

### INTERNATIONAL MONETARY FUND

**IMF Country Report No. 23/300** 

## **RWANDA**

August 2023

# TECHNICAL ASSISTANCE REPORT – PUBLIC INVESTMENT MANAGEMENT ASSESSMENT – PIMA AND CLIMATE PIMA

This Technical Assistance Report on Rwanda 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 August 2022.

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: <a href="mailto:publications@imf.org">publications@imf.org</a> Web: <a href="http://www.imf.org">http://www.imf.org</a>

Price: \$18.00 per printed copy

International Monetary Fund Washington, D.C.



# TECHNICAL ASSISTANCE REPORT

## **RWANDA**

Public Investment Management Assessment – PIMA and Climate PIMA

**AUGUST 2022** 

**Prepared By** 

Bryn Battersby, Imran Aziz, Andrew Ceber, Eivind Tandberg, and Willie Du Preez

**Authoring Departments** 

**Fiscal Affairs Department** 

©2023 International Monetary Fund
The contents of this document constitute technical advice provided by the staff of the International
Monetary Fund to the authorities of Rwanda (the "CD recipient") in response to their request for technical
assistance. Unless the CD recipient specifically objects to such disclosure, this document (in whole or in part) or summaries thereof may be disclosed by the IMF to the IMF Executive Director for Rwanda, to
other IMF Executive Directors and members of their staff, as well as to other agencies or instrumentalities
of the CD recipient, and upon their request, to World Bank staff, and other technical assistance providers
and donors with legitimate interest (see <u>Staff Operational Guidance on the Dissemination of Capacity</u>
<u>Development Information</u> ). Publication or Disclosure of this report (in whole or in part) to parties outside the IMF other than agencies or instrumentalities of the CD recipient, World Bank staff, other technical
assistance providers and donors with legitimate interest shall require the explicit consent of the CD
recipient and the IMF's Fiscal Affairs department.

This technical assistance (TA) was provided with financial support from the Government of Japan.

## **Contents**

Abbreviations and Acronyms	6
Preface	7
Executive Summary	8
Recommendations	13
I. PUBLIC INVESTMENT IN RWANDA	15
A. Public Investment, Capital Stock, and Fiscal Policy	15
B. Composition and Financing of Public Investment	19
II. THE EFFICIENCY OF PUBLIC INVESTMENT	21
III. PUBLIC INVESTMENT MANAGEMENT INSTITUTIONS	23
A. The PIMA Framework	23
B. Overall Assessment	24
C. Investment Planning	25
D. Investment Allocation	31
E. Investment Implementation	37
IV. CLIMATE CHANGE PUBLIC INVESTMENT MANAGEMENT ASSESSMENT	44
A. Climate Change and Public Infrastructure in Rwanda	44
B. Evaluation Using the PIMA Climate Module	45
V. CROSS-CUTTING ISSUES	53
A. Legal Framework	53
B. IT Systems and Data Management	55
C. Capacity	56
Boxes	
Development Planning Framework and National Transformation Strategy	18
Key Changes to the Budget Calendar to Enforce MTEF Ceilings	32
3. Identified Concerns Across Procurement Entities	39
4. Shortfalls Identified by the OAG and RPPA in Project Management	42
5. Irregularities in Asset Management Identified by the OAG	43
6. Rwanda's Nationally Determined Contribution (NDC) 2020 Update	45
7. Overview of the Mainstreaming of Climate Change Interventions in the Planning and Budgeting	
Process	48
Figures	
Rwanda PIMA: Institutional Design and Effectiveness	9
Institutional Strength of Climate Change-Related Public Investment Management	10

3a. Rwanda: Composition of Total	16
3b. General Government Investment	16
4a. Public Capital Stock and Investment	16
4b. Capital Stock Comparison	16
5a. Capital vs Current Spending – Rwanda and sub-Saharan Africa	17
5b. Deficit and Debt	17
6a. Capital Spending by Level of Government	19
6b. Major PC by Assets and Liabilities	19
6c. Investment by Funding Source	20
7a. Public Private Partnership, Capital Stock	20
7b. Public Private Partnership,Capital Stock, 2019	20
8a. Measures of Physical Access to Infrastructure	21
8b. Perceived Infrastructure Quality	21
9a. Public Investment Efficiency Frontier, Hybrid Indicator	22
9b. Public Investment Efficiency	22
10. PIMA Framework	23
11. Design of Public Investment Management Institutions	24
12. Effectiveness of Public Investment Management Institutions	25
13. Change in Planned Annual Expenditure from Budget Framework to Enacted Budget	26
14. Checklist for Risk Analysis in Project Appraisal	28
15. MTEF Ceilings, Annual Budgets, and Outturns	31
15a. Development ceilings, budgets, and actuals	31
15b. MTEF Ceilings and actuals	31
16. Net Virements from the Capital Budget	34
17. Rwanda NDC Emission Scenarios	45
18. Rwanda Adaptation Investment Requirements	45
19. Climate Public Investment Management Assessment Framework	46
20. Expected Average Annual Loss	51
21. Possible Organizational Structure of the National Investment Department	57
Tables	
1. PIMA Summary Assessment for Rwanda	11
2. C-PIMA Summary Assessment for Rwanda	
3. Rwanda: Summary of Recommendations	
4. Competition in Infrastructure Markets	
5. Variance between Budget Capital Ceilings and the Finance Law	32
6. Acquisition of Nonfinancial Assets by Extrabudgetary Units	
7. LODA Minimum Maintenance Costs	
8. Awarded Tenders in 2018/19	
9. Summary of Appeals from 2010 to 2021	
10. Details of Slow Progress at Project Sites	
11. Legislation, Regulations, and Guidelines for Public Investment Management	
12. Key Functions of the Planned Project Module in the IFMIS	
13. Broad Functions of Each Section in the Public Investment Management Unit	

#### **Annexes**

1. ACTION PLAN	58
2. PIMA QUESTIONNAIRE	62
3. DETAILED PIMA SCORES	71
4. PROPOSED REVISED BUDGET CALENDAR	72
5. SUGGESTED FORMAT TO INCLUDE TOTAL PROJECT	80
6. TRANSPARENCY IN PROJECT	81
7. THE CALIFORNIAN S-CURVE	82
8. CLIMATE CHANGE AND GREEN BUDGETING	83

## **Abbreviations and Acronyms**

BA Budget agency

BAU Business as usual

BFP Budget Framework Paper

C-PIMA Climate module of the PIMA

EAC East African Community

EBU Extra budgetary unit

EIA Environmental Impact Assessment

FAD Fiscal Affairs Department

GDP Gross domestic product

GHG Greenhouse gas

IFMIS Integrated Financial Management and Information System

IMF International Monetary Fund

LODA Local Administrative Entities Development Agency

MINALOC Ministry of Local Government

MINECOFIN Ministry of Finance and Economic Planning

MININFRA Ministry of Infrastructure

MTEF Medium-term expenditure framework

MTFF Medium-term fiscal framework

NDC Nationally determined contribution

NST National Strategy for Transformation

OAG Office of the Auditor General

OLSFP Organic Law on State Finances and Property

PC Public corporation

PIC Public Investment Committee

PIMA Public Investment Management Assessment

PPP Public-private partnership

RPPA Rwanda Public Procurement Authority

RWF Rwandan Franc

SNG Sub-national government

USD US Dollar

#### **Preface**

At the request of the Ministry of Finance and Economic Planning (MINECOFIN) of Rwanda, a team from the IMF's Fiscal Affairs Department (FAD) undertook a Public Investment Management Assessment (PIMA) and Climate PIMA (C-PIMA) during the periods from January 17-28 (virtually) and April 11-22 (in person). The mission team was led by Bryn Battersby and comprised, Andrew Ceber (fiscal economist), Eivind Tandberg (all FAD) Imran Aziz (AFE) and Willie du Preez (FAD expert). The mission was provided with funding assistance from Japan.

The mission met the Minister of State in charge of Economic Planning, Dr. Uwera Claudine, at the outset and close of the mission, who provided helpful guidance to the mission on the public investment management priorities in Rwanda.

The mission conducted meetings with ministries, departments, and agencies involved in public investment and climate change in Rwanda. Within MINECOFIN, the mission held meetings with the National Planning Directorate, the National Projects and Programmes Directorate, the National Investment Department, the Budget Directorate, the Macroeconomic Directorate, the Debt Management Directorate, the Accountant General's Department, the Fiscal Decentralization Directorate, and the Planning Directorate.

The mission team also met with senior representatives from the Rwanda Development Board, the Ministry of Infrastructure, the Ministry of Local Government, the Local Administrative Entities Development Agency, the Ministry of Environment, the Ministry of Health, the Rwanda Environment Management Authority, the Office of the Auditor General, the Rwanda Competition Authority, the Rwanda Utilities Regulation Authority, the Rwanda Transport Development Agency, the Rwanda Housing Authority, and the Rwanda Public Procurement Authority.

The mission team also met with public corporations and district governments, including the Rwanda Energy Group, the Energy Development Corporation Limited, the Water Sanitation Corporation, the City of Kigali, the District of Rwamagana, and the District of Rubavu.

The mission team would like to thank the Rwandan government for their cooperation and their participation in constructive discussions during the mission, and especially Mr. Emmanuel Nyirimana for coordinating all mission activities and requests.

### **Executive Summary**

Public investment to support economic transformation has been a high priority for the Rwandan government. The Rwandan government's objective is for Rwanda to reach middle-income status by 2035 and high-income status by 2050, with public investment playing an important role in supporting this vision. The role of public investment in achieving these goals was initially elaborated on in Vision 2020 and later Vision 2050, which focused investment on human capital development, growth-enhancing infrastructure, and developing areas of higher value economic activity. Public investment has averaged around 10 percent of gross domestic product (GDP) since the early 2000, though given depreciation and the high rate of economic growth, this is only sufficient to keep the public capital stock steady. Investment has accelerated in recent years with several large public sector projects, including the Kigali Convention Center, the Kigali Arena, and Bugesera International Airport. As a result, Rwanda's level of public investment is now well above comparator countries and other low-income developing countries.

While measures of public investment access are mixed in Rwanda, impressions of the quality of infrastructure far exceeds those in peer countries. Rwanda faces challenging infrastructure needs as it is a landlocked country with complex geography. Consequently, Rwanda is one of the highest-cost destinations in the world for a shipping container to reach. Access to public education and drinking water infrastructure lags other low-income countries, though this has improved significantly over the past decade. Rwanda performs more strongly on measures of access to health infrastructure, outperforming peer countries on access to hospital beds.

Measured against other sub-Saharan countries, Rwanda performs well in the design and effectiveness of public investment management institutions. Rwanda also performs strongly when compared with emerging market economies. Measures of institutional design show how well Rwanda rates in terms of its existing laws and regulations, as well as the formal guidelines and instructions issued by the government to implement these laws. The Public Investment Management Assessment (PIMA) diagnostic tool also measures how effectively, in practice, the government implements and enforces these laws and regulations. On both measures of the strength of institutional design and effectiveness, Rwanda performs well, though more strongly on design than on effectiveness (Figure 1 and Table 1).

Across the PIMA, Rwanda is particularly strong in planning and coordination institutions but has mixed results in allocation and implementation. Rwanda's planning institutions are very strong, with a comprehensive strategic framework for investment and tight integration of sub-national government investment plans. While the budget is comprehensive and well unified, there are challenges in multi-year budgeting. There are extensive guidelines, regulations, and rules governing the implementation of projects, and procurement institutions are particularly strong. However, the stalling and abandonment of some projects reveal issues in the effectiveness of some implementation institutions.

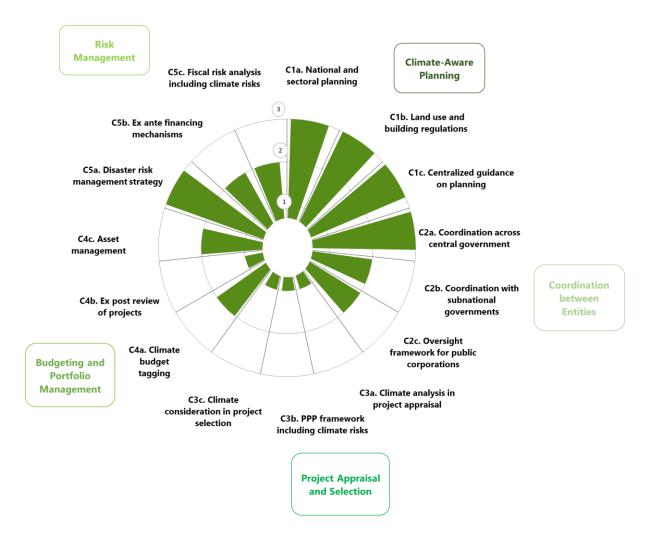
IMPLEMENTATION **PLANNING** 1. Fiscal targets and rules (3) 2. National and sectoral planning 15. Monitoring of public assets 14. Management of project 3. Coordination between entities implementation 13. Portfolio management 4. Project appraisal and oversight DESIGN 12. Availability of funding 5. Alternative infrastructure financing 11. Procurement 6. Multiyear budgeting 7. Budget comprehensiveness 10. Project selection and unity 9. Maintenance funding 8. Budgeting for investment ALLOCATION

Figure 1. Rwanda PIMA: Institutional Design and Effectiveness

Rwanda performs similarly well in the climate-aware planning institution of the C-PIMA, though there are gaps in other areas. Infrastructure development and improvement is a key part of Rwanda's climatechange adaptation strategy. Rwanda's latest Nationally Determined Contribution document lists 24 measures to adapt to climate change with an anticipated cost of more than USD5.3 billion (55 percent of GDP) by 2030,1 emphasizing the importance of strengthening climate change-sensitive public investment management practices. Rwanda already performs strongly in climate change-aware planning, with a very well-designed and effective system for integrating climate change considerations in national and sectoral planning processes (Figure 2 and Table 2). However, there is considerable scope to incorporate climate change mitigation and adaptation criteria in project appraisal and selection processes, where the aspirations of the planning framework meet the tangible outcomes of specific projects.

<sup>&</sup>lt;sup>1</sup> Rwanda: <u>Updated Nationally Determined Contribution</u>, May 2020.

Figure 2. Institutional Strength of Climate Change-Related Public Investment Management **Institutions in Rwanda** 



Many institutions across the PIMA and C-PIMA would improve with small changes, such as the publication of relevant material. Annex 1 provides an action plan of the recommendations proposed throughout this document that, taken together, would further strengthen an already robust set of public investment management institutions. These recommendations are summarized in Table 3. Among the most important of these recommendations are those that fully operationalize the 2018 Project Appraisal Guidelines and those that go toward improving transparency. Budget agencies and districts in Rwanda undertake a significant amount of high-quality work, but the results of this work often go unpublished, reducing scrutiny and accountability around the analysis. This lack of transparency in relatively procedural areas is a recurring theme across all PIMA and C-PIMA pillars. Among the many unpublished but important documents and data are the Fiscal Risk Review of the Government Portfolio; the costs of individual projects and their multi-year projections; the list of Public-Private Partnership projects and projects undertaken by public corporations; and project selection criteria. Publishing these and other documents and data would add a layer of rigor and accountability that would meaningfully improve public investment management in Rwanda.

**Table 1. PIMA Summary Assessment for Rwanda** 

	Phas	se/Institution	Institutional Strength	Effectiveness	Reform Priority
	1	Fiscal targets and rules	MEDIUM. The MTFF distinguishes between capital and current expenditure and provides a deficit target. There are EAC supranational fiscal rules on debt and deficit.	MEDIUM. EAC criteria are not used, and the fiscal deficit has exceeded the EAC criteria, but the MTFF provides a strong anchor for the budget.	Low
_	2	National and sectoral planning	HIGH. Comprehensive strategic framework for public investment decisions, including sectoral strategies specifying major investment plans.	HIGH. The strategic planning framework is used for managing investment plans, including regular comparisons of results against plans.	Low
A. Planning	3	Coordination between entities	MEDIUM. District plans are fully integrated with the central government planning and decision- making process, but capital transfers are not based on legally binding rules.	MEDIUM. District investments coordinated with central government and allocations are stable over time, but the consolidation of public corporation contingent liabilities is incomplete.	Medium
٩	4	Project appraisal	HIGH. There is a comprehensive framework for systematic project appraisal, but appraisal documents are not published.	MEDIUM. The 2018 project appraisal framework is not yet fully operationalized, and there is little documentation of the project appraisal process.	High
	5	Alternative infrastructure financing	MEDIUM. Legislation and policies support private sector involvement in major infrastructure markets.	MEDIUM. Private sector infrastructure investments are still limited, and the legal and policy framework is unproven.	Medium
	6	Multi-year budgeting	MEDIUM. Aggregate medium-term projections and development ceilings are published, but information on project costs is not.	LOW. There is a weak relationship between forecasts, ceilings, and capital spending.	High
7		Budget comprehensive- ness and unity	MEDIUM. Most capital spending is reflected through the budget, and the presentation includes most funding sources.	HIGH. EBUs account for 3 percent of capital spending and externally financed and PC projects included in budget documents. Strong coordination between planning and budgeting.	Medium
Allocation	8	Budgeting for investment	MEDIUM. MINECOFIN may approve virement from capital to recurrent, but this is discouraged.	MEDIUM. Information on total project costs is not included in budget documents at the time of appropriation.	High
B. A	9	Maintenance funding	MEDIUM. Funding for major improvements in sector plans, but methodologies unavailable. Maintenance is in the budget but is aggregated.	MEDIUM. Routine and capital maintenance are not disaggregated in the budget nor used for analysis. It is not clear that maintenance funding is sufficient to maintain asset values.	Medium
	10	Project selection	MEDIUM. MINECOFIN conducts a central review of major project appraisals from a project pipeline. Decisions taken for inclusion in the budget use broad selection criteria.	MEDIUM. There is a pipeline of appraised projects and specific standardized project selection criteria, but these are not automated nor published.	Medium
	11	Procurement	HIGH. Procurement is open and transparent. Procurement complaints are reviewed in a timely manner. All procurement-related processes are published.	in a timely trained, and there are procurement entities that	
ıtion	12 Availability of funding		MEDIUM. Quarterly cash forecast and commitments are required. No formal requirement for the timely release of funds. External funding must be held at central bank.	MEDIUM. Stalled and abandoned projects reported as a result of cash flow stoppages by Accountant General, with occasional cash rationing. Limited information on external funding.	Medium
C. Implementation	13	Portfolio management and oversight	MEDIUM. Monitoring of portfolio is well defined. Reallocation allowed, but no clear decision mechanism. Ex-post reviews are required but not independent.	LOW. No systematic data or analysis on delays or cost overruns. Re-allocation actively discouraged. No evidence of ex-post reviews.	High
ပ	14	Management of project implementation	MEDIUM. Project management responsibilities are well-defined. Cost adjustments are fixed in law. Ex-post audits are mandated and published.	MEDIUM. Inefficient project management reported. Projects have significant time and cost overruns. Cost adjustments couldn't be verified.	Medium
	15	Monitoring of public assets	MEDIUM. Asset registers are required to be comprehensive and updated. Asset values should be included in financial accounts. The straight-line depreciation method is used.	LOW. The OAG reports issues with the accuracy of asset registers. No asset values in Government Financial Accounts. Depreciation not in operating statements.	High

Table 2. C-PIMA Summary Assessment for Rwanda

	Phase/Institution		Institutional Strength	Reform priority
	C1	Climate-aware planning	HIGH. Public investment planning incorporates climate change considerations, and the National Land Use Plan guides climate change-sensitive land use. The NDC implementation framework assigns NDC targets to sectors and activities.	Low
hange	C2 Coordination between entities  C3 Project appraisal and selection  C3 Project appraisal and selection  C3 MEDIUM. Climate change investment decisions are facilitated by annual dialogue on NDC implementation between ministries, districts, and PCs. There are no standard shadow prices for GHG emissions and no climate change -specific decision criteria in public investment allocations.  C3 Project appraisal and selection  C3 MEDIUM. The mainstreaming processes partially identifies  MEDIUM. The mainstreaming processes partially identifies		Medium	
A Climate C			High	
PIM	C4	Budgeting and portfolio management	MEDIUM. The mainstreaming processes partially identifies climate change-related expenditure and some asset policies address climate change-related risks. However, climate change-related ex-post reviews are not conducted.	Medium
	C5	Risk management	MEDIUM. A comprehensive risk management strategy is in place, and the budget includes a contingency reserve that can be used for natural disasters.	Medium

## **Recommendations**

**Table 3. Rwanda: Summary of Recommendations** 

1. Improv	e Investment Planning	
1.1	Publish the Fiscal Risk Review of Government Investment and improve reporting of contingent liabilities from PCs, PPPs, and districts.	PC oversight, Treasury, and Macroeconomic Dept. 2022
1.2	Operationalize the 2018 Project Appraisal Guidelines, including a robust and well-documented project validation process by MINECOFIN.	MINECOFIN National Investment Dept. 2022-23
1.3	Make all major project appraisal documents publicly available while redacting any commercial secrets or sensitive information.	MINECOFIN National Investment Dept. 2022-23
2. Improv	re Investment Allocation	
2.1	2.1 Issue multiyear budget ceilings at the BA and district level earlier in the budget preparation process.	MINECOFIN Budget, Planning, Macro Depts. 2022
2.2	2.2 Publish project costs and multiyear projections by adapting the data that is submitted and stored in the IFMIS.	MINECOFIN National Investment Dept. 2023
2.3	2.3 Develop specific methodologies and thresholds for routine and major maintenance.	Line ministries 2022
2.4	2.4 Automate and publish a pipeline of appraised major projects and publish project selection criteria.	MINECOFIN National Investment, IFMIS Depts. 2022
3. Improv	e Investment Implementation	
3.1	Prepare and publish clear guidelines on when project payments may be withheld.	Accountant General's Department

		2022
3.2	Strengthen the ex-post evaluation process and require evaluations for large projects.	Line ministries 2023
3.3	Include asset values in the financial statements and consolidated asset values in the Consolidated Financial Statements.	MINECOFIN 2022
4. Impr	ove the Sensitivity of Public Investment Management to Climate Ch	nange
4.1	Produce and require the use of methodologies to assess the GHG impact and climate change-resilience of projects in feasibility studies.	MINECOFIN, National Investment Dept, MINALOC, Environment 2023
4.2	Prepare specific selection criteria addressing the mitigation and adaptation aspects of projects and produce relevant guidance.	MINECOFIN 2023
4.3	Update the 2018 PPP guidelines to provide specific guidance on the sharing of climate change-related risks in PPP contracts.	Rwanda Development Board 2023
4.4	Explore options to tag climate change-related investments in the budget.	MINECOFIN Budget, Accountant General and IFMIS Dept. 2022
4.5	Expand the Fiscal Risk Statement to include quantitative analysis of the fiscal risks related to climate change.	MINECOFIN Macro Dept. 2023

#### PUBLIC INVESTMENT IN RWANDA

#### A. Public Investment, Capital Stock, and Fiscal Policy

- 1. Several important contextual factors have influenced public investment in Rwanda. Over the past 25 years, Rwanda has experienced robust growth, with per capita incomes more than tripling and output performance surpassing comparator countries.<sup>2</sup> Rwanda also rebuilt public sector institutions, with solid performance accountability imposed on public sector officials at all levels. After a period of stabilization, Vision 2020 was launched in 2000 and implemented through four year-strategies linked to the annual budget process. Vision 2050 was launched in 2018 and implemented through a seven-year strategy that was also linked to the budget. The first of these was named the National Strategy for Transformation (NST, See Box 1). Public investment has been linked to the vision statements' goals and has contributed around 40 percent of gross domestic product (GDP) growth since 2000.
- 2. Over the past decade, total investment has been driven by both the public and private sectors. Public investment has averaged around 10 percent of GDP since the early 2000s, with this share increasing to about 12 percent of GDP prior to the onset of COVID-19. Private investment has also increased significantly, although the share of government investment has been consistently around half of total investment. In recent years the high level of public investment reflects large public sector projects including Bugesera Airport, the Kigali Convention Center, the Kigali Arena, and support for RwandAir. In 2020 and 2021, public investment was directed toward supporting Rwanda through the COVID-19 crisis, with funds directed toward supporting school construction, healthcare resilience, and, more recently, vaccination3.
- 3. Rwanda's level of public investment is well above comparators and low-income countries. While comparator countries have averaged public investment of around 8 percent of GDP over the last five years, Rwanda has seen rates well above 10 percent of GDP. This strong growth in investment is anticipated well into the middle half of this decade as Rwanda has an ambitious investment agenda to achieve both its development goals (See Box 1) and climate change commitments.4

<sup>&</sup>lt;sup>2</sup> IMF (2020), The Development Path Less Travelled, the Experience of Rwanda, points out economic performance in Rwanda surprised comparator countries in the SSA that also experienced severe conflict.

<sup>&</sup>lt;sup>3</sup> See IMF (2022), Country Report 2022/007 Rwanda: 2021 Article IV Consultation and Fifth Review Under the Policy Coordination Instrument Staff Report.

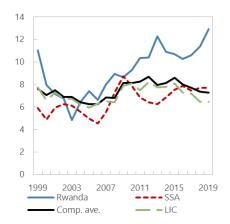
<sup>&</sup>lt;sup>4</sup> IMF Country Report 2022/007 discusses the magnitude of Rwanda's development agenda encompassing both its climate and development agenda.

Figure 3a. Rwanda: Composition of Total **Investment** 

(Percent of GDP)

30 25 20 15 10 1999 2002 2005 2008 2011 2014 2017 2020 ■Government Private

Figure 3b. General Government Investment (Percent of GDP)



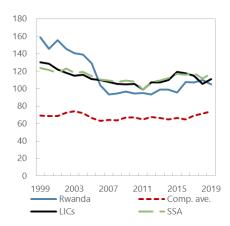
Source: Staff estimates based on official data and the World Economic Outlook.

4. Rwanda's capital stock is similar to low-income developing countries and Sub-Saharan African averages, although well above regional comparator countries. The capital stock declined in the years leading up to 2007 as public investment fell to lower levels. Public investment to GDP fell to around 4 percent in 2004, before picking up significantly from 2007 onwards. The capital stock subsequently began to grow, though remained relatively stable as a share of GDP, reflecting the underlying strong GDP growth over the period. Consistent with the IMF methodology for deriving the capital stock,<sup>5</sup> new public investment must first cover depreciation for the ratio of the capital stock to GDP to rise, so considerable investment is required just to maintain a steady ratio.

Figure 4a. Public Capital stock and **Investment** (Nominal, percent of GDP and growth)

160 12 140 10 120 100 80 60 40 20 0 2007 2015 2019 1999 2003 2011 Public Investment (RHS) Public Capital Stock (LHS)

Figure 4b. Capital Stock Comparison (Nominal, percent of GDP)



Source: Staff estimates based on official data and the World Economic Outlook.

<sup>&</sup>lt;sup>5</sup> See the IMF manual for deriving capital stock: https://infrastructuregovern.imf.org/content/PIMA/Home/Knowledge-Hub/Publications.html.

5. Public investment has been a priority in Rwanda's fiscal policy, but fiscal space has tightened in recent years. In line with its development objectives, Rwanda devotes a significant share of its aggregate expenditure to public investment spending. In 2019 Rwanda committed 38 percent of total expenditure to capital. Compared to its peers in Sub-Saharan Africa, Rwanda devotes a similar share of GDP to recurrent expenditure. However, it sits significantly above the median in capital spending. During COVID-19, Rwanda used its fiscal space to support recovery rather than cut back its capital expenditure. This, combined with high levels of recurrent expenditure and falling domestic revenues, has meant that the fiscal deficit averaged around 10 percent of GDP during the crisis. Even before the onset of COVID-19, Rwanda was running relatively large fiscal deficits. The high historical deficits, combined with the pandemic, have culminated in an increase of total public sector debt to around 75 percent of GDP. The risk of debt distress has also shifted from low to moderate<sup>6</sup>. While debt remains sustainable, Rwanda now has limited fiscal space to absorb future shocks.

Figure 5a. Capital vs Current Spending -Rwanda and sub-Saharan Africa (Nominal, percent of GDP)

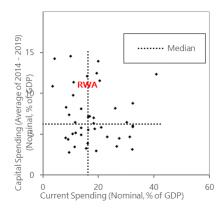
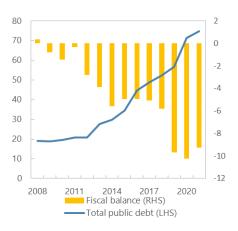


Figure 5b. Deficit and Debt (Nominal, percent of GDP)



Source: Staff estimates based on official data and the World Economic Outlook.

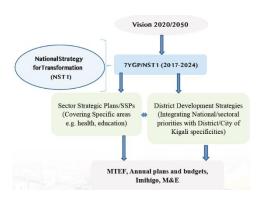
6. Ensuring sound public investment management will allow Rwanda to get the most out of its investment while fiscal space is constrained. While debt remains sustainable, Rwanda has limited fiscal space to absorb shocks. With the support of the IMF's Policy Coordination Instrument, Rwanda has committed to adopting growth-friendly fiscal consolidation measures to preserve debt sustainability, while supporting the recovery and priorities under the NST. This fiscal consolidation is targeted at revenue mobilization and recurrent spending while maintaining public sector investment at high levels. Improving public investment management is likely to play a critical role in achieving the planned fiscal consolidation.7

<sup>&</sup>lt;sup>6</sup> See IMF Country Report 2022/07, DSA Annex.

<sup>&</sup>lt;sup>7</sup> Globally, on average around one-third of the potential impact of public investment is lost due to inefficiencies in public investment processes.

#### Box 1. Development Planning Framework and National Transformation Strategy

Rwanda's Vision 2020 was devised in 2000 and was the roadmap for the development progress the country has achieved to date. In 2017, the government began to develop Vision 2050, an even more ambitious roadmap aimed to achieve upper middle-income status by 2035 and high-income status by 2050.



Vision 2050 will be operationalized by a series of more detailed development strategies, starting with the "National Strategy of Transformation". The 7-year NST-1 aims to transform the economy, society, and government into that of a higher-income country. The three transformation pillars are underpinned by detailed and costed sectoral strategies that, among other things, aim to achieve a "domesticated" version of the Sustainable Development Goals.

The "economic transformation" pillar aims to accelerate inclusive growth and development founded on the private

sector, knowledge, and Rwanda's natural resources. It builds on the successes of Vision 2020 in boosting productivity in agriculture, industry, and services. Looking forward, the NST-1 prioritizes:

- Creating new jobs by promoting new investment, bolstering domestic production, and providing science, technology, engineering, and mathematics training and vocational training;
- Managing land and urbanization, including upgrading Kigali's infrastructure and developing secondary cities:
- Improving education quality, with a focus on technical and information and communication technology skills, including through investment at all levels;
- Shifting the production and export base to higher value-added goods and services by creating growth-enhancing infrastructure and making strategic public interventions;
- Increasing domestic savings and expanding financial services access and depth; and
- Improving agricultural productivity via training; irrigation; pesticides; crop rotation; linking farmers, cooperatives, and markets; access to financial services and insurance; and promoting agribusiness and horticulture.

The social and governance transformation pillars are also specified, with goals to eradicate extreme poverty and malnutrition, improve the quality of education and health, build capable and accountable public institutions, ensure continued citizen participation and engagement in development strategies, continue international development cooperation, and ensure security and safety, as well as justice, and law and order.

NST-1 also stipulates cross-cutting interventions in capacity development; HIV/AIDS and non-communicable diseases; disability and social inclusion; climate change; regional integration; gender; and disaster management.

Source: IMF Country Report No. 19/211 and the Rwanda NST-1.

#### B. Composition and Financing of Public Investment

- 7. The central government undertakes most public investment, while districts and public corporations (PCs) have a lesser role. Between 2016-19 the central government accounted for almost 80 percent of total public investment, while PCs and districts each accounted for around 10 percent. Over the past decade, Rwanda's largest public infrastructure projects have focused on the energy, water, and road infrastructure sectors.8 While PCs in Rwanda are only responsible for around 10 percent of annual public investment, they have a significant role in delivering critical infrastructure, particularly in the water and energy sectors.
- 8. Public investments in Rwanda are primarily funded through domestic resources, although foreign donors play a significant role. Over the past five years, domestic resources have accounted for around 55 percent of total investment resources. Rwanda receives a sizeable portion of its public investment through concessional grants and loans. In 2019 investment to GDP was 12.9 percent. Around 40 percent of this was financed through foreign support. Of this, about 45 percent was from grants, and 55 percent was from highly concessional loans. In 2021 Rwanda accessed international capital markets with the issuance of a USD620.0 million (5.0 percent of GDP) Eurobond, of which around USD147.5 million was earmarked for strategic investment projects. Rwanda has also committed to using the 1.0 percent of GDP of the 2021 Special Drawing Rights allocation to fund infrastructure projects that will help with the recovery from the pandemic and recent natural disasters.

Figure 6a. Capital Spending by Level of Government

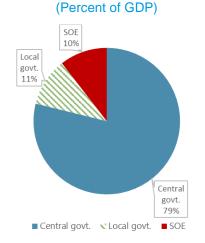
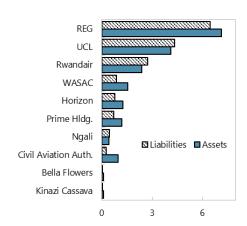
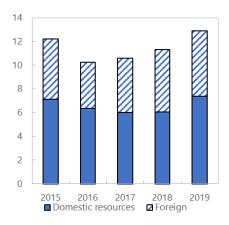


Figure 6b. Major PC by Assets and Liabilities (RWF billion)



<sup>&</sup>lt;sup>8</sup> See Annex, World Bank Rwanda Economic Update, 2021.

**Figure 6c. Investment by Funding Source** (Percent of GDP)

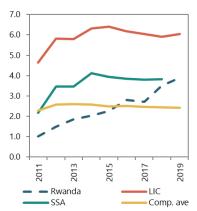


Source: Staff estimates based on official data and the World Economic Outlook.

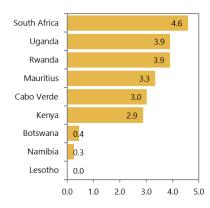
9. Rwanda has a reasonable track record of Public Private Partnerships (PPPs), though these have mostly been in the form of power-purchase agreements in the energy sector. PPPs have started to pick up since the passage of the Law Governing Public Private Partnerships (2016) and the preparation of the Public Private Partnership Guidelines in 2018. The government has signed 60 PPP contracts with a total project value of around USD1.8 billion. 93 percent of these are in the energy sector, with the rest spread across water and sanitation, culture, tourism, and logistics sectors. The World Bank Private Participation in Infrastructure Database identifies only six transactions before the approval of the PPP Law in 2016, all of which were in the energy sector.

Figure 7a. Public Private Partnership, Capital Figure 7b. Public Private Partnership, Capital Stock Stock, 2019

(Percent of GDP)



(Percent of GDP)



Source: Staff estimates based on official data and World Economic Outlook.

<sup>&</sup>lt;sup>9</sup> Government of Rwanda, Fiscal Risk Statement 2022/23.

#### II. THE EFFICIENCY OF PUBLIC INVESTMENT

10. Measures of infrastructure access are mixed in Rwanda. Rwanda faces challenging infrastructure needs as it is a landlocked country with complex geography. Transport connectivity is challenging, making it one of the highest-cost destinations for a shipping container in the world. Access to public health infrastructure outperforms peers in terms of access to hospital beds, but access to education infrastructure and water infrastructure is below comparator countries. There has been significant improvement in education and water coverage over the past decade, with the secondary teacher ratio increasing from 0.7 per 1000 students in 2000 to 2.6 in 2017. Access to drinking water has increased from 45 percent to 60 percent over the same period. The perceived infrastructure quality in Rwanda is much higher than in peer countries.10 Rwanda scores 4.7 out of 7 on the World Economic Forum Infrastructure Quality Index, which is significantly above both the low-income developing country average and the average for Sub-Saharan Africa. These quality scores contrast with measures of infrastructure access, though this might reflect an implicit focus of the quality measure on Kigali.

Figure 8a. Measures of Physical Access to Infrastructure

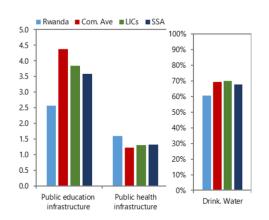
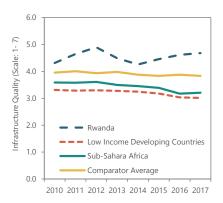


Figure 8b. Business Leaders Impressions of **Infrastructure Quality** (2010-2017)



Source: World Bank and staff estimates. Units vary to fit scale. Source: World Economic Forum and staff estimates. The Left hand axis: Public education infrastructure is measured as secondary teachers per 1,000 persons; and Public health infrastructure as hospital beds per 1,000 persons. Right hand axis: percentage of people using at least basic water services.

World Economic Forum surveys business leaders' impressions of the quality of key infrastructure services.

11. Rwanda scores well against the IMF methodology that assesses public investment efficiency,<sup>11</sup> but there is still significant room to improve. The IMF has developed a methodology to assess the efficiency of public investment through the development of an efficiency frontier. A hybrid indicator for infrastructure efficiency compares a composite of quality and access indicators to the public

<sup>&</sup>lt;sup>10</sup> World Bank World Development Indicators.

<sup>11</sup> See the 2015 IMF Staff Report "Making Public Investment More Efficient" for an outline of the methodology for estimating investment efficiency.

capital stock. On this measure, Rwanda sits at the public investment efficiency frontier (Figure 9a). However, as Rwanda's capital stock grows, Rwanda will need to improve both the quality and access to its infrastructure to remain on the efficiency frontier. Given that Rwanda is anticipated to have high rates of investment over the next several years to reach its NST objectives, addressing gaps in public investment management would help to increase the efficiency of capital spending and allow Rwanda to remain at the frontier.

Figure 9a. Public Investment Efficiency Frontier, Hybrid Indicator

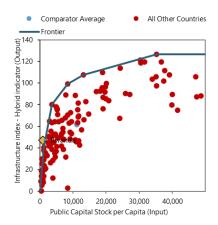
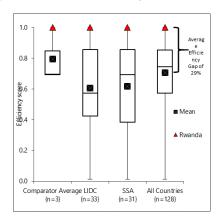


Figure 9b. Public Investment Efficiency (Benchmark based on hybrid indicator)



Source: Staff Estimates.

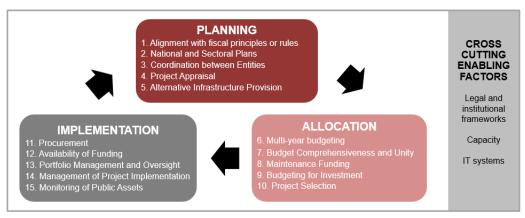
The hybrid indicator combines the physical and survey-based indicators into a synthetic index of the coverage and quality.

# III. PUBLIC INVESTMENT MANAGEMENT INSTITUTIONS

#### A. The PIMA Framework

- 12. 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.
- 13. The tool evaluates 15 "institutions" involved in the three major stages of the public investment cycle (Figure 10). 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.

Figure 10. PIMA Framework



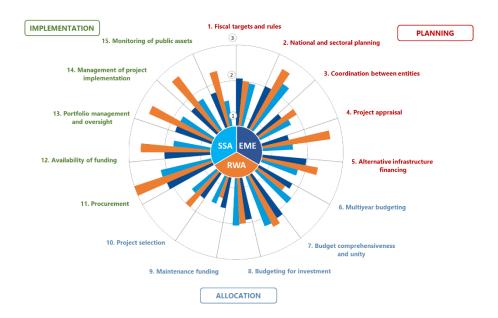
- 14. For each of these 15 institutions, three indicators are analyzed and scored according to a scale that determines whether the criterion is met in full, in part, or not met (see Annex 2 for the PIMA Questionnaire). Each dimension is scored on three aspects: institutional design, effectiveness, and 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 provides 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 the 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 Rwanda.

The following sections provide a detailed assessment of Rwanda according to this methodology.

#### **B.** Overall Assessment

- 15. Rwanda's institutions for managing public investment compare very well against other Sub-Saharan countries and even emerging market economies. On both institutional design and effectiveness, Rwanda is very strong in national and sectoral planning, coordination across government, and procurement. However, Rwanda is relatively weaker in some allocation institutions, including multi-year budgeting and budgeting for investment.
- 16. Like many countries, Rwanda's institutional design (Figure 11) is stronger than institutional effectiveness (Figure 12). The sharpest differences are in areas where recent changes to the institutional framework are yet to be fully effective. For example, project appraisal, portfolio management, and public asset monitoring are institutions yet to benefit from recent institutional changes. At the same time, some institutions are effective despite a relatively weaker design. Despite weaker formal fiscal targets or rules, Rwanda has maintained debt-sustainability and a credible fiscal path that has allowed it to manage large fiscal shocks such as the COVID-19 pandemic. Coordination between entities is also very effective.
- 17. The following sections provide a detailed assessment of Rwanda's public investment institutions and recommendations to address challenges and issues identified during the evaluation. Across many institutions, institutional design and effectiveness would improve with small changes, particularly around transparency and the publication of existing information.

Figure 11. Design of Public Investment Management Institutions



IMPLEMENTATION 1. Fiscal targets and rules PLANNING (3) 15. Monitoring of public assets 2. National and sectoral planning 14. Management of project implementation 4. Project appraisal 13. Portfolio management and oversight 12. Availability of funding financing 11. Procurement 6. Multiyear budgeting 10. Project selection 7. Budget comprehensiveness 9. Maintenance funding 8. Budgeting for investment ALLOCATION

Figure 12. Effectiveness of Public Investment Management Institutions

Source: IMF Staff.

#### C. Investment Planning

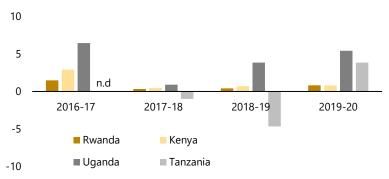
#### 1. Fiscal Principles or Rules (Strength— Medium; Effectiveness—Medium; Reform **Priority—Low**)

- 18. Rwanda publishes a medium-term fiscal framework (MTFF) with a stated fiscal limit and the supranational fiscal rules of the East African Community (EAC). Under the existing Policy Coordination Instrument program, Rwanda committed to a deficit target of under 5.5 percent of GDP as a rolling average for the central government fiscal deficit. Under the EAC convergence criteria, Rwanda committed to a more stringent central government deficit rule of no more than 3 percent of GDP, and a 50 percent of GDP ceiling on the present value of gross public debt. An MTFF is prepared and anchors the annual budget, though it provides only a limited framework for investment management and does not distinguish between new and ongoing projects nor identify fiscal space for new projects.
- 19. While the MTFF provides a credible anchor for budget preparation, other targets and rules are generally not adhered to. For example, the debt-to-GDP target was maintained before the pandemic, 12 but the deficit was forecast to exceed the EAC supranational fiscal rule of 3 percent of GDP in each Budget Framework Paper (BFP) from 2016-17 to 2019-20. Fiscal forecasts from the MTFF are published in the BFP and include a breakdown of current and development expenditure. However, the

<sup>12</sup> In present value terms, debt-to-GDP was around 40 percent in 2022 and was forecast to remain under the EAC ceiling of 50 percent of GDP in the medium term in the Medium-Term Debt Strategy. Debt-to-GDP rose sharply during the pandemic, from around 56 percent in 2019 to over 73 percent in 2021. Subsequently, the fiscal target under the Policy Coordination Instrument program was changed to achieving a path that reaches a debt to GDP of below 65 percent by 2029.

MTFF is also presented with different classifications to the Annual State Finance Law.<sup>13</sup> The average discrepancy between the forecast for annual expenditure in the first year of the MTFF and the budgeted annual expenditure in the Annual State Finance Law was around 0.75 percent of GDP between 2016-17 and 2019-20 (Figure 13). Moreover, while the MTFF generally provides a credible fiscal anchor for the budget, it has not been a reliable anchor for projecting capital spending over the medium term (see Institution 6).

Figure 13. Change in Planned Annual Expenditure from Budget Framework to Enacted Budget (Percent of GDP)



Source: Relevant government documents and staff estimates. Note: n.d is no data.

20. Rwanda's MTFF provides a relatively credible anchor for the budget, but fiscal space has tightened. Reflecting the realization of macroeconomic and fiscal risks during the pandemic, Rwanda's risk of debt distress has moved from low to moderate. In Improving the comparability of the budget with the MTFF (for instance, through directly comparable tables in both documents, including a breakdown of capital spending into ongoing and new projects) would improve transparency and further strengthen the link between the MTFF and the budget.

# 2. National and Sectoral Plans (Strength— High; Effectiveness—High; Reform Priority—Low)

21. There is a comprehensive strategic framework for public investment decisions, including sector strategies specifying major investment plans. Box 1 (in Section I) describes the strategic planning framework in Rwanda. The Rwanda Vision 2050 and the National Strategy for Transformation 2017-2024 provide the foundation for detailed sectoral and district strategies, covering largely similar periods as the NST. The strategies are operationalized through medium-term and annual budgets and action plans. The sectoral strategies cover all major programs and projects within each sector regardless of funding source. Annexes specify most major investment projects. There are overall cost estimates and financing strategies in all sector strategies, but there is no costing of individual major projects. The sector strategies include detailed outcome and output targets for major programs.

<sup>&</sup>lt;sup>13</sup> For instance, the MTFF contains projections for capital expenditure, whereas the Annual State Finance Law includes acquisition of fixed assets and development expenditure, leaving the link between the MTFF and the budget unclear.

<sup>&</sup>lt;sup>14</sup> https://www.imf.org/en/Publications/CR/Issues/2022/01/13/Rwanda-2021-Article-IV-Consultation-and-Fifth-Review-Under-the-Policy-Coordination-511923.

- 22. The strategic planning framework is used effectively to manage investment plans, and includes the regular comparison of results against plans. Rwanda has a comprehensive system for tracking and managing performance against strategic objectives (lmihigo). In addition to annual performance plans and performance reports from each agency, there are regular backward- and forward-looking joint sector review reports. Most major investment projects in performance plans and reports have been described in sector strategies. However, project names and descriptions tend to evolve, and there is no table in any performance report that provides a direct comparison with the sector strategies.
- 23. Rwanda's planning system is well-designed and effective, and there is no urgent need to change the planning processes to promote public investment. However, changes in other public investment functions may also impact detailed planning procedures, including the system's transparency. For instance, systematic publication of project appraisal reports and PC oversight reports, as discussed under institutions 4 and 5, would also positively impact the planning process. In addition, more systematic references to projects in sector performance reports would add to transparency.
- 3. Coordination Between Entities (Strength— Medium; Effectiveness— Medium; Reform Priority— Medium)
- 24. District investment plans are well integrated with the central government planning and decision-making process, but capital transfers are not based on legally binding rules, and reporting on contingent liabilities is incomplete. District budget proposals are subject to central review and endorsement and are included in the annual budget documents. According to Ministry of Local Government (MINALOC) officials, the annual transfer to district development projects should be at least 10 percent of central government revenues. The distribution of development funds among different districts is determined in the annual budget process and is not based on legally binding rules. There are no central government guarantees to districts and no systematic reporting or monitoring of other district contingent liabilities. Fiscal risks related to central government guarantees to PCs and PPPs are described in the Fiscal Risk Statement. Other contingent liabilities of PCs, which are largely related to contractual and other legal disputes, are required to be reported in the financial statements of each PC. However, these are not consolidated and not presented in the Fiscal Risk Statement, the government financial statements or the (unpublished) Fiscal Risk Review of Government Investment.
- 25. District investments are effectively coordinated with the central government, and allocations are quite stable over time, but the consolidation of contingent liabilities is incomplete. All district investment plans are submitted to the central government, and there is extensive coordination across and between the different government levels, including PCs. Although development fund allocations to different districts are not based on legally binding rules, the allocations are guided by an internal MINECOFIN policy that reflects factors like geographical size, population and poverty levels in the budget process. The actual allocations of development funds to different districts as a share of the total are quite consistent over time.
- **26. Improvements in reporting contingent liabilities are a medium priority.** Rwanda has made important improvements in identifying and reporting fiscal risks in recent years. Systematic identification

<sup>&</sup>lt;sup>15</sup> Planning and budgeting guidelines for decentralized development projects, 2013.

<sup>&</sup>lt;sup>16</sup> It was indicated that this followed from the MINALOC founding law, but this law has not been available to the mission.

of contingent liabilities of PCs, PPPs, and districts is vital for building a complete overview of these risks. Consolidation of these fiscal risks in the Fiscal Risk Statement will allow for the development of appropriate risk mitigation strategies.

#### 4. Project Appraisal (Strength— High; Effectiveness— Medium; Reform Priority—High)

27. There is a comprehensive regulatory framework for the appraisal of investment projects, but appraisal documents are not published nor subject to external review. MINECOFIN has issued detailed guidelines for project appraisal.<sup>17</sup> The guidelines distinguish between small, medium and major projects and provide detailed guidance on procedures to be followed and methodologies to be applied. This includes methodologies for risk analysis (Figure 15). The requirements for the appraisal of major projects are very stringent. However, the feasibility studies are not published, and there is no requirement for external review of the documents. MINECOFIN provides central support to the project development and appraisal process, including training and other outreach activities.

Figure 14. Checklist for Risk Analysis in Project Appraisal

Step	Question				
Risk	Is the sensitivity analysis carried out variable by variable and possibly using switching				
assessment	values?				
	Has the scenario analysis been carried out?				
	Is the project's economic case robust to downside scenarios such as (for example)				
	increases of 25 percent on construction costs, delays to project completion of 6, 12,				
	and 24 months, or increases of 25 percent on annual operating costs over the				
	reference period?				
	What is the proposed risk prevention and mitigation strategy?				
	Has a full risk prevention matrix been built?				
	Have risk mitigation or prevention measures been identified?				
	If the project appears to be still exposed to risk, has a probabilistic risk analysis been				
	carried out?				
	What is the overall assessment of project risk?				

Source: Guidelines for preparation and assessment of Feasibility Study Reports of Projects at Central Government level in Rwanda.

28. The appraisal framework described in the 2018 guidelines for project appraisal is not yet fully effective, and the appraisal process is not well documented. Given fiscal constraints, only a few new investment projects have been submitted and approved according to the investment project appraisal framework. MINECOFIN is still establishing the necessary capacity and procedures to ensure that the demanding process defined in the appraisal guidelines is followed in practice. No publicly available documentation is available to demonstrate that project proposals and feasibility studies are subject to rigorous validation by MINECOFIN, and the system to document the appraisal process results is still under development. MINECOFIN maintains a spreadsheet database that includes proposed and ongoing projects, but this contains minimal information about each project and is mainly used for

<sup>&</sup>lt;sup>17</sup> Guidelines for preparation and assessment of Feasibility Study Reports of Projects at Central Government level in Rwanda.

budgeting purposes. Projects financed by international finance institutions are generally subject to stringent appraisal by these institutions.

29. An effective and transparent project appraisal process is a high priority. The systematic application of project appraisal guidelines will contribute significantly to the quality of the public investment portfolio. Publication of project appraisal documents will open the process and the documents for comments and scrutiny from stakeholders, including external experts. This will be a strong incentive to ensure the quality and consistency of the project appraisal documents and the decisions based on these documents. The Government Integrated Financial Management and Information System (IFMIS) is currently being expanded to include a project module (see Section V), which will enhance the effectiveness of project appraisal. Rwanda already undertakes extensive consultation regarding public investment priorities, and more transparent project documents will reinforce this process. If appraisal documents include confidential or sensitive information, this can be redacted in line with the Government's policies on information disclosure.

# 5. Alternative Infrastructure Financing (Strength— High; Effectiveness— Medium; Reform Priority— Medium)

- **30.** Legislation and policies strongly support private sector involvement in major infrastructure markets. The 2017 National Investment Policy strongly emphasizes expanding private sector involvement in the economy. Private companies, including international companies, are generally allowed to enter infrastructure markets, with a few exceptions (Table 3). The Rwanda Utility Regulatory Authority regulates prices in most infrastructure markets and cooperates with the Rwanda Development Board and the Rwanda Inspectorate, Competition and Consumer Protection Authority to facilitate private sector investments in these markets. The telecommunications, electricity generation, off-grid electricity distribution, and transport markets are competitive. Rwanda Energy Group has a monopoly on electricity transmission and distribution through the national grid. Infrastructure for water supply and sanitation is owned by the Water and Sanitation Corporation (a PC) and district governments, but the districts have outsourced the operations to private entities. The National Investment Policy describes the government's strategy for PPPs. This is supplemented by a PPP law and detailed guidelines for developing and approving PPPs. Most PC investments are financed from the budget, and the regular planning and budgeting processes cover these.
- 31. While there is substantial private sector involvement in critical infrastructure markets, the number of PPPs is still limited, and the oversight of PC investments is fragmented and not fully effective. Table 4 illustrates that private companies have significant market shares in many infrastructure markets. Only a few PPPs have been fully developed under the Law Governing Public Private Partnerships (2016), and only one of these has been completed: The Kigali Bulk Water project reached financial closure in 2017 and began operations in 2021. There is extensive oversight of budget-funded and development partner-funded PC investments. There is no specific oversight of PC investments financed by own resources, but these are reported to be very limited. For instance, the Rwanda Energy Group had capital investments of RWF147 billion in 2021, all financed by grants and loans from the

<sup>&</sup>lt;sup>18</sup> Law Governing PPPs in Rwanda (2016) and Public Private Partnership Guidelines (2018).

government and development partners. The Fiscal Risk Review of Government Investment has comprehensive coverage of public corporations but is not published, undermining its effectiveness.

**Table 4. Rwanda: Competition in Infrastructure Markets** 

Sector	Market structure	Private market share (percent)
Telecommunications	Competitive	99
Electricity generation	Competitive	25
Transmission	State monopoly	-
Distribution	Off-grid is competitive	52
Land transport	Competitive	100
Air transport	Competitive	?
Water infrastructure	Public	-
Water operations	Competitive in districts	30

Source: Rwanda Utility Regulatory Authority.

32. Increased transparency around PC investments and financial performance is a medium priority. PCs play a crucial role in infrastructure provision. Consistent oversight and more transparency around PC's investment activities, including publishing the Fiscal Risk Review of Government Investment, would contribute to higher efficiency in this sector.

#### **Recommendations to Improve Investment Planning**

Issue: There is no systematic collection or publication of information about fiscal risks from contingent liabilities related to PCs, PPPs, and districts.

Recommendation 1.1: Publish the annual Fiscal Risk Review of Government Investment and improve the reporting of contingent liabilities from PCs, PPPs, and districts and provide a consolidated overview of these risks in a published Fiscal Risk Statement.

Issue: The 2018 Project Appraisal Guidelines provide a well-designed framework for appraisal, but these guidelines are not yet fully operationalized in MINECOFIN procedures, capacities, and information systems.

Recommendation 1.2: Operationalize the 2018 Project Appraisal Guidelines, including a robust and welldocumented project validation process by MINECOFIN.

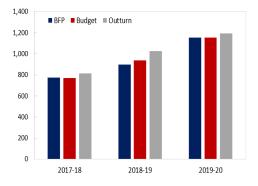
Recommendation 1.3: Make all major project appraisal documents publicly available while redacting any commercial secrets or sensitive information.

# 6. Multi-year Budgeting (Strength— Medium; Effectiveness— Low; Reform Priority— High)

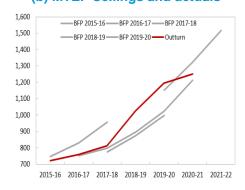
- 33. Budget documents reflect medium-term capital spending projections at an aggregated level and contain indicative multi-year ceilings but do not reflect total project costs. Projections of total capital spending for the general government are forecast at the project level by budget agencies (BAs) and districts and published at an aggregate level in the BFP. Multi-year ceilings are first issued in February (five months before the start of the fiscal year). They are indicative in nature as there is scope for amendments during budget consultations following their issuance. <sup>19</sup> The ceilings comprise domestic and externally financed components for the development budget and recurrent spending for BAs and districts. However, total construction costs of projects are not published, even though this information is stored in the IFMIS and local government management information system.
- 34. While the medium-term expenditure framework (MTEF) is well-established and closely aligned to Rwanda's fiscal strategy, it is not a reliable anchor for projecting capital spending over the medium term. Aggregate capital budget allocations deviate from the budget (Figure 15). In the previous three financial years before COVID-19, spending exceeded the development budget ceiling with an average deviation of 11 percent, though data were not available to assess the specific projects causing the deviations. Multi-year ceilings are issued late in the budget calendar compared to the neighboring EAC countries of Uganda and Kenya. There was a 17 percent variation between the ceilings in the second budget call circular and the Annual State Finance Law in the three years before the pandemic (Table 5). The lack of publication for project costs implies that no changes in construction costs are identified or explained to guide budget decision-making.

Figure 15. MTEF Ceilings, Annual Budgets, and Outturns (RWF Billions)

#### (a) Development ceilings, budgets, and actuals



#### (b) MTEF Ceilings and actuals



Source: IMF Staff based on BFPs, original Annual State Finance Laws and budget execution reports (various years).

<sup>&</sup>lt;sup>19</sup> In accordance with the Ministerial Order of Financial Regulations.

**Table 5. Variance between Budget Capital Ceilings and the Finance Law** (RWF billions and percentage change)

	Second Budget Call Circular Ceiling	Finance Law	Absolute Percentage Change
FY2016-17	716.1	785.7	10
FY2017-18	791.3	771.9	2
FY2018-19	646.5	897.1	39

Source: The Second Budget Call Circular Indicative Ceilings and Original Finance Law.

**35.** Bringing forward the setting and Cabinet approval of BA and district expenditure ceilings earlier in the budget process would strengthen the binding nature of the ceilings. This should occur before the issuance of the second budget call circular. Annex 4 provides details of a revised budget calendar adopting this approach, which would require subsequent amendments to the Ministerial Order of Financial Regulations and both the first and second budget call circulars. <sup>20</sup> Box 2 below summarizes the three stages in the updated calendar.

#### Box 2. Key Changes to the Budget Calendar to Enforce MTEF Ceilings

**Stage 1: Calculating the budget baseline.** The first stage is based on improvements to costing of existing projects (capital budget baseline), with a sharper focus on costing techniques and methodologies, which would be integrated into the IFMIS to support the National Investment Department multi-year projections. More specifically, for capital projects, this would require an accurate estimation of multi-year commitments, including expropriation costs, counterpart funding, and other major cost drivers. The first budget call circular would be expanded to provide instructions to guide this process.

**Stage 2: Set early expenditure ceilings.** BA and district expenditure ceilings for the development budget would be communicated earlier as part of the Budget Outlook Paper in November. The ceilings would be compared with the budget baseline results, indicating any fiscal gap with fiscal objectives, targets, and rules.<sup>21</sup> High-level investment priorities would also be communicated to Cabinet, who would approve the ceilings and guide the project prioritization in stage 3.

Stage 3: BA and district prioritization: From November to March, BAs and districts would have to prioritize project allocations within the expenditure ceilings, ensuring that ongoing projects are adequately funded. This would form the basis of the Public Investment Committee (PIC) hearing in January and the quality assurance and budget challenge role conducted by the National Investment Department, the Local Administrative Entities Development Agency (LODA), and Rwanda Development Board. By the time the BFP is published in April, these deliberations would be finalized, and the ceilings would be binding and guide the detailed annual budget.

36. Capturing and publishing project costs and revisions is important to ensure these changes are known and accounted for. As no costs are published, there is no visibility on how these have been revised or explanations for their changes. This could be quickly adopted in the IFMIS, drawing on the expertise of the in-house IT team (see Section IV.B). Project costs could be added to existing

<sup>&</sup>lt;sup>20</sup> Article 17 of the Ministerial Order of Financial Regulations would require amendment if this approach is adopted.

<sup>&</sup>lt;sup>21</sup> Article 17(1) of the Ministerial Order of Financial Regulations states that the Budget Outlook Paper should include information on "macroeconomic indicators and the aggregate resource envelope".

annexes or presented in a supplementary document. Annex 5 offers a potential format that this could take.

#### 7. Budget Comprehensiveness and Unity (Strength— Medium; Effectiveness—High; **Reform Priority— Medium)**

- 37. A strong legal and regulatory framework covers public investments undertaken by extrabudgetary units (EBUs), PCs, and PPPs, and recurrent and development budgets are prepared and presented together. EBUs must disclose how they plan to spend revenues they retain as part of the second budget call circular. This provides a platform to address possible duplication issues and support investment prioritization at the budget hearings.<sup>22</sup> The detailed project annex to the budget (Annex II-3) is comprehensive and includes externally financed projects (loans and grants) and public investments undertaken by public corporations that are funded through the government budget. Total capital and recurrent budgets are prepared and presented by MINECOFIN based on fully integrated program and functional classifications by each ministry and BA.23
- 38. The budget is largely comprehensive and there is evidence of strong coordination in the preparation of capital and recurrent budgets. Investments undertaken by EBUs are generally small. An assessment of the three most recent years shows that, on average, EBUs have accounted for only 3 percent of total capital expenditure (Table 6). The most significant capital projects (including EBUs) are disclosed individually and by funding sources in annual budget documentation, except for PPPs and some significant PCs. Different departments coordinate the recurrent and development budgets, and collective decisions are made as part of the planning and budgeting consultations through combined action plans.

Table 6. Rwanda: Acquisition of Nonfinancial Assets by Extrabudgetary Units (RWF billions)

Level of Government	Number of entities	2016-17	2017-18	2018-19
General Government	162	763	854	1,042
Central Government	129	664	749	929
Budgetary Central Government	121	641	729	915
Extra Budgetary Units (EBUs)	8	23	20	21
Local Government	31	103	100	111
Social Security Funds	2	(4)	5	2
EBU spending as a percentage of				
total General Government		3	2	2
EBU spending as a percent of GDP		0.3	0.2	0.2

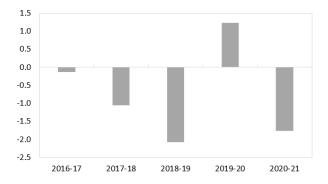
Source. MINECOFIN Government Finance Statistics Manual 2014 tables and 2018-19 consolidated financial statements. Note: No Government Finance Statistics Manual 2014 consolidated public sector tables available after 2018-19. The eight entities comprise five hospitals; Rwanda Military Hospital, Central University Hospitals of Butare and Kigali, Neuro Psychiatric Hospital); 2 universities and schools; University of Rwanda, Institute of Legal Practice and Development, and two other noncommercial entities; Rwanda Broadcasting Agency, and Rwanda Utilities Regulatory Agency.

<sup>&</sup>lt;sup>22</sup> Annex 4 of the 2021-22 second budget call circular.

<sup>&</sup>lt;sup>23</sup> Annexes II-2 and II-8 respectively.

- **39. All PPP and PC projects should be included in budget documentation.** This information is currently stored in various documents and databases and could benefit by being presented as one comprehensive investment portfolio as part of a Public Investment Plan.
- 8. Budgeting for Investment (Strength— Medium; Effectiveness— Medium; Reform Priority—High)
- 40. There is a framework for protecting investment projects during budget implementation, but total project outlays are not appropriated by the legislature at the time of a project's commencement. The first budget call circular states the need to prioritize the completion of ongoing projects ahead of new ones to ensure that budget allocations sufficiently match contractual commitments and expenditure needs. There is no clear legal or regulatory requirement that information on total project costs is included in the budget. Article 34 of the Organic Law on State Finances and Property (OLSFP) provides unclear guidance in this area. Transfers of funds between capital and current spending during the fiscal year are generally not permitted without the specific approval of the Minister for Finance and Economic Planning.
- 41. Investment projects are generally well-protected during budget implementation, with minimal virements to the recurrent budget and a reasonable commitment to prioritizing ongoing projects. Net virements from the development budget have been minimal over the past five years, averaging 1.2 percent of capital spending (Figure 16). The share of new projects in the Public Investment Plan is relatively small; in the current budget year, no new projects were approved.<sup>24</sup> Almost 90 percent of the Public Investment Plan comprises ongoing active projects. A three-year average from 2019-20 demonstrates that new projects have accounted for 11 percent of total projects retained for budgeting. There is evidence of project delays, cost overruns, and stalled projects, which suggests some funding constraints for ongoing projects, but these only amounted to 3 percent of total capital spending in 2020.

Figure 16. Net Virements from the Capital Budget (RWF billions)



Source: Data provided from the IFMIS. Negative figures indicate a net flow from capital to recurrent.

42. Publishing information on planned costs would reduce the risk of underestimating future expenditures. This could be easily adopted, given that multi-year planned disbursements are currently

<sup>&</sup>lt;sup>24</sup> The Public Investment Plan spreadsheet consists of 471 projects, 48 of which are pipeline (USD1.2 billion) and 423 (USD8.2 billion) are active ongoing projects.

stored in the IFMIS. Linking the IFMIS and procurement database to capture multi-year contracts is an existing reform area that MINECOFIN and the Rwanda Public Procurement Authority (RPPA) have prioritized. If implemented, this will ensure there are more stringent mechanisms to protect ongoing projects and that they receive the required funding they need to be completed on time.

# 9. Maintenance Funding (Strength— Medium; Effectiveness— Medium; Reform Priority— Medium)

- 43. Methodologies for routine and capital maintenance and for major improvements exist, but coverage is mixed. Standard methodologies for assessing routine maintenance and capital maintenance are only available at the local government level. The Ministry of Infrastructure (MININFRA) is responsible for the overall formulation of policies for the road sector as well as for the maintenance of the classified road network. Rwanda Energy Group utilizes the operation and maintenance manuals issued by the suppliers of the electricity generation equipment. Routine maintenance manuals for public buildings are not yet in place. The Transport Sector Strategic Plan for the National Strategy for Transformation, the LODA Annual Action Plan, and the Water and Sanitation Sector Strategic Plans all made provision for rehabilitation, and budgets for capital maintenance are contained in sector strategies.
- 44. Budgets for maintenance can be identified in the budget but there is not a clear distinction between routine and capital maintenance, and it is not clear that funding is sufficient to retain asset values. The Road Maintenance Fund ensures the collection and funding for the maintenance of the road network in Rwanda.<sup>25</sup> However, there is no distinction between routine and capital maintenance in funding. LODA publishes minimum maintenance costs, but these are low by international standards.

**Table 7. Rwanda: LODA Minimum Maintenance Costs** 

Project category	Project Sub-category	Percentage of	South African
		infrastructure	percentages
		investment	(Comparative)
Transport Infrastructure	Roads	2	5-10
Energy	Solar energy systems	1	
Water and sanitation	Water supply systems	2	4-8
	Storage tanks	2	2-3
	Water pump stations	2	2-3
Administrative	District/sector offices	2	4-6
Infrastructure	District/sector offices	2	4-0
School Infrastructure	School buildings and	2	4-6
	related infrastructure		4-0
Public Health	Health Centers and	2	5-8
Infrastructure	related Infrastructure	2	5-6

Source: LODA and Staff estimates.

<sup>&</sup>lt;sup>25</sup> The current revenues of the Fund are derived from a petrol and diesel levy, which is approximately 69.4 percent of the revenues and a road toll charged on foreign heavy vehicles, which is approximately 29.6 percent of the revenues.

45. Completing operation and maintenance manuals by all Government entities is a medium priority. Systematic methodologies are required to determine routine- and capital maintenance needs, including the costing. The manual will ensure the systematic compilation of operation and maintenance plans.

#### 10. Project Selection (Strength— Medium; Effectiveness— Medium; Reform Priority— Medium)

- 46. MINECOFIN undertakes a central review of major project appraisals from a project pipeline before decisions are taken for inclusion in the budget, and this is based on broad selection criteria. The role of the PIC is formalized through the National Investment Policy (2017). The National Investment Department plays the lead secretariat role for the PIC and undertakes a review of project submissions through selection criteria to guide PIC deliberations. These are broad based and published in the 2017 National Investment Policy and more recently updated in the Budget Outlook Paper. The review process covers BAs, districts, PCs, and PPPs but excludes externally financed projects because they pass through their own review processes. Decisions are recorded in project profile documents, which are now included in the IFMIS project module. In accordance with the National Investment Policy, the government maintains a project pipeline, where projects have been reviewed by MINECOFIN and the PIC but cannot be allocated budget funds. The pipeline is contained in a manually updated spreadsheet and is not published. It includes projects that can be implemented by general government, PCs, or as PPPs.
- 47. The central review process has a reasonable level of rigor with procedures guiding the selection of projects, and some major projects are rejected and returned. Detailed selection criteria are used before budget selection. 13 percent of new projects were rejected on average over the three years between 2018 and 2021, while 40 percent of projects were rejected in the current budget round at the district level. The National Investment Department applies the detailed project selection criteria to new and ongoing projects in the pipeline for most projects.<sup>26</sup> An internal process in BAs and districts to prioritize projects based on community consultation also guides the budget consultation process.
- Compiling and publishing the project pipeline, as stated in the National Investment Policy, 48. could further strengthen the project selection process. The lack of visibility of the review process, the detailed selection criteria, and the composition of the pipeline undermines the effectiveness of the project selection process. Maintaining a living document depicting the current pipeline would allow for closer scrutiny of its content and the selection decisions before budget approval. Annex 6 provides elements of transparency in project selection that were recently introduced in Malawi that could be customized for Rwanda.

<sup>&</sup>lt;sup>26</sup> This standalone spreadsheet includes detailed selection criteria that includes an assessment of: (i) technical feasibility; (ii) strategic fit; (iii) value for money, and (iii) appropriateness of request and funding model. Each dimension is scored on a scale of 1-5 to develop a project score. This scoring is used to determine if a project should be retained in the budget, put on hold for consideration in a future year or rejected. A similar process is used for local government projects and PPPs. BAs indicated that they generally use this process annually.

#### **Recommendations to Improve Investment Allocation**

Issue: Budget ceilings are issued late and do not serve as an adequate fiscal constraint.

**Recommendation 2.1**: MINECOFIN to issue multiyear budget ceilings at the BA and district level earlier in the budget preparation process. This would be provided as an annex to the Budget Outlook Paper. Cabinet approval should be solicited before issuance in the second budget call circular. This should draw upon the revised budget calendar proposed in Annex 4.

**Issue**: Information on project costs, their revisions, and multi-year planned expenditures are not published at the time of appropriation.

**Recommendation 2.2**: MINECOFIN to publish project costs and multiyear projections in the budget annexes, or as a standalone budget document, by adapting the data that is submitted and stored in the IFMIS and district management information system. This should include cost revisions, drawing upon the illustration provided in Annex 5.

Issue: There is a lack of methodologies to guide maintenance needs and cost projections.

**Recommendation 2.4**: MINECOFIN to develop guidelines and thresholds for maintenance that include specific methodologies and thresholds for routine and major maintenance.

**Issue**: There is no published consolidated project pipeline of appraised projects nor criteria for selection of projects for inclusion in the budget.

**Recommendation 2.5**: MINECOFIN to automate and publish a pipeline of appraised major projects to compare within and across sectors transparently and competitively, and to publish project selection criteria.

#### **E.** Investment Implementation

#### 11. Procurement (Strength— High; Effectiveness— High; Reform Priority—Low)

- **49.** The procurement system is open and transparent. The government has made substantial and consistent efforts over the past few years toward improving and bringing the public procurement system closer to international standards. Open, transparent, and competitive procurement is required for major projects, and the RPPA is mandated to monitor procuring agencies and bidders. There is a procurement database with detailed information, and the government publishes and uses reports generated in the database. The legal framework provides for an independent complaints review body, and when an appeal is lodged, the procurement process must be suspended.
- **50. Most major projects are tendered in an open and competitive process, and information is provided promptly.** The electronic database is comprehensive and effectively used. All rewards are published and are included in the system. The RPPA published reference prices for supply and construction and a list of blacklisted companies (which includes the reasons for blacklisting and the duration of blacklisting). Table 8 presents a summary of the tenders awarded in 2018/19. Single-sourced tenders make up a relatively large proportion of the tenders (around 30 percent). The RPPA notes that

this reflects responses to emergencies and unlocking projects that had stalled due to previous poor performance. While Reports produced using the electronic database contain information on the number and value of transactions by procurement method and the types of goods procured. Statistical reviews are conducted yearly, and contracting authorities' mistakes are published on the website. An annual report is issued as well as a list of the most common mistakes made by contracting parties. The system in place to monitor procurement is the Annual RPPA Report, which scrutinizes all processes and procedures, and all the monitoring is captured in the report and published. The Independent Review Panel reviews procurement complaints. Table 8 provides a summary overview of the appeals between 2010 and 2021.

51. Notwithstanding the substantial progress that has been made on public procurement, there remain some issues across procurement entities. The RPPA noted several substantial issues across procuring entities in its 2018/19 Annual Report. These ranged from delays in the execution of contracts to forged documentation. There are 303 personnel from procuring entities that are not trained in the procurement procedures, and some are on the Procuring Committee. The training of procurement entities should be prioritized.

Table 8. Rwanda: Awarded Tenders in 2018/19

		Value (RWF billions)	Percentage	Number	Percentage
	Goods	160	26	4272	76.25
Tuno	Works	368	61	725	12.99
Туре	Services	74	121	586	10.50
	Total	604	100	5583	100.00
	Single Sourcing	184	30	316	5.66
Methods	Open	327	54	4,410	78.99
	Other	93	16	1,173	15.35
	Total	604	100	5583	100.00

Table 9. Rwanda: Summary of Appeals from 2010 to 2021

Designation	Number	Percentage
Admissible and founded appeals	36	31.6
Admissible and unfounded appeals	60	52.5
Inadmissible appeals	04	3.5
Terminated procurement proceedings	07	6.0
No mandate	04	3.5
Withdrawn appeals	02	1.8
Appeal against decision	01	0.9
TOTAL:	114	

Source (Table 8 and 9): Rwanda Public Procurement Authority

#### **Box 3. Identified Concerns Across Procurement Entities**

The RPPA identified several serious issues across procurement entities in their Annual Activity Report for 2018/19. These issues included:

- Lack of clear technical specifications required in the bidding documents.
- Delay of the execution of some contracts awarded and penalties for delays were not applied.
- Use of discriminatory criteria for some tenders resulting in only one or two bidders.
- Many cases of forged documents, no due diligence conducted.
- Some contracts with very high prices, and some prices differ from the prices provided by the successful bidder. Modification of nature for the tender award in favor of another unplanned tender.
- Minutes for the reception of goods or works and validation of reports for studies are not available.
- Awarded contract prices are between 29 percent and 1,532 percent higher than the planned cost.
- Contractors appointed before supervision consultants are appointed, causing delays and overruns.

Source: Rwanda Public Procurement Authority, Annual Activity Report for FY 2018-2019.

#### 12. Availability of Funding (Strength— Medium; Effectiveness— Medium; Reform **Priority— Medium**)

- 52. Cash forecasting supports good planning for funding availability, but funding can be withheld for delayed projects. Article 64 of the Financial Regulations requires quarterly cash-flow forecasts to be prepared as well as commitment ceilings for the full fiscal year. Cash flow reports are prepared, and MINECOFIN submits monthly user expenditure reports to the Treasury. Through these reports, the Accountant General can determine which projects lag in the implementation stage and has the discretion to delay payments. Expenditure reports are prepared daily and monthly for internal use and cash monitoring. The Rwanda Aid Policy Manual of Procedures requires that external financing should be fully integrated with the main government bank account structure.
- 53. Cash for project outlays is usually provided promptly, though sometimes cash is rationed. The Office of the Auditor General (OAG) identified several projects in the implementation stage that were put on hold or abandoned due to delayed payments. Public entities had abandoned contracts worth RWF11.7 billion (0.1 percent of GDP) by the completion of the current year's audit. These comprise two cases worth RWF795 million identified during the year under audit and two cases worth RWF10.9 billion from previous audits that are still abandoned. In addition, 16 projects were stalled due to budget constraints and lengthy procurement procedures. The Annual Activity Report from the RPPA for 2018/2019 stated that some procuring entities award tenders with assured financing resources, but during the implementation stage, resources are not released on time. All external funding is channeled through the National Bank of Rwanda and is visible in Budget Annex II-2.
- 54. Formal mechanisms to ensure the timely release of project funds when payments come due should be put in place. This mechanism could clearly define the circumstances when the Accountant General can delay project payments. Without this mechanism, the Accountant General should carefully analyze the causes of project delays before a decision is taken to withhold funding. More detailed cash forecasting (for instance, monthly) could also help better plan cash requirements for project funding.

# 13. Portfolio Management and Oversight (Strength— Medium; Effectiveness—Low; Reform Priority— High)

- **55.** Guidelines on portfolio oversight and management and project adjustment are generally robust. The 2021 National Monitoring, Evaluation, and Learning Guidelines require the monitoring and oversight of projects. The guidelines describe the monitoring, frequency, and reporting through IFMIS. However, the reporting template lacks critical information for a thorough evaluation and analysis. Although monitoring and evaluation is described in detail in the guidelines, there is no reference to the analysis of the information in the reports. The PFM Manual allows the reallocation of funds between projects, with a maximum of 20 percent in a fiscal year. Funds from projects funded from external sources may also be reallocated with the approval of the funding entity. The National Investment Policy states that ex-post evaluations should be carried out between three and five years after completion. Ex post reviews and evaluations are also described in the National Monitoring, Evaluation, and Learning Guidelines. However, there are no requirements in the guidelines for an independent expert to conduct ex-post reviews.
- **56.** Persistent cases of delayed projects suggest weakness in portfolio management and oversight effectiveness. The OAG reported stalled, idle, and abandoned projects, with no clear action from MINECOFIN, LODA, or MININFRA to correct and prevent this from occurring. The 2020 audits found 62 cases of delayed contracts worth RWF216 billion (1.8 percent of GDP) in 38 public entities and projects. Fifty of the delayed projects (RWF21 billion) were carried over from previous audits. There is also no evidence of any reallocation of funds or the use of the relevant procedures. Reallocation is discouraged and seldom utilized, disallowing the acceleration of implementation on any particular project. While ex-post reviews are required, they are not conducted for all major projects. The OAG has noted that the information in ex-post reviews either lacks credibility or is not applied in future projects.
- 57. Improvements in the monitoring template and strengthened ex-post evaluations could quickly improve the effectiveness of portfolio oversight. The institutional design of project management and oversight is robust, but persistent problems emphasized by the OAG highlight issues in the effectiveness of these institutions. Making the information required in the monitoring template more comparative to the contractual situation would help. Conducting ex-post reviews and exercising better control to ensure lessons from previous ex-post reviews are learned for future projects would also improve effectiveness.
- 14. Management of Project Implementation (Strength— Medium; Effectiveness—Medium; Reform Priority— Medium)
- **58.** Project monitoring by senior officials is required, there are standardized rules for project adjustment, and the OAG has a wide mandate for ex-post audits. The National Monitoring, Evaluation, and Learning Guidelines require that major projects be monitored during the implementation stage on a weekly, quarterly, and annual basis and that a senior project manager be assigned. Responsibility for physical and financial monitoring of the progress of projects rests with the respective implementing agencies. There are rules for project adjustments, but these do not include reviews of the project rationale. An amendment of up to 20 percent of the project cost is allowed, but amendments above 20 percent must be tendered. All cost adjustments must be analyzed and documented, and approved by MINECOFIN. There is no legal requirement to review the project rationale, cost, and outputs

prior to the approval of cost adjustments. The OAG is mandated to conduct ex-post financial, compliance, performance, IT, and special audits of projects.

- 59. Project monitoring as described in the guidelines is not yet fully effective, though ex-post audits are conducted and published. Project monitoring by senior officials is undertaken but implementation plans are not prepared. The OAG found project management at the district level to not be effective. The OAG also reported that the execution of contracts was slowly progressing but far from completion. Table 10 presents the detail of slow progress at sites identified by the OAG, and Box 4 presents a list of shortfalls identified by the OAG and RPPA in the management of projects. Ex-post audits conducted by the OAG are published and scrutinized by the Legislature. Recommendations are made, and all entities are required to comply with them.
- 60. There is scope to improve project management with improved capacity and new tools. For example, several projects have seen slow progress (Table 10), which could have been identified and remediated earlier using analytical tools such as S-Curve analysis (see Annex 7). The training of project managers and contract engineers could also be focused on the correct application of the contract as well as the enforcement of contract regulations to accelerate the claims process. Progress reports should have all physical and financial progress details, and an analysis of remaining risks in the project to inform management decisions.

Table 10. Rwanda: Details of Slow Progress at Project Sites

Description	Contract amount (RWF billion)	Percentage of work completed	Percentage of the execution period lapsed
Construction of port at Rubavu and Rusizi Lake Kivu	11	9	61
Upgrading works for Nyagatare-Rukomo road	45	70	93
Rehabilitation and widening of Rbengera-Rambura Road	13	19	67
TOTAL:	70		

Source: Report from the OAG, June 2020.

#### Box 4. Shortfalls Identified by the OAG and RPPA in Project Management

The following shortfalls in the project management were identified:

- Delayed construction works without valid contractual agreement.
- Failure to charge penalties for delays to correct defects.
- Lack of adequate supervision and internal control.
- Project stalled because of budget constraints.
- Projects are delayed up to 257 percent of original contract period.
- Contract prices higher than the budgeted amount, actual cost varied between 29 percent to 1532 percent of planned cost.
- Unrealistic project timeframes.
- Level of Contractor's understanding of the project very low.
- Low standard of feasibility studies.
- Project governance not good.
- Final inspections in arrear of two year.
- Some projects took five years to commence after completion of feasibility studies.
- Lack of qualified staff.
- Organizational setup is weak.
- Some entities commence with projects without a site available.
- Projects commenced without adequate funding for expropriation.

Source: Reports from the OAG and RPPA.

# 15. Monitoring of Public Assets (Strength— Medium; Effectiveness— Low; Reform Priority— High)

#### 61. The management process for the inventory of state assets is contained in the PFM Manual.

The manual defines the methods that should be used to register, maintain and manage assets. Several laws and orders are also applicable in the management of assets, central and decentralized. The International Public Sector Accounting Standards-based accounting system is not yet functional, and a comprehensive asset register cannot be compiled at this stage. Still, it is in development in collaboration with the OAG. Where institutions have large numbers of assets, the institution may appoint a consultant to conduct the assets verification. The PFM Manual requires that asset values be recorded in the financial statements. Depreciation is defined in the PFM Manual and is applied to assets regularly using the straight-line methodology.

- **62.** Assets registers are not fully updated according to the PFM Manual, there is minimal reporting of asset values and depreciation is not recognized in the statements. While asset registers are partially updated, the OAG has identified several irregularities in the management of assets (Box 5). Most government financial statements do not include the value of non-financial assets, and the assets are not revalued regularly. While Chapter 14 of the PFM Manual requires that depreciation be included in the asset register and financial statements, the same manual states that depreciation or impairment of assets and revaluations will not be recognized in the financial statements. This is a contradiction in the manual that should be corrected. The depreciation is currently recorded in the fixed asset registers of entities.
- 63. The asset management process described in the PFM Manual is not yet fully effective.

  Addressing the inconsistencies in the manual and requiring depreciation to be recognized in the financial

statements would be an important first step. In addition, consolidated asset values should be presented in the financial statements, and entities should present asset values in their financial statements.

#### Box 5. Irregularities in Asset Management Identified by the OAG

The OAG identified numerous irregularities in asset management in the 2020 Annual Report. These included:

- Value of disclosed assets in the financial statements were not supported by asset registers
- Disclosed assets without reliable sources
- Failure to disclose assets acquired during the year under review
- Unexplained differences between amounts recorded in asset registers and the ones disclosed in financial statements
- Assets with no estimated value
- Absence of title deeds for disclosed assets
- Incomplete information in the disclosure note. It lacks important information such as the date of acquisition, depreciation, accumulated depreciation

Source: Annual Report of the OAG, June 2020.

#### Recommendations to Improve Investment Implementation

**Issue**: Funds are withheld from projects with low execution progress.

Recommendation 3.1: Prepare and publish clear guidelines on when payments may be withheld.

Issue: There are systematic procedures for ex-post review, but these are not always used.

Recommendation 3.2: Strengthen the ex-post evaluation process and require evaluations for large projects.

Issue: Asset management is limited, and asset values are not published.

Recommendation 3.3: Include asset values in the financial statements and consolidated asset values in the Consolidated Financial Statements.

# IV. CLIMATE CHANGE PUBLIC INVESTMENT MANAGEMENT ASSESSMENT

#### A. Climate Change and Public Infrastructure in Rwanda

- **64. Rwanda** is increasingly experiencing the impacts of climate change. Rwanda's economy depends heavily on agriculture, which is primarily rain-fed and sensitive to climate change. The intensity and variability of rainfall has increased, and the mean temperature has risen between 1.4 and 2.6 degrees in Rwanda's southwest and eastern regions over the past 50 years.<sup>27</sup> These developments in temperature and rainfall are important drivers of droughts, floods, landslides, and storms, all of which are associated with damage to infrastructure. The resilience of Rwanda's infrastructure to climate change will be increasingly crucial for supporting the country's medium- and long-term goals for economic prosperity.
- **65.** Rwanda has maintained clear and comprehensive commitments to mitigating and adapting to climate change. In 2011, Rwanda developed its Green Growth and Climate Resilience Strategy to guide its response to climate change. Rwanda also hosted the 28th Meeting of the Parties to the Montreal Protocol, at which the 'Kigali Amendment' to substantially reduce the consumption of hydrofluorocarbons was agreed. Rwanda updated its Nationally Determined Contribution (NDC) in 2020 with an emission reduction objective of 38 percent from the business-as-usual (BAU) scenario. The NDC also laid out the challenges and costs of adapting to climate change in Rwanda, noting particular vulnerabilities in the agricultural sector and water management, urban housing, and transportation. However, to fully meet the NDC goals, financing costs are likely to be more than 10 percent of GDP annually through to 2030.<sup>28</sup>
- **66.** The development and improvement of infrastructure is a key part of Rwanda's climate-change adaptation strategy. The NDC (Box 6) includes 24 measures to adapt to climate change with an anticipated cost of more than USD5.3 billion (55 percent of annual GDP) by 2030. The development of climate-resilient infrastructure and improvement of existing infrastructure makes up over 85 percent of the value of these measures. This would mark a substantial increase in overall public investment in Rwanda and a shift in the sectoral composition of investment toward the agricultural sector, though 60 percent of this investment (including the largest projects) is contingent on co-financing. These extensive forthcoming infrastructure needs emphasize the importance of developing robust climate-sensitive public investment practices.

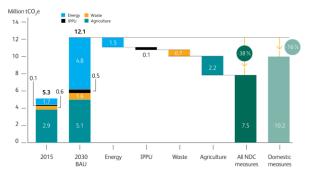
<sup>&</sup>lt;sup>27</sup> Rwanda: Updated Nationally Determined Contribution, May 2020.

<sup>28</sup> IMF 2021 Article IV Consutlation and Fifth Review Under the Policy Coordination Instrument - Staff Report.

#### Box 6. Rwanda's Nationally Determined Contribution (NDC) 2020 Update

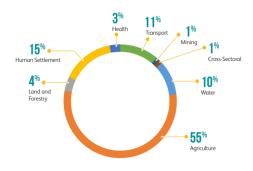
The NDC update sets out Rwanda's objectives, targets, and implementation measures for climate mitigation and adaptation. The emissions reduction objective is 38 percent from the BAU scenario in the year 2030, of which 16 percent is unconditional ('domestic measures'), and 22 percent is conditional on international support and external funding (Figure 17).

Figure 17. Rwanda NDC Emission Scenarios



The NDC also defines 24 measures for climate change adaptation, with a combined cost of USD5.3 billion (Figure 18). The largest of these measures includes the expansion of irrigation and improved water management (USD2.3 billion); improved transport infrastructure (USD0.6 billion); improvements to high-density buildings (USD0.4 billion); and stormwater management (USD0.4 billion). The total cost of the NDC is estimated to be USD11.0 billion, of which USD4.2 billion is anticipated to come from national resources, with the rest contingent on external funding.

Figure 18. Rwanda Adaptation Investment Requirements



Source: Rwanda: <u>Updated Nationally Determined Contribution</u>, May 2020

#### **B. Evaluation Using the PIMA Climate Module**

67. The Climate PIMA assesses five public investment management practices from a climate change perspective and is an extension of the existing PIMA framework. There is a close resemblance between the C-PIMA institutions and corresponding PIMA institutions, although some of the C-PIMA institutions combine dimensions in separate PIMA institutions, and institution 5 in C-PIMA (risk management) has no counterpart in PIMA. Figure 19 describes the main elements of the C-PIMA and illustrates the relationship between PIMA and the C-PIMA Module.

PIMA Framework

PIMA

C-PIMA

#### 68. The C-PIMA covers the following specific issues:

- C1. Climate-aware planning: Aligning national and sectoral plans and associated investment
  portfolios to climate objectives is essential in transforming public sector infrastructure toward climate
  resilience and sustainability. The planning phase is particularly relevant for incorporating climate into
  spatial planning and construction requirements.
- C2. Coordination between entities: Public investment can involve various layers of government, PCs, and PPPs. Integrating green considerations into public investment management thus means coordinating across all parts of the public sector and on joint ventures with the private sector.
- C3. Project appraisal and selection: This is a crucial phase in the decision-making process on major infrastructure projects. It determines which projects get done and ensure that the most effective and efficient investments are prioritized. Climate change-related analysis of mitigation and adaptation impacts of investments must be included in this phase.
- C.4 Budgeting and portfolio management: Green investment and maintenance allocations should be budgeted for and reported on through the annual budget and other fiscal instruments such as the medium-term expenditure framework and the government's financial statements. Asset management and ex-post audit and review should similarly consider climate objectives.
- C5. Risk management: Climate change creates risks that impact public infrastructure and the budget.
   Natural disaster management strategies and fiscal risk analyses must incorporate such risks, and risk mitigation strategies should consider climate considerations.

#### C1. Planning (Institutional Strength— High; Reform Priority— Low)

**69. National and sectoral strategies for public investment are consistent with climate change policies, including the 2020 NDC update (Box 6).** The NDC builds on the 2011 Green Growth and Climate Resilience Strategy, setting out the country's actions and priorities on climate change mitigation and adaptation. The Green Growth and Climate Resilience Strategy also forms the basis for the 2019 National Environment and Climate Change Policy. The actions described in the Green Growth and Climate Resilience Strategy and previous NDC versions are embedded in the 2017 – 2024 NST and in

relevant sector strategies. Rwanda has a very well-designed and effective national planning system (see PIMA Institution 2), which also applies to climate change considerations.

- 70. The National Land Use and Development Master Plan provides clear guidance on how climate change considerations should be reflected in district land use plans, and Parliament approves these plans. Rwanda has a comprehensive and detailed land use planning and permitting framework. The Urban Planning and Building Law (2012) defines land use planning and permitting responsibilities and procedures. The National Land Use Strategy (2011) and National Land Use and Development Master Plan (2020) give detailed guidance on all aspects of land use planning throughout the country, including how climate change considerations should be reflected. The Ministerial Order Determining Urban Planning and Building Regulations (2019) specifies a minimum green building compliance system, which emphasizes the contribution to meeting climate change mitigation objectives and establishing energy and water efficiency standards that help meet adaptation goals. Districts develop their land use plans, which are approved by the district council, reviewed by a technical committee at the national level, and finally approved by Parliament. Applications for construction permits are received and initially reviewed by sub-district authorities before being submitted to the relevant district for review and issuance of the permit. For projects of national importance, there is extensive consultation between central and district governments, but the permit is still issued at the district level.
- 71. The Rwanda NDC and the first budget call circular provide clear guidance for government agencies to provide and cost climate change-aware public investment strategies. The NDC document and accompanying internal implementation framework outline the mitigation and adaptation contributions with critical interventions by sector with costed interventions, key performance indicators, and associated projects aligned to the responsible implementing agency. A monitoring and reporting framework for the NDC is contained in the first annual planning and budgeting circular, which offers a targeted entry point for mainstreaming into the budget and annual reporting process (Box 7). In addition, yearly capacity building and guidelines for planners and environmental officers are provided at the start of each planning cycle to ensure climate change-related interventions are adequately mainstreamed in the planning and budgeting process.

#### Box 7. Overview of the Mainstreaming of Climate Change Interventions in the Planning and **Budgeting Process**

Stage 1: Ensuring climate change-related interventions and targets are integrated into sector plans. At the start of the planning cycle, consultations are held between the Ministry of Environment and the lead sectors and budget agencies to align action plans with the interventions from the NDC and Green Growth and Climate Resilience Strategy.

Stage 2: Climate change monitoring statement communicated through the first budget call circular. This annex to the budget call circular includes the agreed matrix of selected indicators and interventions selected from the Green Growth and Climate Resilience Strategy and the NDC, which are aligned to the lead implementing entity with a proposed budget allocation. Costed budget allocations are included as part of this annex.

Stage 3: Budget hearings to assess if the climate change monitoring statement has transcended into the budget. BA and district action plans and associated budgets are reviewed to ensure climate change interventions have been adequately mainstreamed in the medium-term budget.

Stage 4: Annual reporting for implementing environment and climate change activities. The final stage measures the implementation of the climate change monitoring statement using a traffic light approach that highlights where interventions are on or off track and where corrective action is required. Budget agencies and districts are ranked according to progress made.

#### C2. Coordination (Institutional Strength— Medium; Reform Priority— Medium)

- 72. Climate change-related investment decisions are coordinated through the annual dialogue on NDC commitments, but there is no specific decision mechanism that ensures consistent weighting of climate change objectives. There is a comprehensive framework for national and sectoral planning, including for climate change relevant investments in Rwanda. Annual discussions between central ministries and agencies provide a platform for implementation. These discussions occur before budget submissions and during budget hearings, with comprehensive year-end reporting. The dialogue includes discussions between the Ministry of the Environment and the different ministries about how NDC commitments, operationalized through a detailed NDC implementation framework, will be reflected in the work program of each entity. However, there is no standardized mechanism to promote consistent decisions across sectors, for instance, standardized shadow prices on greenhouse gas (GHG) emissions in project appraisals or special budget incentives to investments that help reach NDC targets.
- 73. District decisions on climate change relevant investments are coordinated through the same annual dialogue, but climate change impacts are not among the standard criteria in the project appraisal mechanism. MINALOC and LODA have developed a comprehensive financial management information system for district governments. This includes a project module that contains key information about district project proposals and MINALOC's assessment of these projects. The assessment reflects information related to several standard criteria, but climate change is not one of these. The consideration of a project's climate change impacts is done outside the information system, and there are no safeguards to ensure that project decisions about climate change-relevant projects are fully consistent. PC investment decisions are also coordinated through the annual dialogue on NDC commitments as PCs participate in the discussions with their parent ministries. This means that PC

projects and their climate change impacts are also subject to extensive discussions. Still, there is no stringent mechanism to ensure that decisions to implement specific projects are entirely consistent from a climate change perspective.

74. Improvements in climate change-sensitive project decisions are a medium reform priority and can be achieved relatively easily. More robust methodologies for appraisal of climate change relevant projects, including standard shadow prices for GHG emissions and assessments of the resilience of investments to climate change hazards, will improve the quality of decision-making and strengthen the consistency within and across different sectors. Inclusion of climate change considerations as part of the mandatory assessment information in the MINALOC information system, and a similar requirement to the central government IFMIS project module as this becomes operational, will also enhance the transparency and consistency of decisions about climate change relevant projects. This transparency and consistency in decisionmaking will take on greater importance as Rwanda looks to undertake the significant ramp up of investment in sectors (like agriculture) outlined in the NDC 2020 update (Box 1).

#### C3. Appraisal and Selection (Institutional Strength—Low; Reform Priority—High)

- 75. The approval of major infrastructure projects does not require specific climate change-related analysis to be conducted. The project appraisal methodology requires an Environmental Impact Assessment (EIA) before the project is appraised. MINECOFIN rejects all major projects submitted without an approved EIA. However, it is not clear that the guidelines for these assessments (or any other guidelines for project appraisal) contain any requirement for climate change-specific analysis of the infrastructure project. There is no evidence of a requirement for technical details relating to climate change adaptation (hazard analysis, risk mapping and screening, loss and damage estimation) or mitigation (BAU GHG emissions and net GHG impacts, marginal abatement cost curves, or shadow prices of carbon). While an EIA is presented at public participation events, the appraisal document is not published, and EIAs are not readily available.
- 76. The PPP framework does not provide guidance on how climate change-related risks should be allocated between government and PPP partners. 93 percent of existing PPP projects are in the energy sector, with the remainder in water and sanitation, culture, tourism, and logistics sectors. Many of these are exposed to some form of climate change-related risk, such as changing precipitation levels, water flows, and higher temperatures. However, while the PPP Law requires a feasibility study with an EIA to be conducted for major projects, there is no explicit consideration in the framework of how risks will be allocated between government and PPP partners. Standard force majeure clauses exist in PPP contracts, but these do not specify how costs from predictable climate change-related events will be shared, nor how costs related to transition risks (such as changes in government policy) are allocated between the PPP partners.
- 77. The project selection process includes a detailed checklist, but this checklist does not contain specific climate change-related selection criteria. Climate change-sensitive selection criteria would include checks on the consistency of the project with the government's climate change mitigation objectives and appropriate design to reduce exposure to adaptation risks. While an EIA is a requirement for a feasibility study to be submitted for selection, it is not clear whether methodologies are in place to provide this analysis. The selection criteria also do not provide specific requirements for a review of this type of analysis, nor guidance on how projects should be considered from a climate change perspective.

78. Climate change-related appraisal, selection, and contracting are complex but important aspects of climate change-sensitive public investment management. These are especially important institutions because they convert the aspirations of the planning framework into tangible outcomes in specific projects. With over USD5.3 billion in climate change-related infrastructure investment planned in the NDC 2020 update, and with some of this in sectors that have not had large-scale investment projects in the past, clear appraisal and selection criteria should be treated as a critical priority. Strengthening these institutions will require (a) the incorporation of methodologies to assess the sensitivity of projects in feasibility studies to climate change; (b) guidance on the sharing of climate change-related risks in PPP contracts in the PPP guidelines; and (c) specific selection criteria addressing the mitigation and adaptation aspects of projects and guidance on how these criteria should be assessed and applied.

# C4. Budgeting and Portfolio Management (Institutional Strength— Medium; Reform Priority— Medium)

- **79.** Budget documents do not explicitly identify planned climate change-related investment expenditures, although this is partially done through the mainstreaming process. As part of the mainstreaming process, action plans with indicators and activities are identified through the NDC, Green Growth and Climate Resilience Strategy, and NST, but this does not easily translate to the budget structure. Manual efforts are being undertaken to identify climate change-related projects as part of the climate change mainstreaming process. The Chart of Accounts structure adopted in Rwanda could enable a form of climate change budget tagging at various levels (program, sub-program, output, activity, and input). However, this would have to be carefully thought out and integrated with ongoing reforms to streamline performance information across government. Annex 8 sets out some of the main elements and features of green budgeting as identified by the European Commission, the IMF, and the Organization for Economic Cooperation and Development, and cites examples of country practices.<sup>29</sup>
- **80.** Ex-post reviews and audits are not conducted in relation to climate change mitigation and adaptation. The Ministry of Environment does not conduct ex-post reviews. The General EIA Guidelines only require that a decommissioning inspection be undertaken for engineering works, mitigation activities associated with the removal of project facilities, and proposed restoration measures. The process is silent about climate change mitigation and adaptation.
- 81. The Government's asset management policies do not refer to climate change considerations, and there is not yet a requirement for these considerations in asset management. Still, there are cases where PCs are already considering climate change impacts in asset maintenance. For example, the Rwanda Energy Group considers climate change-related effects in the maintenance schedules of electricity generation plants. Each generation plant is maintained to the level prescribed by the manufacturer's specification concerning emission standards. The Rwanda Transport Development Agency has also commenced with the inclusion of climate change aspects during road maintenance and rehabilitation.

cop26\_en.pdf.

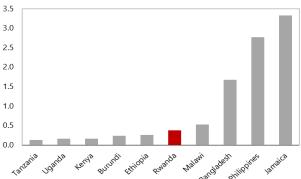
<sup>&</sup>lt;sup>29</sup> Green budgeting: Towards Common Principles, <a href="https://ec.europa.eu/info/sites/default/files/economyfinance/">https://ec.europa.eu/info/sites/default/files/economyfinance/</a>

82. Exposure to climate change impacts and risks and climate change mitigation targets create a need for specific budgeting, review, and asset maintenance practices. To embed this need in budget practices, MINECOFIN and the Ministry of Environment should explore options for clearly identifying climate change-related investments in the budget. For projects with a mitigation component, ex-post reviews should compare actual GHG emissions against projected and actual emissions under a BAU scenario. For adaptation projects, reviews should assess the impact of hazards and risks of climate change impacts on the completed infrastructure. Maintenance manuals and schedules should also guide maintenance requirements in those sectors where climate change is likely to increase damage (for instance, due to hydrological events or higher temperatures).

#### C5. Risk Management (Institutional Strength—Medium; Reform Priority—Medium)

83. Rwanda has a comprehensive disaster risk management strategy for natural hazards, which includes risk mitigation measures. Rwanda experiences relatively low levels of annual losses from environmental risks, with natural disasters accounting for around 0.3 percent of GDP (Figure 20). The principal natural disaster risks are floods and earthquakes. The Ministry of Emergency Management produces a comprehensive national hazard assessment (the National Risk Atlas (2015)) which is supported by an assessment of climate change vulnerability (2018). This National Risk Atlas assesses exposure, vulnerability, and economic costs of five categories of natural hazards based on the expected costs of a range of infrastructure assets. In addition, it includes a targeted contingency plan for each type of hazard. The climate change monitoring statement (see Box 7) also consists of a subset of indicators for disaster preparedness, to which budget agencies and districts must adhere.

Figure 20. Expected Average Annual Loss (Percent of GDP)



Source: United Nations Office for Disaster Risk Reduction's Prevention Web Initiative

84. The OBLSF provides for the establishment of an emergency budget reserve as a contingency not exceeding 3 percent of the current budget. The contingency is appropriated under MINECOFIN, and the Minister may authorize the use of these funds to cover urgent, unforeseen, and unavoidable expenditures. However, it is not possible to identify the specific emergency reserve contingency in the budget documents or budget execution reports.<sup>30</sup> No separate quarterly report on the utilization of the contingency is published. There is no other financing mechanism to meet the costs of

<sup>30</sup> In practice the budget provision and actual utilization of the contingency is unclear. The CoA includes an economic item code (285103) titled "other contingencies and emergencies but this is contained at sub-item level within the item (2851) "miscellaneous other expenditures," which includes sixteen different sub-items per the CoA.

climate change-related damages to public infrastructure, although there are plans to initiate an emergency disaster fund.

**85. MINECOFIN publishes** a **Fiscal Risk Statement with** a **qualitative analysis of climate change-related risks**. Natural disasters are identified in a standalone chapter indicating the number and type of hazards that have affected different sectors of the economy. An estimation of budgetary commitments and mitigation measures are also provided. This analysis provides a solid platform for more quantitative analysis of potential economic and fiscal exposure and the probability of occurrence. This could draw on the quantitative methods in the National Risk Atlas<sup>31</sup> and the methods for the assessment of long-term fiscal sustainability and climate change risks developed by the IMF.<sup>32</sup>

## Recommendations to Improve the Sensitivity of Public Investment Management to Climate Change

**Issue**: The appraisal and selection of projects do not contain assessments of project mitigation and adaptation aspects.

**Recommendation 4.1**: Produce and require the use of methodologies to assess the GHG impact and climate change-resilience of projects in feasibility studies.

**Recommendation 4.2**: MINECOFIN to prepare specific selection criteria addressing the mitigation and adaptation aspects of projects and produce guidance on how these criteria should be assessed and applied.

**Issue**: There is no guidance on how climate change-related risks (such as predictable climate change-related natural disasters and transition risks) should be shared between government and PPP partners.

**Recommendation 4.3**: Rwanda Development Board to update the 2018 PPP guidelines to provide specific guidance on the sharing of climate change-related risks in PPP contracts.

**Issue**: Climate change-related investments cannot be identified in the budget.

**Recommendation 4.4**: MINECOFIN to explore options to tag climate change-related investments in the budget and incorporate other elements of green PFM in the PFM framework. This should build on the existing streamlining reforms and the recent analytical work on green PFM undertaken by the European Commission, Organization for Economic Cooperation and Development, and IMF.

**Issue**: The analysis of fiscal risks related to climate change is qualitative and does not provide a measure of the scale of the possible risks related to climate change in Rwanda.

**Recommendation 4.5**: MINECOFIN to expand the Fiscal Risk Statement to include quantitative analysis of the fiscal risks related to climate change. This should start with an assessment of long-term fiscal sustainability under different climate change scenarios and discrete fiscal risks directly affected by climate change.

<sup>&</sup>lt;sup>31</sup> In the <u>National Risk Atlas</u>, the estimation of economic cost is a function of the total exposure, the damage state of each element at risk, and their replacement or repair cost. This methodology could be projected forward to support the quantification of the chapter on natural disasters in the Fiscal Risk Statement.

<sup>&</sup>lt;sup>32</sup> See, for example, Harris, J. et. al (2022): <u>Georgia – Updating the Balance Sheet and Quantifying Fiscal Risks From Climate Change.</u> IMF Country Report 22/150.

### V. CROSS-CUTTING ISSUES

#### A. Legal Framework

- **86.** A comprehensive legal, policy, and regulatory framework covers all key aspects of public investment management. Rwanda's legal system combines civil law and common law practices. While many important issues are covered in legislation, some public investment institutions are primarily governed by regulations, policies, and guidelines. Table 11 provides an overview of the most important laws, regulations, and guidelines related to each PIMA and Climate PIMA institution.
- 87. Public Investment management, including climate-relevant public investments, is well covered by the current legal and regulatory framework. However, some of the recommendations in this report will have implications for laws and regulations and will require minor amendments over time. The revised OLSFP was passed in 2022, but public investment management considerations did not directly drive the changes.

Table 11. Legislation, Regulations, and Guidelines for Public Investment Management

		Phase/Institution	Legislation		
	1	Fiscal principles or rules	Organic Law on State Finances and Property (2022)		
	2	National and sectoral plans	National Strategy for Transformation (2017)		
			Manual of Public Financial Management (PFM) Policies and Procedures		
			(2019)		
g	3	Coordination between entities	Planning and budgeting guidelines for decentralized development		
A. Planning			projects (2013)		
Plar	4	Project appraisal	National Investment Policy (2017)		
ج ح			Feasibility study guidelines (2018)		
	5	Alternative infrastructure financing	National Investment Policy (2017)		
			Law Governing PPPs in Rwanda (2016)		
			Public Private Partnership Guidelines (2018).		
			Monitoring and evaluation planning guidelines and tools for state owned corporations.		
	6	Multi-year budgeting	Organic Law on State finances and property (2013)		
			Ministerial order on financial regulations (2016)		
	7	Budget comprehensiveness and	Guidelines for planning and budgeting		
	'	unity	Manual of Public Financial Management (PFM) Policies and Procedures		
io		unity	(2019)		
cat	8	Budgeting for investment			
B. Allocation	•	Budgeting for investment			
œ.	9	Maintenance funding	Road maintenance Fund Law (2013)		
		_	Organic Law on State finances and property (2013)		
	10	Project selection	National Investment Policy (2017)		
	10	Froject selection	Feasibility study guidelines (2018)		
	11	Procurement	Public procurement law (2018)		
	• •		(2010)		
	12	Availability of fronting	Ministerial and an anti-namial regulations (2046)		
Ë	12	Availability of funding	Ministerial order on financial regulations (2016)  Manual of Public Financial Management (PFM) Policies and Procedures		
tatic			(2019)		
C. Implementation	13	Portfolio management and	The National Monitoring, Evaluation and Learning Guidelines, (2021)		
len		oversight			
<u>ਛ</u>	14	Project implementation	National Monitoring, Evaluation and Learning Guidelines, (2021)		
Ċ	'-	1 roject implementation	Public procurement law (2018)		
			OAG law (2013)		
	15	Management of public assets	Organic Law on State finances and property (2013)		
	1				
	C1	Climate-aware planning	Environment Law (2018) Ministerial Order Preventing Activities that Pollute the Atmosphere		
			(2010)		
			Environment and climate change policy (2018)		
≰			Law governing urban planning and building (2012)		
e PIIM	C2	Coordination between entities			
Climate PIMA	C3	Appraisal and selection			
ပ	C4	Budgeting and portfolio	Organic Law on State finances and property (2013)		
		management			
	<b>C</b> 5	Risk management	Organic Law on State finances and property (2013)		
			The National Disaster Management Policy, 2012		

#### B. IT Systems and Data Management

- 88. IT systems and data management are well rooted in Rwanda's public investment management cycle with strong in-house capacity to adapt and customize when required. Districts have a financial management information system that can store project information such as feasibility studies, reviews, appraisals, and selection decisions. The E-Procurement system is operational, and there are plans to link multi-year contractual commitments with the IFMIS. Disbursements of externally financed projects can be effectively tracked with a bridge to the government's accounting framework. The IFMIS is currently being expanded to include a project module (see below), building on the effective development over the past ten years. The homegrown system has evolved since the early adoption of an Oracle platform, which was found to be inflexible and expensive to maintain. 33
- 89. The National Investment Department is working with the in-house IFMIS team to develop a project module to automate the current manual processes. Currently, much of the work undertaken by the department involves data collection and document and spreadsheet management based on various templates, which reduces the time for effective project analysis. The development of the project module aims to automate key stages and decision points in the project cycle (Table 12). Based on experience from other countries, the plans in place appear to be comprehensive and should allow for greater visibility of a project at a given point in either of the planning, allocation, and implementation phases.34

Table 12. Rwanda: Key Functions of the Planned Project Module in the IFMIS

Stage in project cycle	Main functionality
Planning/Project concept	For a new project to be entered in the IFMIS, there are several criteria that will require completion. This includes key elements of financial information, such as project costs, and non-financial components such as performance indicators, project milestones, and activity plans.
Project review	Before a project can be considered for the PIC, it will have a two-stage review in the IFMIS system. The first is a review by the National Investment Department, which scores projects using a set of criteria based on a ranking system. This stage will also require certain documents to be uploaded consistent with the National Investment Policy. The second is the PIC decision, where documentation and decisions taken by the PIC, such as minutes, are uploaded to change the project status to "approved." This then makes the project eligible for selection.
Project selection for budgeting	Once the project has been approved, it is pushed into the budget module of the IFMIS, where the MTEF constraint is introduced. Selection decisions are made on which projects should be included in the budget, with priority given to the completion of ongoing projects with known and verified future commitments. Scoring and ranking of projects will be undertaken at this stage.
Project Execution	Each project must maintain an up-to-date implementation plan, annual work plan, and commitment plan on a quarterly and annual basis.
Monitoring and Reporting	Every quarter, each project must report on performance against stated milestones in the implementation plan and provide explanations for any planned deviation, changes to design and scope, and corrective measures to be taken.

<sup>33</sup> Locally hired programmers are now responsible for managing upgrades to the IFMIS system. This is supported by the World Bank and other development partners.

<sup>34</sup> Findings are based on a demonstration of the system. No project document or user requirements were provided.

- **90.** The planned project module will have extensive coverage across the public sector. Coverage will include districts, PPPs, and most PCs as the sole repository of information for projects. Currently, district information is captured through a separate management information system, while PPP information is collected in Excel. Both of these are consolidated in the PIC. There are plans to integrate these as one system through the IFMIS.
- 91. In developing the project module, it will be necessary to ensure procedural consistency and links with other IT systems. There is some evidence of a mismatch between guidelines and system functions. For example, unit cost guidelines exist, but these are not incorporated in the IFMIS. In addition, information is often requested, such as uploading contracts, but this could be connected to the procurement database for greater security and accuracy.

#### C. Capacity

- 92. The National Investment Department has similar staffing levels to regional peers and plays a vital coordination role with budget agencies and districts. It has nine staff members: a department head, four project design specialists, and four project design officers. This is consistent with the staffing levels in Kenya and Ethiopia but there are fewer staff than Uganda and Malawi (who have between 15 and 20 staff). The department works closely with BAs and districts where there is extensive knowledge of the public investment management cycle. BAs and districts can also draw upon central expertise when required, helping to build a strong feedback loop for capacity development across government. Staff capacity appears to be high, but more time could be dedicated to analytical functions to support PIM. The automation of the project module is still ongoing, so the department has to spend a lot of time manually collecting data, which could be more effectively used to analyze project decisions.
- 93. The planned organizational restructuring in MINECOFIN provides an excellent opportunity to define functional roles and responsibilities in the department. Based on the current organogram, roles and responsibilities are not well-delineated. For example, project monitoring and evaluation is under a separate directorate. Plans for organizational restructuring are at an advanced stage, and the department could draw from examples of how public investment management units have been established across the region. Figure 21 and Table 13 provide examples of staffing structures, expertise, and functions that Rwanda could draw upon.
- **94.** Elsewhere, there are significant areas for further capacity strengthening. A team of just three people in the Accountant General's Department oversees PCs, though PCs are responsible for much of the nation's critical infrastructure. As new systems continue to be developed and brought online (such as the new projects module of the IFMIS), officials will need to be trained in its use. Procurement entities and procurement committee members would also benefit from training on procurement procedures.
- 95. Climate change-aware public investment management will also require an investment in skills and knowledge. Across all aspects of public investment management (and public financial management), training will be needed to mainstream mitigation and adaptation. Climate change-related EIAs will also require more climate change expertise in the Rwanda Development Board, where six officers are responsible for reviewing over 400 EIAs each year.

Figure 21. Possible Organizational Structure of the National Investment Department



Table 13. Rwanda: Broad Functions of Each Section in the Public Investment Management Unit

Section	Functions	Coordination roles
Financial	Assessment of the affordability and financial viability of projects	Budget, Debt and PPP Departments
Economic	Economic and Social assessment	Macro unit
Technical	Appraisal of technical issues (designs, land, environment, social)	Line ministries
Monitoring and Evaluation	Monitoring of project delivery and evaluation	Budget Department, Line ministries
Analysts	Research, analysis, modelling	All

### **Annex 1. ACTION PLAN**

Inst.	Issue	Action	Capacity building needs	Responsibility	Timing
A. PI	anning Sustainable Levels of Public In	vestment			
3	There is no systematic collection or publication of information about fiscal risks from contingent liabilities related to PCs, PPPs, and districts.	Publish the annual Fiscal Risk Review of Government Investment. Improve reporting of contingent liabilities from PCs, PPPs, and districts and provide a consolidated overview of these risks in a published Fiscal Risk Statement.  Update accounting regulations for PCs, PPPs, and districts to specify that all contingent liabilities must be reported to MINECOFIN  Prepare section for Fiscal Risk Statement on contingent liabilities for whole of public sector and publish.	Receive comments on draft regulations.  Capacity building on Fiscal Risk Statement.	MINECOFIN Treasury dept.  MINECOFIN Macroeconomic dept	2022
4	The 2018 Project Appraisal guidelines provide a well-designed framework for appraisal, but these guidelines are not yet fully operationalized in MINECOFIN procedures, capacities and information systems.	<ul> <li>Operationalize the 2018 project appraisal guidelines, including a robust and well-documented project validation process by MINECOFIN.</li> <li>Ensure that the Government IFMIS is developed to provide adequate support to the public investment process.</li> <li>Make all major project appraisal documents publicly available while redacting any commercial secrets or sensitive information.</li> </ul>	Training on good practices for project validation	MINECOFIN Investment department	2022 - 2023

Inst.	Issue	Action	Capacity building needs	Responsibility	Timing
B. Er	nsuring Public Investment is Alloc	ated to the Right Sectors and Projects			
6	Budget ceilings are issued late in the budget calendar and do not serve as an adequate fiscal constraint.	<ul> <li>MINECOFIN to issue multiyear budget ceilings at the BA and district level earlier in the budget preparation process as an annex to the Budget Outlook Paper and solicit Cabinet approval prior to issuance in the second budget call circular.</li> </ul>	Working sessions to update budget documentation Training of trainers	MINECOFIN (Budget, Planning, Macro)	2022
6	Information on project costs, their revisions, and multi-year planned expenditures are not published at the time of appropriation.	<ul> <li>Publish project costs and multi-year projections in the budget annexes, or as a standalone budget document, by adapting the data that is submitted and stored in the IFMIS and district management information system.</li> </ul>	Design of formats for cost estimates	MINECOFIN (National Investment Department)	2023
9	Maintenance methodologies are required to guide maintenance needs and maintenance cost projections.	<ul> <li>Develop methodologies for routine-, and major maintenance, inclusive of indicative cost calculation principles.</li> </ul>	Working sessions	Line ministries	2022
10	There is no published consolidated project pipeline of appraised projects nor criteria for selection of projects for inclusion in the budget.	<ul> <li>Automate and publish a pipeline of appraised major projects to compare projects within and across sectors in a transparent and competitive manner and publish detailed selection criteria.</li> </ul>	Specification of IFMIS project module and design of document	MINECOFIN (National Investment Department, IFMIS Department)	2023

Inst.	Issue	Action	Capacity building needs	Responsibility	Timing		
C. I	Delivering Productive and Durable Public Assets						
12	Funds are withheld from projects with low execution progress.	Prepare and publish clear guidelines on when payments may be withheld.	Working sessions	Accountant General's Department	2022		
13	There are systematic procedures for ex-post review, but these are not always used.	Strengthen the ex-post evaluation process and require evaluations for large projects.	Continuous professional development training	Line Ministries	2023		
15	Asset management is limited, and asset values are not published	<ul> <li>Include asset values in the financial statements and consolidated asset values in the Consolidated Financial Statements.</li> </ul>	Updated PFM manual	MINECOFIN	2022		

	Climate PIMA						
Inst.	Issue	Action	Capacity building needs	Responsibility	Timing		
C3	The appraisal and selection of projects do not contain assessments of project mitigation and adaptation aspects.	<ul> <li>Produce and require the use of methodologies to assess the GHG impact and climate change-resilience of projects in feasibility studies.</li> <li>Prepare specific selection criteria addressing the mitigation and adaptation aspects of projects and produce guidance on how these criteria should be assessed and applied.</li> </ul>	Update EIA Guidelines  Updated and transparent selection criteria	National Investment Dept, MINALOC, Environment. MINECOFIN	2023		
C3	The PPP framework does not provide guidance on how climate change-related risks should be allocated between government and PPP partners.	<ul> <li>PPP Guidelines should be clear in relation to risk allocation, and guidelines require additions with regard to climate risk allocation.</li> </ul>	Update the PPP Guidelines	Rwanda Development Board	2023		
C4	Climate change-related investment cannot be readily identified in the budget	<ul> <li>Explore options for tagging and incorporating elements of green PFM. This should build on the existing streamlining reforms and the recent work undertaken by the European Commission, Organization for Economic Cooperation and Development, and IMF.</li> </ul>		MINECOFIN (Budget, Accountant General and IFMIS) Ministry of Environment	2022		
C5	Climate change-related fiscal risk analysis is largely qualitative.	<ul> <li>Expand the Fiscal Risk Statement to include quantitative analysis of the fiscal risks related to climate change by assessing long-term fiscal sustainability under different climate change scenarios methodology and discrete fiscal risks related to climate change.</li> </ul>	Formats and analytical techniques for quantification	MINECOFIN (Macro), Ministry of Environment	2023		

### **Annex 2. PIMA QUESTIONNAIRE**

Indicator		Scoring				
		1 = To no or a lesser extent	2 = To some extent	3 = To a greater extent		
A. P	Planning Sustainable Levels of Public In	vestment				
1. F	iscal targets and rules: Does the govern	nment have fiscal institutions to support	fiscal sustainability and to facilitate mediu	m-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. N	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).		

	Indicator	<u>Scoring</u>				
		1 = To no or a lesser extent	2 = To some extent	3 = To a greater extent		
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. Co	oordination between Entities: Is there ef	  fective coordination of the investment p	lans of central and other government entit	ies?		
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. Pro	oject Appraisal: Are project proposals s	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		

Indicator		Scoring		
		1 = To no or a lesser extent	2 = To some extent	3 = To a greater extent
				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. AI	ternative Infrastructure Financing: Is th	ere a favorable climate for the private se	ctor, PPPs, and PCs to finance in infrastru	cture?
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.

Indicator		Scoring			
		1 = To no or a lesser extent	2 = To some extent	3 = To a greater extent	
В. Е	Ensuring Public Investment is Allocated	to the Right Sectors and Projects			
6. M	ulti-Year Budgeting: Does the governme	ent prepare medium-term projections of o	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. B	dudget Comprehensiveness and Unity: T	o what extent is capital spending, and re	elated recurrent spending, undertaken thro	ugh 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.	

Indicator		Scoring			
		1 = To no or a lesser extent	2 = To some extent	3 = To a greater extent	
8. E	Budgeting for Investment: Are investment	nt projects protected during budget imp	lementation?		
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. M	laintenance Funding: Are routine mainte	l enance and major improvements receivi	ng 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.	

Indicator		Scoring			
		1 = To no or a lesser extent	2 = To some extent	3 = To a greater extent	
10. P	roject 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. D	Delivering Productive and Durable Publi	c Assets			
11. P	rocurement				
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.	

Indicator		Scoring			
		1 = To no or a lesser extent	2 = To some extent	3 = To a greater extent	
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. A	vailability of Funding: Is financing for o	capital spending made available in a time	ely 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. Po	ortfolio Management and Oversight: Is	adequate oversight exercised over imple	mentation of the entire public investment p	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.	

Indicator		Scoring		
		1 = To no or a lesser extent	2 = To some extent	3 = To a greater extent
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 co	ontrolled 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.

Indicator		Scoring			
		1 = To no or a lesser extent	2 = To some extent	3 = To a greater extent	
15. M	lonitoring of Public Assets: Is the value	of assets properly accounted for and re	ported 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	s-cutting issues				
A	IT support. Is there a comprehensive computerized information system for public investment projects to support decision making and monitoring?				
В	<b>Legal Framework</b> . Is there a legal and regulatory framework that supports institutional arrangements, mandates, coverage, procedures, standards and accountability for effective PIM?				
С	Staff capacity. Does staff capacity (number of staff and/or their knowledge, skills, and experience) and clarity of roles and responsibilities support effective institutions?				

### **ANNEX 3. DETAILED PIMA SCORES**

A. Planning				
	Institutional Design	Effectiveness		
1.a.	2	2		
1.b.	2	2		
1.c.	2	3		
2.a.	3	3		
2.b.	2	2		
2.c.	3	3		
3.a.	3	3		
3.b.	1	2		
3.c.	2	2		
4.a.	2	2		
4.b.	3	2		
4.c.	3	1		
5.a.	3	2		
5.b.	3	2		
5.c.	2	2		

B. Allocation			
	Institutional Design	Effectiveness	
6.a.	2	2	
6.b.	2	1	
6.c.	1	1	
7.a.	2	3	
7.b.	2	2	
7.c.	3	3	
8.a.	1	1	
8.b.	2	3	
8.c.	3	2	
9.a.	1	2	
9.b.	2	2	
9.c.	2	1	
10.a.	2	2	
10.b.	2	2	
10.c.	2	2	

C. Implementation				
	Institutional Effectiveness			
	Design			
11.a.	3	2		
11.b.	3	3		
11.c.	3	3		
12.a.	2	1		
12.b.	1	2		
12.c.	3	3		
13.a.	3	1		
13.b.	2	1		
13.c.	2	1		
14.a.	2	1		
14.b.	2	1		
14.c.	3	3		
15.a.	3	2		
15.b.	2	1		
15.c.	2	1		

## **ANNEX 4. PROPOSED REVISED BUDGET CALENDAR**

	Steps	Timing		MINECOFIN	BAs on central government level		Districts		
			budget	planning	budget	planning	budget	planning	
Stage 1: Calculate the Baseline	1	June/August	Conduct tra	aining for BAs on the new budget and planning procedures	Participate in trainings		Participate in trainings		
	2	Begin September	MINECOFIN is	sues the 1st budget call circular to instruct BAs on	Receive the 1 <sup>st</sup> budget call circular		Receive the 1s	t budget call circular	
	3		(i) the budget baseline exercise based on the costing methodology.	(ii) the planning requirements for the upcoming MTEF period					
	4	September – mid October	Technical support for BAs to answer questions which may arise during the baseline calculation.	Guides on Backward Looking Joint Sector Reviews (ToRs; technical and quality support for reports, participating in meetings)	Calculate the budget baseline and submit to MINECOFIN by end of August.	Conduct Backward Looking Joint Sector Review activities (prepare and submit draft reports to MINECOFIN, holding meetings)	Calculate the budget baseline and submit to MINECOFIN by end of August.		
	5	Second half of October	Assesses the submitted baseline calculations	Organizes central and local government consultative meetings in collaboration with	Interact with MINECOFIN in case of clarification	Participate in the central and local government	Interact with MINECOFIN in case of clarification	Participate in the central and local government	

Sto	eps	Timing		MINECOFIN	BAs on central government level			Districts		
			budget	planning	budget	planning	budget	planning		
			and requires amendments if necessary.  Consolidates the BA specific baselines into a total budget baseline; compares to fiscal objectives (EAC convergence criteria) and assesses fiscal space.	MINALOC/LODA to harmonize priorities and targets for the upcoming 3 FYs.	and amendment requirements.	consultative meetings.	and amendment requirements.	consultative meetings.		
6		Second half of October	-	ent: Conducts a macroeconomic forecast (update n from April) and calculates total expenditure ocoming FYs.						

	Steps	Timing		MINECOFIN		itral government level	Districts		
			budget	planning	budget	planning	budget	planning	
Stage 2: set early expenditure	7	First half of November	MINECOFIN su to Cabinet for a	ubmits expenditure ceilings (total and BA specific) approval. <sup>35</sup>					
ceilings		End of November		sues a Budget Outlook Paper <sup>36</sup> including c forecast, total and BA specific expenditure					
		Beginning of December		sues a second budget call circular which based on proval of expenditure ceilings instructs on drafting mates.					
Stage 3: BA Prioritization		December	Participates in the ministerial planning consultations.	Conducts  ministerial planning consultations and input from PIC to inform prioritization of policies within set expenditure ceilings.	Participate in Ministerial planning consultations.		Participate in Local Government Project Advisory Committee.		
		December		National Umu	ushyikirano Council				
		December and January	Guides and supports BAs to prioritize within set	Guides and supports BAs to adjust plans and investment based on recommendations from ministerial planning consultations and PIC.	Prioritize expenditure to comply with set	Incorporate recommendations from Ministerial planning consultations and	Prioritize expenditure to comply with set	Incorporate recommendations from LFPAC into priority setting within set	

<sup>&</sup>lt;sup>35</sup> If possible, the ceilings for those FYs which were already included in the previous MTEF should not be changed to support planning reliability.

<sup>&</sup>lt;sup>36</sup> This requires an amendment of the Ministerial Order relating to financial regulations as currently, this legal document requires the Budget Outlook Paper to be issued by the end of September.

Steps	Timing		MINECOFIN		tral government level	Districts	
		budget	planning	budget	planning	budget	planning
		expenditure ceilings.		expenditure ceilings.	PIC into priority setting within set expenditure ceilings.	expenditure ceilings.	expenditure ceilings.
				Develop costed proposals for corrective action in case existing programs and projects cannot be fully covered within set expenditure ceilings.	MINECOFIN by	Develop costed proposals for corrective action in case existing programs and projects cannot be fully covered within set expenditure ceilings.	Submit to the joint team of MINALOC, LODA and MINECOFIN by the end of November draft district plans.
				Submit to MINECOFIN by end of November detailed budget estimates proposals and		Submit to MINECOFIN by end of November detailed budget estimates proposals and proposals for	

Steps	Timing		MINECOFIN		tral government level	Districts	
		budget	planning	budget	planning	budget	planning
				proposals for costed corrective action.		costed corrective action.	
	First half of February	Assesses the draft budget estimate submissions from BAs to ensure compliance with set expenditure ceilings and other provisions of the second budget call circular.	Quality assurance of draft plans and investments from BAs.		IINECOFIN in case and amendment		INECOFIN in case and amendment
	Second half of February	If required, coordinates with BAs adjustments of draft budget estimates and proposals for costed	If required, coordinates with BAs adjustment of draft plans and investment.	Interact with M conduct the ac		Interact with th MINALOC, LO MINECOFIN to adjustments.	DA and

Steps	Timing		MINECOFIN	BAs on ce	entral government level		Districts	
		budget	planning	budget	planning	budget	planning	
		corrective action.						
	February		National Le					
	March	Issues guidelin with BAs.	es and roadmap for PBB and Imihigo and share it		their PBB and draft Imihigos th MINECOFIN.	Districts finalize their PBB contributions.		
		governments in	Organizes consultative meetings among central and local governments in collaboration with MINALOC/LODA to harmonize performance based budgeting and Imihigo priorities and targets.				rict consultations and ctoral priorities and	
						meetings wit	n consultative th Central government e priorities and targets g Imihigo.	
	Second half of March	-	ent: Conducts a macroeconomic forecast and npact on total expenditure ceilings for 3 upcoming					

<sup>&</sup>lt;sup>37</sup> Central government BAs and districts can start the preparation of their performance based budgeting and Imihigo contributions earlier, at the latest in February based on the results of the expenditure prioritization.

	Steps	Timing		MINECOFIN	BAs on cei	ntral government level	С	Districts
			budget	planning	budget	planning	budget	planning
		First half of April	Imihigo submi	assesses the performance-based budgeting and ssions (for districts in cooperation with DA) and if required discusses with BAs and andments.	Incorporate feedback on PBB and Imihigo and submit amended drafts to MINECOFIN.		Incorporate feedback on PBB an Imihigo and submit amended drafts to MINECOFIN.	
		First half of April	expenditure co	croeconomic forecast and its impact on the total eilings for the three upcoming FYs MINECOFIN sterial budget consultations.	Participate in ministerial budget consultations.			
					Adjustment of estimates to in recommendate ministerial but	ncorporate		
Prepare Budget Documents		March/April	expenditure co	prepares the BFP (with final total and BA specific eilings <sup>38</sup> ; reference to EAC convergence criteria; the atement as an Annex).				
		Mid-April		amendments of draft performance based budget and Imihigos if required as result of ministerial tations.	Amend draft F and Imihigos MINECOFIN.	PBB contributions and submit to		performance bnased putions and Imihigos MINECOFIN.

<sup>&</sup>lt;sup>38</sup> If possible and consistent with the macroeconomic forecast conducted in March, the ceilings should be the same as by end of September to support planning reliability.

Steps	Timing		MINECOFIN	BAs on o	entral government level	Districts	
		budget	planning	budget	planning	budget	planning
			itted performance-based budgeting and Imihigo and if required, support BAs to finalize them.				
	April	MINECOFIN S	submits draft budget documents including BFP to Parliament.				
	April		Issues ToRs for Forward Looking Joint Sector Reviews (FLJSR) and participates in FLJSR meetings.		Prepare and submit to MINECOFIN draft reports for FLJSR.		
			Provides technical support and quality assurance for the FLJSR draft reports.		Hold FLJSR meetings.		
					Submit to MINECOFIN signed FLJSR reports.		
	May/June	Responds to i	ssues emanating from Parliamentary review.				
	June	Final budget a	approval – Finance Law				

## ANNEX 5. SUGGESTED FORMAT TO INCLUDE TOTAL PROJECT COSTS AND MULTIYEAR PROJECTIONS

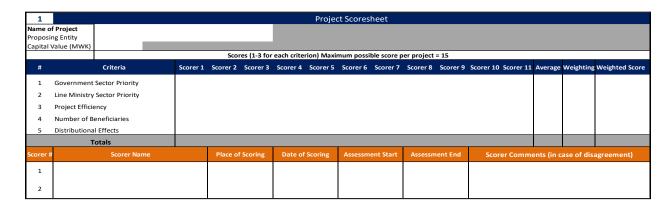
1 2 3 4 5 6 7 8 9 10 11

Ministry	Budget Agency	Project Details	Total Project Cost	Revised Total Cost	Spent to Date	Remaining Balance	Agency Budget Allocation	Year 1 allocation	Year 2 allocation	Remaining Balance

#### **Notes**

- 1 As currently listed in existing Budget Annex II-3
- 2 As currently listed in existing Budget Annex II-3
- 3 As currently listed in existing Budget Annex II-3
- 4 Including all contractual commitments and planned expenditures
- 5 Any planned revisions that have been discussed, reviewed, and verified
- 6 Spending to date by all funding sources for the project
- 7 Balance left for the duration of the project until completion
- 8 Budget allocation for the appropriated budget year inclusive of all funding sources
- 9 Budget allocation for the first outer year
- 10 Budget allocation for the second outer year
- 11 Remaining balance beyond the MTEF period required to complete the project

# ANNEX 6. TRANSPARENCY IN PROJECT SELECTION DECISIONS



	Aggregate Scoresheet											
Rank	Project #	Total Average score	Total Weighted Score	<b>Capital Value</b>	<b>Cumulative Capital Value</b>							
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												

#### **Recording of Project Selection Committee Decisions**

Date and Time of Meeting:

Place of Meeting:

Committee Chair:

Names of Scoring Committee Members:

Others Present and Purpose of Attendance

Concerning Budget Year:

Fiscal Space Available for New Projects:

Number of New Projects Presented:

Number of Qualifying New Projects Assessed:

Number of New Projects Selected within Fiscal Space:

Dissentions, Concerns Raised and Other Remarks:

Signature of Chair:

### Annex 7. THE CALIFORNIAN S-CURVE

The S-Curve below is an early detection tool, to determine the course of a project.

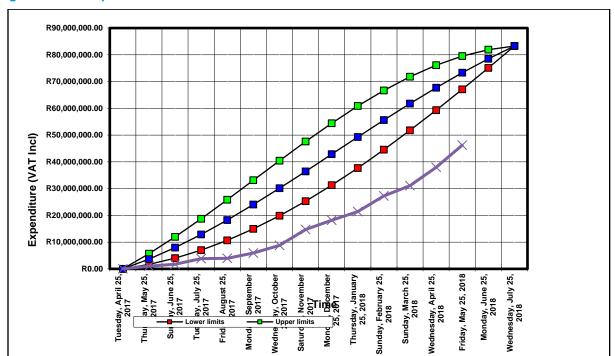


Figure A1. Examples of the S-Curve

#### **Explanation:**

- The percentage progress versus the percentage time lapsed on any given date, is indicate in the S-Curve. The green line indicates the upper limit of expenditure, and the red line indicates the lower limit of expenditure of the project.
- The purple line indicates the actual expenditure versus time of the project, at any timeframe.
- A project that follows the blue line, within the envelop is a well-managed and resourced project.

#### Risk:

Once a project follows the direction of the purple line, below the green and red envelop, it is an indication that the project run a severe risk of cost and time overrun. Urgent action steps are then required to bring the purple line back into the envelop.

Once the purple line continues to stay below the envelop, a management decision is required to request a method statement from the Contractor on how he/she envisages to rectify the under- performance.

### **Annex 8. Climate Change and Green Budgeting**

Budgets are a crucial instrument for climate action and the green transition, and governments are increasingly deploying green budgeting to align their policies with climate commitments. As is presented in the report "Green Budgeting: towards common principles," the European Commission, the IMF, and the Organization for Economic Cooperation and Development worked jointly to define the main elements and features of green budgeting practices. While green budgeting can be pursued in various ways, green budgeting is more efficient when:

- It is inserted in a strategic framework laying out a country's climate change-related national plan.
- It uses budgetary policy tools to contribute to evidence-based decision-making.
- It relies on an institutional design with clearly defined responsibilities and a timeline for actions.
- It uses transparent reporting and independent oversight to ensure openness and accountability.

For reporting, reporting methods on green budgeting vary across countries, from tables in budget plans to comprehensive reports. A good practice in various countries is the publication of a 'Green Budget Statement'. They can be a single document or incorporated in existing budget documents, depending on what is appropriate in individual country settings.

Over the last decade several countries have published Green Budget Statements parallel to the main budget using a variety of specially designed expenditure tracking methodologies to identify climate change-related expenditures but without reporting their mitigation or adaptation impacts. Other countries have reported information on the impact of the annual budget on GHG emissions:

- Scotland's Climate Change Act 2009 requires the government to submit to Parliament an assessment of the impact of proposed expenditures on GHG emissions.39
- In Norway the Climate Change Act (2018) requires government to state in the annual budget the expected impact of the budget on GHG emissions and how Norway can achieve the climate targets set out in the Act.
- In Sweden, the Climate Change Act 2018 requires the government to submit an annual climate report to Parliament in the Budget Bill.40

France has incrementally deepened the extent to which environmental issues are presented in annual budget documents.41 In 2019 a methodology was piloted ex post on that year's enacted State Budget and in 2021 a 'Report on the Environmental Impact of the State' was presented with the budget, the report rates these elements on a scale of -1 (unfavorable) to +3 (very favorable) with respect to each of the six environmental objectives in the EU Taxonomy of Sustainable Environmental Outcomes, resulting in three categories: green, mixed and unfavorable expenses.

<sup>&</sup>lt;sup>39</sup> Carbon Assessment of 2020-21 Budget. Scottish Government.

<sup>&</sup>lt;sup>40</sup> Grantham Research Institute on Climate Change and the Environment Climate Change Laws of the World. https://climate-

<sup>&</sup>lt;sup>41</sup> Lelong, M-L, and Wendling, C, 2020. France's 'Green Budget' for 2021. IMF PFM Blog, November 2, 2020. https://blogpfm.imf.org