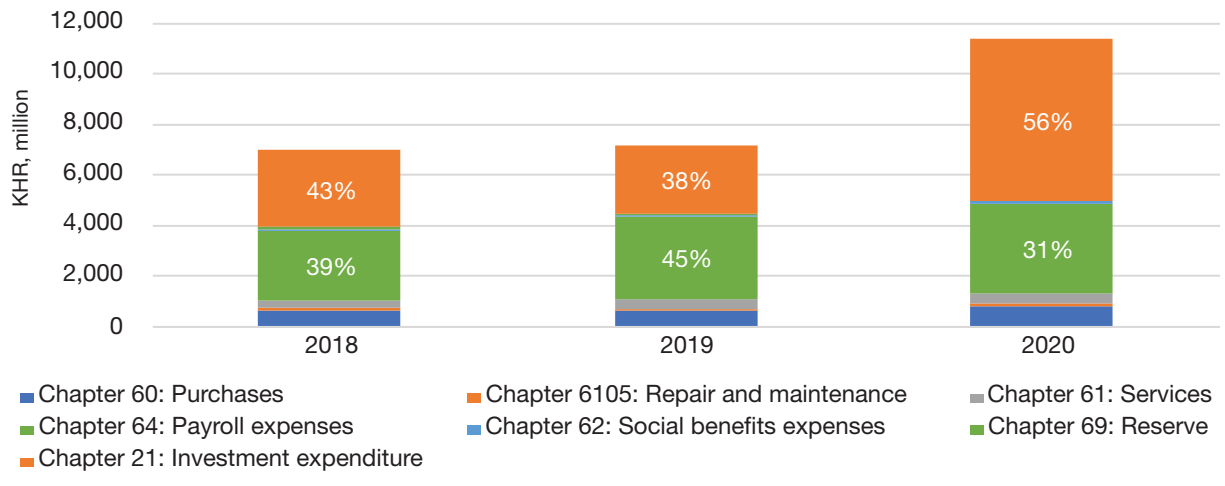
The CS is the lowest level of SNA and has the longest established budget management system. As of 2020, the average total budget for each CS in Preah Sihanouk province was about KHR 320 million (or about US$80,000), virtually all of which (97 percent in 2020) came from national transfer. In 2020, the CS allocated most of its budget to capital investment classified under the investment expenditure budget (Chapter 21) (Figure 6.17). There has been a small variation between the planned and actual budget for CS from 2018 to 2020. The PFM rules for CS are stated in the CS Administration Law, sub-decree on CS fund, and various Prakas and Guidelines. Specific rules on CS budget management are also stated in the annual budget circular.

In this study, we focus on the execution of investment expenditure budget (Chapter 21), including procurement, at the CS level. The data show that the execution of the CS budget has spread throughout the year. Although a moderately high percentage of budget (38 percent) was executed in December for 2020 (Figure 6.18), this proportion is much smaller than the case of the province (82 percent for repair and maintenance (Chapter 6105) and 72 percent for investment expenditure (Chapter 21)) presented earlier for the same year.

No serious concerns were raised on the procurement process although a delay in CS project document preparation was identified. As of 2021, the CS procurement was done following the 2005 PK#231 and the 2017 Project Implementation Manual (PIM). For 2020, the start of CS project document preparation, which is needed for procurement, experienced delays resulting in the postponement of project implementation. For example, the provincial level administration sent technical officials to conduct the project study in May in 2020 and completed the required project documents in August. However, by the time procurement completes, it is close to November when project implementation can begin. Consequently, the MEF issued Circular #002 in early 2022 to adjust the timeline of CS project preparation and implementation by following the 2020 PK #0149 (discussed earlier). A few key points are noted as follows:

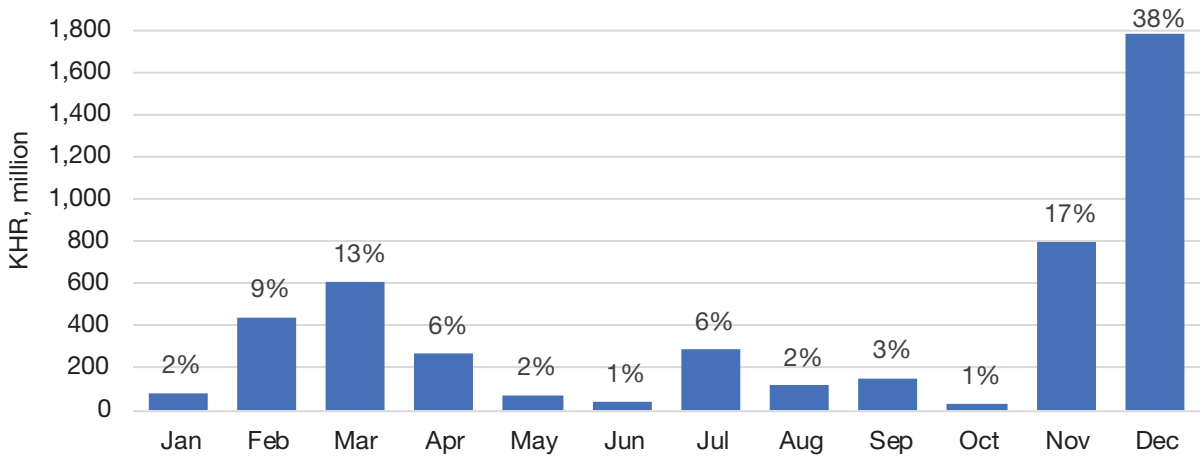
1. CS administrations need to finish preparing their 3y-IP as early as February of year N-1 and send it upward to the DMK level.
2. Provincial administrations need to send technical officials to conduct the project technical study starting in April and finished by August of year N-1.
3. CS administrations need to conduct their

Figure 6.17. Budget allocation for CS budget (2018-2020)



Source: *MEF, FMIS (2022)*

Figure 6.18. CS budget execution by months for road construction in 2020



Source: *MEF, FMIS (2022)*

procurement from January to March of year N.

4. CS administrations cannot make advance payments for contractors, but must follow a payment schedule of 45 percent (for the first 50 percent of work finished), 45 percent (for the other 50 percent of work finished), and 10 percent after six months to assure project quality.

6.5. Recommendations

6.5.1. Provincial administration

Strengthening effectiveness of public finance at subnational level will require improvement in both budget planning and execution. Key challenges include weak spatial planning (urban/sectoral planning); disparity between planning and actual spending; inaccurate revenue forecasts from both tax and non-tax revenue (NTR); and expenditure bunching toward last quarter for capital investment.

To improve allocative efficiency, there is a need to improve provincial administrative planning in terms of integration among different tiers of SNAs and alignment with line departments. This could be achieved through the followings:

1. Improve the provincial BSP preparation using the to-be-adopted assessment criteria, coupled with additional capacity building and on-the-job training for planning and finance officials of the province.
2. Strengthen program budget implementation following the SNA-BSRS and the SNA PB guideline. Specific areas to consider include functional review of the current program structure and how to prepare a plan and report using the program and subprogram structure.
3. Improving data management for SNA planning by 1) introducing a more computer-based and online data sharing, 2) creating more structured planning data worksheets that are linked across different components, and 3) strengthening the capacity of the PDP and the PDEF.
4. Strengthen spatial planning by allocating more budget to support the Provincial Departments of Land Management to work closely with SNA to finish the spatial plans for the province.
5. Clarify and concretize functional assignments for each tier of SNAs. The clarification of such roles will minimize duplication of investment among different SNAs. This will require a clearer legal and policy framework.
6. Clarify and institutionalize SNA roles in social protection, especially social assistance such as cash transfer schemes. The COVID-19 crisis has shed more light on the important roles of SNAs in pandemic prevention and intervention. However, such roles have not been explicitly mentioned in the legal framework.

Improving allocative efficiency also requires improvement in overall revenue (both tax and non-tax) forecast through the following:

7. Improve tax revenue forecast, especially for the main tax revenues such as the stamp taxes on property revenue. In addition, the accountability line between the GDT and the provincial administration should be clarified and institutionalized.
8. Improve NTR forecasting, especially on NTR from state assets that have not been well managed and experienced high plan-to-actual variation.
9. Introduce a formula for budget allocation across the three tiers of SNAs (to achieve vertical balance) and across SNAs of different regions (to achieve horizontal balance), especially in relation to the allocation of the SNA Fund intended for budget surplus and the revenue sharing from CP to DMK and CS levels.
10. Improve the NTR system, processes, and the capacity of those in charge of managing the revenue and continue transferring more NTR functions from line ministries to provincial administrations and the DMK level.

The improvement in revenue forecasting (both tax and non-tax revenue) is also important to enhance operational efficiency. This will reduce the variance in plan and budget execution.

State asset management is an area deserving attention, especially for Preah Sihanouk province. This can be done by assessing the extent to which the current asset inventory is comprehensive and reflects reality, especially in terms of asset use and asset value. For the longer-term, however, an improved governance arrangement for SNA state management needs to be developed, starting with ensuring a more coherent legal and regulatory framework.

6.5.2. DMK administrations

The persistently small budget at the DMK level, despite some increase, raised concerns with regard to service delivery. Improvement of budget allocation to DMK level will be necessary for improving public service delivery. This should be done along with the process of clarifying obligatory versus permissive functions for the 55 functions and the costing of specific functions.

Encourage/require DMK administrations to set up clear mechanisms and updated data on private sector engagement in local service delivery and development. This can be done following the requirement set out in the SD#182 and #184 and the strategic directions indicated in the NP2.

Personnel-related challenges require urgent attention. There is a need to address personnel shortage for key services such as water supply, solid waste, and mining. Additionally, there is a need to clarify how technical staff at the DMK administrations should perform their daily operations under the new working arrangements:

The working relationship between the DMK and line department is another immediate challenge to be addressed. This includes the need to:

1. Identify relevant sectoral regulations that need to be revised to be in line with the D&D reform,
2. Ensure that line departments factor in the recent functional transfer in their regular planning and budgeting exercises.
3. Address the inconsistency in the use of data for planning and M&E purposes by the DMK administrations versus the line departments.

6.5.3. CS administrations

After the adoption of the new Circular on CS procurement, more monitoring and capacity building is needed. The circular represents the policy and regulatory responses to the problem of delay associated with the CS development project implementation. However, like many other regulations, to be effective, local officials need to be aware of its content and intended changes, and their compliance needs to be monitored and feedback collected for future adjustments and strengthening.

Table 6.5 shows recommendations to improvement PFM at provincial, DMK, and C/S level.

Table 6.5. Recommendations by timeframe

SNA	Areas	Short-term recommendations (1-2 years)	Medium-term recommendations (3-5 years)
Province	Strengthen planning capacity	• Continue to improve the preparation of the provincial BSP, the integration of DMK and CS plans into the BSP, and the program-budget planning • Strengthen data management to assist in planning and budgeting exercises with enhanced use of ICT for data collection, storage, and sharing; complemented by strengthening the capacity of the Provincial Department of Planning (PDP) and the Provincial Department of Economy and Finance (PDEF) • Better collection and use of information on national-level investment, private investment, and financing by CSOs to inform more effective planning and resource allocation	• Invest more in spatial planning to support the Provincial Department of Land Management to work closely with SNA to finish the spatial plans in the province
	Improve overall tax revenue forecasting capability	• Improve tax revenue forecast, especially for the main tax revenues such as the stamp taxes on property. In addition, the accountability line between the GDT and the provincial administration should be clarified and institutionalized • Improve tax revenue management and accountability relationship between the GDT provincial branch and the provincial administration	• Consider increasing the percentage of tax revenue sharing from CP to DMK and CS levels in order to reduce the current vertical imbalance among the three tiers of SNAs
	Improve NTR forecasting	• Improve forecast of revenue from state assets • Improve the system, process, the capacity of those in charge of managing the revenue (including on the use of NRMIS) • Continue transferring more NTR functions from line ministries to provincial administration and do so in a more coherent manner	• As the capacity at the SNA improves, consider transferring some of the NTR to the DMK level
	Clarity of functional assignment	• Clarify and concretize functional assignment for each tier of SNAs, especially between the provincial administrations and municipalities on infrastructure development	• SNA's roles in social protection (especially social assistance such as cash transfer schemes) should be explicitly mentioned and institutionalized
	Strengthen state asset management (urgent attention needed)	• Assess the extent to which the current asset inventory is comprehensive and reflects reality, especially in terms of asset use and asset value	• Develop a stronger governance arrangement for SNA state asset management, starting with ensuring a more coherent legal and regulatory framework

SNA	Areas	Short-term recommendations (1-2 years)	Medium-term recommendations (3-5 years)
	Improve budget execution processes	• Improve the timing of project preparation and procurement to allow sufficient time for quality project implementation and payment • Ensure timely and explicit instruction on new procedures/changes (e.g., per SNA-BSRS) • Continue to implement the Public Procurement Strategy to decentralize more authority to the SNA level	• Clarify and, where necessary, adjust the existing COA and recording to better reflect the real nature of specific transactions (such as certain non-tax revenues, capital spending, and incentive sharing) • Build capacity for SNAs with better coordination (including with National School of Local Administration (NASLA)) and more use of digital technology
DMK	Improve budget availability and clarity of functions	• Conduct detailed costing of specific functions • Address the budget gaps at the DMK level as a matter of urgency • Identify relevant sectoral regulations that need to be revised to be in line with the D&D reform, ensure that line departments factor in the recent functional transfer in their regular planning and budgeting exercises, and address the inconsistency in the use of data for planning and M&E purposes by the DMK administrations versus the line departments • Encourage/ require DMK administrations to set up clear mechanisms and updated data on private sector engagement in local service delivery and development. This can be done following the requirement set out in the SD#182 and #184 and the strategic directions indicated in the NP2	• Improve vertical balance by increasing the percentage of tax revenue sharing from CP to DMK and CS levels • Move toward decentralized finance and HR management with centralized information supported by modern shared platform GovTech system
	Improve HR management	• Address personnel shortages for key services such as water supply, solid waste management, and mining • Clarify how technical staff at the DMK administrations should perform their daily operations under the new working arrangements	
CS	Address delays to project development and preparation	Support CS officials to implement the circular associated with the CS development project implementation to prevent delays to project development and preparation	Monitor the implementation and collect feedback for future adjustments and strengthening

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ANNEX

Annex to Chapter 1

Annex 1.1. Fiscal position

Table A.1.1. Fiscal balance

(% of GDP)	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022e
Overall balance (including grants)	**-4.9**	**-4**	**-3.2**	**-1.8**	**-0.5**	**-0.2**	**-0.8**	**0.4**	**1.5**	**-4.6**	**-7**	**-4.7**
Primary balance	**-4.6**	**-3.5**	**-2.5**	**-1.1**	**-0.2**	**0.2**	**-0.4**	**0.8**	**1.9**	**-4.1**	**-6.5**	**-4.2**
Total revenue	**12.8**	**15**	**14.5**	**17.6**	**17.8**	**18.5**	**20.1**	**21.8**	**25.1**	**22.2**	**20.5**	**22.5**
Tax revenue	10.1	11.4	11.8	13.8	14.8	15	16.2	17.4	20	18.3	16.7	18.8
Direct taxes	1.8	2.3	2.5	2.9	3.4	3.6	4.2	4.1	4.6	5.5	5.4	6.1
Taxes on goods and services	6	6.8	6.8	8.1	8.7	8.9	9.7	10.9	12.8	10.7	9.4	10.6
Taxes on international trade	2.3	2.4	2.4	2.8	2.7	2.5	2.2	2.4	2.6	2.1	1.9	2.2
Non-tax revenues	2	2.2	2	3.1	1.9	2.6	2.7	2.9	3	2	1.8	1.9
Grants	4.8	2.7	3.9	2.4	1.9	2.3	1.8	2	1.9	1.8	1.6	0.7
All other revenues	0.6	1.4	0.7	0.8	1.1	0.9	1.2	1.5	2	2	2	1.8
Total revenue (and grants)	**17.6**	**17.7**	**18.4**	**20**	**19.7**	**20.9**	**21.9**	**23.8**	**27**	**24**	**22**	**23.2**
Total expenditure	**22.5**	**21.7**	**21.6**	**21.8**	**20.2**	**21.1**	**22.7**	**23.4**	**25.5**	**28.6**	**29**	**27.9**
Current expenditure	10.9	11.6	11.8	12.3	11.5	12.7	14	14.3	14.6	15.5	15.6	15.5
Wages and compensation	4.3	4.6	5	5.7	6.5	6.8	7.6	8	7.4	8.1	7.2	6.6
Expenditure on goods and services	6.3	6.5	6.1	5.9	4.7	5.5	6	5.8	6.9	6.9	8	8.3
Interest payment	0.3	0.5	0.7	0.7	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.5
Capital expenditure	10.7	9.1	9.1	8.2	6.9	6.7	6.8	6.7	7.7	10.5	9.7	8.8
Other expenditure	0.9	1	0.8	1.2	1.8	1.7	1.9	2.5	3.2	2.7	3.7	3.6
Budget balance	-9.7	-6.7	-7.1	-4.1	-2.4	-2.6	-2.6	-1.6	-0.4	-6.4	-8.5	-5.5
General government debt	29.7	31.6	31.7	31.8	31.2	29.1	30.3	28.7	28.1	33.9	35.2	33.7
Total financing	**4.9**	**4**	**3.2**	**1.8**	**0.5**	**0.2**	**0.8**	**-0.4**	**-1.5**	**4.6**	**7**	**4.7**
External financing	3.7	4.5	3.6	3.9	3.4	2.5	3.3	2.6	3.1	4.7	4.2	5.6
Amortization	-0.3	-0.3	-0.4	-0.5	-0.4	-0.6	-0.6	-0.7	-0.8	-1	-1.1	-1.2
Domestic financing	1.4	-0.2	0.1	-1.7	-2.5	-1.7	-1.8	-2.3	-3.8	0.9	3.8	0.4
Memo item:												
Nominal GDP (billion of riels)	52,068.70	56,616.80	61,390.50	67,740.40	73,422.70	81,241.90	89,830.50	99,544.30	110,014.00	105,891.80	110,505.90	122,883.80

Table A.1.2. Selected indicators

CAMBODIA

SELECTED INDICATORS*	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022 E	2023 F
INCOME AND ECONOMIC GROWTH																
GDP growth (annual %)	6.7	0.1	6.0	7.1	7.3	7.4	7.1	7.0	6.9	7.0	7.5	7.1	-3.1	3.0	5.2	5.5
GDP per capita growth (annual %, real)	4.9	-1.4	4.4	5.5	5.8	5.8	5.7	5.5	5.5	5.6	6.2	5.8	-4.2	1.8	4.0	4.4
GDP per capita (US$, nominal)	741.3	734.7	810.0	889.6	949.4	1030.1	1105.1	1183.2	1281.3	1397.0	1527.3	1667.8	1583.9	1624.7	1768.1	1913.6
Private Consumption growth (annual %)	12.7	-0.2	8.8	10.4	4.6	5.8	4.5	9.4	5.8	3.7	6.8	5.9	-4.0	-0.7	9.5	2.0
Gross Investment (% of nominal GDP)	17.3	20.1	16.2	16.0	17.4	18.7	20.9	21.4	21.7	21.9	22.6	23.4	24.0	25.8	30.9	32.8
Gross Investment - Public (% of nominal GDP)[2]	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
MONEY AND PRICES																
Inflation, consumer prices (annual %, EOP or MRV)[1]	12.5	5.1	2.9	4.6	2.3	4.5	0.9	2.8	3.8	2.1	1.5	3.0	2.8	3.7	5.5	2.5
Inflation, consumer prices (annual %, period average)	12.3	3.1	2.6	5.5	3.0	2.9	3.9	1.2	3.0	2.9	2.5	1.9	2.9	2.8	5.5	2.5
Broad Money (% of GDP)	28.3	37.7	41.6	39.1	50.1	55.5	67.1	72.4	79.2	88.2	100.7	116.3	137.2	152.6	148.3	146.7
Domestic Credit to the Private Sector (% of GDP)[2]	23.5	24.6	27.6	28.3	38.7	52.0	62.7	74.3	81.7	86.7	99.6	114.2	139.6	..	..	..
10 year interest rate (annual average)[1]	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nominal Exchange Rate (local currency per USD)	4060.0	4140.0	4044.0	4016.0	4033.0	4027.0	4030.0	4025.0	4058.0	4062.0	4067.0	4070.0	4077.4	4100.0	4150.0	4110.0
Real Exchange Rate Index (2015=100)	91.3	90.8	98.0	94.3	93.3	92.6	94.9	100.0	101.9	101.8	98.5	99.2	99.2	92.7	95.7	87.0
FISCAL																
Revenue (% of GDP)	16.4	15.9	17.7	17.6	17.7	18.2	20.0	19.7	20.9	21.9	23.8	27.0	23.8	22.0	23.2	23.5
Expenditure (% of GDP)	16.1	20.5	21.0	23.0	21.9	21.4	21.9	20.2	21.1	22.7	23.4	25.5	28.8	29.1	27.9	29.9
Interest Payments (% of GDP)	0.2	0.2	0.3	0.3	0.5	0.7	0.7	0.3	0.4	0.4	0.4	0.4	0.6	0.5	0.5	0.6
Non-Interest Expenditure (% of GDP)	15.9	20.3	20.7	22.7	21.4	20.7	21.2	19.9	20.7	22.3	23.0	25.1	28.2	28.5	27.4	29.3
Overall Fiscal Balance (% of GDP)	0.3	-4.6	-3.3	-5.4	-4.2	-3.2	-1.9	-0.5	-0.2	-0.8	0.4	1.5	-4.9	-7.0	-4.7	-6.4
Primary Fiscal Balance (% of GDP)	0.5	-4.4	-3.0	-5.1	-3.7	-2.5	-1.2	-0.2	0.2	-0.4	0.8	1.9	-4.3	-6.5	-4.2	-5.9
General Government Debt (% of GDP)	27.8	29.1	28.7	29.7	31.6	31.3	31.8	31.2	29.1	30.3	28.3	28.1	33.9	35.2	33.7	35.6
External Public Debt (% of GDP)[1]	24.6	26.4	27.2	27.0	30.5	31.6	31.5	31.2	29.1	29.7	28.5	27.9	33.9	35.1	..	..
EXTERNAL ACCOUNTS																
Export growth, G&S (nominal US$, annual %)	20.2	-24.4	22.9	11.4	16.0	16.8	10.3	7.5	9.0	9.4	12.3	8.5	2.1	11.2	31.9	19.0
Import growth, G&S (nominal US$, annual %)	11.3	-17.0	19.1	11.4	14.2	16.9	8.8	7.6	9.0	7.8	9.3	17.4	5.7	46.1	37.8	9.2
Merchandise exports (% of GDP)	49.4	33.9	38.3	38.8	41.6	44.6	45.4	45.4	45.5	45.2	46.0	46.0	51.8	62.8	70.2	71.8
Merchandise imports (% of GDP)	58.2	46.8	50.4	50.5	53.7	57.5	57.5	57.3	56.9	55.6	55.1	54.6	65.7	92.4	91.4	93.5
Services, net (% of GDP)	6.5	6.2	6.8	6.3	7.3	7.8	7.7	7.5	7.0	7.0	7.4	1.8	4.1	-5.8	-26.9	-18.9
Current account balance (current US$ millions)	-622.3	-1120.4	-1165.3	-1309.3	-1390.7	-1489.3	-1899.7	-1680.6	-1756.5	-2140.5	-2180.1	-4107.7	-3221.0	-11492.8	-7798.4	-6256.3
Current account balance (% of GDP)	-6.0	-10.8	-10.0	-10.1	-9.9	-9.6	-11.3	-9.2	-8.8	-9.7	-8.9	-15.2	-12.4	-42.6	-26.3	-19.3
Foreign Direct Investment, net inflows (% of GDP)	7.6	8.8	11.8	11.8	14.0	13.0	10.6	9.5	12.0	12.1	12.6	13.2	13.5	12.6	-12.6	-13.5
Multilateral debt (% of total external debt)[2]	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
POPULATION, EMPLOYMENT AND POVERTY																
Population, total (millions)	13.9	14.2	14.4	14.6	14.8	15.0	15.2	15.4	15.6	15.8	16.0	16.2	16.4	16.6	16.8	16.9
Population Growth (annual %)	1.7	1.5	1.5	1.5	1.5	1.4	1.4	1.4	1.3	1.3	1.2	1.1	1.2	1.2	1.1	1.1
Unemployment Rate[2]	0.8	0.6	0.8	0.6	0.5	0.4	0.7	0.4	0.7	0.1	0.1	0.1	0.3	0.6	..	..
Inequality - Gini Coefficient[2]	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Life Expectancy[2]	66.5	67.4	67.7	68.4	68.9	69.3	69.7	69.9	70.2	70.5	70.6	70.7	70.4	..	..	..
OTHER																
GDP (current LCU, millions)	41968385.4	43056731.7	47047985.2	52068692.7	56616800.5	62219524.1	67740449.6	73422701.6	81241866.0	89830524.8	99544274.8	110014048.2	105891753.0	110505915.9	123036850.5	133268805.9
GDP (current US$, millions)	10337.0	10400.2	11634.0	12965.3	14038.4	15450.6	16809.0	18241.7	20020.2	22114.9	24476.1	27030.5	25970.2	26952.7	29647.4	32425.5
GDP per capita LCU (real)	2055920.0	2026907.2	2116702.2	2233632.6	2362497.2	2500274.8	2641674.7	2787803.8	2941584.8	3106427.6	3297922.6	3490805.5	3343715.1	3405004.0	3542598.8	3699204.4

Source: *MFMOD, Budget Settlement Laws and World Bank staff estimates.*

Note: *e = estimates.*

Table A.1.3. Loan disbursements

Loan disbursement quickly increased, financing widening fiscal deficits as the pandemic hit

	2019		2020		2021		2022	
Top 3 bilateral creditors	Amount (US$ m)	% of GDP	Amount (US$ m)	% of GDP	Amount (US$ m)	% of GDP	Amount (US$ mln)	% of GDP
China	322.1	1.2	365.5	1.4	285.5	1.1	301.1	1.0
Japan	83.8	0.3	149.8	0.6	382.0	1.4	386.2	1.3
Republic of Korea	44.8	0.2	67.0	0.3	72.1	0.3	60.4	0.2
Top 3 multilateral creditors								
ADB	159.1	0.6	421.9	1.6	189.0	0.7	238.3	0.8
World Bank	61.7	0.2	66.1	0.3	84.5	0.3	268.9	0.9
IFAD	10.4	0.0	19.4	0.1	11.2	0.0	29.8	0.1
Other bilateral/multilateral creditors	147.8	0.5	123.6	0.5	134.4	0.5	60.3	0.2
Total	**829.7**	**3.1**	**1,213.4**	**4.7**	**1,158.6**	**4.3**	**1,345.0**	**4.5**

Source: *Public debt statistical bulletins.*

Note: *US$ m= US$ million*

Table A.1.4. Fiscal projections

(% of GDP)	2023p	2024p	2025p
Overall balance (including grants)	**-6.4**	**-4.9**	**-4.2**
Primary balance	**-5.9**	**-4.4**	**-3.6**
Total revenue	**22.8**	**23.5**	**24.6**
Tax revenue	19.3	19.8	20.7
Direct taxes	6.3	6.4	6.7
Taxes on goods and services	10.8	11.3	11.8
Taxes on international trade	2.1	2.1	2.2
Non-tax revenues	1.7	1.6	1.7
Grants	0.6	0.5	0.4
All other revenues	1.8	2.0	2.2
Total revenue (and grants)	**23.5**	**24.0**	**25.0**
Total expenditure	**29.9**	**29.0**	**29.2**
Current expenditure	15.6	15.2	15.6
Wages and compensation	6.7	6.8	7.0
Expenditure on goods and services	8.3	7.8	8.1
Interest payment	0.5	0.6	0.6
Capital expenditure	9.5	8.7	8.4
Other expenditure	4.8	5.0	5.2
Budget balance	-7.1	-5.5	-4.6
General government debt	35.1	35.6	35.9
Total financing	**6.4**	**4.9**	**4.2**
External financing	4.5	4.3	3.9
Amortization	-1.3	-1.4	-1.4
Domestic financing	3.3	2.0	1.7
Memo item:			
Nominal GDP (KHR, billion)	**133,268.8**	**145,073.8**	**157,731.7**

Source: *World Bank staff projections.*

Annex 1.2. Tax expenditure analysis

Tax expenditures are tax relief granted on a particular revenue stream to targeted beneficiaries. In many cases, tax expenditures are intended to stimulate specific sectors of the economy (e.g., automobile manufacturing in the case of Cambodia); preferential tax rates give them a competitive advantage vis-à-vis other sectors. On consumption taxes, commodities can be taxed at a lower rate or exempted; in some cases, commodities like food and pharmaceuticals can be zero-rated or exempt in a VAT system. The preferential treatment reduces the cost of a sector or commodity making goods and services more affordable, and skewing consumers' decisions towards those sectors that produce the identified goods and services. This preferential treatment is called "non-neutrality." Whereas the cost of direct expenditures is evident, without tax expenditure analysis relief from taxes is not measured, making a cost-benefit analysis of these decisions difficult.

Cambodia tax expenditure on imports

Cambodia's tax expenditures on imports are substantial. Figure A.1.1 shows that the tax expenditures on the country's imports were about half its revenue potential over this period. The columns show that between 2016 and 2019 the country's share of collections lowered significantly but were reversed in 2020, likely due to COVID. In addition, the results show that a substantial amount of the relief was granted on VAT, which may not necessarily have been a tax expenditure because firms are eligible for input tax credits. However, foregone customs revenue went from 22 percent of total potential revenue to a low of 17 percent in 2019 rising back to 20 percent of potential revenue in 2020. Relief on special taxes was about 5 percent of potential revenue and petroleum taxes were negligible throughout the period. The data show that Cambodia made significant progress in rationalizing foregone revenue on imports prior to COVID. This suggests that the country can increase its collections on imported goods in the years to come.

Figure A.1.2 shows the amount of foregone revenue from customs, special taxes and additional petroleum tax compared to amounts paid for the same three taxes from 2016 through 2020. Note that, VAT is excluded from this chart, because the bulk of Cambodia's value-added tax is paid by firms that can subsequently claim input tax credits.

Figure A.1.1. Forgone revenue as a share of collections paid (exc VAT)

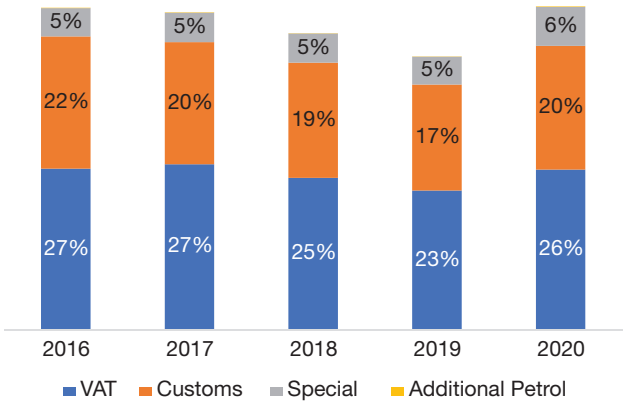


Figure A.1.2. Foregone revenue vs. amounts (KHR, billion)

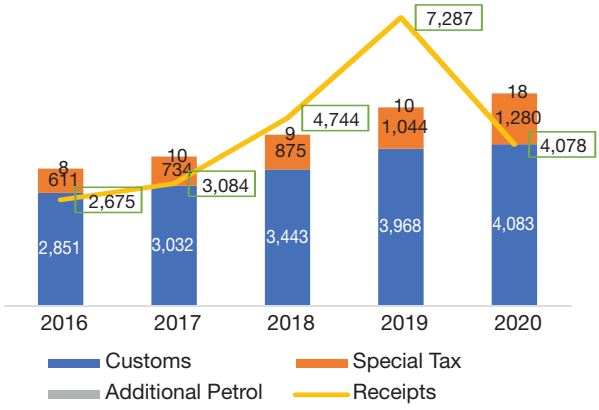


Table A.1.5 shows that Cambodia relieves significantly more VAT on imports than it collects. There is a trend toward collecting a greater share of potential VAT from 2016 to 2019; this is reversed in 2020, likely due to COVID. However, most of this relief is not a tax expenditure because the firms making imports are usually eligible for input tax credits. Granting VAT relief on imports makes the tax system unnecessarily complicated. Cambodia exempts very few commodities from VAT; charging VAT on importations would streamline the system reducing the costs of compliance for taxpayers and simplify administration for the government.

Table A.1.5. VAT foregone as a share of value added tax collected

	2016	2017	2018	2019	2020
Forgone VAT/VAT collected	155%	168%	143%	120%	150%

The bulk of the relief Cambodia grants on imports is foregone customs revenue, shown in blue, which rose from about KHR 2.9 trillion in 2016 to nearly KHR 4.1 trillion in 2020. Over the same period relief on special taxes, shown in orange, doubled from around KHR 600 billion to about KHR 1.3 trillion. At the same time, revenue receipts rose from about KHR 2.6 trillion in 2016 and peaked at about KHR 7.3 trillion in 2019, dropping back to about KHR 4.1 trillion in 2020. In revenue terms, the foregone tax on imported petroleum products is negligible.

Table A.1.6 underscores that Cambodia's tax relief on imports is generous. Between 2016 and 2020 Cambodia relieved about two-thirds of the potential customs revenue on imports whereas the share of relief on special taxes was about 22 percent in 2016, falling to 16 percent in 2019 and rebounded to 26 percent in 2022. Relief on both taxes fell steadily from 2016 to 2019 and rose sharply with the onset of COVID.

Table A.1.6. Customs and special taxes relief as a share of potential collections

	2016	2017	2018	2019	2020
Customs	66%	67%	66%	62%	70%
Special tax	22%	20%	18%	16%	26%

Between 2016 and 2020 the amount of revenue foregone on imports into Cambodia rose about 45 percent from around KHR 3.3 to nearly KHR 4.7 trillion. Moreover, figure 5.3 shows that while QIP relief dominates, foregone revenue through Special Economic Zones increased as a share of total relief from 2016 through 2020. Furthermore, the share of relief granted through mechanisms other than Qualified Investment Projects and Special Economic Zones also increased over the period analysed.

The increase in average transaction value among firms benefiting from relief from methods other than Qualified Investment Projects and Special Economic Zones rose constantly from 2016 through 2019 and then quite dramatically in the last year (Figure A.1.3). Conversely, the average value of each transaction on a QIP declined fairly consistently over the horizon whereas the average relief on SEZ remains relatively consistent (Figure A.1.4). This raises the question about the homogeneity of the imported commodities.

Figure A.1.3. Foregone revenue by relief mechanism (KHR, billion)

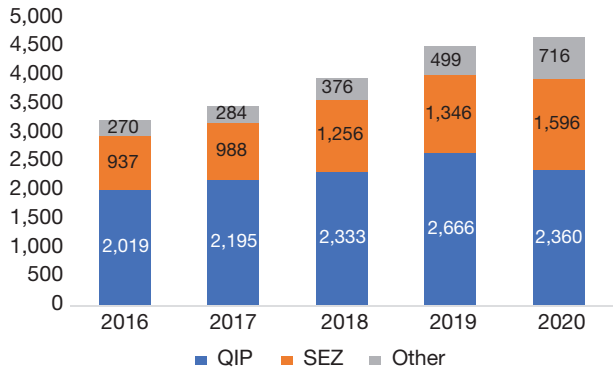
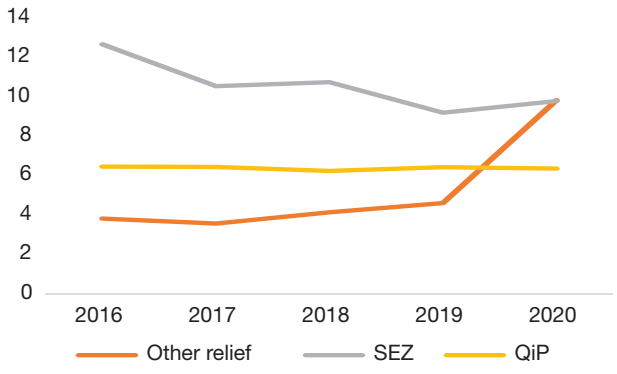


Figure A.1.4. Average relief claimed per transaction



Relief on importations by QIP and SEZ have very different profiles. The top five commodities are consistent among the five years and account for about 55 percent of imports for both QIPs and SEZ. However, the commodities imported by each are very different (Figure A.1.5). Typically, QIPs claim the greatest relief on fabrics used in garment production. The largest sources of relief for the SEZs are typically inputs into manufacturing processes. These results suggest that firms using SEZ may be making investments in higher value-added industries than those claiming relief through QIPs.

Figure A.1.5. Top five imported commodities

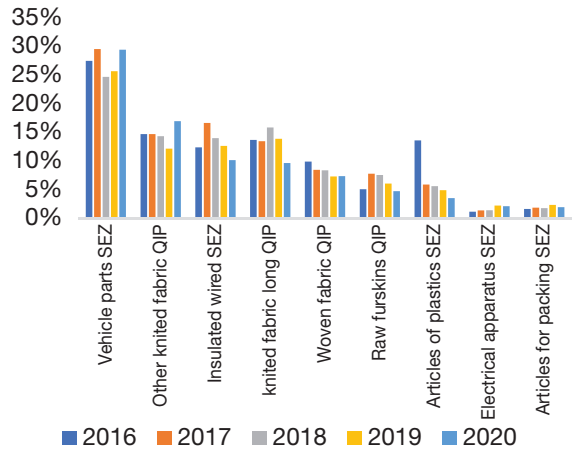
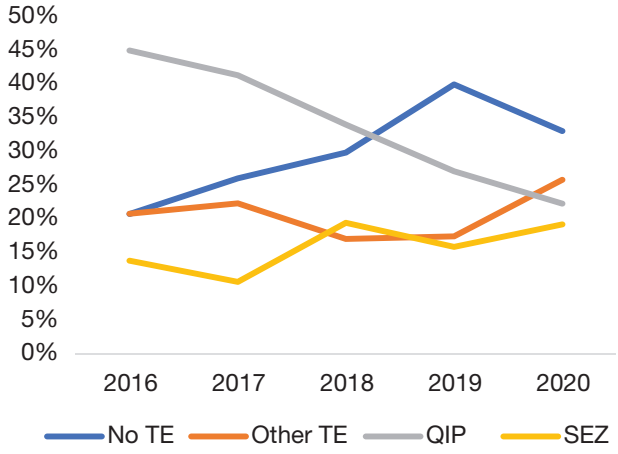


Figure A.1.6. Importations of construction equipment by type of investor



Interestingly, investments in construction equipment are negatively correlated with tax relief on importations. Construction equipment by QIPs declined significantly from nearly half of all importations to less than one quarter in 2020 (Figure A.1.6). Conversely, firms paying all their customs and excise duties on importations and construction equipment accounted for about 20 percent of importations in 2016 and, by 2018 they were the biggest importers of construction machinery and equipment. While the importations as a share of the total for these commodities dropped off between 2019 and 2020, the upward trend in the growth in expenditures is in stark contrast to cases where Cambodia forgoes tax on imports. Throughout the period we see that relief on construction equipment for firms in SEZs rose marginally and interestingly were below those claiming other forms of tax exemptions on there importations. This result suggests that Cambodia has additional capacity to mobilize revenue by targeting tax relief more effectively.

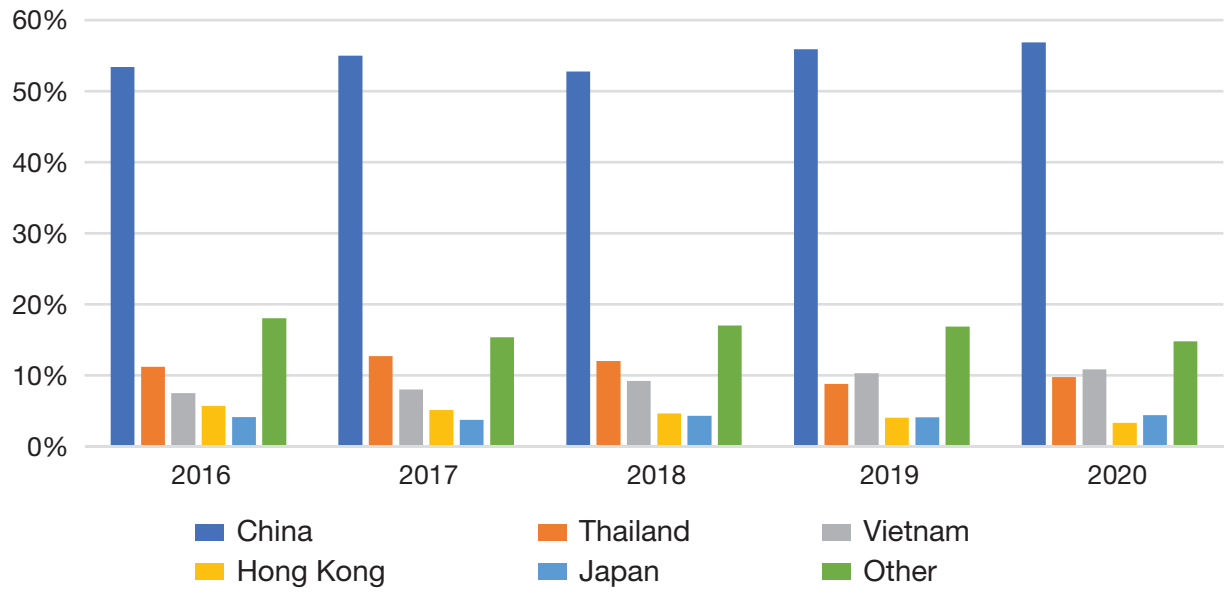
Overwhelmingly, the relief on customs, special taxes and the additional tax and petroleum is granted through either QIPs or in SEZs. Table A.1.7 shows that in 2016 about 63 percent of the relief was granted through QIPS; this dropped to 51 percent in 2020. Conversely the use of Special Economic Zones rose from 29 percent in 2016 to 34 percent over the same period. Over the period total relief on imports rose, but not as rapidly as the value for duty. The relief granted through mechanisms other than QIPs and SEZs grew from 8 percent in 2016 and 2017 to 15 percent in 2020 (Table A.1.7). Throughout the observation period the use of Qualified Investment Projects and Special Economic Zones contributed significantly to the foregone revenue on imports. These programs are expensive and should be reviewed thoroughly to ensure that they are achieving their policy objectives.

Table A.1.7. Share of relief granted through QIP or SEZ

	2016	2017	2018	2019	2020
QIP	63%	63%	59%	59%	51%
SEZ	29%	29%	32%	30%	34%
Non-QIPSEZ	8%	8%	9%	11%	15%
Total	100%	100%	100%	100%	100%

The top 5 exporting nations account for more than 80 percent of the customs relief granted to QIPs and SEZs. Exports from China accounted for more relief than all others combined. From 2016 through 2020 the Chinese share rose steadily from about 53 percent to more than 57 percent. Thai and Vietnamese exports traded places for second place over the period analyzed, typically around 10 percent of relief granted of imports into Cambodia among QIPs and SEZs.

Figure A.1.7. Share of total QIP or SEZ relief



Annex to Chapter 3

Box A.3.1. Roles and responsibilities of public health administrations and facilities

Cambodia's health system consists of three levels of administration: (i) national-level administration, (ii) provincial-level administration, and (iii) district-level administration.

- At the national level, MOH - consisting of three directorate generals - is responsible for managing the healthcare system in Cambodia. Specifically, (i) preparing, mobilizing funding, and implementing a health policy framework, (ii) developing laws and regulations governing the health services quality, infrastructure development of referral hospitals and HC/HP, (iii) preparing and implementing national preventive programs, (iv) preparing human resources development plan, core competencies of professional health care staff, and providing capacity development for health care workforce of a referral hospital, HC/HP, (v) developing standards of and procuring and distributing drugs and medical supplies/equipment to all health facilities, (vi) providing support to provincial/capital administrations in developing a budget and operational plan, and (vii) monitoring and evaluating the management and health services of provincial/capital administrations.
- At the provincial level, provincial/capital administrations are responsible for (i) developing an annual plan and budget for delivering health care services at the provincial level, (ii) coordinating with DPs and NGOs, mobilizing funding, managing financial and human resources to implement the annual plan, (iii) requesting MOH for health professional staff and capacity building for health care staff, and (iv) reporting implementation progress to MOH and Ministry of Interior (MOI).
- Provincial health departments (PHD) (25 provinces) are responsible for (i) coordinating with provincial administration to implement health policies and plans set out by MOH, (ii) distributing financial resources, supervising and monitoring the performance of Operational District (OD) and provincial referral hospital in delivering health care services, and (iii) providing continuous training for health care staff. From 2021, PHD received a budget allocation for provincial health from the respective provincial administration.
- At the district level, 103 operational district (OD) offices - covering 208 administrative districts/khans/krongs - were established in 2005. OD's roles and responsibilities include (i) coordinating with PHD to implement health policies and plans within its own jurisdiction areas, (ii) allocating budget, supervising and monitoring the performance of district referral hospitals and health centers (HC)/health posts (HP), and (iii) providing in-service training to health care staff.

Referral hospitals- at national, provincial, and district levels provide health care services including specialized services, diagnosis, follow-up, and treatment for the management of complex health problems. Health Center (HC) and Health Post (HP) province health care services at the district level and remote areas, respectively. Referral hospitals are located in populated areas within a two-hour drive, covering 80,000 to 200,000 population. HC is located within 10 kilometers, covering 8,000-12,000 population. HP is located in distant communes or villages, covering 2,000-3,000 population.

Sources: *MOH and World Bank staff*

Box A.3.2. Summary of CDHS 2021 and government achievements

Family planning

- 62 percent of currently married women use a method of contraception.
- The total demand for family planning among currently married women increased from 69 percent in 2014 to 74 percent in 2021–22; 61 percent of the total demand is satisfied by modern methods.
- 42 percent of currently married women who are not using contraception intend to use family planning in the future.
- Forty-six percent of women who currently use a modern method of contraception last obtained that method from a public sector source, primarily a government health center (37 percent), while 52 percent obtained their method from the private sector.

Infant and child mortality

- The infant mortality rate declined from 28 deaths per 1,000 live births in the 5 years before the 2014 survey to 12 deaths per 1,000 live births in the 5 years before the 2021–22 survey. Over the same period, the under-5 mortality rate declined from 35 deaths per 1,000 live births to 16 deaths per 1,000 live births.

Maternal and newborn healthcare

- Almost all women (99 percent) age 15–49 who had a live birth in the 2 years preceding the survey received antenatal care (ANC) from a skilled provider during their most recent birth.
- Almost all women who received antenatal care for their most recent pregnancy had their blood pressure measured (99 percent), 88 percent had a blood sample taken, and 76 percent had a urine sample taken.
- Nearly all births in the past 2 years were delivered in a health facility (98 percent).
- 85 percent of mothers, 77 percent of newborns, and 74 percent of both mothers and newborns had a postnatal check during the first 2 days after delivery.

Child health

- 76 percent of children age 12–23 months had received all basic vaccinations by the time of the survey, and 65 percent were fully vaccinated according to national schedule.
- 1 percent of children under age 5 had symptoms of acute respiratory infection (ARI) in the 2 weeks before the survey. Advice or treatment was sought for 92 percent of children with symptoms of ARI.
- 6 percent of children under age 5 had diarrhea in the 2 weeks before the survey, and advice or treatment was sought for 69 percent of these children. Fifty-three percent of children with diarrhea received oral rehydration therapy (ORT), while 17 percent received no treatment.

Nutrition of children and women

- 22 percent of children under age 5 are stunted, 10 percent are wasted, 16 percent are underweight, and 4 percent are overweight.
- Among children age 0–23 months, 54 percent were breastfeed within 1 hour of birth and 50 percent were exclusively breastfed for the first 2 days after birth; 50 percent of children under age 6 months are exclusively breastfed.
- 49 percent of children age 6–23 months received meals with the minimum recommended diversity the previous day, 82 percent received meals at the minimum frequency, 42 percent were fed a minimum acceptable diet, 28 percent were given sweet beverages, and 21 percent were given unhealthy foods.

Box A.3.2. Summary of CDHS 2021 and government achievements (Cont.)

- During the 12 months before the survey, 15 percent of children age 6–59 months were given iron-containing supplements. During the 6 months before the survey, 40 percent of children age 6–59 months were given vitamin A supplements and 47 percent of children age 12–59 months were given deworming medication.
- 4 percent of women age 20– 49 and 14 percent of young women age 15–19 are of short stature. In addition, 7 percent of women age 20–49 and 29 percent of women age 15–19 are thin. The prevalence of overweight or obesity is 33 percent among women age 20– 49 and 6 percent among women age 15–19.
- 57 percent of women consumed food from at least five of 10 specified food groups (minimum dietary diversity) the previous day, 63 percent consumed sweet beverages, and 33 percent consumed unhealthy foods.
- 49 percent of households have iodized salt.

Knowledge, attitudes, and behavior related to HIV AND AIDS

- About one quarter of women and men (26 percent each) age 15–49 express discriminatory attitudes towards people living with HIV.
- 88 percent of women and 64 percent of men age 15–49 have heard of PrEP approve of using it to prevent HIV infection.
- Less than 1 percent of women and 4 percent of men reported having sex with a person who neither was their partner nor lived with them in the 12 months preceding the survey.
- 47 percent of women and 76 percent of men reported using a condom during their last sexual intercourse with a nonmarital or noncohabiting partner.
- 47 percent of women and 28 percent of men age 15–49 have ever been tested for HIV and received the test results.

Disability

- 21 percent of household members age 5 or above have some level of difficulty in at least one functional domain, and 4 percent have a lot of difficulty or cannot function at all in at least one domain.
- The proportion of household members who have some difficulty in at least one domain generally rises with increasing age. For instance, less than 2 percent of household members in the age groups below 40 years have a lot of difficulty or cannot function at all in at least one domain, as compared with 20 percent of those age 60 and above.
- 20 percent each of women and men who are widowed have a lot of difficulty or cannot function at all in at least one domain compared to 6 percent or less among women and 10 percent or less among men in other marital status categories.
- 7 percent of rural women and 6 percent of rural men have a lot of difficulty or cannot function at all in at least one domain compared to 4 percent of urban women and 3 percent of urban men.
- The percentages of men and women who have some difficulty or have a lot of difficulty or cannot function at all in at least one domain generally decline with increasing education and household wealth.

Adult and maternal mortality

- The adult mortality rate is 1.30 deaths per 1,000 population among women and 2.81 deaths per 1,000 population among men.
- The lifetime risk of maternal death indicates that 1 in 250 women in Cambodia will die from maternal causes.
- The maternal mortality ratio for the 7-year period before the 2021–22 CDHS is estimated at 154 maternal deaths per 100,000 live births.
- The estimated pregnancy-related mortality ratio for the 7-year period preceding the 2021–22 CDHS is 163 deaths per 100,000 live births.

Source: *CDHS (2021/22)*

Box A.3.3. Level of public health care services as regulated by MOH

In 2006, the National Guidelines on Complementary Package of Activities for Referral Hospital

Development from 2006 to 2010 stipulated the level of health care services provided by public health facilities. The first level of health care services is Minimum Packages of Activities (MPA) provided by health centers. The second level of health care is the Complimentary Package of Activities (CPA) provided by referral hospitals. The second level of health care consists of three CPAs (CPA-1, CPA-2, and CPA-3). The guidelines set out detailed quality assurance criteria for referral hospitals to comply with to be entitled as CPA referral hospitals. MOH consistently conducts assessments on referral hospitals against the quality assurance requirements.

	MPA	CPA-1	CPA-2	CPA-3
Description of services	MPA includes preventive and basic curative services provided by HC/HP, including neonatal, child health services, maternal health services, prevention and treatment of communicable diseases, treatment of non-communicable diseases, etc.	A referral hospital is required to provide at least one of the three CPAs-CPA-1, CPA-2, CPA-3. CPA-1 referral hospital is required to have 40-60 beds and provide basic health care services without major surgery or blood bank.	A CPA-2 referral hospital provides CPA-1 services with 60- 100 beds and it is required to provide emergency care services and grand surgery (with general anesthesia).	A CPA-3 referral hospital has the highest level of health services, with 100-250 beds. In addition to CPA-2 health services, a CPA-3 referral hospital provides specialized health services and a blood bank.
National referral hospital	0	0	0	9
Provincial referral hospital	0	0	4	21
District referral hospital	0	60	35	0
Health center/ health post	1,269	0	0	0

Sources: *MOH, WHO, and World Bank staff*

Note: *MOH=Ministry of Health; MPA = Minimum package of activities; CPA = Complementary package of activities, HC=Health center; HP=Health post*

Table A.3.1. Distribution and characteristics of public health care providers

Public health facilities	Total (2021)	Characteristics and provisions of health care services
National hospital	12	• National hospitals, the majority located in Phnom Penh, provide high level tertiary services. All 12 national hospitals are delegated as Special Operating Agency (SOA). Largely autonomous (as delegated by the MOH), national hospitals employ the workforce, monitor and evaluate the performance of the hospital and services, and make decisions how to make use of user fees to provide incentives for the health care workforce. • National hospitals provide the highest level of health care services (specialized services) which include general hospital services, and specialized services such as pediatrics and tuberculosis. • Sources of funding: (i) budget allocated across expenditure categories at the national level, (ii) Service Delivery Grant (SDG), including fixed lumpsum grant and performance-based grant, (iii) user fees, (iv) NSSF (National Social Security Fund) payment, and (v) HEF reimbursement. • Accountability framework: national hospitals are accountable for delivering health care services under the supervision of the Directorate General of Health, MOH.
Provincial referral hospital	25	• Provide CPA at three levels of health services (CPA1, CPA-2, CPA-3) at the provincial level depending on the number of factors such as staff and number of beds. Twenty out of 25 provincial referral hospitals provided CPA-3 level services. • Only Kandal provincial referral hospital has a psychiatric unit. • Only 10 out of 25 provincial hospitals are SOAs. • Conduct assessments to comply with the CPA requirements. A referral hospital is required to comply with at least CPA-1 requirements. • Sources of funding: (i) budget allocated from provincial health department (PHD), (ii) Service Delivery Grant (SDG)- including fixed lump-sum grant and performance-based grant, (iii) user fees, (iv) NSSF payments and (v) Health Equity Fund (HEF) reimbursement. • Accountability framework: provincial referral hospitals are under the direct supervision of the Provincial Health Department (PHD). Performance metrics at the facility are prepared in consultation with PHD, which is responsible for conducting performance monitoring of the provincial referral hospital.

Public health facilities	Total (2021)	Characteristics and provisions of health care services
District referral hospital	95	• Provide CPA at two level services (CPA1, CPA-2) depending on the number of criteria including the number of staff and beds at the district level. • Communicable diseases services are mainly provided by referral hospitals and health centers. • Conduct assessments to comply with CPA requirements. • Sources of funding: (i) budget allocated from the operational district (OD)), (ii) SDG, (iii) user fees, (iv) NSSF payment, and (v)HEF reimbursement. • Accountability framework: District referral hospitals are under the supervision of OD. OD is responsible for monitoring the performance of district referral hospitals. OD is accountable vis-à-vis PHD. for the performance results of district referral hospitals and health centers under its supervision.
Health center	1,288	• Working much closer at a community level, provides MPA including neonatal, child health services, maternal health services, prevention and treatment of communicable diseases, and treatment of non-communicable diseases. • Covering 10,000–20,000 people. • User fees covering drugs. • Conduct assessments to comply with the MPA requirements. • Sources of funding: (i)budget allocated from PHD), (ii) SDG, including fixed lump-sum grant and performance-based grant (iii) user fees, (iv) NSSF payments, and (v) HEF reimbursement. • Accountability framework: Health centers are under the supervision of OD. OD is responsible for monitoring the performance of health centers. Health Posts, which are located in remote areas, are under the health center.

Source: *MOH and World Bank staff*

Note: *MOH=Ministry of Health; MPA = Minimum package of activities; CPA = Complementary package of activities; SOA=Special Operating Agencies; DG=Directorate General, HEF=Health Equity Fund*

MPA includes preventive and basic curative services.

CPA has three levels (CPA-1, CPA-2, CPA-3). CPA-1 hospital is the lowest level of a hospital with 40-60 beds which provides basic health without major surgery or a blood bank. CPA-2 hospital has 60-100 beds providing CPA-1 services and additional services such as emergency care, major surgery, blood transfusion, etc. CPA-3 hospital has 100-250 beds, providing CPA-2 services plus major surgery, and other specialized services.

Table A.3.2. List of private health facilities and pharmaceutical and medical supply institutions in Cambodia (September 2023)

No	Type of Private Facilities and Institutions	Total
I. Private Health Facilities without In-patient Bed (Small-size facilities)		
1	Antenatal care room	2,327
2	Nursing care room	6,728
3	Dental care room	373
4	Physiotherapy room	34
5	Medical consultation cabinet	4,462
6	Dental consultation cabinet	965
7	Ophthalmology consultation cabinet	53
8	ENT consultation cabinet	34
9	Dermatology consultation cabinet	56
10	Mental health consultation cabinet	22
	Sub-total Small-size Facilities	***15,054***
II. Private Health Facilities with In-patient Beds (Large-size facilities)		
1	Private hospital	23
2	Polyclinic	104
3	Medical clinic	749
4	Pediatric clinic	2
5	Maternity clinic	18
6	Dental clinic	71
7	Ophthalmology clinic	4
8	ENT clinic	0
9	Dermatology clinic	0
10	Mental health clinic	3
11	Laboratory	106
12	Aesthetic center	46
13	International Hospital Representative Office in Cambodia	5
	Sub-total Large-size private facilities	***1,131***
	TOTAL PRIVATE HEALTH FACILITIES (small & large size facilities)	***16,185***
III. Private Pharmacies		
1	Pharmacy	3,147
2	Sub-pharmacy level "A"	357
3	Sub-pharmacy "B"	248
4	Khmer and Chinese Traditional Medicine Store	155
	Sub-total Pharmacies (excluding traditional medicine store)	***3,752***
IV. Pharmaceutical and Medical Equipment and Supply Institutions		
1	Pharmaceutical Import and Export company	605
2	Branch of Pharmaceutical Import and Export company	33
3	Pharmaceutical Manufacturer	15
4	Medical Equipment and Supply Manufacturer	17
5	Branch of Medical Equipment and Supply Manufacturer	1
6	Nutritious Product Manufacturer	1
7	Aesthetic Product Manufacturer	8
8	Aesthetic Product Import and Export company	1,356
9	Branch of Aesthetic Product Import and Export company	5
	Pharmaceutical and Medical Equipment and Supply Institutions	***2,041***
TOTAL PHARMACIES AND PHARMACEUTICAL & MEDICAL EQUIPMENT SUPPLY INSTITUTIONS		**5793**

Source: *MOH, Department of Hospital Service, Department of Drugs, Food and Cosmetics, as of August 2023*

Table A.3.3. Policy and key health care reform priorities, implementation progress, and challenges ahead

Key priorities reforms and strategies	Key implementation progress	Challenges ahead
Health Equity Fund	Established in 2000, HEF mobilized funds from the government and development partners to provide health care services and financial protection for the poor (around 3 million population). HEF covered 100 percent user fees related to hospitalization, and health care services, transportation and food costs at referral hospitals and health centers. The beneficiaries covered under HEF included poor as identified by ID Poor[136] system and informal sector workers.[137] HEF covered all public health facilities in 2015. Between 2016 to 2020, total HEF cost was estimated at US$70 million. Of the total HEF cost, 57.14 percent (US$402 million) was financed by the government and the rest 42.85 percent (US$30 million) financed by pooled donor fund.[138] In 2021, HEF cost reached US$18.81 million, of which 68 percent was covered by MOH budget. [139]	PFM challenges: • Increase utilization rate and coverage.
Health system reform to strengthen capacity of public health facilities to deliver quality health services	Since 2008, MOH converted a number of health Operational District (OD) and Provincial Hospitals into Special Operating Agencies (SOAs). 12 national hospitals, 11 provincial hospitals, 38 ODs, and 78 referral hospitals, were converted into SOAs. SOA was granted with a level of management autonomy to make use of resources-human and financial- to deliver results. SOA has authority to hire additional workforce, provide incentives for them, and monitor their performance. In addition to MOH budget allocation and user fees, SOA received Service Delivery Grant (SDG)-a government budget for health sector support. SOA budget was channeled through PHD and OD. Service Delivery Grant (SDG) consisted of fixed lumpsum grant and performance-based grant. In 2021, performance-based grant was US$11.36 million (50 percent was covered by MOH), while fixed lumpsum grant amounted to US$0.3 million. Fixed lumpsum grant can be used only for covering operating costs at health facilities (MOH and MEF). SOA was an internal contracting in which SOA facilities singed service delivery management contract and was accountable for delivering results agreed upon in the performance metrics. At national level, national hospitals signed service delivery contract with MOH; and MOH monitored their performances accordingly. At provincial level, MOH singed service delivery contract with PHD; PHD, in turn, singed service delivery contract with SOA facilities-OD and provincial referral hospital- within its own jurisdiction. PHD were responsible for monitoring performance of OD and provincial referral hospitals. OD monitored district referral hospitals and health facilities on a regular basis. Anecdote evidence suggested SOA facilities had improved on health care staff behavior such as improved punctuality of staff, 24 hours of health services at health facilities.[140]	PFM challenges • Monitoring performance of SOA health facilities was challenging due to limited resources for conducting performance monitoring on regular basis. • Although there were incentives for health workforce at SOA health facilities, the incentives were not enough to encourage facility staff to conduct dual health care practices- both at public health facility and at private health care providers.[141]

136 ID-Poor is a program implemented by the Ministry of Planning that pre-identifies poor household nation-wide.

137 MOH, guidelines for the HEF Promoter, 2016.

138 World Bank, Project Appraisal Document for Health Equity and Quality Improvement Project (H-EQIP), p. 33

139 ID-Poor is a program implemented by the Ministry of Planning that pre-identifies poor household nation-wide.

140 Internal contracting of health services in Cambodia: drivers for change and lessons learned after a decade of external contracting, Vong et al. BMC Health Services Research (2018)

141 ReBuild Consortium, understanding contracting in Cambodia: findings from interviews with key informants and health service managers and providers (2015)

Key priorities reforms and strategies	Key implementation progress	Challenges ahead
Moving towards universal coverage	The Strategic Framework for Health Financing 2008-2015 aimed at achieving universal health coverage by improving health system financing. The framework introduced National Social Health Protection Schemes to cover informal sector social protection, including HEF, CBHI, and maternal health voucher schemes. CBHI's coverage was low in both the rural and urban areas. Urban households had as low chance as rural households in receiving free and subsidized care from CBHI (1.3 percent vs 1.5 percent). Households in lowest quintile were more likely to receive free and subsidized care from CBHI (2 percent for quintile 1 versus 0.6 percent for quintile 5). Established in 2008, The National Social Security Fund (NSSF) is designed social protection schemes providing health insurance coverage for formal private sector employee. The scheme covered 1.3 million workers in the formal private sector, by 2019. The medical benefits under NSSF included all services available in the public hospitals, expect expensive procedures, malaria, HIV/AIDS, dental acre, plastic surgery and laser surgery etc.	• Increase health coverage through integration of all social health protection.

Sources: *MOH, WHO, and World Bank staff*

Note: *MOH=Ministry of Health; WHO=World Health Organization; HEF=Health Equity Fund; SOA=Special Operating Agencies; OD=Operational District; CBHI= Community-based Health Insurance; H-EQIP=Health Equity and Quality Improvement Project, SDG=Service Delivery Grant; M&E= Monitoring and Evaluation*

Table A.3.4. Distribution of public health facilities by province and OPD cases (2022)

Provinces	National hospitals	Provincial hospitals	District hospitals	Total hospitals	OPD at hospital	Health center	OPD at health center	Total health facilities	Total OPD
Banteay Meanchey	0	1	8	9	81,042	68	730,005	77	811,047
Battambang	0	1	6	7	178,445	82	682,328	89	860,773
Kampong Cham	0	1	8	9	63,668	91	551,101	100	614,769
Kampong Chhnang	0	1	2	3	35,251	45	238,075	48	273,326
Kampong Speu	0	1	3	4	69,031	58	331,217	62	400,248
Kampong Thom	0	1	2	3	17,639	56	357,432	59	375,071
Kampot	0	1	4	5	34,605	64	239,812	69	274,417
Kandal	0	1	10	11	124,742	106	675,563	117	800,305
Kep	0	1		1	8,434	5	14,049	6	22,483
Koh Kong	0	1	1	2	28,855	13	42,930	15	71,785
Kratie	0	1	4	5	26,175	40	85,072	45	111,247
Mondul Kiri	0	1	1	2	3,195	16	51,665	18	54,860
Oddar Meanchey	0	1	1	2	24,250	38	126,147	40	150,397
Pailin	0	1		1	12,052	7	13,890	8	25,942
Phnom Penh	0	1	8	9	88,357	43	385,367	52	473,724
Preah Sihanouk	0	1		1	19,934	17	43,578	18	63,512
Preah Vihear	0	1	1	2	37,713	30	142,983	32	180,696
Prey Veng	0	1	11	12	74,172	113	899,019	125	973,191
Pursat	0	1	3	4	39,998	47	366,990	51	406,988
Ratanakiri	0	1	1	2	16,907	30	126,807	32	143,714
Siemreap	0	1	4	5	167,602	93	743,018	98	910,620
Stung Treng	0	1		1	6,889	19	78,162	20	85,051
Svay Rieng	0	1	5	6	68,222	48	238,283	54	306,505
Takeo	0	1	6	7	150,451	85	548,459	92	698,910
Tbong Khmum	0	1	6	7	51,790	74	520,439	81	572,229
National Hospital	12			12	1,642,488				1,642,488
Total in all provinces (excluding national hospitals)	12	25	95	120	1,429,419	1,288	8,232,391	1,408	9,661,810

Sources: *MOH and World Bank staff*

Table A.3.5. MOH budget outturn

	2017			2018			2019			2020			2021		
	BL	Actual	Execution rate	BL	Actual	Execution rate	BL	Actual	Execution rate	BL	Actual	Execution rate	BL	Actual	Execution rate
Chapter 60: Purchases	201,445	196,620	98%	223,416	218,093	98%	209,935	205,469	98%	231,833	223,487	96%	221,623	213,673	96%
Chapter 61: Services	78,531	69,132	88%	82,070	73,346	89%	89,625	82,015	92%	91,963	76,737	83%	79,973	63,485	79%
Chapter 64: Payroll expenses	401,277	396,566	99%	466,148	444,777	95%	514,316	486,842	95%	565,189	528,035	93%	562,955	522,135	93%
Chapter 62: Social benefits expenses	469,459	467,326	100%	574,444	595,819	104%	675,727	669,666	99%	691,810	620,223	90%	801,031	637,946	80%
Chapter 65: Subsidy expenses	50,609	47,555	94%	47,347	47,185	100%	55,402	54,599	99%	55,180	175,828	319%	54,589	53,331	98%
Chapter 63: Taxes and tariffs	534	219	41%	549	254	46%	520	257	49%	523	246	47%	513	277	54%

Sources: *MEF and World Bank staff estimates*

Annex to Chapter 4

Annex 4.1. Budget Strategic Plan

The introduction of the Budget Strategic Plan (BSP) and the piloting of Program Budgeting (PB) are important steps forward under the Public Financial Management Reform Program (PFMRP). MAFF was one of the first ministries to pilot program-based budgeting as part of RGC's reform roadmap. It thus provides valuable experience to Cambodia's reformers as they seek to build a foundation to support the next stage of reforms aimed at strengthening accountability for results. This section reviews the MAFF experience with the BSP and PB in the context of the reform aims. The analysis focuses on strategic guidance, planning and budgeting, performance framework (assessment of the quality of output and outcome indicators), and implementation.

The Royal Government of Cambodia (RGC) developed and launched a Public Financial Management Reform Program (PFMRP) with a detailed and sequenced action plan in 2004. The PFMRP is a sector-wide tiered (multi-stage or multi-platform) approach that aims to instill high standards of management and accountability in the mobilization of resources and ensure their effective and efficient use. Specifically, the sequenced multi-step reform process aims to strengthen budget credibility, improve financial accountability, establish budget-policy linkages, and improve performance accountability. One of the objectives at the current stage (platform 3) of the reform is to strengthen the foundation towards adopting performance-informed budgeting (PIB),[142] with program budgets as a key component. The Budget System Reform Strategy (BSRS 2018-2025) frames the implementation of program budgeting as a tool for linking budget to policy objectives and, by extension, the measuring of performance. Piloting of program budgeting was introduced to 10 LMs in 2015 and expanded to 36 LMs/institutions in 2017, with the aim to gradually strengthen accountability and the availability of performance and outcome information en route to the planned implementation of full performance budgeting from 2025 onwards.

Reflecting the Government's modular and sequential reform approach, each reform stage is supported by ministry-level pilots to gain valuable operational experience and strengthen the practical understanding of the challenges in the implementation of reforms that could take place across the whole of government. The introduction of the Budget Strategic Plan (BSP) and the piloting of Program Budgeting within MAFF is one such example to help guide the implementation of Stage 3 of the PFMRP.

BSP and PB attempt to connect Line Ministry expenditure allocations to policy priorities and outcomes across a three-year horizon. The preparation of the BSP precedes the annual budget preparation and provides the background information and parameters to shape the basis for budget allocations. A joint review of the reform efforts conducted by the PFMRP Steering Committee and the WB noted that the introduction of the BSP was a key step forward and contributor to positive progress along Cambodia's reform journey and specifically in promoting the focus on performance. The MAFF case study demonstrates that program structures and BSP have helped strengthen elements of the planning process, but are yet to impact budgeting and budget management systems. Deepening of PB reforms will require the integration of program logic to budget management processes that go beyond planning and are guided by strategic sequencing choices and targeted functional reforms in prioritized bottlenecks.

142 Performance-informed budgeting could be seen through the lens articulatesd in the Budget System Reform Strategy (BSRS), with the obejctive for to have the discussion on budget proposal, both current and capital budget, to be principally be based on program performance.

International experiences suggested that PB implementation has faltered mainly due to the difficulty of combining the objectives of planning, management, and control in one budget system. In some countries, instead of providing more information to the government to manage its resources, program budgeting, as implemented, may have resulted in the implementation of more, rather than less, controls and a fragmentation of the budget, which is exactly counter to the aspirations of program budgeting.[143]

Annex 4.2. Program budget structure

Table A.4.1. MAFF program structure across administrative units

MAFF entity/department	Program
1) General Directorate of Agriculture 2) General Department of Rubber 3) Department of Agro-Industry 4) Cambodian Agricultural Research and Development Institute 5) Cambodian Rubber Research Institute 6) Provincial Departments of Agriculture, Forestry, and Fisheries	**Program 1:** Increasing productivity, diversifying agricultural crops, and agribusinesses
1) General Department of Animal Health and Production 2) Provincial Departments of Agriculture, Forestry, and Fisheries	**Program 2:** Promoting animal production and animal health
1) Fishery Administration 2) Provincial Departments of Agriculture, Forestry, and Fisheries	**Program 3:** Fisheries management and aquaculture development
1) Forestry Administration 2) Provincial Departments of Agriculture, Forestry, and Fisheries	**Program 4:** Management and development of forest and wildlife resources
1) Department of Planning and Statistics 2) Department of Finance and Accounting 3) Department of Personnel and Human Resource Development 4) Department of Internal Audit 5) Department of Internal Cooperation 6) Department of Agricultural Legislation 7) Department of Administrative Affairs 8) Agricultural Documentation and Information Center 9) General Inspectorate 10) Royal University of Agriculture 11) Prek Leap National Institute of Agriculture 12) Kampong Cham National Institute of Agriculture	**Program 5:** Increasing effectiveness of supporting services and human resource development

143 Brumby,James A.; Hashim,Ali; Piattifuenfkirchen,Moritz Otto Maria Alfons. 2022. Introducing the New PPB: Pragmatic Program Budgeting: Overcoming Design Obstacles to Planning, Management, and Control (English). Equitable Growth, Finance and Institutions Insight Washington, D.C.: World Bank Group.

Annex to Chapter 5

Table A.5.1. Numbers of irrigation schemes and irrigated areas

High >=10%	Low >1% <5%
Med 5-10%	Very low<1%

Province	Number of irrigation schemes (No.)					Irrigated area (ha)															
						Large				Medium				Small				Total			
	Small	Medium	Large	Reservor	Total	Dry season	Wet season	Annual total	%	Dry season	Wet season	Annual total	%	Dry season	Wet season	Annual total	%	Dry season	Wet season	Annual total	%
Banteay Meanchey	6	75	6	0	87	7,899	32,305	**40,204**	**8%**	18228	99,094	**117,322**	**13%**	336	827	1,163	**1%**	26,463	132,226	**158,689**	**10%**
Battambang	65	36	8	1	109	13,100	104,046	**117,146**	**24%**	10411	56,019	**66,430**	**7%**	1,157	4,505	5,662	**4%**	24,668	164,570	**189,238**	**12%**
Kampong Cham	129	117	1	0	247	300	5,000	**5,300**	**1%**	40526	31,009	**71,535**	**8%**	9,469	3,226	12,695	**10%**	50,295	39,235	**89,530**	**6%**
Kampong Chhang	151	79	2	0	232	-	5,406	**5,406**	**1%**	19959	51,599	**71,558**	**8%**	11,844	6,000	17,844	**14%**	31,803	63,005	**94,808**	**6%**
Kampong Speu	115	48	0	1	163	3000	6,000	**9,000**	**2%**	3355	31,890	**35,245**	**4%**	456	8,813	9,269	**7%**	6,811	46,703	**53,514**	**3%**
Kampong Thom	50	133	2	0	185	5631	38,444	**44,075**	**9%**	13508	59,962	**73,470**	**8%**	1,220	4,884	6,104	**5%**	20,359	103,290	**123,649**	**8%**
Kampot	13	38	2	0	53	3000	10,000	**13,000**	**3%**	13167	34,193	**47,360**	**5%**	430	1,374	1,804	**1%**	16,597	45,567	**62,164**	**4%**
Kandal	237	151	1	0	389	1200	8,360	**9,560**	**2%**	55318	13,082	**68,400**	**7%**	24,312	2,467	26,779	**20%**	80,830	23,909	**104,739**	**7%**
Kep	6	5	0	0	11	-	22	**22**	**44**	532	1,555	**2,087**	**0%**	139	374	513	**0%**	671	1,951	**2,622**	**0%**
Koh Kong	1	9	0	0	10	-	28	**28**	**56**		5,460	**5,460**	**1%**	-	358	358	**0%**	-	5,846	**5,846**	**0%**
Kratie	47	31	0	0	78	-	156	**156**	**312**	6128	8,743	**14,871**	**2%**	2,766	2,132	4,898	**4%**	8,894	11,031	**19,925**	**1%**
Mondulkiri	4	9	0	0	13	-	26	**26**	**52**	546	5,893	**6,439**	**1%**	-	518	518	**0%**	546	6,437	**6,983**	**0%**
Oddar Meanchey	11	18	1	1	30	-	62	**62**	**124**	731	10,705	**11,436**	**1%**	102	1,806	1,908	**1%**	833	12,573	**13,406**	**1%**
Pailin	0	2	0	0	2	-	4	**4**	**8**	653	2,763	**3,416**	**0%**			-	**0%**	653	2,767	**3,416**	**0%**
Phnom Penh	1	6	0	0	7	-	14	**14**	**28**	1719	4,342	**6,061**	**1%**	148	148	296	**0%**	1,867	4,504	**6,371**	**0%**
Preah Sihanouk	0	9	0	0	9	-	10,500	**10,500**	**2%**		2,721	**2,721**	**0%**	-	164	164	**0%**	-	13,385	**13,385**	**1%**
Preah Vihear	21	11	0	4	32			**0**	**0%**	60	4,158	**4,218**	**0%**	20	833	853	**1%**	80	4,991	**5,071**	**0%**
Prey Veng	66	111	4	0	181	6,000	9,998	**15,998**	**3%**	29980	57,751	**87,731**	**9%**	10,843	7,073	17,916	**14%**	46,823	74,822	**121,645**	**8%**
Pursat	5	39	4	2	48	6,026	46,088	**52,114**	**10%**	5971	37,804	**43,775**	**5%**	55	682	737	**1%**	12,052	84,574	**96,626**	**6%**
Ratanakiri	28	4	0	0	32			**0**	**0%**		1,146	**1,146**	**0%**	30	2,567	2,597	**2%**	30	3,713	**3,743**	**0%**
Siem Reap	47	95	6	0	148	19,966	45,461	**65,427**	**13%**	9103	56,358	**65,461**	**7%**	546	5,352	5,898	**4%**	29,615	107,171	**136,786**	**9%**
Stung Treng	2	18	0	0	20			**0**	**0%**	3627	8,304	**11,931**	**1%**	106	262	368	**0%**	3,733	8,566	**12,299**	**1%**
Svay Rieng	2	27	6	0	35	10,488	30,820	**41,308**	**8%**	7949	14,991	**22,940**	**2%**	569	250	819	**1%**	19,006	46,061	**65,067**	**4%**
Takeo	59	64	7	0	130	29,929	21,772	**51,701**	**10%**	48150	24,589	**72,739**	**8%**	818	4,328	5,146	**4%**	78,897	50,689	**129,586**	**8%**
Tbong Khmom	65	36	3	1	104		17,465	**17,465**	**4%**	4084	13,904	**17,988**	**2%**	2,652	4,322	6,974	**5%**	6,736	35,691	**42,427**	**3%**
Grand Total	1,131	1,171	53	10	2,355	106,539	391,977	**498,516**	**100%**	293705	638,035	**931,740**	**100%**	68,018	63,265	131,283	**100%**	468,262	1,093,277	**1,561,535**	**100%**

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