

**Sierra Leone: Technical Assistance
Report-Public Investment Management
Assessment**



SIERRA LEONE

May 2021

TECHNICAL ASSISTANCE REPORT—PUBLIC INVESTMENT MANAGEMENT ASSESSMENT

This Technical Assistance Paper on Sierra Leone was prepared by a staff team of the International Monetary Fund. It is based on the information available at the time it was completed in March 2020.

Copies of this report are available to the public from

International Monetary Fund • Publication Services
PO Box 92780 • Washington, D.C. 20090
Telephone: (202) 623-7430 • Fax: (202) 623-7201
E-mail: publications@imf.org Web: <http://www.imf.org>
Price: \$18.00 per printed copy

International Monetary Fund
Washington, D.C.

Sierra Leone

Public Investment Management Assessment

Yugo Koshima, Fazeer Rahim, Alok Verma, Kemoh Mansaray, and Innocent Kamugisha



Technical Assistance Report

March 2020

CONTENTS

ABBREVIATIONS AND ACRONYMS	4
PREFACE	5
EXECUTIVE SUMMARY	6
PUBLIC INVESTMENT IN SIERRA LEONE	11
A. Public Investment and the Stock of Public Capital	11
B. Composition and Financing of Public Investment	13
IMPACT AND EFFICIENCY OF PUBLIC INVESTMENT	15
PUBLIC INVESTMENT MANAGEMENT INSTITUTIONS	20
C. The PIMA Framework	20
D. Overall Assessment	21
E. Investment Planning	22
F. Investment Allocation	30
G. Investment Implementation	38
CROSS CUTTING ISSUES	47
H. IT Support	47
I. Legal Framework	47
J. Staff Capacity	48
BOXES	
1. The Returns to Investment in Thermal Power Plants	16
2. Measuring Efficiency	18
3. The Wellington-Masiaka Toll Road	27
4. Impact of Energy PPPs on State-Owned Energy Companies	29
FIGURES	
1. Public Investment Management Institutional Design	9
2. Public Investment (Percent of Nominal GDP)	11
3. Public Capital Stock	11
4. Real Public Investment	12
5. Growth of Real GDP	12
6. Public Investment (in Percent of GDP, Average 2008–17)	12
7. Public Capital Stock	12
8. Composition of Public Capital Stock, 2018	13
9. Financing of Public Investment	14
10. Share of Financing by Type of Investment	14
11. Revenue, Spending and Fiscal Deficit	14

12. Government Debt	14
13. Measures of Infrastructure Access (Most recent year)	15
14. Measures of Infrastructure Access	15
15. Households at Risk of Very High Contamination with E. Coli	17
16. No Test Check During Pregnancy	17
17. Maximum Shocks from Roads to Vehicles (m/s ²)	17
18. Perception of Infrastructure Quality	18
19. Efficiency Frontier and Gap – Physical Output Indicators	19
20. Efficiency Frontier and Gap – Quality Indicators	19
21. PIMA Framework Diagram	20
22. Public Investment Management Institutional Design	21
23. Public Investment Management Effectiveness	21
24. Total Annual Costs of Energy Sector Projects	24
25. Performance Targets of Energy Sector Strategies	24
26. Capital Spending of Local Governments	25
27. EDSA's Electricity Purchase and Net Loss	29
28. EGTC's Revenue and Receivables	29
29. Projections and Actuals of Domestically Financed Development Expenditure	31
30. Spending for Makeni-Kamakwe-Medinaoula Road Project	31
31. Project Delay and Total Cost Increase of 12 Road Projects	33
32. Failure Rate of Transmission Lines	35
33. Transfer to the RMFA	35
34. Existing Project Selection Process	36
35. Length of Road Work per Person Under Township Road Projects	36
36. Average Delay in Invoice Payments	41
37. Outturn Minus Budgets of Development Exp	42

TABLES

1. Summary Assessment	8
2. Summary of Recommendations	10
3. Basic Infrastructure, Before and After the War	11
4. Key Procurement Indicators, 2018	40
5. Examples of Cost Increases due to Project Changes	44

APPENDICES

I. Proposed Action Plan	49
II. PIMA Questionnaire	53

ABBREVIATIONS AND ACRONYMS

AGD	Accountant General Department
BSL	Bank of Sierra Leone
EDSA	Electricity Distribution and Supply Company
EGTC	Electricity Generation and Transmission Company
ESRR	Electricity Sector Reform Roadmap
FSS	Fiscal Strategy Statement
GDP	Gross Domestic Product
GoSL	Government of Sierra Leone
IMF	International Monetary Fund
IPP	Independent Power Producer
IPRP	Independent Procurement Review Panel
LGDG	Local Government Development Grants
MDA	Ministries, Departments, and Agencies
MoF	Ministry of Finance
MoPED	Ministry of Planning and Economic Development
MTNDP	Medium-Term National Development Plan
MW	Megawatt
NAME	National Monitoring and Evaluation Department, MoPED
NAPHS	National Action Plan for Health Security
NPPA	National Public Procurement Authority
NREAP	National Renewable Energy Action Plan
PET	Public Expenditure Tracking
PFM	Public Financial Management
PIMA	Public Investment Management Assessment
PIMD	Public Investment Management Directorate
PIP	Public Investment Program
PPA	Public Procurement Act
PPP	Public Private Partnership
PPP-adjusted	Purchasing Power Parity Adjusted
RMFA	Road Maintenance Fund Administration
SALWACO	Sierra Leone Water Company
SLL	Sierra Leone Leones
SLRA	Sierra Leone Roads Authority
SOE	State Owned Enterprise
TSA	Treasury Single Account
USD	United States Dollar

PREFACE

In response to a request from the Ministry of Finance (MoF) and the Ministry of Planning and Economic Development (MoPED), a FAD team visited Freetown, Sierra Leone during December 4–17, 2019 to support improvement in public financial management (PFM). The team comprised Yugo Koshima (FAD, head), Fazeer Rahim, Alok Verma (both FAD), Kemoh Mansaray, and Innocent Kamugisha (both World Bank).

The tasks were to: (i) assess Sierra Leone’s public investment management framework; (ii) assist the authorities to prepare a prioritized action plan for strengthening the management of public investment; and (iii) recommend follow-up areas of support that could be provided by the IMF, and other development partners.

At the Ministry of Planning and Economic Development, the team met with Hon. Francis Kaikai, the Director of the Public Investment, Mr. Alpha K. Bangura, the Director of Planning and Research, Dr. Sheka Bangura, and staff of the Ministry. At the Ministry of Finance, the team met with the Principal Deputy Financial Secretary, Mr. Matthew Dingie, the Accountant General, Mr. Richard Williams, the Director of Budget, Mr. Tasima Jah, the Director of Macro-Fiscal Policy, Dr. Samuel Bonzu, and staff of the Ministry.

Outside of these two Ministries, the team met with the Minister of Works and Public Assets, Mr. Peter Konteh, his colleagues; the Permanent Secretaries of the Ministries of Energy, Basic and Secondary Education, and Technical and Higher Education, their respective colleagues; staff of the Auditor General Office, and the Ministry of Health and Sanitation; the management of Sierra Leone Road Authority (SLRA), National Public Procurement Authority (NPPA), Sierra Leone Water Company (SALWACO), the Electricity Distribution and Supply Authority (EDSA), and the Electricity Generation and Transmission Company (EGTC)

The team also met with the Mayor of Freetown Municipality, Ms. Yvonne Aki-Sawyerr, OBE; Dr. John Tambi, Chairman of the Presidential Infrastructure Initiative, and staff of the Public Private Partnership Unit of the Office of the Vice President. The team travelled to Moyamba district, where it met the Chairman of the District Council, Mr. Joseph Mbogba, and his colleagues. In Freetown, the team met with the directors of various private sector companies, and staff of various development partners, including the European Union the World Bank, and the African Development Bank.

The team expresses its gratitude to everyone for their close cooperation, and to the Ag. Director of PFM reforms, Ms. Princess Johnson, and her colleagues, and the IMF Resident Representative, Ms. Monique Newiak, and Office Manager of the IMF office, Mr. Edison Jusu.

EXECUTIVE SUMMARY

Sierra Leone has made significant strides to rebuild its public infrastructure after the devastating civil war, but the desperate infrastructure needs remain. At the end of the conflict in 2002, the country was left with virtually no infrastructure. Redevelopment of public infrastructure was ignited by the mining boom, which started in the late 2000s. Over the period 2008–18, public investment averaged 6.5 percent of gross domestic product (GDP), which has translated into an estimated capital stock of about 65 percent in constant 2011 GDP. However, a level of public investment is still lower than neighboring countries by about one percentage point. The level of capital stock per capita is one of the lowest in the region, only slightly above that of Liberia. Some districts still have no paved roads, no electricity, and no water systems, almost 20 years after the war.

Sierra Leone's public investments has been volatile, mirroring the huge swings in the economy and the fragile fiscal conditions. In anticipation of high growth, the government launched several major projects in the late 2000s. This led to a spike of public investments in 2009 and 2010. After then, public investments experienced iterated ups and downs. After the major mines were operationalized in 2012, Sierra Leone experienced 20.7 percent of economic growth in 2013. However, the “twin-shocks” of an Ebola outbreak and commodity price collapse led to negative 20.4 percent of growth in 2015. After the Ebola outbreak, the government ramped up investments in 2016 and 2017 and is facing challenges of a high public debt (63 percent of GDP in 2018) and accumulation of arrears (approaching to 10 percent of GDP in 2019).

Under pressure from infrastructure demands and economic volatility, public investments were driven by top-down decisions, without waiting for the institutional development. The tendency of politically-driven investment decisions became noticeable, as the financing sources were expanded from grants to domestic revenue and loans after the Ebola outbreak. Particularly in the road sector, which was the priority of the then government, several major domestically financed projects were selected without appraisals; contracts were awarded by bypassing the procurement framework; construction commenced without complete designs; and frequent and significant project changes caused cost overshoot and confused the project implementation. This led to extremely delayed and unpredictable invoice payments; budget allocations far below unpaid multiyear contracts; and some projects delayed for a decade. Significant delay in payments is a main cause of accumulation of arrears. The Public Investment Management Department (PIMD) of the Ministry of Planning and Economic Development (MoPED) has taken significant efforts to develop the public investment management institutions, but it was established only in 2014 and is still a young organization.

The institutional weaknesses caused inefficient public investments. Some major projects did not generate intended outputs. For example, in the energy sector, 27 power generators were installed in 10 thermal power plants of the state-owned power generator (the Electricity

Generation and Transmission Company – EGTC). However, adequate measures have not been taken yet to address large technical and commercial losses incurred by the state-owned power distributor (the Electricity Distribution and Supply Authority – EDSA). Because the EDSA effectively suspended payments to the EGTC, its fuel-powered generators are all producing zero electricity, in the absence of fuel and parts. The solar powered streetlight projects developed tens of streetlights in every main township, but most of them have stopped functioning due to the design flaw and the unaffordability of parts. Some projects have been abandoned in the middle of implementation (e.g. the new Audit House) or right after the completion (e.g. seven vocational schools). The USD 200 million Public-Private Partnership (PPP) project was launched to widen an existing highway with limited traffic; and an expensive tariff started to be charged in 2017 while the construction is still ongoing and expanded lanes are not open yet.

Inefficiency in public investments led to poor performance and quality of public

infrastructure. Although the volume of public capital stock was increased by 60 percent for the last ten years, there is no corresponding increase in outputs of public infrastructure. The quality of infrastructure is also deteriorating. In the road sector, uneven surfaces of unpaved trunk roads cause huge shocks to vehicles equivalent of those of roller coasters. Because funds for routine maintenance are often neglected, government buildings and school facilities are in dilapidated conditions. This translates into large “efficiency gaps” in Sierra Leone’s public investments, which are 48 percent, bigger than the average of sub-Saharan African countries (41 percent).

Institutional reforms are critical to prevent further deterioration of infrastructure quality within limited resources. Given a high public debt and arrears stock, a fiscal space for public investments will be limited in the medium term. To fill efficiency gaps, the reforms of the following nine public investment management areas should be prioritized:

- A Road Sector Master Plan should be published and sectoral strategies should be reviewed in light of the Medium-Term National Development Plan (MTNDP);
- Project appraisal templates and guidelines should be developed and the appraisals of all approved projects including PPPs should be published;
- Total costs, contracts, unpaid invoice amount should be published in the budget document and a major project change should be treated as a new project;
- A maintenance policy should be published;
- The Public Investment Guidelines/Manuals should be published and a prioritized pipeline of appraised projects including PPPs should be maintained;
- The public procurement for capital projects should be reformed through a series of actions;
- Quarterly allotment and commitment control processes should be streamlined;
- Steps should be taken for systemic ex post review and audits of capital projects;
- The re-appraisal of a project should be required when a total cost increase exceeds a threshold, or a project is ongoing for a long period.

Table 1, Figure 1, and Figure 2 show the summary assessment and recommendations.

Table 1. Sierra Leone: Summary Assessment

Phase/Institution			Design	Effectiveness	Rec. #	Reform Priority
A. Planning	1	Fiscal principles or rules	Low: Medium-term debt targets exist, but not permanent rule codified in the law; FSS is published after a Budget Call Circular is issued.	Medium: The targets under the IMF program effectively provide operational guidance to fiscal policy.		Medium
	2	National and sectoral plans	Medium: A master plan of road sector does not exist; sectoral strategies do not always include project costs or outcome targets.	Low: Sectoral plans prepared before the MTNDP are yet to be reviewed to ensure consistencies	1	High
	3	Coordination between entities	Medium: Capital projects of local budgets are discussed with central government but not published; LGDG is not rule-based; disclosure of contingent liabilities is limited to guarantees.	Medium: The absence of a consolidated pipeline of all local projects may reduce the effectiveness of the central-local coordination.		Medium
	4	Project appraisal	Low: Some domestically financed major projects bypassed appraisal requirements; the capacity to centrally challenge project appraisals is limited.	Low: Some appraisals did not fully appreciate inherent risks; the lack of publication of appraisals weakens accountability.	2	High
	5	Alternative infrastructure financing	Low: Some infra. markets are opened to competition; the PPP policy to implement the PPP Act is yet to be published; SOEs' investment plans are not reviewed by the MoF.	Low: Financial analysis of investments through PPPs and SOEs has not captured in full implicit contingent liabilities, which are affecting viability of e.g. energy SOEs.	2	High
B. Allocation	6	Multi-year budgeting	Medium: Three-year projections of individual projects exist, but not a MDA-level ceiling on capital spending; total costs are not published.	Low: The lack of publication of total costs, multiyear contracts, and paid and unpaid invoices reduces the budget credibility.	3	High
	7	Budget comprehensiveness and unity	Medium: All capital projects are presented in the budget document, except for some projects of local gov't and SOEs.	Medium: Amount of capital projects not presented in the budget document is generally small.		Low
	8	Budgeting for investment	Medium: Multiyear contracts are not shown in the budget document; reallocation from capital to recurrent exp. is prohibited; there is a policy to prioritize ongoing projects in the budget.	Low: Prioritization of ongoing projects has been hindered by new projects being implemented as changes in ongoing projects	3	High
	9	Maintenance funding	Low: Maintenance standards and plans do not exist in all sectors; routine maintenance is not systemically identified in the budget.	Low: Inadequate funding for routine maintenance reduces infrastructure sustainability; funds for road maintenance were diverted to capital projects, until the new policy in 2019.	4	High
	10	Project selection	Low: Some domestically financed major projects have been selected without appraisal; the selection criteria are not published; there is no prioritized pipeline of all appraised projects.	Low: The absence of published criteria created a perception of projects being selected by political motivations. The absence of a prioritized pipeline increases risks of selecting non-viable projects.	5	High
C. Implementation	11	Procurement	Low: Projects are not always tendered through open competitive bidding; public has limited access to procurement information; there is insufficient database and scrappy information; IPRP exist but has heard only few complaints.	Low: Invitations for bids are poorly prepared; NPPA has no information on tendering; procuring entities do not publish contract award; reporting by most entities is inconsistent and untimely; rules on contract amendments are flouted; IPRP decisions are delayed and not publicized.	6	High
	12	Availability of funding	Low: Commitment ceilings are issued with significant delay; capital spending is subject to cash rationing; external financing is largely held in commercial bank accounts	Low: Significantly delayed and unpredictable payments for capital projects have been a major cause of project delay and arrears accumulation.	7	High
	13	Portfolio management and oversight	Low: Monitoring and evaluation of capital projects by central agencies is limited; there is no systemic ex-spot review of domestically financed major projects.	Low: In the absence of an ex-post review, several projects have been abandoned or ceased to generate outputs.	8	High
	14	Project implementation	Medium: Reliable project implementation plans are not always available; there is no rule on project adjustments; the recent technical audit of road projects was a one-off exercise.	Low: The absence of re-appraisal requirements leads to significant project changes and allows a new project to bypass the appraisal; little follow up was made on the recent technical audit.	8, 9	High
	15	Management of public assets	Low: There is no comprehensive asset register and no statistics on public capital stock	Medium: Some sectors maintain the asset register for maintenance purposes.		Medium

Figure 1. Public Investment Management Institutional Design

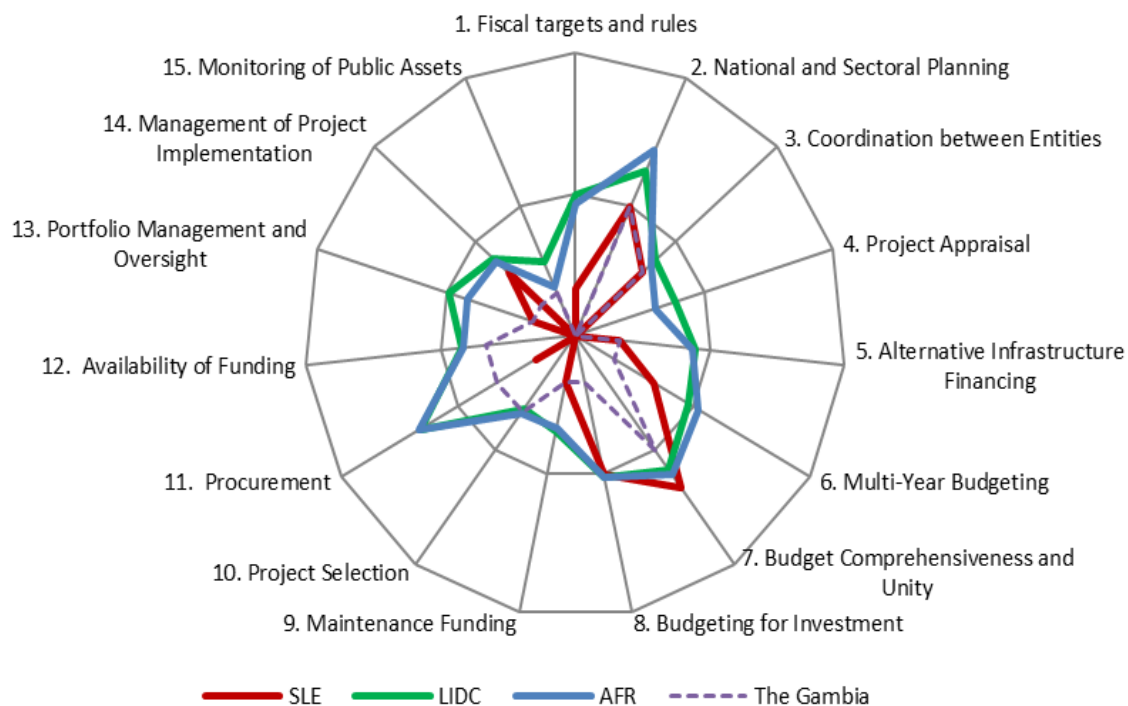


Table 2. Sierra Leone: Summary of Recommendations

Recommendations	Inst.
A. Investment Planning	
Publish a Road Sector Master Plan and review sectoral strategies prepared before the MTNDP to align them with the MTNDP	2
Develop project appraisal templates and guidelines and publish the appraisals of all approved projects including PPPs	4
B. Investment Allocation	
Publish an annex of the annual budget, presenting total costs, multiyear contracts, paid and unpaid invoice amount; clarify that a project change exceeding a threshold will be considered and deprioritized as a new project	6, 8
Require (Ministries, Departments, and Agencies (MDAs)) to publish a maintenance policy; create a separate line item for routine maintenance; and present the RMFA budget in the budget document	9
Publish the project selection criteria; develop the methodologies for prioritizing projects based on feasibility studies and appraisals; and design and maintain a prioritized pipeline of appraised projects including PPPs	10
C. Implementing Investments	
Revise the Procurement Law and Regulations to allow for joint approval of procurement plans and robust coordination between MoF and NPPA; Strengthen the capacity of the NPPA by providing the authority with sufficient financial and human resources and harmonize procurement processes in the public service; Allow the NPPA to exercise its mandate under Section 15 of the Public Procurement Act (PPA) that gives it power to obtain information and impose remedial sanctions; Expedite the implementation of the online electronic procurement system (e-Procurement) and make it mandatory for all large investment project; Develop systems for managing contracts for capital projects and ensure that all designs are comprehensive and approved by a panel of experts and the NPPA; Develop procedures for variations, price adjustments and contract amendments to ensure they are in accordance with the law and approved by NPPA in open and transparent manner; Organize regular training programs for the IPRP and raise public awareness about existence of independent review panel	11
Implement recommendations of the FAD's in-depth assessment of quarterly allotment and commitment control processes	12
Operationalize the NaMED to produce an annual report on public investment projects; and assess the resource needs for the Audit Service to undertake regular ex-post audit of major capital projects	13, 14
Require a project to be re-appraised and re-selected when (i) an increase in total costs exceeds a threshold or (ii) the project is ongoing for a certain number of years	14

PUBLIC INVESTMENT IN SIERRA LEONE

A. Public Investment and the Stock of Public Capital

1. Sierra Leone has made significant strides to rebuild its public infrastructure after a devastating civil war. At the end of the conflict in 2002, the country was left with virtually no

power generation capacity (Freetown was known as the “darkest city in the world”), most of its roads were unpaved, two-thirds of its population had no access to a reliable source of water, and there were only two hospital beds remaining for every 10,000 inhabitants. Since then, the authorities have accelerated the development of basic infrastructure, with an emphasis on roads, energy, water, sanitation, and health. In the last ten years, public investment averaged 6.5 percent of GDP

(Figure 2), the stock of public capital is estimated to have doubled in constant 2011 GDP, reaching at 65 percent in 2018 (Figure 3).

Table 3. Sierra Leone: Basic Infrastructure, Before and After the War

	1990	2002
Installed power generation capacity (megawatt) [1]	120	0
Paved roads (in percent of road network) [2]	NA	5%
Hospital bed density (per 10,000 inhabitant) [2]	12	2
Percent of the population with access to reliable source of water		30
Percentage of children immunized against BCG, DTP3, MCV1, Pol3, TT2plus [3]	85	30
Number of primary schools [4]	2000	700
Sources: [1] Authorities; [2] World Bank estimates; [3] World Health Organization; [4] Interim Poverty Reduction Strategy Paper, IMF		

Figure 2. Public Investment
(percent of nominal GDP)

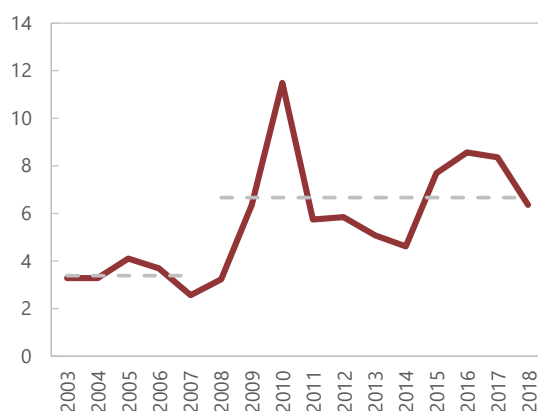
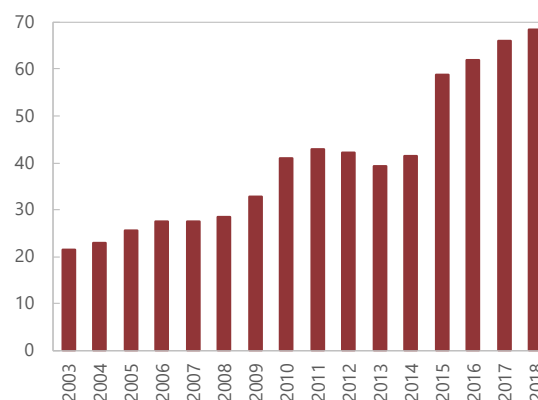


Figure 3. Public Capital Stock
(percent of constant 2011 GDP)



Source: [Development Assistance Database](#) for Sierra Leone for externally financed investment; various audit reports, and budget profiles for budget financed (domestic) projects. Method for calculating the capital stock follows the IMF’s methodology (See [Estimating the stock of public capital in 170 countries, IMF, 2017](#)).

2. Public investment has experienced ups and downs, partly mirroring the large swings in the economy. After a slow start, the volume of public investment picked up significantly after 2008—it quadrupled between 2008 and 2010, in anticipation of the mining boom (Figure 4), only to drop by more than 40 percent in 2011. In the years that followed, as the boom materialized and the economy expanded (Figure 5), it continued to increase until 2017, despite the crash in iron ore prices and the Ebola epidemic.

Figure 4. Real Public Investment
(percentage growth)

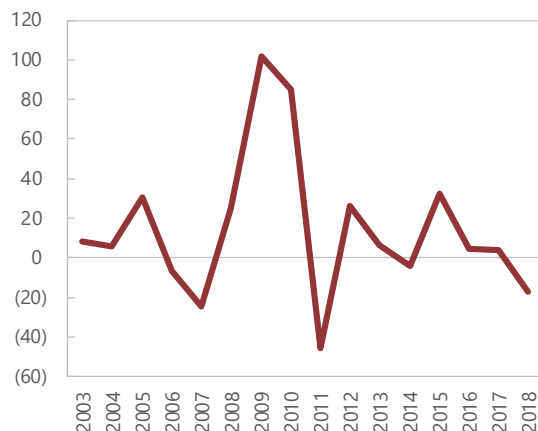


Figure 5. Growth of Real GDP
(percentage growth)



3. Notwithstanding the recent increase, public investment and the stock of public capital have yet to reach the level of peers. In the last 10 years, public investment in percent of GDP lagged neighboring countries by about one percentage point on average (Figure 6). This has translated into the accumulation of capital in per capita terms of about \$600 in PPP-adjusted dollars, which puts Sierra Leone slightly above Liberia, but well below other neighboring countries (Figure 7).

Figure 6. Public Investment
(in percent of GDP, average 2008–17)

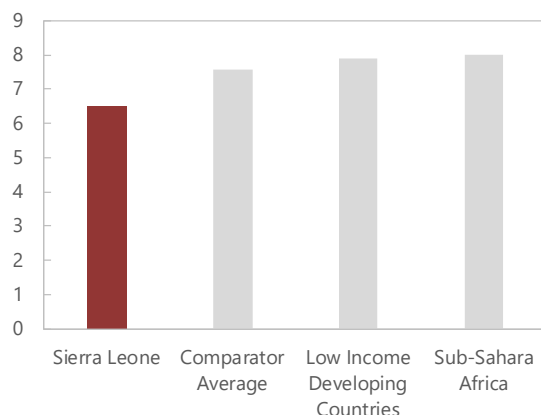
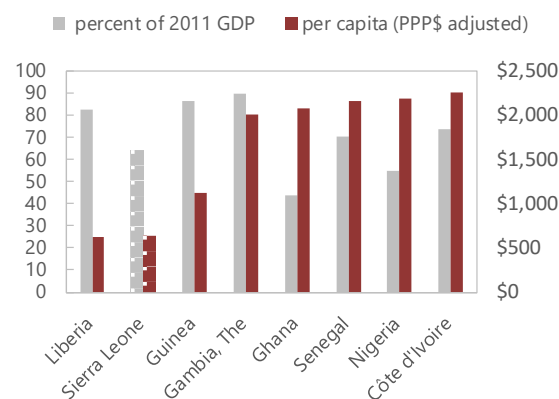


Figure 7. Public Capital Stock

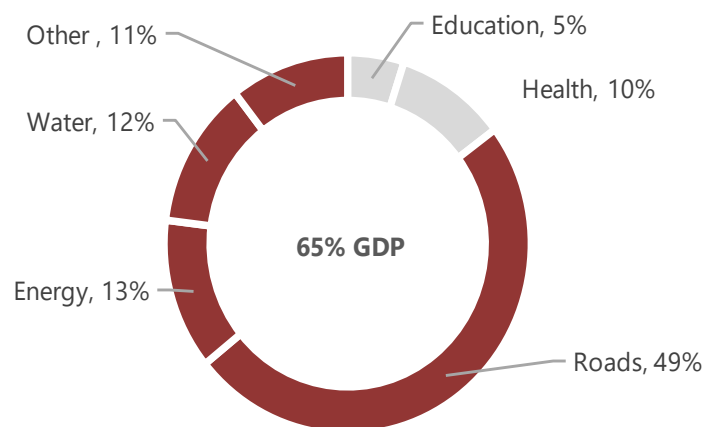


Source: staff estimates and IMF dataset. Comparator countries are Côte d'Ivoire, The Gambia, Ghana, Guinea, Liberia, Nigeria, and Senegal

B. Composition and Financing of Public Investment

4. **The bulk of capital spending has been directed to infrastructure such as roads, energy, water, and sanitation.** Roads account for an estimated half of the capital stock (Figure 8), comprising largely of city roads, as well as trunk roads that connect Freetown with the four provincial capitals. Many of these are still undergoing rehabilitation. The energy infrastructure includes the 50 MW Bumbuna hydro power plant (operational in 2009), and several small thermal power plants across the country, installed between 2010 and 2017, with a total capacity of 40MW. Other physical assets include the water and sanitation infrastructure in the main districts, government buildings, public hospitals, health centers, schools, and public universities.

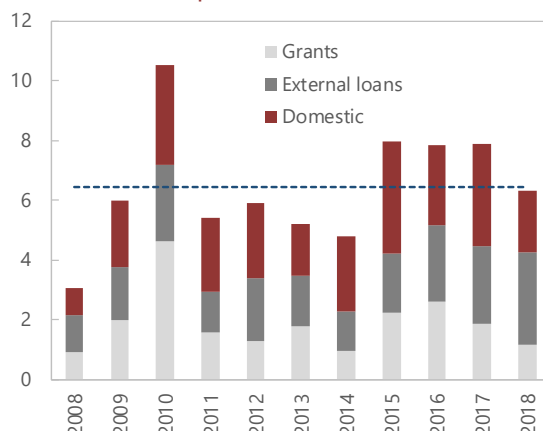
Figure 8. Composition of Public Capital Stock, 2018



Source: [Development Assistance Database](#) for Sierra Leone for externally financed investment; various audit reports, and budget profiles for budget financed (domestic) projects

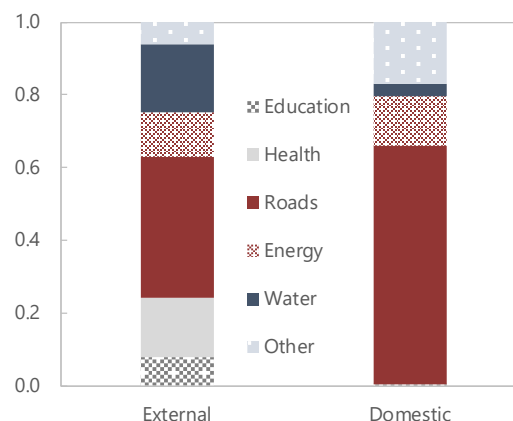
5. **Foreign grants, external borrowing, and, increasingly, domestic resources have funded public investment.** Prior to 2009, the use of domestic resources was minimal. Grants, and to a lesser extent, concessional loans, funded almost all capital projects. Over the years, however, there has been a noticeable shift towards external borrowing, and more recently, domestic resources (Figure 9). Grants still remain as the principal source of funding in the areas of education and health (Figure 10).

Figure 9. Financing of Public Investment
(in percent of GDP)



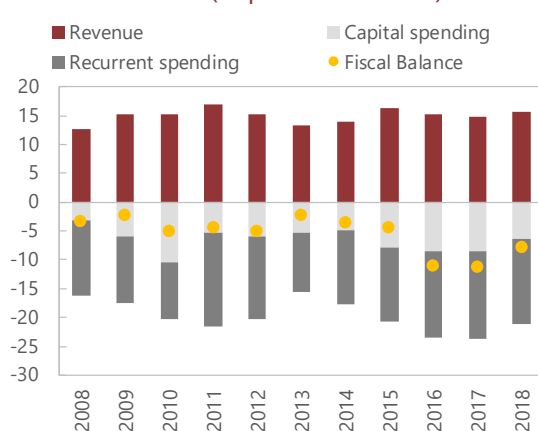
Source: Staff estimates

Figure 10. Share of Financing by Type of Investment



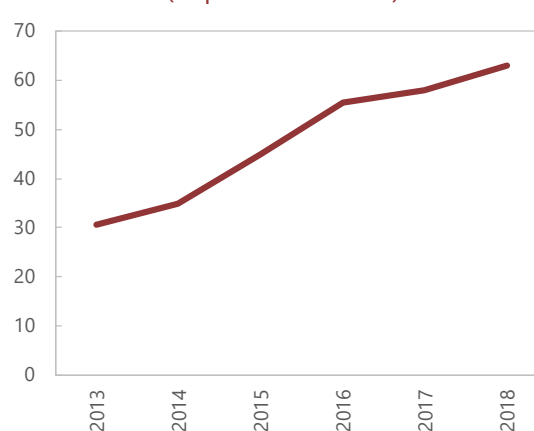
6. Going forward, fiscal space will be tight, highlighting the need to maximize the gains from the limited resources that can be freed for capital spending. The significant increase of both capital and recurrent spending in 2016 and 2017, at a time when revenue from iron ore collapsed, has led to the sharp deterioration in the fiscal deficit (Figure 11). Government debt, which in 2013 amounted to 30 percent of GDP, has reached 63 percent of GDP in 2018 (Figure 12), with a significant increase in short term, high interest bearing, domestic debt. The accumulation of a large stock of government arrears to domestic suppliers and contractors in recent years, to the tune of 10 percent of GDP, which the government has committed to clear in coming years, will limit fiscal space further.

Figure 11. Revenue, Spending and Fiscal Deficit
(in percent of GDP)



Source: IMF World Economic Outlook

Figure 12. Government Debt
(in percent of GDP)



7. The authorities are currently exploring alternative ways to fund the development of public infrastructure. Several public private partnership (PPP) initiatives are in the pipeline. In the energy sector, Phase II of the Bumbuna hydro project (150 MW), and a solar energy project

of 50 MW, are being negotiated with private developers, requiring about USD 1 billion worth of investment (25 percent of 2018 GDP), alongside government-backed guarantees. In the transport sector, a concession agreement has been signed with the China Railways Seventh Group on the Wellington-Masiaka road, toll booth installed, as the road is being widened to four lanes by the concessionaire at a cost of USD 163 million. In June this year, the government launched the tender process for the financing, and construction of a USD 2 billion worth, 8-kilometer long, bridge connecting Freetown to the airport town in Lungi, with the expectation that no public debt will be incurred, or public guarantees required.

IMPACT AND EFFICIENCY OF PUBLIC INVESTMENT

8. On three out of four outcome indicators, Sierra Leone underperforms compared to comparator countries.¹ There are still fewer teachers, and hospital beds per capita than in comparator countries (Figure 13). While the number of teachers per capita has improved, hospital beds briefly increased during the Ebola outbreak, but fell back after (Figure 14). Sierra Leone also generates only half of electricity per capita in comparator countries, despite the significant increase in investment in this sector (see Box 1).

Figure 13. Measures of Infrastructure Access¹ (Most recent year)

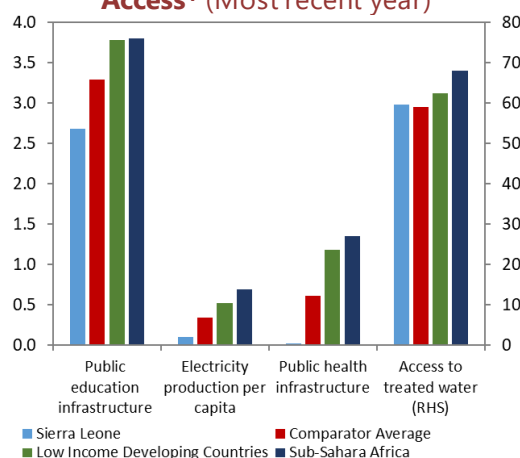
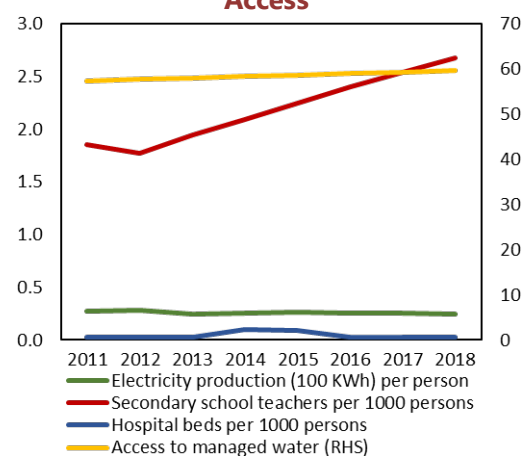


Figure 14. Measures of Infrastructure Access



Source: Staff estimates based on various official reports.

1/ Data for Sierra Leone data are derived from various sectoral strategies and official reports. Other countries' data are derived from the World Bank development indicators database.

¹ An IMF Board Paper identifies four indicators to proxy the impact of public infrastructure: (i) the number of secondary school teachers per 1,000 population; (ii) the electricity production per capita; (iii) the number of hospital beds per 1,000 population; (iv) the access to treated water as measured by percentage of dwellings equipped with water pipes. See "Making Public Investment More Efficient," June 2015, IMF

Box 1. The Returns to Investment in Thermal Power Plants

The Government of Sierra Leone has invested heavily in thermal power plants since 2010. Capacity worth 60 MW has been added to the network, at a cost exceeding USD 100 million. Some are designed to back up the reduction in power generation by the Bumbuna hydro dam during the dry period; others are used as primary sources of electricity generation in various districts. All are operated by the state-owned Electricity Generation and Transmission Company (EGTC)

In recent years, due to the lack of maintenance, several power plants—a third of installed capacity—have fallen into disrepair (see table below). Of the remaining two-thirds, only 15 percent are being currently utilized. The rest have ground to a halt—due to extreme cash shortage, EGTC is unable to purchase fuel to maintain them in operation. The electricity distribution and supply authority, EDSA is instead buying electricity from Independent Power Producers (IPPs). In December 2019, two privately owned power generating ships were supplying power to Freetown and its outskirts.

Condition and Utilization of Thermal Power Plans (Excluding IPPs)

LOCATION	INSTALLATION DATE	TECHNICAL CAPACITY	CONDITION	UTILIZED CAPACITY
Freetown Kingtom and BHR	2020	26.5	Good; No fuel for operation	0
Bo District	2014-16	7.6	Shutdown; Need repairs	0
Makali		0.1	Good; No fuel for operation	0
Makeni	2014	6.2	Shutdown; Need repairs	0
Lungi	2014	2.0	Good; in Operation	1.5
Lungi	2014	6.0	Shutdown; Need repairs	0
Lunsar	2016	1.0	Shutdown; Need repairs	0
Magburaka	2016	0.8	Good; No fuel for operation	0
Kono	2017	6.0	Operational	4.2
Kono	1987	2.0	Shutdown; Need major repairs	0
Port Loko	2017	0.4	Shutdown, Need major repairs	0
Total		271.8		5.7

Source: EGTC.

Note: This table shows thermal power plants for which data on utilized capacity are available.

9. Outcomes are also low in health and sanitation, with significant regional disparities.

A 2017 study by Statistics Sierra Leone on household drinking water shows that half of the population is at very high of faecal contamination with *Escherichia coli* (i.e. > 100 E. coli per 100 mL). This risk is about 30 percent in the Western Rural Area of Freetown, but exceeds 60 percent in many districts (Figure 15). The same study finds that around 18 percent of pregnant women do not receive access to key tests (blood pressure measured, and urine sample and blood sample taken) during their pregnancies. This proportion exceeds 25 percent in some districts (Figure 16).

Figure 15. Households at Risk of Very High Contamination with E. Coli
(percent of total)

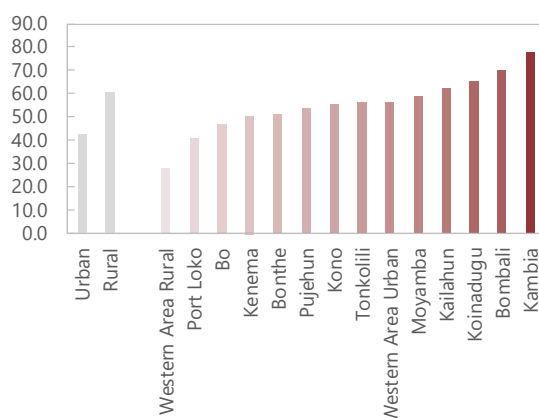
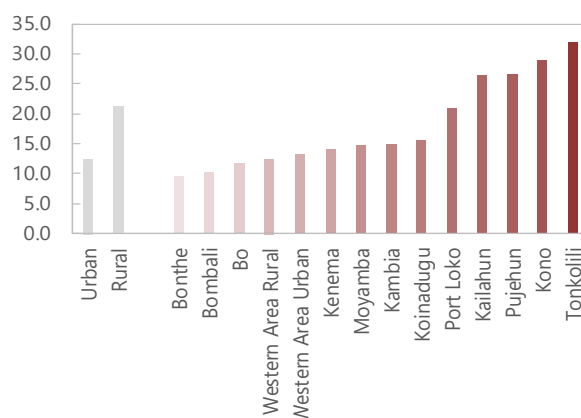


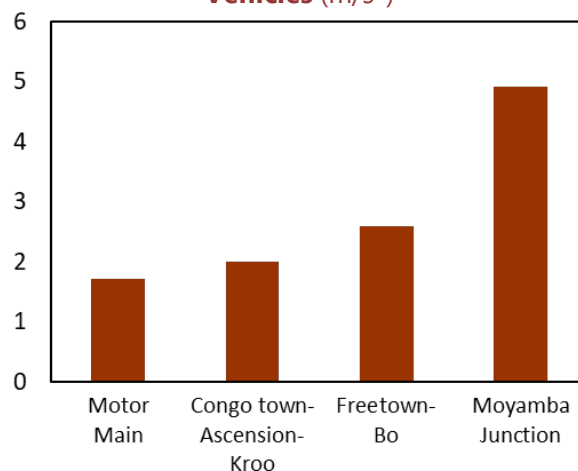
Figure 16. No Test Check During Pregnancy
(percent of women with live birth)



Source: Sierra Leone Multiple Indicator Cluster Survey 2017, Statistics Office

10. The quality of roads varies significantly, with some at the lower end of the spectrum. Using a vibration accelerometer, the FAD team assessed the quality of roads in and around Freetown, on the major Freetown-Bo highway, and the Moyamba junction. On some unpaved roads (e.g. Moyamba Junction), large vibrations were registered equivalent to those experienced during a roller coaster ride (Figure 17). Along portions of the paved Freetown-Bo highway, conditions were still deemed suboptimal, with vibrations reaching those registered on unpaved roads, such as the Congo Town-Ascension-Kroo street in Freetown.

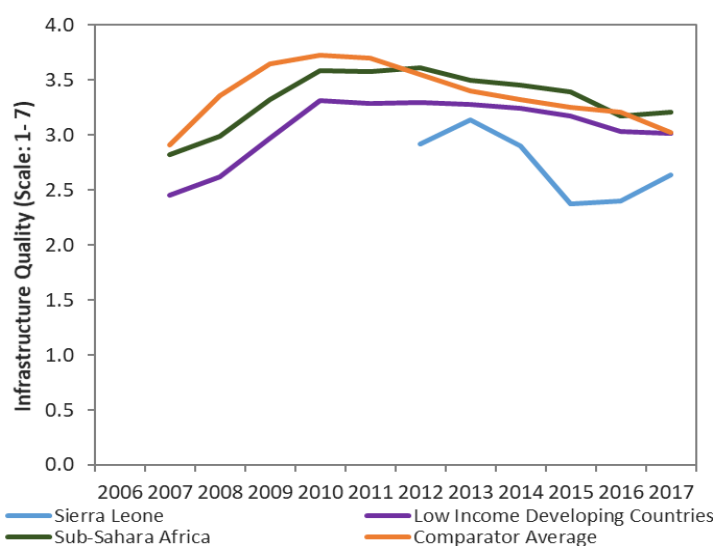
Figure 17. Maximum Shocks from Roads to Vehicles (m/s^2)



Source: Mission estimates using a vibration accelerometer (Extech Model VB300) placed on a vehicle driving on the respective roads

11. Perception of infrastructure quality also remains below peers, and the gap has risen since 2012. This indicator, scaled 1 to 7, is drawn from the World Economic Forum's infrastructure quality surveys. While, the gap with peers was narrowing in 2011 and 2012, it widened significantly until 2015, improving slightly since (Figure 18).

Figure 18. Perception of Infrastructure Quality



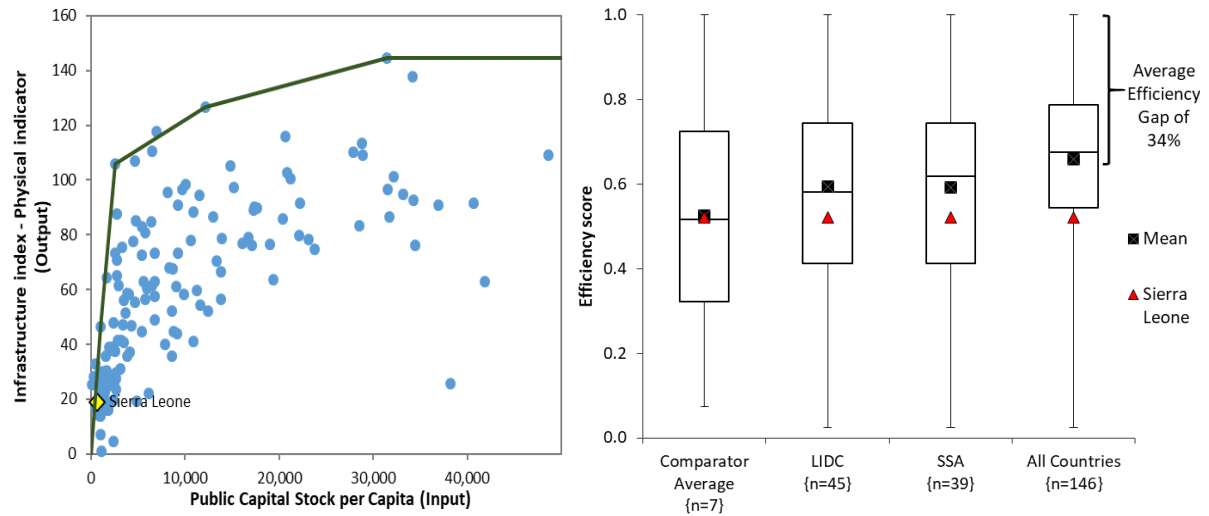
Source: World Economic Forum

12. Sierra Leone has 48 percent of efficiency gaps in public investments, larger than the average of sub-Saharan African countries. A hybrid indicator approach to efficiency is used (Box 2). This combines the set of access indicators shown in Figure 13 with the perception surveys shown in Figure 18 into one single indicator for each country. This indicator is compared against the measured per capita stock of capital of the country, and countries that perform best on the index for a given level of stock of capital make the “efficiency frontier”. Sierra Leone’s efficiency gap measured by the physical outputs is 48 percent (Figure 19). This means that a half of public investments in Sierra Leone are not producing intended outputs. The efficiency gap measured by the quality indicator is also sizable (25 percent), at the same level as the average of sub-Saharan African countries (Figure 20). The existence of large efficiency gaps implies inefficiencies in public investment management, which have failed to generate intended outputs or maintain the infrastructure quality, as discussed in the following sections.

Box 2. Measuring Efficiency

The IMF methodology uses a hybrid indicator approach to efficiency. This combines the set of access indicators shown in Figure 13 with the perception surveys shown in Figure 18 into one single indicator for each country. This indicator is compared against the measured per capita stock of capital of the country, and countries that perform best on the index for a given level of stock of capital make the “efficiency frontier.” The higher the gap, the larger the efficiency gains in terms of better access to infrastructure, and perception of its quality, can be made if resources were deployed more efficiently.

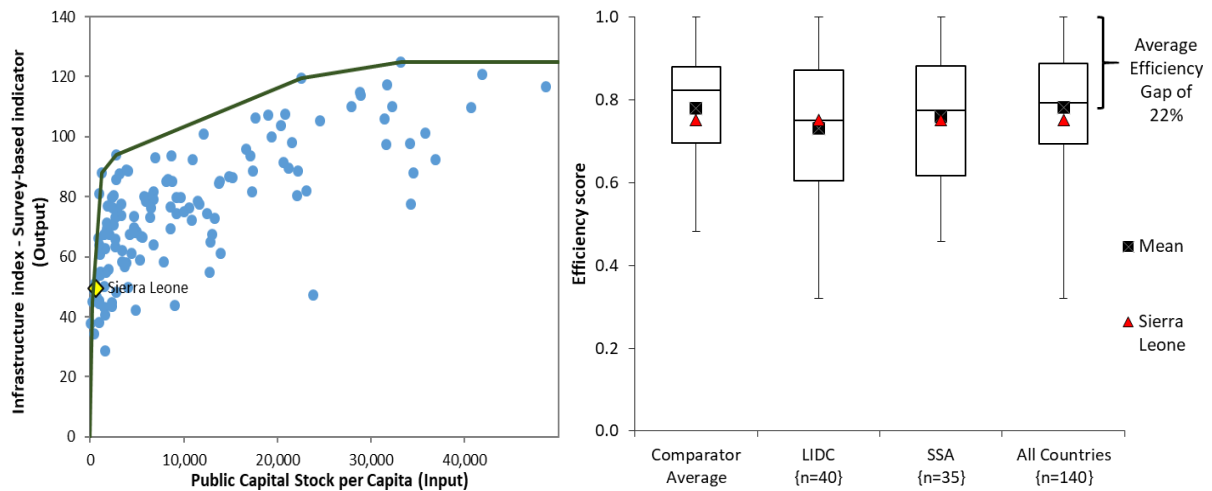
Figure 19. Efficiency Frontier and Gap – Physical Output Indicators
 (a) Efficiency Frontier (b) Efficiency Gap



Source: Staff estimates

Source: Staff estimates

Figure 20. Efficiency Frontier and Gap – Quality Indicators
 (a) Efficiency Frontier (b) Efficiency Gap



Source: Staff estimates

Source: Staff estimates

PUBLIC INVESTMENT MANAGEMENT INSTITUTIONS

C. The PIMA Framework

13. The IMF has developed the Public Investment Management Assessment (PIMA) framework to assess the quality of the public investment management of a country.

It identifies the strengths and weaknesses of institutions and is accompanied by practical recommendations to strengthen them and increase the efficiency of public investment.

14. The tool evaluates 15 "institutions" involved in the three major stages of the public investment cycle (Figure 21).

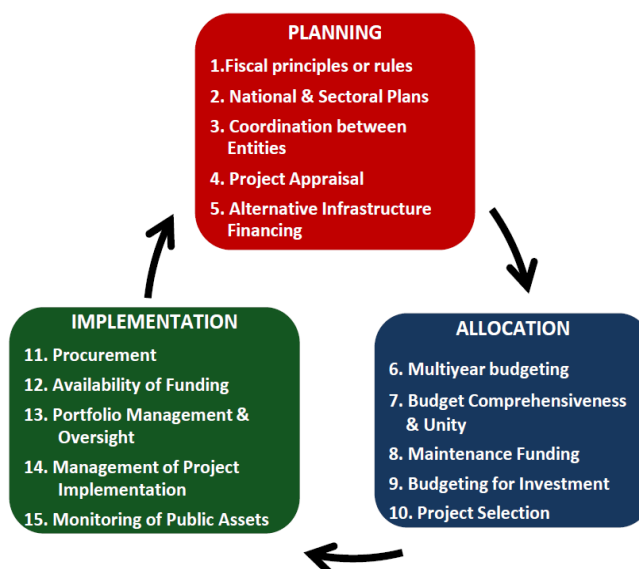
These are: (i) planning of investment levels for all public-sector entities to ensure sustainable levels of public investment; (ii) allocation of investments to appropriate sectors and projects; and (iii) delivering productive and durable public assets.

15. For each of these 15 institutions, three indicators are analyzed and scored, according to a scale that determines whether the criterion is met in full, in part, or not met (see Appendix II for the PIMA Questionnaire). Each dimension is scored on three aspects: institutional design, effectiveness, and reform priority:

- Institutional design refers to the objective facts indicating that appropriate organizations, policies, rules, and procedures are in place. The average score of the institutional design of three dimensions provide the score for the institution, which may be high, medium, or low.
- Effectiveness refers to the degree to which the intended purpose is being achieved or there is a clear useful impact. The average score of the effectiveness of three dimensions provides the effectiveness score for the institution, which may be high, medium, or low.
- Reform priority refers to whether the issues contained within the institution are important to be improved in the specific conditions faced by Sierra Leone.

16. The following sections provide the detailed assessment for Sierra Leone according to this methodology.

Figure 21. PIMA Framework Diagram



D. Overall Assessment

17. Sierra Leone's public investment management institutions underperform other countries in the region on almost all 15 institutions. The institutional design of Sierra Leone is assessed to be lower than the average of African countries that have undertaken the PIMA for all institutions, except for one institution (budget comprehensiveness) (Figure 22). In particular, four institutions (project appraisal, project selection, availability of funds, monitoring of public assets) are assessed to have the lowest score. The effectiveness of these institutions is also assessed to be lower than the average of African countries, except for a few institutions (Figure 23).

Figure 22. Public Investment Management Institutional Design

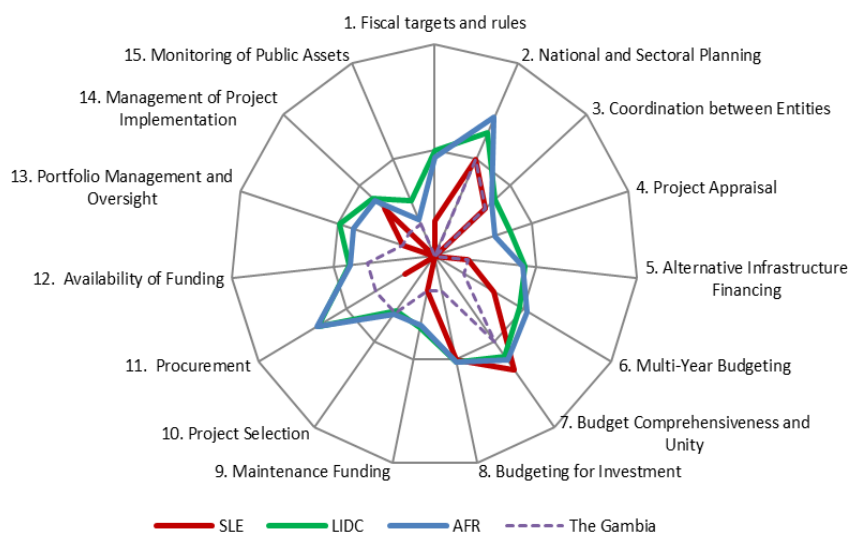
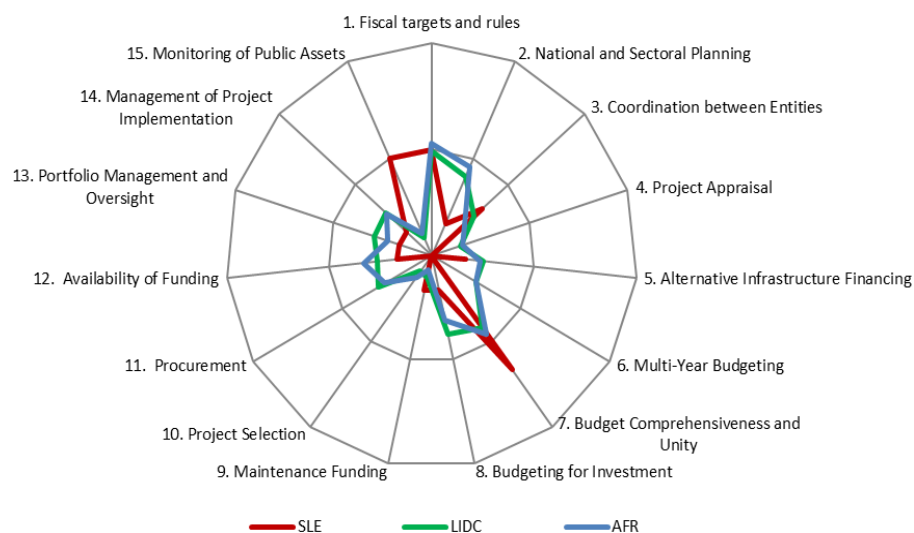


Figure 23. Public Investment Management Effectiveness



18. The following sections provide the detailed assessment for Sierra Leone’s public investment management institutions. Each institution is provided an aggregate score for institutional design and effectiveness, followed by the supporting evidence of how these scores were derived.

E. Investment Planning

1. Fiscal Principles or Rules (Design—Low; Effectiveness—Medium)

19. Sierra Leone has adopted a fiscal responsibility framework, and has put in place a nominal debt ceiling of 70 percent of GDP. The Public Financial Management (PFM) Act 2016 requires the government to maintain a prudent level of debt, and an appropriate balance between revenues and expenditures, but does not specify permanent numerical rules. Instead, it requires any new government to set fiscal objectives for five years in its first Fiscal Strategy Statement (FSS). The FSS 2019—the first of the current government—targets an average deficit, including grants, of 2.8 percent of GDP for 2019–23, and sets a ceiling to nominal debt of 70 percent of GDP, in line with the country’s commitment under Economic Community of West African States. This ceiling however has neither constrained nor provided operational guidance to fiscal policy in recent years: government debt doubled from 30 percent of GDP in 2013 to 63 percent in 2018 (Figure 12).

20. In the medium term, the targets agreed under the Extended Credit Facility Program with the IMF provide operational guidance to fiscal policy. These are a gradually reduction domestic bank borrowing to around 2 percent of GDP over the program period to contain inflation and the interest bill; a quantitative performance criteria on the net credit to the government; and an indicative target on the domestic primary balance.

21. The medium-term fiscal framework underpinned in the FSS does not guide the budget process. The PFM Act 2016 requires the government to submit the FSS to Parliament in July. The FSS should contain the macro-fiscal forecasts, and outline the government’s fiscal objectives, and policy priorities. This, together with the budget call circular, is expected to serve as the basis for budget preparation and discussion on both recurrent and capital spending. Currently, the FSS is only made available at the time at which the budget is submitted for approval.

2. National and Sectoral Plans (Design—Medium; Effectiveness—Low)

22. The Medium-Term National Development Plan (MTNDP) is published, but the absence of master plans in the road sector affects investment planning of other sectors. The MTNDP 2019–23, which was approved in February 2019, provides for broad strategic guidance on development projects in all sectors and with all financing sources, including PPPs. Many sectors have the sectoral strategies, which typically include more detailed information on projects and activities. However, the Ministry of Works and Public Assets is preparing but yet to

finalize a master plan, which shows the road network that the sector intends to develop. The Sierra Leone Road Authority (SLRA) has a strategic plan, which focuses, however, on institutional issues and is not published.

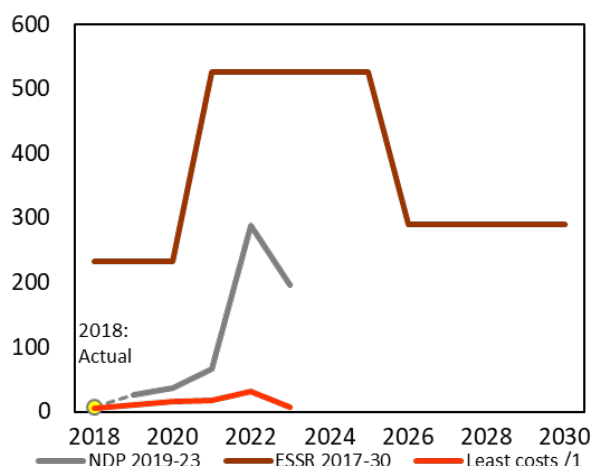
23. The MTNDP and sectoral strategies include broad estimates of total costs but do not always include costing of individual projects. The MTNDP presents costing information broken down by sector, but does not disclose costs of individual projects. Some sectoral strategies (e.g. National Action Plan for Health Security (NAPHS) 2018–22) include costs of individual projects and activities. However, strategies of other sectors include only broad estimates of total costs (e.g. Electricity Sector Reform Roadmap (ESRR) 2017–30) or do not include costing information (e.g. National Renewable Energy Action Plan (NREAP) 2015–20/30). The lack of project costs information makes it difficult to review various sectoral strategies and ensure they are consistent with the MTNDP.

24. Some, but not all, sectoral strategies include targets for both outputs and outcomes. For example, the ESRR 2017–30 includes both output (e.g. generation capacity in MW of EGTC) and outcome targets (e.g. number of households that have access to electricity). However, the NAPHS includes only broad statement of objectives without measurable outcome targets (e.g. prevent likelihood of outbreaks).

25. Sectoral strategies that were prepared before the MTNDP are yet to be reviewed in full to ensure consistency with the MTNDP. The MTNDP's horizon is matched with the term of the government. However, some sectoral strategies were prepared before the MTNDP approval (e.g. ESRR and NREAP). This makes it possible that projects included in those strategies are not aligned with priorities and fiscal constraints shown in the MTNDP. For example, in the energy sector, costs of ESRR between 2019–23 are five times larger than the amount allocated by the MTNDP (Figure 24).² This is because the MTNDP presents the underlying fiscal framework and has sharply prioritized proposed projects in order to fit their costs within the fiscal framework. At least for the medium term, the MTNDP's costs for the energy sector are closer to the least investment costs necessary for reducing losses of state-owned energy companies and ensuring their business sustainability (see also Institution 5). While financial resources are reduced, some outputs and outcome targets of the MTNDP remain as ambitious as sectoral strategies in the energy sector (Figure 25). For various planning documents to provide coherent guidance on project planning, it is necessary for the MoPED to review sectoral strategies made before the MTNDP and require MDAs to update them in light of the MTNDP.

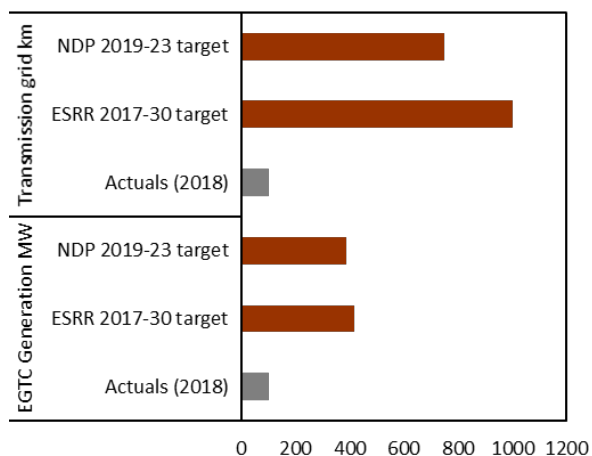
² The opposite tendencies exist in other sectors. The costs of NAPHS for 5 years are estimated to be USD 291 million, while the MTNDP allocates USD 428 million to the health-care. There is no explanation of this difference.

Figure 24. Total Annual Costs of Energy Sector Projects
(USD million)



Source: MTNDP and ESRR

Figure 25. Performance Targets of Energy Sector Strategies
(Index 2018=100)



Source: MTNDP and ESRR

1/Least costs are drawn from the World Bank' study presented in "Project Paper on a Proposed Additional Credit to the Energy Sector Utility Reform Project," April 2019.

3. Coordination Between Entities (Design—Medium; Effectiveness—Medium)

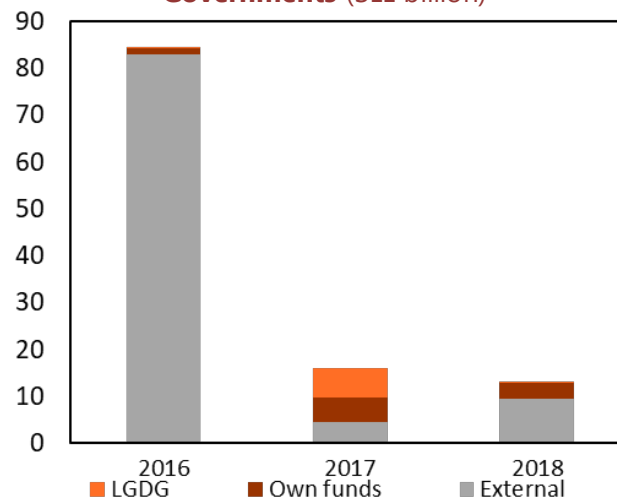
26. Major capital projects of local governments are formally discussed with the central government, but their budgets are not published in a website. The funding sources of local government capital projects include: (i) their own revenue; (ii) Local Government Development Grants (LGDG); and (iii) external financing. A list of capital projects funded by own revenue are reviewed by the MoF through the budget process where the MoF as well as the Ministry of Local Government and Rural Development scrutinize the draft local government budgets. Financing from LGDG is reviewed by the MoF on a project-by-project basis as discussed below. The MoF also negotiates and signs all agreements for external financing of local government projects. However, the local government budgets that have a list of projects are yet to be published in a website. Some externally financed projects of local governments do not appear in either the central or local governments' budgets (e.g. the new Freetown City Hall Complex project).

27. Capital transfers to local governments through LGDG do not yet follow a rule-based system. When LGDG was originally created in 2004 with development partner's support, the amount of transfer to each district council was intended to be based on the transparent criteria. After the donor left a space, the amount of transfer was decided on a project-by-project basis, targeting a small number of selected ongoing projects. Given a cash constraint, a district council barely knows the amount of transfer, until receiving disbursements.

28. The absence of a consolidated pipeline of all capital projects of local governments may reduce the effectiveness of coordination with the central government. In aggregate, capital projects of local governments have been minimal in recent years (0.1 percent of GDP in 2017). However, some local governments are implementing major projects through external financing. For example, the new Freetown City Hall Complex project financed by a Korean EXIM Bank loan, which was raised by the MoF and on-lend to Freetown City Council, raised a level of local governments' capital spending in 2016

(Figure 26). The central government does not have systemic access to pipelines of projects that each local government plans to implement. This may pose challenges for the central-local coordination, because some local governments are envisaging to expand capital projects. For example, Freetown City prepared the new development plan ("Transform Freetown") in 2018, which includes major projects with total costs of USD 200 million.

Figure 26. Capital Spending of Local Governments (SLL billion)



Source: Staff estimates based on MoF data and DAD

29. Government guarantees are presented in the budget document, but other contingent liabilities are not. An annex of the budget document presents a list of government guarantees (0.3 percent of GDP in 2018). The Fiscal Strategy Statement for 2019 also includes a list of possible government guarantees required for planned PPP projects. Borrowing of local governments and public corporations are reported to, and subject to the limits set by, the MoF under the Public Debt Management Act 2011. However, the budget documents or Fiscal Strategy Statements do not include full disclosure of a broader range of contingent liabilities, such as on-lending (e.g. on-lending to Freetown City Council for the new city hall complex project), SOEs' liabilities, or implicit contingent liabilities associated with PPPs.

4. Project Appraisal (Design—Low; Effectiveness—Low)

30. Processes appraising the feasibility of project proposals, as well as their economic and financial impact, are yet to be put in place. The PFM Act 2016 requires a proposing agency to submit an appraisal of its project to the MoF before approval is granted, regardless of the source of funding. The PFM Regulations 2018 requires a Public Investment Operational Manual to prescribe the appraisal, selection and implementation processes, with standard methodologies on how to design, cost, assess the technical and economic viability of a project, and the availability of alternative options. This Manual is still under preparation.

31. Some domestically financed major projects undergo full appraisal, some partial, while others bypass this stage, and move straight to implementation. The March 2019 Technical Audit of the Social Security, Telecommunications, Civil Works and Energy Sectors undertaken by the Auditor General (hereinafter called “March 2019 technical audit”) reviews 18 road projects, only four of which underwent full appraisal (technical and economic). While some may have been appraised in the past, with documents no longer available, others were clearly only assessed on their technical feasibility, without proper cost benefit and environmental impact assessments.³ This lack of comprehensive appraisal is based on the design and build approach sometimes used by SLRA (i.e., contractors are awarded projects and expected to gradually design and cost them as work progresses), on the basis that roads are being built on existing sites, and do not require further studies. However, this has in the past led to frequent adjustments and additions during implementation, as exemplified by the 25 kms Lumley-Tokeh road, which has been 10 years in the making, costing six times the initial estimates (see Institution 14). In addition, presidential initiated projects, such as a proposed new Freetown airport, were, in the past, approved and loan agreement entered into, without being appraised (see Institution 10).

32. The capacity to centrally review and challenge project proposals is limited and constrained by the selection process. Technical capacity resides within the implementing agencies (e.g. SLRA and EGTC); capacity within their parent ministries is even weak than in central ministries. The MoPED, whose role is to challenge the economic assessment of proposed projects, has, in practice, little say on project selection, which is perceived to be driven by political considerations (see institution 10). Consequently, agencies often get away with proposals that are based on optimistic assumptions, with insufficient appreciation of the risks inherent in implementation. Box 3 illustrates this with the example of the Wellington – Masiaka Toll Road.

33. While it may be difficult to eliminate political pressure during project selection, enhanced transparency requirements on appraisal can hold decision makers accountable. Publishing analysis of the economic impact of selected projects would encourage MDAs to take the appraisal process more seriously. It can encourage decision makers to seek alternative options for projects that do not appear bring expected economic benefits. Currently, appraisals are only published for externally financed projects, if so required by the development partner.

³ For example, the Freetown street Phase II and Waterloo township road projects.

Box 3. The Wellington-Masiaka Toll Road

The Wellington – Masiaka Toll Road project is a PPP agreement between the Government of Sierra Leone (GoSL) and the China Railway Seventh Group (CRSG) to widen 63 kms of the 240 kms highway that connects Freetown to Bo. CRSG will built and maintain the road for 25 years, after which it will be handed over to the GSL, in return to collecting tolls over this period. The current toll structure charges mid-size private cars about USD 0.40, and commercial trucks USD 15 for a one-way usage.

The appraisal of this project—which is not published—estimates toll collection at USD 8 million initially, rising to USD 20 million at the end of the 25 years. The overall economic benefits, in terms of reduced commute times, and increased economic activity is estimated at USD 30million annually (1 percent of current GDP). These benefits appear to be based on assumptions for freight traffic used for developing new railway projects in other countries. An enlargement to a four-lane dual carriageway of an existing road with limited traffic, this road is different in nature.

The project has generated controversy within the country. Toll booths have already been installed and road users charged, while construction is still under way. Users, commercial and private users alike, are also questioning the toll structure. While there may be good economic arguments in favor of this project, publishing the appraisal may help to allay some of these concerns.

5. Alternative Infrastructure Financing (Design—Low; Effectiveness—Low)

34. A few economic infrastructure markets are opened to competition; and some independent regulators have been established. In the power sector, the National Electricity Act 2011 unbundled the former National Power Authority into the state-owned upstream (Electricity Generation and Transmission Company – EGTC) and downstream companies (Electricity Distribution and Supply Authority – EDSA). While the EDSA is the sole power distributor, a power generation market has been liberalized and includes independent power producers (IPPs). In the telecom sector, a land-line service is provided only by Sierratel, a state-owned telecom company, but a private sector is active in mobile markets. In the water sector, two state-owned companies are the sole suppliers.⁴ The independent regulators responsible for setting tariffs include the Electricity and Water Regulatory Commission and the National Telecommunication Commission.

35. The PPP policy that implements the PPP legal framework is yet to be published. The PPP Act 2014 provides for high-level principles, including the contents of PPP agreements, the roles of the PPP Unit, and the procurement process. In practice, the process has been developed for appraisal and selection of PPP projects. In case of a “solicited project” initiated by the government, MDAs prepare first a project roadmap (pre-feasibility) and then a feasibility study, both of which are scrutinized by the PPP Unit, which is under the Vice-President’s Office and plays a gatekeeping role.⁵ The MoF (Fiscal Risk Division) assesses a “financial clause” which

⁴ Guma Valley Water Company supplies water to Freetown and Western area. Sierra Leone Water Company (SALWACO) supplies water in the rest of the country.

⁵ The mission saw a cost-benefit analysis of rehabilitation of the Wellington-Masiaka toll road (see Institution 4).

sets out the deadline for a private partner to secure funding. With consent of the MoF as well as Ministry of Justice, a project will be selected by the Cabinet for the implementation.⁶ However, there is no published PPP policy that documents this process and clarifies the guidance on planning and selection. For such PPP policy, the draft PPP regulations and guidelines for energy sector PPPs are being prepared and expected to be published next year.

36. The investment plans of public corporations are reviewed by the MoF only when they are funded by donors or the budget. Most major projects of public corporations require funding from donors or the budget and thus are scrutinized by the MoF during the budget process. Some SOEs also undertake capital investments with their own funds. For example, the EDSA implements a project to connect a mining company in Kono to a transmission line with its own funds. These projects are reviewed and approved by the shareholding line ministry, but are not reviewed by the MoF. The MoF Fiscal Risk Division has collected the financial statements of SOEs, but is yet to produce a report on their investment plans or financial performance, other than the budget document, which only shows revenue, expenditure, and net profits of SOEs.

37. Financial analysis of investments through PPPs and public corporations has not captured implicit contingent liabilities in full. While Sierra Leone is yet to make extensive use of PPPs (see Chapter I), the energy sector is planning a few major PPPs and is planning to add more to the pipeline. The Fiscal Strategy Statement published in September 2018 lists five PPP projects for power generation, which adds around 215 megawatt (MW) to the installed capacity. They are still at a preparatory stage, undergoing a feasibility study process. The MoF and PPP Unit control government guarantees on private partners' financing by providing a limited amount of guarantees for a short-period of time (e.g. six months). If a private sector fails to secure financing within this period, the contract will be cancelled. However, the MoF and PPP Unit has not completed assessment of implicit contingent liabilities arising from the energy PPPs, which are likely to have substantial impact on SOEs' financial viability (Box 4).

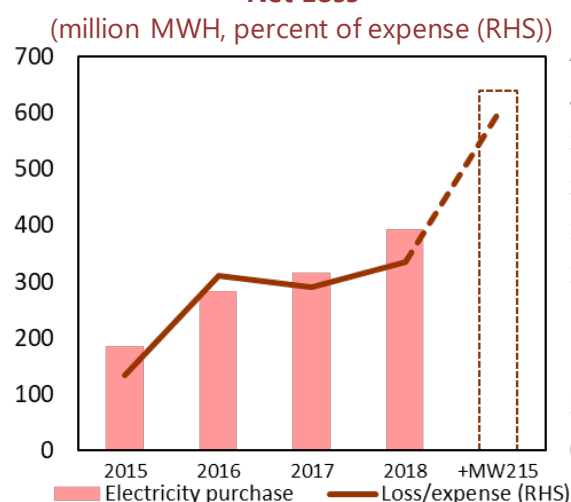
⁶ In case of a "unsolicited project" proposed by a private partner, MDAs review project viability and sign an MOU with a private partner. The PPP Unit then hires experts who prepare a feasibility study.

Box 4. Impact of Energy PPPs on State-Owned Energy Companies

Since 2015 when the EDSA and EGTC were operationalized, the installed capacity of power generation has been almost doubled from around 100 MW to 200 MW. This is achieved mainly by increasing IPPs, including the Turkish Karadeniz power-ship (126 MW) and the EMCO in Bo. The EDSA, which is the sole purchaser of electricity from IPPs, is suffering from losses arising from worn out transmission lines and losses on tariff collection. The tariff structure does not include transmission fees to compensate loss of electricity during transmission, which increases exponentially as more electricity flows. In the current situation, the EDSA makes more losses as more electricity is generated. Its ratio of net losses to electricity purchase costs has increased from 9 percent in 2015 to 22 percent in 2018 (Figure 27). If no measure is taken, adding capacity of 215 MW through PPPs could double the level of EDSA's loss ratio. Such high level of losses impacts SOEs' financial viability and public finance. Because payments to IPPs are prioritized over those to the EGTC, it has accumulated a large amount of receivables in arrears owed by the EDSA (Figure 28). Because of lack of cash to buy fuels, the EGTC has effectively ceased its operations (see Chapter II). This is still not enough to allow the EDSA to pay for IPPs. In 2019, the government budget paid SLL 160 billion directly to IPPs, which were around half of the EDSA's revenue.

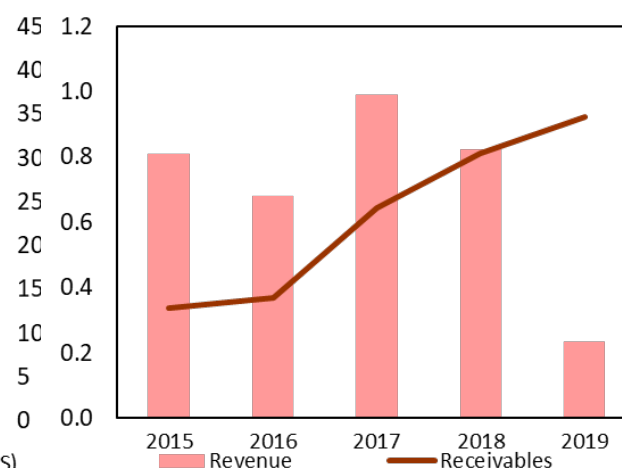
Source: IMF mission

Figure 27. EDSA's Electricity Purchase and Net Loss



Source: staff estimates based on budget profiles

Figure 28. EGTC's Revenue and Receivables
(Percent of GDP)



Source: staff estimates based on budget profiles

Recommendations on Investment Planning

Issue 1: Sectoral strategies do not adequately guide investment planning or support the implementation of the MTNDP.

Recommendation 1: Improve the transparency in sectoral strategies and their consistency with the MTNDP by:

- Publishing a Master Plan on Road Sectors for the MTNDP period, with costing information of individual projects;

- Reviewing sectoral strategies prepared before the MTNDP approval and making updates necessary for aligning them with the MTNDP.

Issue 2: Processes for appraising projects are not in place and many projects were not appraised before they were selected.

Recommendation 2: Appraisal should be strengthened by:

- Enforcing section 73 of the PFM Act 2016 that requires that all capital projects being proposed are accompanied with their cost and appraisal documents;
- Developing and publishing the guidelines and template upon which the MoPED will review the appraisal of new projects;
- Requiring the publication of the appraisal of approved projects including PPPs before their inclusion in the PIP.

F. Investment Allocation

6. Multiyear Budgeting (Design—Medium; Effectiveness—Low)

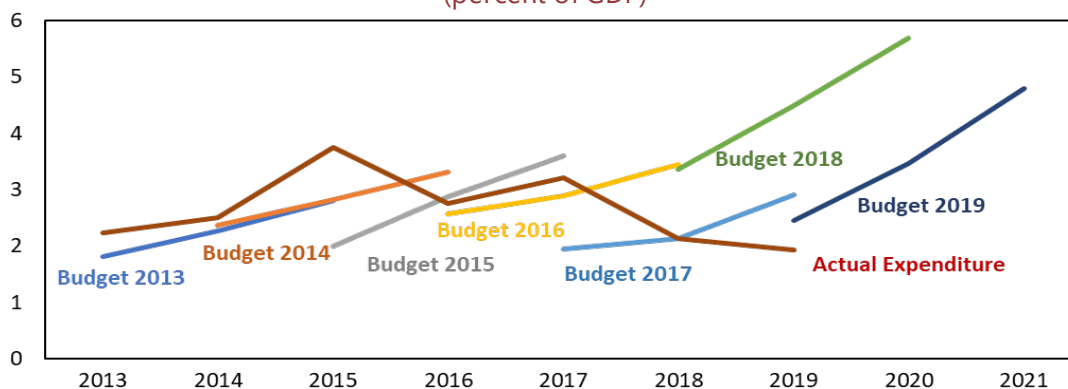
38. The budget document presents projections of capital spending broken-down by individual projects over the next three years. An annex of the annual budget includes a “Public Investment Program” (PIP) which presents, in respect of each development project, (i) spending for the next three years broken down by domestic and external financing and (ii) the names of donors and funding types (grants v. loans) in case of externally financed projects. Projects are grouped by a cluster of the MTNDP.

39. There is no multiyear ceiling on capital expenditure. Although the PIP presents multiannual projections, these do not constitute ceilings. In a Budget Call Circular, multiyear ceilings on MDAs’ budget submissions cover only non-wage, non-interest, recurrent expenditure. The MoF determines budget allocations to capital expenditure by scrutinizing every individual project. In a template defined by a Budget Call Circular, MDAs submit detailed “project profiles” for all new and ongoing projects.

40. There is no publication of total costs of major projects. While MDAs are required to provide the MoF with updated total costs through a project profile, they are not published in the budget document. Furthermore, the MoF does not maintain a centralized, comprehensive database on multiannual contracts, although the MoF approves all contracts, total costs of which exceed SLL 200 million (around USD 20,000).

41. Projections for capital expenditure have included large forecast errors (Figure 29). Until the recent year, there were systemic tendencies of projections being over-spent due mainly to the lax in-year adjustment rules (see Institution 13). Since the 2018 budget, projections have been under-executed due mainly to cash shortage.

Figure 29. Projections and Actuals of Domestically Financed Development Expenditure
(percent of GDP)

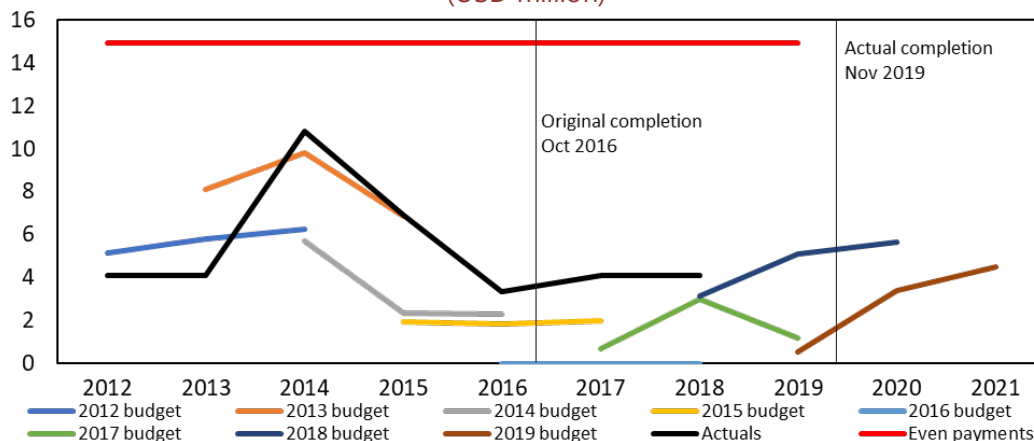


Source: mission based on budget profiles.

Note: This graph captures both recurrent and capital expenditure included in development expenditure

42. The absence of information on total costs, multiannual contracts, paid amount, and unpaid invoices has been reducing the budget credibility. An underlying cause of the budget deviations is a multiannual contract not being factored into the budget. For example, in case of the Makeni-Kamakwe-Madinaoula road, which was domestically financed and started in 2012 and should have been completed in 2019, the total contract value was USD 119 million. If this amount was paid equally before the project was completed, the budget would spend USD 15 million every year. However, the budget allocation was USD 3 million and actual spending USD 5 million on average between 2012 and 2019 (Figure 30). This difference forms arrears if a contractor performs the contractual obligations. The authorities discuss that factoring multiannual contracts into the budget in full is difficult at this moment given a large amount of unpaid invoices carried over from the past years. However, as a first step, it is necessary to disclose in the budget document (i) updated total costs, (ii) multiannual contracts, (iii) amount paid, (iv) amount of unpaid invoices, and (v) updated project completion date, in respect of each project, in order to verify gaps between the budgets and commitments.

Figure 30. Spending for Makeni-Kamakwe-Medinaoula Road Project
(USD million)



Source: Mission based on budget profiles and the March 2019 technical audit report

7. Budget Comprehensiveness (Design—Medium; Effectiveness—Medium)

43. Budget documentation includes capital projects undertaken or funded by central government, regardless of funding sources. Annex 4 of the Budget Profile, which Parliament approves, contains the list of projects in the PIP. The name of the funding agency (GoSL, or donor), the type of funding (grant or loan), any GoSL copayment, and estimates of the outlays for the budget year, and two outer years are provided. The PIP also includes projects implemented by subvented agencies, such as the SLRA, and by public corporations, provided they are funded through the budget.

44. It does not include capital spending done by local governments and public corporations from own revenue. Local governments, which have little own source revenue and receive little or no grants for capex, tend to spend little on capital projects. The notable exception is the Freetown City Council Administrative Complex worth USD 50 million, funded by the Korean Exim Bank. Given the precarious financial position of the most public corporations in recent years, their capex has been minimal, even by those that are capital intensive, such as EDSA, EGCT, Guma Valley Water Company, or Sierratel.

45. The capital budget is prepared by the MoPED, alongside the recurrent budget prepared by the MoF, but follows neither program nor functional classifications. The capital budget is presented along three dimensions: (i) the eight policy clusters set in the MTNDP 2019–2023; (ii) the ministries responsible for implementation; and (iii) the project description. Neither a program structure nor the international classification of the functions of government (COFOG) are used in Sierra Leone.

8. Budgeting for Investment (Design—Medium; Effectiveness—Low)

46. Capital outlays are appropriated annually, but the total project costs and multi-annual commitments are not included in the budget document. See also Institution 6. Section 35 of the PFM Act 2016 requires disclosure of multiannual commitments in PIP, but this provision has not been implemented yet.

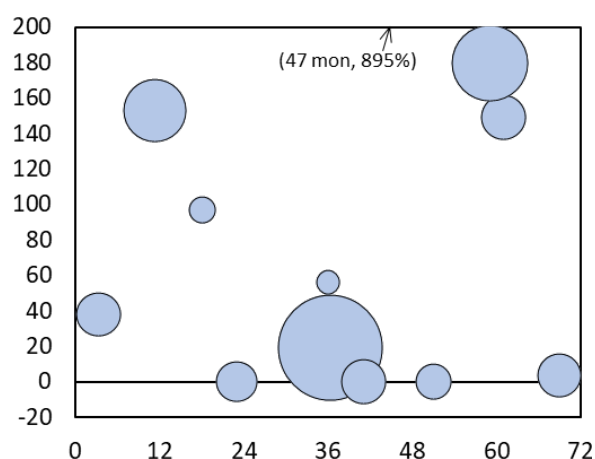
47. Reallocations from capital to recurrent expenditure are prohibited by the PFM Act 2016 (Section 43(5)) without parliamentary approval of supplementary budgets. However, the budget classifications for projects use development expenditure concepts without breakdown between recurrent and capital expenditure. In PIP, around half of allocation to development expenditure seems to be of recurrent nature. Because reallocations between different projects included in PIP are permitted (see Institution 13), they effectively allow reallocations from capital to recurrent projects.

48. The policy exists to prioritize ongoing projects over new projects, but has been hindered by new projects being implemented as changes in ongoing projects. For example, the Budget Call Circular for 2019 stipulates that the priority will be given to the completion of

ongoing projects and prohibits MDAs from submitting new projects, other than those included in the Fiscal Strategy Statement as government priorities. However, as discussed in Institution 14, several new projects have been implemented as “addition” or “Phase II” of ongoing projects. These projects are considered as changes in ongoing projects and able to bypass the above noted policy to prioritize ongoing projects.

49. Implementing new projects as project changes has complicated baseline costing of ongoing projects. For example, in case of 12 major road projects covered by the March 2019 technical audit, the project completion has been delayed for more than three years on average. However, response of total costs to project delay differs significantly across projects (Figure 31). Total costs of five projects have increased by more than 100 percent after project delay. This implies that delay in these projects was caused by new roads being added to the existing projects. In contrast, total costs of four projects have not changed although their completion has been delayed by two to six years. This implies that contractors adjusted projects to cut costs and absorb cost increase caused by delay. In order to establish accurate baseline, a project change exceeding a threshold needs to be considered as a new project and its costs need to be separated from costs of completing existing works.

Figure 31. Project Delay and Total Cost Increase of 12 Road Projects
(X-axis: months delay, y-axis: percent increase, size of bubbles: total costs)



Source: Staff based on the March 2019 technical audit

9. Maintenance Funding (Design—Low; Effectiveness—Low)

50. A standard methodology for determining the needs of routine maintenance exists in some but not all sectors. Some sectors have developed a database on conditions of assets and a methodology for identifying the maintenance needs. For example, the SLRA developed a database on road conditions by using a specific software and a methodology for selecting roads for routine maintenance. However, for many assets, including government real estate and school buildings, comprehensive databases and maintenance policies are yet to be developed.⁷

51. The MTNDP and sectoral strategies include capital maintenance projects, but a standard methodology for identifying the capital maintenance needs does not exist in all sectors. The MTNDP and many sectoral strategies give emphasis on the needs of capital

⁷ “Performance audit report on the management of school facilities by the Ministry of Education, Science and Technology” by the Auditor General (October 2018) mentions that there was no policy or guideline for maintenance of school buildings and no maintenance plan was prepared.

maintenance (e.g. the ESRR 2017–30 and the “Education Sector Plan 2018–2020”). However, a standard methodology for prioritizing maintenance projects is yet to be developed for many assets, as discussed above.

52. Routine maintenance is not systemically identified in the budget. Capital maintenance can be identified in a PIP, which is an annex of the budget. However, routine maintenance is not systemically identified in the budget, which uses activity classifications for non-wage, non-interest expenditure without breakdown to economic items. In case of the road sector, routine maintenance is financed through the Road Maintenance Fund Administration (RMFA), which is funded by earmarked fuel levy and vehicle registration fees. Between 2016 and 2018, the RMFA financed not only recurrent maintenance but also major rehabilitation of roads. However, the RMFA is an extrabudgetary entity and its budget is not included in the government budget, which shows only the amount of transfer to the RMF.

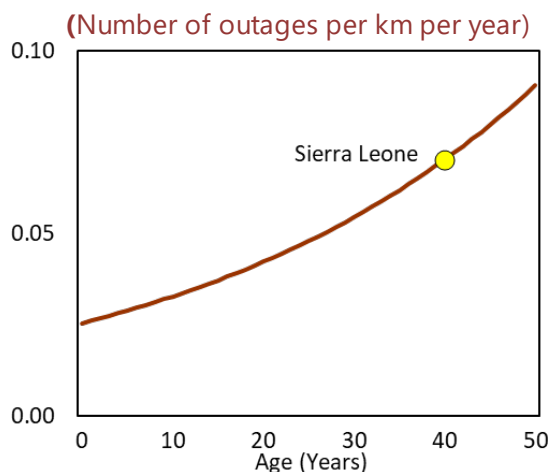
53. The inadequate funding for routine maintenance reduces infrastructure outputs. For example, actual spending for recurrent maintenance of government buildings has been minimal. It was limited to SLL 4 billion (USD 0.5 million) on average between 2015 to 2018. In case of the energy sector, a study shows that a failure rate (i.e. number of outage per km per year) of a distribution line increases exponentially as a function of age (Figure 32).⁸ If we follow this model, in Sierra Leone where most distribution lines were built before the civil war in the 90s, roughly around 14 out of 100 power outages per year per user could be attributed to the aging of distribution lines. In case of the road sector, the budget for transfer to the RMFA has been under-executed for the last five years (Figure 33).⁹ In 2018, only 24 percent of the original budget amount (USD 4 million) was disbursed to the RMFA. Furthermore, between 2016 and 2018, around 80 percent of the RMFA’s funding was diverted to capital road projects. In 2016 and 2017, the RMFA also borrowed respectively around USD 5 million and USD 7 million with government guarantees, in order to finance major road rehabilitation projects.¹⁰ Although in 2019 the RMFA adopted the new policy and disbursed its funding only to routine maintenance, it is important to protect maintenance funding by developing maintenance policies and increasing transparency in their budget allocation.

⁸ Nemati et. al. (2015) “Reliability Evaluation of Underground Power Cables with Probabilistic Models,” *International Conference on Data Mining*.

⁹ <https://tradingeconomics.com/>

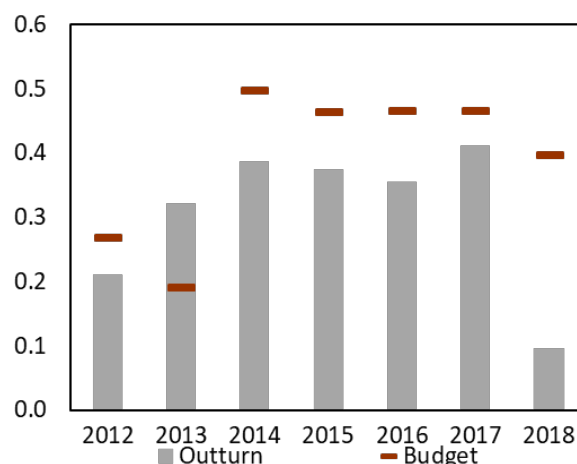
¹⁰ The RMF financial statements for 2016, the Fiscal Strategy Statement for 2018.

Figure 32. Failure Rate of Transmission Lines



Source: Staff estimates based on Nemati et. al. (2015)

Figure 33. Transfer to the RMFA
(percent of GDP)



Source: Staff estimates based on final accounts

10. Project Selection (Design—Low; Effectiveness—Low)

54. Some major projects have been included in the budget without preparing proposals, feasibility studies, or designs. In the existing project selection process, the MoPED screens project proposals before they move to subsequent stages (Figure 34). In this process, a project is required to prepare a proposal, feasibility study, and design, before its civil work is included in the budget or donor financing arrangements. Several major projects followed this process. Examples include the Makeni-Kamakwei-Medinaoula road project and the project for rural electrification of six district towns.^{11,12} However, some major projects bypassed this process, particularly when there was political pressure. For example, in case of the new Freetown International Airport project, a loan agreement was signed before a feasibility study was undertaken. The Waterloo township road project was included in the budget without cost-and-benefit analysis; and a contractor started civil work before a full design was prepared.¹³ The full design of the Lumley-Tokeh road project was completed ten years after the project started in 2009, due mainly to significant and repeated project changes (see Institution 14).¹⁴

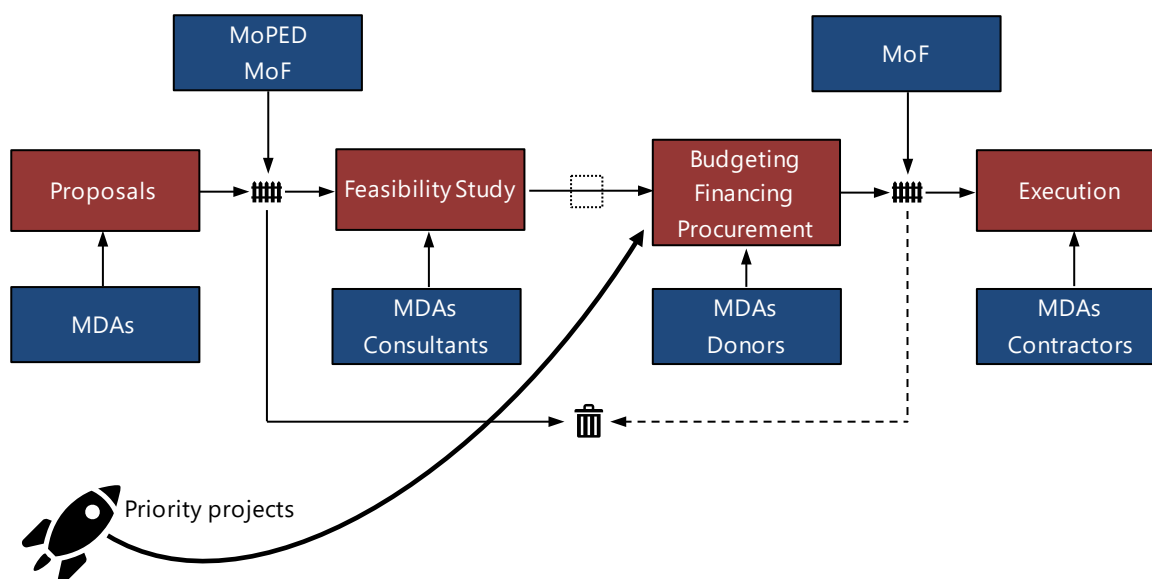
¹¹ The March 2019 technical audit. This is one of the biggest road projects in recent years (total costs USD 119 million). According to the said audit report, cost-and-benefit analysis, technical studies, and entire designs were prepared before the civil work started.

¹² A copy of the project proposal was made available to the mission.

¹³ The March 2019 technical audit. The total project cost is USD 14 million. In this type of situation, a contractor concurrently designs and builds a small section of a road on a piecemeal basis as the work progresses.

¹⁴ MoF announcement on 23 May 2019 (available at the Ministry of Information and Communication website) and the presidential speech on 14 Nov 2018 (available at the State House website).

Figure 34. Existing Project Selection Process

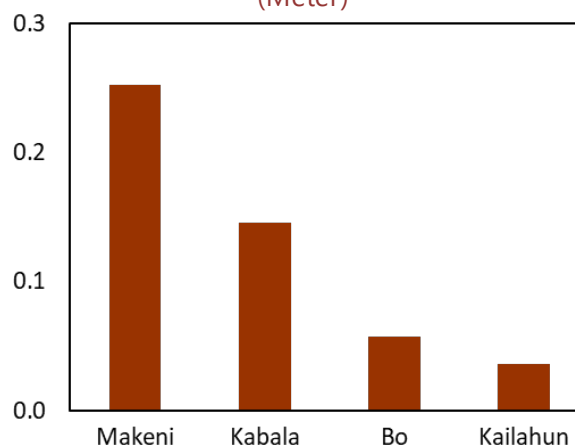


Source: IMF mission

55. The project selection process and criteria are yet to be published. The MoPED screens project proposals by using a scoring system, based on the following indicators; (i) the needs assessment; (ii) identification of key activities; (iii) technical feasibility; (iv) costing; and (v) a financing plan. MDAs demonstrate these indicators in project proposals prepared in the defined format. These criteria or process are prescribed only in an internal circular and not published, although the PFM Regulations (Section 19(5)) requires publication of the “Public Investment Operational Manual.”

56. The absence of published selection criteria has created perception of projects being selected by political motivations. For example, under the township road projects, which started in 2016 and rehabilitated certain length of roads in each main township, there was no clear criteria on determining how many kilometers of road work were allocated to each township. Since townships in a northern side (e.g. Makeni, Kabala) tends to be allocated longer length of road works in terms of population than those in a southern side (Bo, Kailahun), the mission was informed that the allocation was often perceived to be driven by political motivations (Figure 35). Publishing the project selection criteria is

Figure 35. Length of Road Work per Person Under Township Road Projects (Meter)



Source: Staff estimates based on SLRA project tracker

necessary to enable stakeholders to understand how projects are prioritized and increase a possibility of projects being selected by their benefits.

57. The MoPED maintains a consolidated list of all project ideas and proposals, but not a prioritized pipeline of appraised projects. The MoPED (i) collects from all MDAs lists of project ideas or “wish lists”; (ii) maintains a consolidated list of project proposals prioritized by the scoring system noted above; and (iii) collects all feasibility studies and economic analysis of projects from MDAs. However, the MoPED is yet to prioritize appraised projects based on the results of feasibility studies and economic analysis. Maintaining a prioritized pipeline of appraised projects ready for financing and implementation is important to show which projects can be more sustainable (i.e. affordable for maintenance) and generate more benefits and inform the decision-making on project selection.

Recommendations on Investment Allocation

Issue 3: Multiyear contracts of ongoing projects are not factored in the budget and not protected from new projects that are implemented as changes in ongoing projects

Recommendation 3: Increase transparency in total costs and multiyear contracts of capital projects and improve the budget credibility by:

- Publishing an annex of the annual budget, which presents, for each project, (i) updated total costs, (ii) updated value of multiannual contracts, (iii) amount already paid, (iv) amount of unpaid invoices, and (v) updated project completion date;
- Separating appropriations for recurrent and capital expenditure in the PIP;
- Clarifying in the Budget Call Circular that a project change that increases total costs by a certain threshold is considered as a new project and is deprioritized in the budget process.

Issue 4: Inadequate maintenance is deteriorating performance of infrastructures and assets.

Recommendation 4: Protect funding for routine maintenance by:

- Requiring each sector to prepare and publish a maintenance policy;
- Creating a separate line item in the budget for routine maintenance of each MDA;
- Presenting in the budget document the RMF budget with clear allocations to routine maintenance of SLRA and local districts, separately from other expense.

Issue 5: Project selection is often not guided by sustainability or economic benefits.

Recommendation 5: Establish a project selection process based on the transparent criteria and prioritized pipeline of projects by:

- Publishing the project selection criteria which apply to all projects including PPPs, as part of the public investment guidelines and manuals required under the PFM Regulations;

- Developing methodologies for scrutinizing the feasibility studies and economic analysis and prioritizing appraised projects;
- Designing a prioritized pipeline of appraised projects including PPPs and maintaining it.

G. Investment Implementation

11. Procurement (Design—Low; Effectiveness—Low)

58. The procurement system is decentralized to cover central government, local councils and SOEs. Decentralization of procurement functions and the establishment of operational procurement units and procurement committees in all procuring entities is now fully integrated into the public sector administration processes.

59. Procurement oversight is undertaken by the regulatory body. The Sierra Leone National Public Procurement Authority (NPPA) was established under the Public Procurement Act (PPA) of 2004 and revised in 2016 to perform procurement oversight functions and advise government on public procurement management. The NPPA does not have a mandate to review and approve procurement plans as well as approving contracts for procuring entities. This is the responsibility of the MoF as an entity responsible for managing the national budget. However, the NPPA is mandated to ensure compliance with the procurement plans approved by the MoF, which has created lapses by allowing procuring entities to by-pass the regulatory authority. Public access to procurement information is minimal. Adverts for major projects are published in local newspapers but information on the various stages of tendering or the award of contracts is not available to the public nor the NPPA.

60. The PPA requires public investment projects to be tendered through open competitive bidding, but it is not always the case in practice and the public has limited access to procurement information. The PPA 2016 in its Section 37 provides for open tendering as a default procurement method but also the Act allows other methods that limit competition and provides conditions under which they should be used (sections 38, 39, 40, and 41). A large number of infrastructure projects are funded by donors and the PPA allows donor procurement procedures to be used in cases where the PPA conflicts with the donor procurement procedures mainly on tenders that approach international market. Section 26 of the PPA requires procuring entities to promptly publish (in Gazette and local newspapers of wide national circulation) each contract award that exceeds SLL 600 million threshold for works but this is not done on all major investment projects. The NPPA does not impose sanctions for non-compliance with this requirement.

61. There is insufficient database and patchy information covering all public procurement activities. The NPPA does not have a database on major investment projects and there is no mechanism in place to collect procurement data from procuring entities. Section 15(3) of the PPA makes a provision for mandatory reporting of procurement activities through the

Procurement Committee. However, reporting by most procuring entities (with the exception of a few) is inconsistent and untimely. To compensate for this poor reporting, the NPPA conducts annual surveys to collect the required procurement information from entities. The NPPA devotes significant effort to carry out the surveys thereby making the exercise both costly and time consuming. In addition, the procurement and contract management information available in the records of procuring entities is not comprehensive; some files are missing and some procurement and contract management decisions that are made are not recorded. There are no analytical reports made on major investment projects by the regulatory authority.

62. Contract management of investment projects is a very big challenge. It is characterized by delays in implementation process, amendments and variations to contract that are far above the original contract cost, price adjustments during project implementation and cancellation of contracts pre-maturely due to lack of funds. The legal requirement that contract amendments beyond 15 percent original amount be approved by the NPPA is often flouted. Advance payment guarantees and performance bonds issued by other financial institutions other than banks are being accepted contrary to the Act while notification of award of contract is not communicated to the losing bidders nor published in major newspapers or the NPPA's website. In addition, contracts are missing major contractual provisions such as liquidated damages, warranties, termination, breach of contract, modification/variation and term.¹⁵

63. The NPPA is often excluded from procurement of major public works, large part of which do not seem to be subject to open competitive process. In 2018, the NPPA reviewed 5,709 procurement activities performed by 136 entities for a total value of Le725,74 billion. In terms of value, a large majority of all procurement captured by the NPPA was through open competitive bidding methods (Table 4). However, a large part of procurement activities captured by the NPPA were for the procurement of goods. A portion of procurement of goods made through competitive processes is higher than that of Works. The amount of procurement of works captured by the NPP is less than 25 percent of total domestic development expenditure in 2018. This indicates the exclusion of the NPPA from the procurement of major public works, which are often procured in non-competitive manners. It was also observed from the contract files that most of the contracts below the threshold for open competitive bidding which could have been aggregated to attract competition were split into smaller lots that allowed for the use of Request for Quotations (RFQs). On the other hand, 89 percent (5,062) of the activities were planned with a value of Le 572,59 billion. Declining unplanned procurement indicates an improvement in planning of procurement activities.

¹⁵ The 2018 annual assessment report of the NPPA.

Table 4. Sierra Leone: Key Procurement Indicators, 2018

	Value (SLL billion)	Percent of all captured procurement
Total procurement captured by the NPPA	725.7	100
ICB goods and services	357.9	49
NCB goods and services	91.3	13
ICB works	78.1	11
NCB works	60.6	8
Others	137.8	19

Source: NPPA

64. The authorities have made strides to strengthen the overall procurement management in recent years, although there is still much required for further improvement. The government through the World Bank funded project is supporting the following procurement reforms:

- Introduction of an electronic procurement system (e-GP) to improve transparency and efficiency of procurement processes;
- Review of the PPA and Procurement Regulations to streamline with new technological requirements and remove ambiguities of some clauses;
- Strengthening of the NPPA through technical assistance and staffing; and
- Capacity building of procurement cadre at both central level and local councils in order to improve on efficiency.

65. The PPA established the Independent Procurement Review Panel (IPRP) for purposes of conducting independent administrative review of challenges to the process of the award decisions and complaint arising out of it. The IPRP consist of three members appointed by the Minister of Finance from among eminent Sierra Leoneans with a background in public procurement, the Sierra Leone Chamber of Commerce, Industry and Agriculture, the business community, university, legal profession, and other relevant fields. The Panel carries out a grievance redressal mechanism for aggrieved bidders/suppliers. Since the IPRP's inception, only few complaints have been reported due to the fear of retaliation as Government is a major source of business for most. Where complaints are made there are significant delays in decision making and complaint resolutions are not published.

12. Availability of Funds (Design – Low; Effectiveness - Low)

66. Commitment ceilings are not issued in a timely manner and not linked with the cash availability shown in cashflow forecasts. Cashflow forecasts prepared by the Cash Management Unit in the Accountant General's Department (AGD) are primarily used for cash rationing. Quarterly commitment ceilings for development projects are issued by the MoF using a Public Expenditure Tracking Form-1 (PET Form-1) on recommendations of the MoPED.¹⁶ MDAs

¹⁶ Hansen et al, "Sierra Leone: Strengthening Fiscal management," March 2019.

are required to submit project profiles to the MoPED, which proposes to the MoF an allocation for each project. After scrutinizing these proposals, the MoF directly issues a PET Form-1 to MDAs for payments processing. Quarterly commitment ceilings are often issued with significant delay (e.g. two months after the beginning of a quarter) or sometimes not issued but combined with next quarter's ceilings.

67. Project payments are subject to cash rationing. All payment vouchers for capital projects submitted to the AGD for payments are sent to the MoF Finance Secretary for prioritization and approval. Only for approved vouchers, cheques are printed and sent to the Bank of Sierra Leone (BSL) for payment. There remains a large amount of printed but not cleared checks at the AGD and BSL, which stood at SLE 1.1 trillion (3 percent of GDP) at the end of June 2019.¹⁷

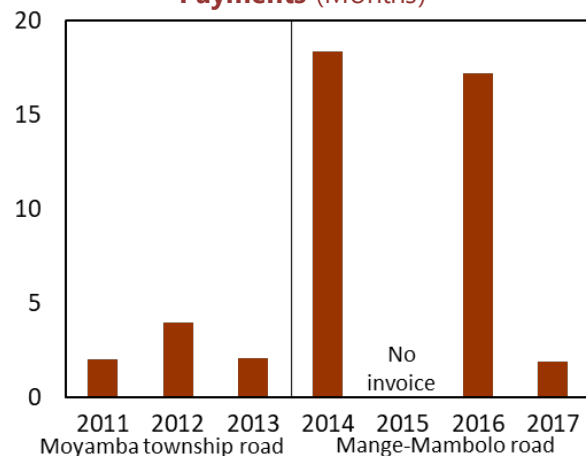
68. External financing is largely held outside the Treasury Single Account (TSA) and mostly in commercial bank accounts.

For each externally financed project, a separate government bank account is opened and managed by MDAs.¹⁸ Receipts and expenditures under these projects are not reported in the accounts of the Government but disclosed in the notes.¹⁹ Integrated external financing into the TSA may be a long-term issue.

69. Significantly delayed and unpredictable payments for capital projects have been a major cause of project delay and arrears accumulation.

Neither the budget documents nor commitment ceilings indicate when funds will be available for a capital project. In practice, payments for capital projects are determined on a case by case in a not-transparent manner. For example, the March 2019 technical audit finds delays in invoice payments of two different road projects (Figure 36). Although payments were always delayed from the deadline (60 days after the invoice date) for both projects, one project was paid much faster than the other project. For the latter project, no invoice was submitted in 2015, while 15 invoices were submitted in 2016. This could imply that delayed and unpredictable payments affected financing of a contractor, who further delayed a project until it found a financing source.

Figure 36. Average Delay in Invoice Payments (Months)



Source: March 2019 Technical Audit Report

¹⁷ This includes both recurrent and capital expenditure.

¹⁸ According to annual accounts of the Government, an amount of SLE 100.87 billion was held in these bank accounts as of 31st December 2018.

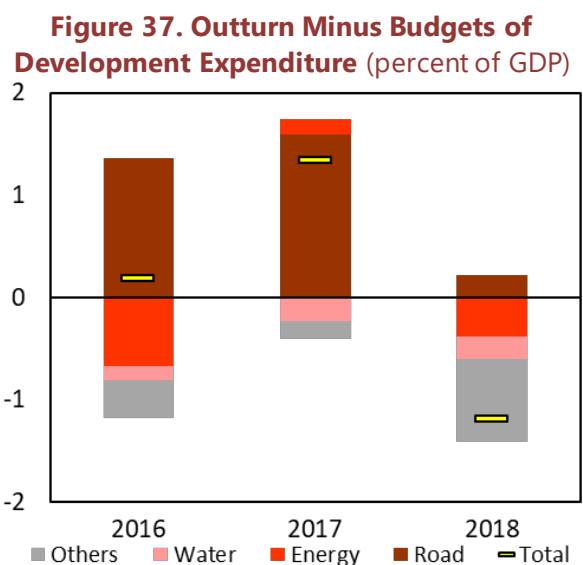
¹⁹ Appendix-4A, Development projects fund flows, the annual General Purpose Financial Statements, 2018.

The absence of timely and predictable funds for capital projects has adversely affected the budget execution and resulted in suspension of projects and accumulation of arrears.²⁰ The current mission undertook in-depth assessment of the allotment and budget execution process, which provides a set of recommendations.

13. Portfolio Management and Oversight (Design – Low; Effectiveness - Low)

70. Monitoring activity of major projects by central agencies is limited. For a capital project, a detailed monthly report on physical and financial progress, which is prepared by a consultant hired for a project, is submitted to MDAs. MDAs use these monthly reports to monitor project implementation. For example, the SLRA maintains a “project tracker” of ongoing projects, including updates of contracted and spent amount, physical progress, annual spending projections, and starting and ending dates. However, the purpose of project monitoring by the MoF and MoPED is centered in processing of quarterly allotments and invoice payments. MDAs’ project tracker is not consolidated into a central database. Neither the MoPED nor MoF regularly produce a report that analyzes and makes recommendations on project progress.²¹

71. Funds can be reallocated between projects, but the process for budget adjustments has not been transparent. Before the approval of the PFM Act 2016, the in-year adjustments were made through various procedures such as special presidential warrants, many of which were not transparent. This permitted both the original and revised budgets to be overspent through the execution. The PFM Act 2016 strengthened controls over the in-year adjustments. This includes new virement rules where the MoF can make reallocation within the same ministry up to 10 percent of total budget of that ministry; and reallocation between different ministries require the approval of a supplementary budget (Section 43). However, the progress in implementing the PFM Act 2016 has been somewhat slow. The budgets for road projects have been overspent for the last three years (Figure 37). Simultaneously, the budgets for other sectors’ projects, such as



Source: Staff estimates based on final accounts

²⁰ According to SLRA, seven road projects have been suspended due to non-availability of funds.

²¹ The government published “Nationwide Verification and Monitoring of On-Going Development Projects” included the Agenda for Prosperity in December 2015. However, this was a one-off monitoring activity. The MoF was producing a semiannual public investment report only until 2017.

energy and water, tend to be under-executed. The budget documents or final accounts do not explain how resources were reallocated across different ministries.

72. There is no systemic ex post review of major projects other than inspection of works for payments. MDAs and the MoF undertake in-field inspection of civil works, in order to process payments. An ex post review that assesses more broadly the project planning and implementation and discusses lessons learnt is regularly produced for externally financed projects as per the donor requirements. The MoPED has recently produced such ex-post review report that cover both externally and domestically financed projects, but the report is not published; and this is yet to be made a regular, systemic exercise.

73. In the absence of an ex post review, several projects have been abandoned or ceased to generate outputs, shortly after the completion. In the energy sector, examples include the solar-powered streetlight project and the procurement for thermal power plants in district headquarters project, both of which were domestically financed and implemented until 2016. The former built tens of streetlights each with a solar battery in every main township. Almost all these street lights stopped functioning soon after the completion, because of (i) the design flaw—a solar battery was designed for a dry weather and breaks in the rainy season; and (ii) the lack of economic analysis—maintenance parts are not available in Sierra Leone and so unaffordable. As discussed in Chapter II, the thermal power plants in district headquarters have ceased to generate powers, due to the EGTC's financial problem. Similar problems have occurred in a range of sectors. For example, seven vocational schools built in the late 2000s were all closed without being used for one day, due to the government change. Only one school has been converted into a college by a development partner, while the rest were abandoned. Currently, the National Monitoring and Evaluation Department (NAME) of the MoPED, which was established in 2018, is planning to produce an annual monitoring report of government program and projects. An ex post review is necessary to shed light on inefficient projects and draw lessons for the future projects.

14. Management of Project Implementation (Design – Medium; Effectiveness - Low)

74. Project management arrangements are in place, but reliable implementation plans are not always available before the budget approval. The arrangements somewhat vary across sectors. For the road sector, the SLRA has 66 qualified engineers from whom a project manager is appointed to each project. A consulting company is hired for each project, which reviews a design, stations engineers in the field, reviews invoices and Interim Payment Certificates (i.e. certificates of works done), and prepares a monthly progress report, which are sent to the SLRA's project manager for approval. In the energy and water sectors, SOEs are responsible for project implementation and appoint project managers from the engineers. For some externally-financed projects, a Project Implementation Unit is established (e.g. a Bo-Kenema transmission line project). MDAs in the social sector manage capital projects through internal engineers (e.g. the Ministry of Health and Sanitation). Because of significant and frequent project changes and delays, it is difficult for MDAs to prepare reliable implementation plans that

underlie the budget proposals. The March 2019 technical audit report found that in the road sector the SLRA did not have an updated work program of 18 ongoing road projects.

75. There is no standardized rules or procedures for project adjustments. There is no requirement to reappraise a project when there is a significant project adjustment. The Procurement Regulations provide that price variations exceeding 15 percent of the original price constitute a new procurement and require re-tendering. However, this rule has not been implemented for several capital projects (see Institution 11).

76. The absence of re-appraisal requirements motivates frequent and significant project changes and allows a new project to bypass the project appraisal. Such project changes caused cost overshoot and implementation delay and posed a challenge to the project feasibility. For example, the Tokeh-Lumely road project was originally designed as a 2-lane road but expanded to 4 lanes. The original design included two bridges, which were later removed and subsequently put back. The project is still ongoing ten years after the commencement, because the topological conditions of the last few kilometers is challenging to build a wide road. This project expansion and delay increased the total costs fivefold (Table 5). In addition, several new projects have been implemented as “addition” or “extension” or “Phase II” of ongoing projects, so that the new projects could bypass the project appraisal as well as the procurement process. This is caused by the absence of the project adjustment policy, which requires re-appraisal and re-selection of a project that is experiencing total cost increase exceeding a threshold or has passed certain number of years after the commencement.

Table 5. Sierra Leone: Examples of Cost Increases due to Project Changes (USD million)

	Original Contract	Revised Contract	Project Changes
Tokeh-Lumely road	28	140	Changing from 2 lane to 4 lanes
Roads in Bo, Kenema Makeni, Magburaka	10	80	Including 20.2km of additional roads in the original project of 21.2km of roads
Jomo-Kenyatta, Hill Cot Junction, Choithrams road	23	96	Adding Jomo-Kenyatta road as “Phase II” of the original project
Roads in Western Area of Freetown	9	34	Including various additional roads
Rokupr Spur – Mange – Mambolo road	14	37	Including 11 km of additional township roads
Roads in Moyamba, Pujehun, Matru Jong	15	36	Adding a new bridge, a new walkway,
Roads in Port Loko, Kambia, Lunsar	9	14	Including 7.2 km of additional roads in the original project of 14 km of roads

Source: SLRA project tracker, mission

77. The Audit Service conducted for the first time an external audit of 18 major road projects in March 2019. The March 2019 “technical audit,” cited elsewhere in this report, was a one-off exercise requested by the government. Previously, the Audit Service undertook only financial audits of major projects. The March 2019 technical audit assessed the public investment management process of 18 major road projects, including (i) the existence of feasibility studies,

economic analysis, and designs; (ii) the magnitude of project delay and cost increase; (iii) the procurement irregularities; and (iv) the evaluation of physical outputs in comparison with designs. This was undertaken by inviting experts from Kenya, Tanzania, and Uganda.

78. The absence of systemic ex post audit and follow-up process weakens an incentive for MDAs to comply with the public investment management process. Because the Audit Service does not have an engineer or project management expert, it does not have a plan to continue the technical audit on major infrastructure projects on a systemic, regular basis. In addition, there is no process in place to follow up on recommendations of the technical audit. The March 2019 technical audit report drew media attentions when it was published and submitted to Parliament, but the Public Account Committee is yet to prepare a recommendation in response to the report. MDAs also have not provided any substantive response to the report.

15. Monitoring of Public Assets (Design – Low; Effectiveness – Medium)

79. The asset register is neither comprehensive nor updated regularly. The National Asset and Government Property Commission is responsible for maintaining an asset register. However, the commission has been understaffed for a long time and is in a process of reforms. The asset register has been outdated and not comprehensive. Several government buildings appear to be occupied illegally and need to be stock-taken and recovered.

80. There are no statistics on government nonfinancial assets. The government finance statistics follows a cash basis and does not include information on public capital stock.

81. Some sectors have developed the own asset registers and been monitoring the assets conditions. As mentioned in Institution 9, the road sector maintains a road database used for prioritizing the maintenance needs. The health and education sectors are undertaking surveys of health and school facilities, in order to inform the development of a maintenance policy and the prioritization of capital projects in the future.

Recommendations on Investment Implementation

Issue 6.1: NPPA is mandated to ensure compliance with the procurement plans approved by the MoF, which has created lapses by allowing procuring entities to by-pass the regulatory authority.

Recommendation 6.1: Revise the Procurement Law and Regulations to allow for joint approval of procurement plans and robust coordination between MoF and NPPA.

Issue 6.2: NPPA and the wider public do not have complete information on the various stages of tendering or the award of contracts – legal requirement to publish contract award that exceeds the Le600 million threshold is often flouted.

Recommendation 6.2: The government should strengthen the capacity of NPPA by:

- providing the authority with sufficient financial and human resources to enforce the Law and harmonize public procurement processes in the public service;

- allowing the NPPA to exercise its mandate as required by Section 15 of the PPA that gives it power to obtain information and impose remedial sanctions for noncompliance.

Issue 6.3: There is insufficient database and scrappy information covering all public procurement activities; and the NPPA does not have database on major investment projects and there is no mechanism in place to collect procurement data from procuring entities

Recommendation 6.3: The government should expedite the implementation of the online electronic procurement system (e-Procurement) and make it mandatory for all large investment project.

Issue 6.4: Contract management of capital projects is characterized by delays in implementation process, variations to contract far above the original cost, price adjustments during project implementation and cancellation of contracts pre-maturely due to lack of funds.

Recommendation 6.4: The government should develop:

- systems for managing contracts for capital projects and ensure that all designs are comprehensive and approved by a panel of experts and the NPPA before implementation;
- procedures for variations, price adjustments and contract amendments to ensure that they are in accordance with the law and approved by NPPA in open and transparent way;

Issue 6.5: There is an independent procurement review panel (IPRP) that reviews complaints but it has heard on few complaints and where complaints are made there are significant delays in decision making due to lack capacity and its complaints' resolutions are not published.

Recommendation 6.5: Organize regular training programs for the IPRP to enhance its capacity to complete reviews in a reasonable time; and raise public awareness and sensitization about existence of independent review panel to build public trust and confidence in the Panel and make its resolutions.

Issue 7: Delayed and unpredictable invoice payments severely affected the project implementation and led to accumulation of arrears.

Recommendation 7: Improve the quarterly allotment and commitment controls for capital projects by implementing recommendations of the in-depth assessment report by the current mission.

Issue 8: Several projects are abandoned or ceased to generate outputs soon after the completion.

Recommendation 8: Undertake ex post review and audit of major capital projects in a regular, systemic manner by:

- Operationalizing the NaMED and producing an annual report on public investment projects, which should be published;
- Assessing the resource needs for the Audit Service to undertake regular ex-post technical audits of major capital projects.

Issue 9: Several new projects or significant project expansion have been implemented as changes in existing projects without being appraised

Recommendation 9: Develop and implement the project adjustment rules by:

- Requiring a project to be re-appraised and re-selected when (i) an increase in the total costs exceeds a threshold or (ii) the project is ongoing for more than a certain number of years;
- Applying this project adjustment policy to major ongoing projects which require more than few years to be completed.

CROSS CUTTING ISSUES

H. IT Support

82. A computerized information system for capital projects is available in some sectors but not at a central agency. As mentioned in Institution 9, the road sector uses a specific software to maintain a road database and prioritize the maintenance needs. The MoPED uses an excel to monitor project progress. The NaMED is planning to procure a computerized system to support its monitoring activities.

83. The MoPED should be given at least access to the IFMIS in order to facilitate their project monitoring. The Public Investment Management Department has lost access to the IFMIS when the MoPED was separated from the MoF. It is expected to recover access to the IFMIS in the next months.

I. Legal Framework

84. The PFM Act and Regulations provide the sound legal framework for public investment management. The PFM Act 2016 and the PFM Regulations 2018 were prepared with the support of a series of FAD missions. Section 35(1) of the PFM Act 2016 requires the budget documents to include a "Public Investment Program," which is required to present medium-term spending projections, multiannual commitments, and other details of all PPPs and development projects. The same section empowers the Minister of Finance to issue the methodologies for public investment management. Building on these sections of the Act, the PFM Regulations 2018 set out (i) the principles of affordability, economic viability, and best option for all major projects and PPPs (regulation 19(1)); (ii) the gatekeeping role of the Minister of Finance to assess these principles and refuse un-appraised projects to be included in the budget (regulations 19(1)

20(4)); (iii) the requirement of project preparation and appraisal to comply with the “Public Investment Operational Manual” published by the Minister of Finance (regulations 19(5) and 20(1)); (iv) the requirement of project costing information during the budget process (regulation 20(2)); and (v) prohibition of moving to procurement process before a project is included in the budget (regulation 21(2)).

85. The implementation of the PFM Act and Regulations requires the publication of the Public Investment Guidelines and Manuals. As noted above, there is the robust legal framework for public investment management. However, as discussed in elsewhere in this report, the implementation of the new legal framework has been slow. As discussed in Institution 10, developing and publishing the Public Investment Guidelines and Manuals is a key to facilitate the implementation of the legal framework.

J. Staff Capacity

86. It is critical to develop staff capacity of the MoPED Public Investment Management Department (PIMD), which is responsible for performing the gatekeeping roles. As mentioned elsewhere in this report, the MoPED PIMD is responsible for screening and prioritizing project proposals and appraisals and maintaining a project pipeline. In order to perform such responsibilities and implement the reforms recommended by this report, the staff capacity of the PIMD needs to be enhanced, as it is still a young department developed in 2014. In particular, the capacity to scrutinize and challenge feasibility studies and economic analysis prepared by MDAs and monitor and advise on project progress will be a key area of development.

87. Follow-up technical support from development partners is needed for the capacity development. The short-term priority areas of such technical support include (i) the development of a template for project appraisal, in particular economic analysis; (ii) the design of a prioritized pipeline of appraised projects; and (iii) the methodologies and outputs of project monitoring including ex post review. For the MoF and MoPED, technical support may also be needed for (i) the development of an expanded annex on public investments in the budget document discussed in Institution 6; and (ii) the costing methodologies for assessing impacts of project delay and changes on total and annual costs of projects as discussed in Institution 8.

Appendix I. Proposed Action Plan

Recommendation	2020	2021	2022	Responsible agency	Follow-up needs
Improve the transparency in sectoral strategies and their consistency with the MTNDP	Publishing a Master Plan on Road Sectors for the MTNDP period, with costing information of individual projects			MoWPA SLRA	
		Reviewing sectoral strategies prepared before the MTNDP approval and making updates necessary for aligning them with the MTNDP		MoPED MDAs	
Project appraisal should be strengthened	Publish all existing appraisals of ongoing capital projects	Developing and publishing the guidelines and template upon which the MoPED will review the appraisal of new projects	Enforcing section 73 of the PFM Act 2016 that requires that all capital projects being proposed are accompanied with their cost and appraisal documents;	MoPED	Yes
Increase transparency in total costs and multiyear contracts of capital projects and improve the budget credibility	Clarifying in the Budget Call Circular that a project change that increases total costs by a certain threshold is considered as a new project and is deprioritized in the budget process.	Publishing an annex of the annual budget, which presents, for each project, (i) updated total costs, (ii) updated value of multiannual contracts, (iii) amount already paid, (iv) amount of unpaid		MoF MoPED	

Recommendation	2020	2021	2022	Responsible agency	Follow-up needs
		invoices, and (v) updated project completion date			
Protect funding for routine maintenance		Creating a separate line item in the budget for routine maintenance of each MDA; Presenting in the budget document the RMF budget with clear allocations to routine maintenance of SLRA and local districts, separately from other expense.	Requiring each sector to prepare and publish a maintenance policy	MoF MoPED	
Establish a project selection process based on the transparent criteria and prioritized pipeline of projects by:	Developing methodologies for scrutinizing the feasibility studies and economic analysis and prioritizing appraised projects	Publishing the project selection criteria as part of the public investment guidelines and manuals required under the PFM Regulations	Maintaining a prioritized pipeline of all appraised projects	MoPED	Yes
Strengthen the public procurement framework	Expedite the implementation of the online electronic procurement system (e-Procurement) and make it mandatory for all large investment project.	Revise the Procurement Law and Regulations to allow for joint approval of procurement plans and robust coordination between MoF and NPPA.		NPPA MoF GoSL	Yes
Strengthen the capacity of NPPA	Providing the authority with sufficient financial and human resources to enforce	Allowing the NPPA to exercise its mandate as required by Section 15 of the		NPPA MoF	Yes

Recommendation	2020	2021	2022	Responsible agency	Follow-up needs
	the Law and harmonize public procurement processes in the public service	PPA that gives it power to obtain information and impose remedial sanctions for noncompliance			
Improve contract management and enforce rules on variations, price adjustments, and contract amendments	Developing procedures for variations, price adjustments and contract amendments to ensure that they are in accordance with the law and approved by NPPA in open and transparent way	Developing systems managing contracts for capital projects and ensure that all designs are comprehensive and approved by a panel of experts and the NPPA before implementation		NPPA MoF	Yes
Strengthen capacity of IPRP	Organize regular training programs for the IPRP to enhance its capacity to complete reviews in a reasonable time	Raise public awareness and sensitization about existence of independent review panel to build public trust and confidence in the Panel and make its resolutions		IPRP NPPA MoF	Yes
Improve the quarterly allotment and commitment controls	Implement recommendations of the in-depth assessment report by the current mission	Implement recommendations of the in-depth assessment report by the current mission	Implement recommendations of the in-depth assessment report by the current mission	MoF AGD	Yes
Undertake ex-post review and audit of major capital projects in a regular, systemic manner	Assessing the resource needs for the Audit Service to undertake regular ex-post technical audits of major capital projects.	Operationalizing the NAME and producing an annual report on public investment projects, which should be published.		MoF MoPED Audit Service	Yes

Recommendation	2020	2021	2022	Responsible agency	Follow-up needs
Develop and implement the project adjustment rules	Requiring a project to be re-appraised and re-selected when (i) an increase in the total costs exceeds a threshold or (ii) the project is ongoing for more than a certain number of years	Appraise major ongoing projects which require more than few years to be completed.		MoPED MoF	Yes

Appendix II. PIMA Questionnaire

A. Planning Sustainable Levels of Public Investment				
1. Fiscal targets and rules: Does the government have fiscal institutions to support fiscal sustainability and to facilitate medium-term planning for public investment?				
1.a.	Is there a target or limit for government to ensure debt sustainability?	There is no target or limit to ensure debt sustainability.	There is at least one target or limit to ensure central government debt sustainability.	There is at least one target or limit to ensure general government debt sustainability.
1.b.	Is fiscal policy guided by one or more permanent fiscal rules?	There are no permanent fiscal rules.	There is at least one permanent fiscal rule applicable to central government.	There is at least one permanent fiscal rule applicable to central government, and at least one comparable rule applicable to a major additional component of general government, such as subnational government (SNG).
1.c.	Is there a medium-term fiscal framework (MTFF) to align budget preparation with fiscal policy?	There is no MTFF prepared prior to budget preparation.	There is an MTFF prepared prior to budget preparation but it is limited to fiscal aggregates, such as expenditure, revenue, the deficit, or total borrowing.	There is an MTFF prepared prior to budget preparation, which includes fiscal aggregates and allows distinctions between recurrent and capital spending, and ongoing and new projects.
2. National and Sectoral Planning: Are investment allocation decisions based on sectoral and inter-sectoral strategies?				
2.a.	Does the government prepare national and sectoral strategies for public investment?	National or sectoral public investment strategies or plans are prepared, covering only some projects found in the budget.	National or sectoral public investment strategies or plans are published covering projects funded through the budget.	Both national and sectoral public investment strategies or plans are published and cover all projects funded through the budget regardless of financing source (e.g., donor, public corporation (PC), or PPP financing).
2.b.	Are the government's national and sectoral strategies or plans for public investment costed?	The government's investment strategies or plans include no cost information on planned public investment.	The government's investment strategies include broad estimates of aggregate and sectoral investment plans.	The government's investment strategies include costing of individual, major investment projects within an overall financial constraint.

2.c.	Do sector strategies include measurable targets for the outputs and outcomes of investment projects?	Sector strategies do not include measurable targets for outputs or outcomes.	Sector strategies include measurable targets for outputs (e.g., miles of roads constructed).	Sector strategies include measurable targets for both outputs and outcomes (e.g., reduction in traffic congestion).
3. Coordination between Entities: Is there effective coordination of the investment plans of central and other government entities?				
3.a.	Is capital spending by SNGs, coordinated with the central government?	Capital spending plans of SNGs are not submitted to, nor discussed with central government.	Major SNG capital spending plans are published alongside central government investments, but there are no formal discussions, between the central government and SNGs on investment priorities.	Major SNG capital spending plans are published alongside central government investments, and there are formal discussions between central government and SNGs on investment priorities.
3.b.	Does the central government have a transparent, rule-based system for making capital transfers to SNGs, and for providing timely information on such transfers?	The central government does not have a transparent rule-based system for making capital transfers to SNGs.	The central government uses a transparent rule-based system for making capital transfers to SNGs, but SNGs are notified about expected transfers less than six months before the start of each fiscal year.	The central government uses a transparent rule-based system for making capital transfers to SNGs, and expected transfers are made known to SNGs at least six months before the start of each fiscal year.
3.c.	Are contingent liabilities arising from capital projects of SNGs, PCs, and PPPs reported to the central government?	Contingent liabilities arising from major projects of SNGs, PCs, and PPPs are not reported to the central government.	Contingent liabilities arising from major projects of SNGs, PCs, and PPPs are reported to the central government, but are generally not presented in the central government's budget documents.	Contingent liabilities arising from major projects of SNGs, PCs, and PPPs are reported to the central government, and are presented in full in the central government's budget documents.
4. Project Appraisal: Are project proposals subject to systematic project appraisal?				
4.a.	Are major capital projects subject to rigorous technical, economic, and financial analysis?	Major capital projects are not systematically subject to rigorous, technical, economic, and financial analysis.	Major projects are systematically subject to rigorous technical, economic, and financial analysis.	Major projects are systematically subject to rigorous technical, economic, and financial analysis, and selected results of this analysis are published or undergo independent external review.
4.b.	Is there a standard methodology and central support for the appraisal of projects?	There is no standard methodology or central support for project appraisal.	There is either a standard methodology or central support for project appraisal.	There is both a standard methodology and central support for project appraisal.

4.c.	Are risks taken into account in conducting project appraisals?	Risks are not systematically assessed as part of the project appraisal.	A risk assessment covering a range of potential risks is included in the project appraisal.	A risk assessment covering a range of potential risks is included in the project appraisal, and plans are prepared to mitigate these risks.
5. Alternative Infrastructure Financing: Is there a favorable climate for the private sector, PPPs, and PCs to finance in infrastructure?				
5.a.	Does the regulatory framework support competition in contestable markets for economic infrastructure (e.g., power, water, telecoms, and transport)?	Provision of economic infrastructure is restricted to domestic monopolies, or there are few established economic regulators.	There is competition in some economic infrastructure markets, and a few economic regulators have been established.	There is competition in major economic infrastructure markets, and economic regulators are independent and well established.
5.b.	Has the government published a strategy/policy for PPPs, and a legal/regulatory framework which guides the preparation, selection, and management of PPP projects?	There is no published strategy/policy framework for PPPs, and the legal/regulatory framework is weak.	A PPP strategy/policy has been published, but the legal/regulatory framework is weak.	A PPP strategy/policy has been published, and there is a strong legal/regulatory framework that guides the preparation, selection, and management of PPP projects.
5.c.	Does the government oversee the investment plans of public corporations (PCs) and monitor their financial performance?	The government does not systematically review the investment plans of PCs.	The government reviews the investment plans of PCs, but does not publish a consolidated report on these plans or the financial performance of PCs.	The government reviews and publishes a consolidated report on the investment plans and financial performance of PCs.
B. Ensuring Public Investment is Allocated to the Right Sectors and Projects				
6. Multiyear Budgeting: Does the government prepare medium-term projections of capital spending on a full cost basis?				
6.a.	Is capital spending by ministry or sector forecasted over a multiyear horizon?	No projections of capital spending are published beyond the budget year.	Projections of total capital spending are published over a three to five-year horizon.	Projections of capital spending disaggregated by ministry or sector are published over a three to five-year horizon.
6.b.	Are there multiyear ceilings on capital expenditure by ministry, sector, or program?	There are no multiyear ceilings on capital expenditure by ministry, sector, or program.	There are indicative multiyear ceilings on capital expenditure by ministry, sector, or program.	There are binding multiyear ceilings on capital expenditure by ministry, sector, or program.

6.c.	Are projections of the total construction cost of major capital projects published?	Projections of the total construction cost of major capital projects are not published.	Projections of the total construction cost of major capital projects are published.	Projections of the total construction cost of major capital projects are published, together with the annual breakdown of these cost over a three-five-year horizon.
7. Budget Comprehensiveness and Unity: To what extent is capital spending, and related recurrent spending, undertaken through the budget process?				
7.a.	Is capital spending mostly undertaken through the budget?	Significant capital spending is undertaken by extra-budgetary entities with no legislative authorization or disclosure in the budget documentation.	Significant capital spending is undertaken by extra-budgetary entities, but with legislative authorization and disclosure in the budget documentation.	Little or no capital spending is undertaken by extra-budgetary entities.
7.b.	Are all capital projects, regardless of financing source, shown in the budget documentation?	Capital projects are not comprehensively presented in the budget documentation, including PPPs, externally financed, and PCs' projects.	Most capital projects are included in the budget documentation, but either PPPs, externally financed, or PCs' projects are not shown.	All capital projects, regardless of financing sources, are included in the budget documentation.
7.c.	Are capital and recurrent budgets prepared and presented together in the budget?	Capital and recurrent budgets are prepared by separate ministries, and/or presented in separate budget documents.	Capital and recurrent budgets are prepared by a single ministry and presented together in the budget documents, but without using a program or functional classification.	Capital and recurrent budgets are prepared by a single ministry and presented together in the budget documents, using a program or functional classification.
8. Budgeting for Investment: Are investment projects protected during budget implementation?				
8.a.	Are total project outlays appropriated by the legislature at the time of a project's commencement?	Outlays are appropriated on an annual basis, but information on total project costs is not included in the budget documentation.	Outlays are appropriated on an annual basis, and information on total project costs is included in the budget documentation.	Outlays are appropriated on an annual basis and information on total project costs, and multiyear commitments is included in the budget documentation.
8.b.	Are in-year transfers of appropriations (virement) from capital to current spending prevented?	There are no limitations on virement from capital to current spending.	The finance ministry may approve virement from capital to current spending.	Virement from capital to current spending requires the approval of the legislature.

8.c.	Is the completion of ongoing projects given priority over starting new projects?	There is no mechanism in place to protect funding of ongoing projects.	There is a mechanism to protect funding for ongoing projects in the annual budget.	There is a mechanism to protect funding for ongoing projects in the annual budget and over the medium term.
9. Maintenance Funding: Are routine maintenance and major improvements receiving adequate funding?				
9.a.	Is there a standard methodology for estimating routine maintenance needs and budget funding?	There is no standard methodology for determining the needs for routine maintenance.	There is a standard methodology for determining the needs for routine maintenance and its cost.	There is a standard methodology for determining the needs for routine maintenance and its cost, and the appropriate amounts are generally allocated in the budget.
9.b.	Is there a standard methodology for determining major improvements (e.g. renovations, reconstructions, enlargements) to existing assets and are they included in national and sectoral investment plans?	There is no standard methodology for determining major improvements, and they are not included in national or sectoral plans.	There is a standard methodology for determining major improvements, but they are not included in national or sectoral plans.	There is a standard methodology for determining major improvements, and they are included in national or sectoral plans.
9.c.	Can expenditures relating to routine maintenance and major improvements be identified in the budget?	Routine maintenance and major improvements are not systematically identified in the budget.	Routine maintenance and major improvements are systematically identified in the budget.	Routine maintenance and major improvements are systematically identified in the budget, and are reported.
10. Project Selection: Are there institutions and procedures in place to guide project selection?				
10.a.	Does the government undertake a central review of major project appraisals before decisions are taken to include projects in the budget?	Major projects (including donor- or PPP-funded) are not reviewed by a central ministry prior to inclusion in the budget.	Major projects (including donor- or PPP-funded) are reviewed by a central ministry prior to inclusion in the budget.	All major projects (including donor- or PPP-funded) are scrutinized by a central ministry, with input from an independent agency or experts prior to inclusion in the budget.
10.b.	Does the government publish and adhere to standard criteria, and stipulate a required process for project selection?	There are no published criteria or a required process for project selection.	There are published criteria for project selection, but projects can be selected without going through the required process.	There are published criteria for project selection, and generally projects are selected through the required process.
10.c.	Does the government maintain a pipeline of appraised investment projects for inclusion in the annual budget?	The government does not maintain a pipeline of appraised investment projects.	The government maintains a pipeline of appraised investment projects but other projects may be selected for financing through the annual budget.	The government maintains a comprehensive pipeline of appraised investment projects, which is used for selecting projects for inclusion in the annual budget, and over the medium term.

C. Delivering Productive and Durable Public Assets				
11. Procurement				
11.a.	Is the procurement process for major capital projects open and transparent?	Few major projects are tendered in a competitive process, and the public has limited access to procurement information.	Many major projects are tendered in a competitive process, but the public has only limited access to procurement information.	Most major projects are tendered in a competitive process, and the public has access to complete, reliable and timely procurement information.
11.b.	Is there a system in place to ensure that procurement is monitored adequately?	There is no procurement database, or the information is incomplete or not timely for most phases of the procurement process.	There is a procurement database with reasonably complete information, but no standard analytical reports are produced from the database.	There is a procurement database with reasonably complete information, and standard analytical reports are produced to support a formal monitoring system.
11.c.	Are procurement complaints review process conducted in a fair and timely manner?	Procurement complaints are not reviewed by an independent body.	Procurement complaints are reviewed by an independent body, but the recommendations of this body are not produced on a timely basis, nor published, nor rigorously enforced.	Procurement complaints are reviewed by an independent body whose recommendations are timely, published, and rigorously enforced.
12. Availability of Funding: Is financing for capital spending made available in a timely manner?				
12.a.	Are ministries/agencies able to plan and commit expenditure on capital projects in advance on the basis of reliable cash-flow forecasts?	Cash-flow forecasts are not prepared or updated regularly, and ministries/agencies are not provided with commitment ceilings in a timely manner.	Cash-flow forecasts are prepared or updated quarterly, and ministries/agencies are provided with commitment ceilings at least a quarter in advance.	Cash-flow forecasts are prepared or updated monthly, and ministries/agencies are provided with commitment ceilings for the full fiscal year.
12.b.	Is cash for project outlays released in a timely manner?	The financing of project outlays is frequently subject to cash rationing.	Cash for project outlays is sometimes released with delays.	Cash for project outlays is normally released in a timely manner, based on the appropriation.
12.c.	Is external (donor) funding of capital projects fully integrated into the main government bank account structure?	External financing is largely held in commercial bank accounts outside the central bank.	External financing is held at the central bank, but is not part of the main government bank account structure.	External financing is fully integrated into the main government bank account structure.

13. Portfolio Management and Oversight: Is adequate oversight exercised over implementation of the entire public investment portfolio				
13.a.	Are major capital projects subject to monitoring during project implementation?	Most major capital projects are not monitored during project implementation.	For most major projects, annual project costs, as well as physical progress, are monitored during project implementation.	For all major projects, total project costs, as well as physical progress, are centrally monitored during project implementation.
13.b.	Can funds be re-allocated between investment projects during implementation?	Funds cannot be re-allocated between projects during implementation.	Funds can be reallocated between projects during implementation, but not using systematic monitoring and transparent procedures.	Funds can be re-allocated between projects during implementation, using systematic monitoring and transparent procedures.
13.c.	Does the government adjust project implementation policies and procedures by systematically conducting ex-post reviews of projects that have completed their construction phase?	Ex-post reviews of major projects are neither systematically required, nor frequently conducted.	Ex-post reviews of major projects, focusing on project costs, deliverables and outputs, are sometimes conducted.	Ex-post reviews of major projects focusing on project costs, deliverables, and outputs are conducted regularly by an independent entity or experts, and are used to adjust project implementation policies and procedures.
14. Management of Project Implementation: Are capital projects well managed and controlled during the execution stage?				
14.a.	Do ministries/agencies have effective project management arrangements in place?	Ministries/agencies do not systematically identify senior responsible officers for major investment projects, and implementation plans are not prepared prior to budget approval.	Ministries/agencies systematically identify senior responsible officers for major investment projects, but implementation plans are not prepared prior to budget approval.	Ministries/agencies systematically identify senior responsible officers for major investment projects, and implementation plans are prepared prior to budget approval.
14.b.	Has the government issued rules, procedures and guidelines for project adjustments that are applied systematically across all major projects?	There are no standardized rules and procedures for project adjustments.	For major projects, there are standardized rules and procedures for project adjustments, but do not include, if required, a fundamental review and reappraisal of a project's rationale, costs, and expected outputs.	For all projects, there are standardized rules and procedures for project adjustments and, if required, include a fundamental review of the project's rationale, costs, and expected outputs.

14.c.	Are ex-post audits of capital projects routinely undertaken?	Major capital projects are usually not subject to ex-post external audits.	Some major capital projects are subject to ex-post external audit, information on which is published by the external auditor.	Most major capital projects are subject to ex-post external audit information on which is regularly published and scrutinized by the legislature.
15. Monitoring of Public Assets: Is the value of assets properly accounted for and reported in financial statements?				
15.a.	Are asset registers updated by surveys of the stocks, values, and conditions of public assets regularly?	Asset registers are neither comprehensive nor updated regularly.	Asset registers are either comprehensive or updated regularly at reasonable intervals.	Asset registers are comprehensive and updated regularly at reasonable intervals.
15.b.	Are nonfinancial asset values recorded in the government financial accounts?	Government financial accounts do not include the value of non-financial assets.	Government financial accounts include the value of some non-financial assets, which are revalued irregularly.	Government financial accounts include the value of most nonfinancial assets, which are revalued regularly.
15.c.	Is the depreciation of fixed assets captured in the government's operating statements?	The depreciation of fixed assets is not recorded in operating statements.	The depreciation of fixed assets is recorded in operating statements, based on statistical estimates.	The depreciation of fixed assets is recorded in operating expenditures, based on asset-specific assumptions.
Cross-cutting issues				
A	IT support. Is there a comprehensive computerized information system for public investment projects to support decision making and monitoring?			
B	Legal Framework. Is there a legal and regulatory framework that supports institutional arrangements, mandates, coverage, procedures, standards and accountability for effective PIM?			
C	Staff capacity. Does staff capacity (number of staff and/or their knowledge, skills, and experience) and clarity of roles and responsibilities support effective PIM institutions?			