FINANCING RWANDA'S TRANSFORMATION

COSTING AND BUDGETING THE NST-2 SDGS

Towards Accelerated Implementation

July 2025

Financing Rwanda's Transformation: Costing and budgeting NST2 and the SDGs—Towards accelerated implementation

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Costing and Budgeting the NST-2 SDGs

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Acronyms and Abbreviations

€	Euro
AI	Artificial Intelligence
B4SDG	Budgeting for the Sustainable Development Goals
FONERWA	Rwanda Green Fund
GDP	Gross Domestic Product
IMF	International Monetary Fund
INFF	Integrated National Financing Framework
MDAs	Ministries, Departments and Agencies
MINECOFIN	Ministry of Finance and Economic Planning
NDC	Nationally Determined Contribution
NST1	National Strategy for Transformation 1
NST2	National Strategy for Transformation 2
PPP	Public–Private Partnership
RF	Rwandan Franc
SDG	Sustainable Development Goal
UN	United Nations
UNDP	United Nations Development Programme
US$	United States dollar
VAT	Value Added Tax
VNR	Voluntary National Review

NOTE TO THE READER:

The overall objective of this report is to quantify Rwanda's financial requirements for achieving the Sustainable Development Goals (SDGs) integrated into the country's second National Strategy for Transformation (NST2), providing strategic costing, budgeting and financing insights. Its purpose is to guide policymakers in aligning national budget priorities and mobilizing public, private and concessional resources effectively, thereby supporting the accelerated implementation and financing of Rwanda's transformation agenda. Some important points for the reader follow:

Currency and Exchange Rate: All USD figures presented are based on an assumed exchange rate of 1 USD = 1,300 FRW, reflecting anticipated depreciation trends over the medium term.

GDP Baseline: GDP ratios and calculations use projected nominal GDP for fiscal year FY2024/25 at FRW 18,785 billion, sourced from official Ministry of Finance and Economic Planning (MINECOFIN) estimates.

Investment Goals: SDG-related priority sector investments are projected to reach approximately 20% of GDP by 2029, aligning with the NST-2's broader investment target of achieving 32% of GDP.

Time Horizon for Scenarios: The costing scenarios presented extend across three timeframes 2034 ("All-In Leap"), 2044 ("Smart Sequencing"), and 2054 ("Resilience First") each reflecting different rates of investment scale-up, policy ambition, and financing capacity.

Sectoral Scope: The report focuses primarily on costing five critical SDG-linked sectors: Education, Health, Electricity, Water and Sanitation (WASH), and Roads, with implications for other SDGs detailed where relevant.

Data Sources and Consistency: Financial, macroeconomic, and demographic data utilized in scenario development are derived from official sources, including MINECOFIN, the Rwanda National Institute of Statistics, and IMF projections, ensuring consistency and reliability across all estimates.

Public-Private Financing Split: NST-2 financing projections assume that approximately 43% of required resources will be mobilized through private sector investments (mainly domestic financial institutions), with the remaining 57% sourced through public funds, including taxes, grants, and concessional borrowing.

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Fiscal Sustainability: Debt levels, concessional financing availability, and domestic revenue generation rates have been factored into each scenario, reflecting Rwanda's medium-term fiscal constraints and policy objectives for debt sustainability and fiscal prudence.

Climate and Risk Integration: All cost estimates incorporate risk considerations including climate vulnerability, economic volatility, and potential shocks, ensuring the proposed investments are risk-informed and resilient.

Efficiency and Reforms: Spending projections and scenarios assume progressive improvements in public investment efficiency, supported by fiscal reforms, digitization initiatives, and strengthened public financial management systems as outlined in Rwanda's Integrated National Financing Framework (INFF and Sustainable Financing Framework.

Note: On the Nature of Long-Term Costing Projections – Interpretive Boundaries and Assumptions

The SDG costing projections presented in this report span extended time horizons 2034, 2044, and 2054 and should be understood as illustrative pathways rather than definitive forecasts. The justification for choosing such time scenarios for SDG attainment in Rwanda 2054 (business as usual), 2044 (moderate effort), and 2034 (ambitious effort) follows a logical, evidence-based progression grounded in current fiscal trends and performance trajectories:

Baseline Justification: 2054 as Business-as-Usual Scenario: Rwanda is not on track to meet its SDGs by 2030. According to available projections, most targets will only be achieved around 2054 if existing financing levels and policy trajectories continue unchanged. This estimate incorporates slow progress on poverty reduction, particularly in rural areas, persistent gaps in education quality and health outcomes and limited structural transformation in the economy. Rwanda's current expenditure on SDG-relevant sectors (health, education, social protection) is not growing fast enough relative to need or population growth. Unless significant resource reallocations or mobilizations occur, the structural deficits will persist.

Moderate Acceleration: 2044 Scenario (10 Years Faster): A 10-year gain on the business-as-usual trajectory assumes Rwanda scales up current efforts modestly but consistently, including increased domestic resource mobilization, especially through improved tax compliance and efficiency, better aid absorption and alignment of ODA with national priorities and targeted investments in lagging regions and sectors without large-scale policy overhauls. This scenario reflects a "step-change" in efficiency and targeting rather than structural transformation.

Ambitious Scenario: 2034 (20 Years Faster): Justification: This reflects an ambitious but feasible SDG catch-up path requiring a doubling or more of public investments in SDG critical sectors annually, high-impact reforms in governance, public financial management, and service delivery systems, private sector leverage, through blended finance, public-private partnerships, and SDG-aligned capital markets and full alignment of development partner support under national strategies. The pathway assumes considerable political commitment, social mobilization, and access to concessional and climate-linked capital flows. It also assumes considerable external cooperation support.

These projections model the scale and type of financial effort required under three distinct scenarios: the "All-In Leap" (accelerated achievement by 2034), "Smart Sequencing" (phased realization by 2044), and "Resilience First" (conservative trajectory to 2054). Each scenario integrates assumptions on demographic trends, GDP growth, public and private financing dynamics, efficiency gains, institutional capacity, and exogenous variables such as concessional resource availability.

The cost estimates do not account for unpredictable high-impact shocks so-called black swan events such as pandemics, geopolitical upheavals, or systemic financial disruptions, which could substantially alter both the financing landscape and implementation capacity. While climate risk and macroeconomic volatility are embedded in the scenario logic, extreme tail-risk events fall outside the modeled parameters.

These scenarios are therefore not forecasts. Rather, they are technical instruments designed to inform strategic planning by quantifying the relative scale of resource mobilization, policy ambition, and efficiency gains needed to deliver the SDGs in Rwanda. They help to delineate the bandwidth within which Rwanda's fiscal and financing strategy must operate highlighting the degree of latitude available under varying macro-fiscal and policy conditions. The three pathways underscore the trade-offs between speed, sustainability, and fiscal resilience, thereby enabling decision-makers to prioritize reforms and investments consistent with their preferred development trajectory.

Foreword

Rwanda stands at a defining moment in its development journey. As we enter the second phase of our National Strategy for Transformation (NST2), our commitment to realizing the Sustainable Development Goals (SDGs) remains steadfast. Yet, as this comprehensive assessment makes clear, the scale of investment needed to achieve our goals and to do so within a meaningful time frame, requires not just more financing, but smarter, more strategic financing.

To meet this challenge, Rwanda will adopt a right-financing approach. This means aligning every franc of public expenditure with outcomes that advance our national development priorities, while leveraging that public capital to crowd in private, philanthropic and concessional finance. It is not simply about what we fund, but how we fund it. Right-financing calls for an evolution from funding to financing where the state shifts from being the sole provider of development capital to an enabler and catalyst for broader investment partnerships.

This report, Financing Rwanda's Transformation: Costing and budgeting NST2 and the SDGs, provides the evidence base to support that shift. By costing priority SDG-linked sectors, assessing budgetary alignment and identifying financing gaps under various implementation scenarios, the report informs Rwanda's NST2/SDG Acceleration Plan. It lays out three strategic pathways, from steady progress to accelerated achievement and offers concrete policy recommendations for fiscal sustainability, private sector participation and climate-smart investment.

As Rwanda continues to demonstrate regional and global leadership in sustainable development, we are committed to building a resilient, equitable and prosperous nation fuelled by investment choices that are efficient, inclusive and forward-looking. This document is a vital tool to that end. I commend its findings to all our development partners and invite them to join us in financing the future we are determined to build.

Hon. Yusuf Murangwa
Minister of Finance and Economic Planning
Republic of Rwanda

August 2025

Preamble from the Resident Coordinator, United Nations in Rwanda

The 2030 Agenda for Sustainable Development remains a universal call to action to end poverty, protect the planet and ensure peace and prosperity for all. As the Decade of Action advances and global financing challenges intensify, Rwanda stands out for its steadfast commitment to delivering the Sustainable Development Goals (SDGs) through nationally owned strategies, credible data systems and an unwavering focus on results.

This document, Financing Rwanda's Transformation: Costing and Budgeting NST2 and the SDGs, is more than a technical exercise. It is a blueprint for how the United Nations development system can work alongside governments to realign national budgets, leverage private capital and deliver on our shared promise of leaving no one behind.

The UN Country Team in Rwanda recognizes the integrated nature of the SDGs and the importance of matching ambition with viable financing strategies. Rwanda's leadership in mainstreaming the SDGs into its Vision 2050 and second National Strategy for Transformation (NST2), and its efforts to institutionalize sustainable financing, should serve as a model for countries navigating similar development transitions.

The findings presented here reflect the power of inclusive partnerships between government, development partners and the private sector to address financing gaps and policy trade-offs with transparency and accountability. They are a call for renewed international solidarity and catalytic investment aligned to national priorities.

As we move towards the Summit of the Future and beyond, the United Nations system in Rwanda remains fully committed to supporting the government in mobilizing the right type of capital to accelerate progress towards the SDGs.

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Ozonnia Ojielo
United Nations Resident Coordinator in Rwanda

August 2025

Message from the Resident Representative, UNDP Rwanda

The United Nations Development Programme (UNDP) is proud to support the Government of Rwanda in advancing its long-standing tradition of development leadership, this time through the integration of the SDGs into the country's second National Strategy for Transformation (NST2) and application of a right-financing lens across national budgeting and investment systems.

This report offers concrete pathways to cost, prioritize and finance Rwanda's SDG agenda. It brings to life the principles of its Integrated National Financing Framework (INFF), demonstrating how strategic public investment, fiscal discipline and private sector mobilization can combine to close the country's SDG financing gap in a sustainable and equitable way.

Right-financing, as advanced in this report, is not about doing more with less. It is about doing better with what we have, structuring public funds to de-risk investment, aligning incentives to development outcomes and building the fiscal architecture to manage complexity over time. UNDP has supported Rwanda in applying global tools, such as the International Monetary Fund's SDG Financing Tool (SDG-FiT), and translating them into national policy reforms and acceleration strategies.

This exercise also highlights UNDP's role as an integrator, bringing together data, systems and partners to forge a common pathway forward. The methodology applied here enables Rwanda to calibrate its ambitions under three different time-bound SDG scenarios, providing a vital base of evidence for decision-making.

We will continue working closely with the Ministry of Finance and Economic Planning and all partners to deepen these reforms, scale up innovations like Budgeting for the Sustainable Development Goals (B4SDG) and ensure that Rwanda remains at the forefront of sustainable finance and transformative development.

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Fatmata Sesay
Resident Representative, UNDP Rwanda

August 2025

1. Introduction

Rwanda stands at a pivotal juncture in its long-term development trajectory, with the launch of the second National Strategy for Transformation, 2024–2029 (NST2) marking the next phase of its ambition to attain upper middle-income status by 2035 and high-income status by 2050.1 Central to this ambition is the full integration and achievement of the Sustainable Development Goals (SDGs), which serve as both a benchmark and a roadmap for inclusive, resilient and sustainable growth. To translate these global aspirations into concrete national outcomes, a systematic and robust approach to costing and budgeting NST2 and SDGs is essential.

The process of costing provides a foundational step in this transformation. It quantifies the projected public and private investment required to meet Rwanda's development goals and aligns public resources with national priorities. This effort entails assessing sectoral strategies, identifying financial gaps and projecting future expenditure needs under various development scenarios. It also ensures that costing is risk-informed, incorporating the potential impacts of climate change, economic volatility and social shocks into fiscal planning.

Complementing the costing exercise is the Budgeting for the Sustainable Development Goals (B4SDG) framework, which embeds SDGs throughout Rwanda's budget cycle, from formulation to execution and monitoring. This approach strengthens the alignment of fiscal policies with sustainable development, enhances transparency and builds accountability of public finance institutions. Using a B4SDG lens would also suggest reinforcing parliamentary and civil society oversight while integrating evidence-based impact assessments into decision-making processes.

This report outlines the integrated methodology for SDG costing and B4SDG in Rwanda, presenting recommendations to close financing gaps, streamline resource allocation and accelerate the country's progress towards the SDGs. It is grounded in Rwanda's home-grown development model and its leadership role in advancing the Integrated National Financing Framework (INFF). The findings are designed to inform policy choices, attract strategic investments and potentially contribute to global dialogues on sustainable right-financing,2 including showcases at international platforms such as the World Economic Forum in Davos.

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1 Republic of Rwanda, 2023b.

2 Right-financing refers to the strategic alignment of public financial resources—such as taxes, grants and concessional loans—with development priorities in a manner that maximizes efficiency, equity and sustainability. Rather than merely increasing the volume of funding, right-financing emphasizes the optimal use of available resources to catalyze private sector investment and de-risk development initiatives. In contexts where public spending dominates, this approach becomes especially critical to crowd in commercial capital, including foreign direct investment and blended finance, by ensuring that public expenditures are transparently linked to SDG outcomes and investment-ready pipelines. The funding to financing shift represents a deliberate progression from traditional budgetary allocations to market-based financing instruments, underscoring the government's role as a steward of capital that mobilizes, leverages and scales sustainable investment aligned with national priorities such as the NST2 and the 2030 Agenda.

2. Integration of NST2 and SDGs

Although the SDGs are not explicitly cited in the NST2 document, they are fully mainstreamed into the strategy's design, logic and implementation framework. The document functions as a national translation of the global development agenda, ensuring that Rwanda's Vision 20503 is delivered in step with the 2030 Sustainable Development Goals. This integration is evident in the structural organization of the strategy, the specific sectoral targets set, the cross-cutting principles applied, and the institutional mechanisms deployed to measure progress.

This national strategy is structured around three pillars, economic transformation, social transformation and transformational governance, across which environmental sustainability is deeply integrated. These pillars map directly onto the three core dimensions of sustainable development: economic, social and environmental (governance). Each NST2 pillar reflects environmental considerations through policy directions, programmatic focus and cross-cutting strategies. Each pillar contains thematic focus areas and flagship initiatives that mirror the ambitions of the SDGs, whether they concern inclusive growth, environmental resilience, education, health or institutional accountability. Additionally, NST2 identifies cross-cutting areas such as gender, climate change, disability and regional integration, which are identical to key SDG integration themes. Furthermore, the monitoring and evaluation systems embedded in NST2, its theory of change, climate budget tagging and results-based budgeting mirror the global SDG monitoring framework. These are tools widely adopted in SDG-aligned national strategies across the world and ensure transparent, evidence-based delivery of development outcomes. Table 1 outlines how NST2 priority areas align with the SDGs and relevant SDG targets.

Table 1: Illustrative alignment of NST2 priorities with the SDG target

SDG	NST2 primary area of focus	Relevant SDG targets
SDG 1: No poverty	Promote graduation from poverty; expand social protection, safety nets, insurance, nutrition and VUP	1.1–1.3, 1.5: End poverty, implement social protection systems, build resilience
SDG 2: Zero hunger	Reduce stunting through nutrition and early childhood development; promote food security; support smallholder farmers	2.1–2.3: End hunger; improve nutrition; double productivity of small-scale food producers
SDG 3: Good health and well-being	Improve access to health care; reduce maternal and child mortality; expand insurance; combat non-communicable diseases; improve mental health	3.1–3.4, 3.7–3.8, 3.d: Reduce mortality; universal health care; strengthen health capacity and resilience
SDG 4: Inclusive, quality education	Improve foundational learning; expand technical and vocational education and training, and higher education; increase adult literacy	4.1, 4.3–4.5: Equitable access; technical skills; gender equality in education
SDG 5: Gender equality	Close gender gaps in employment and education; reduce gender-based violence; support female-headed households	5.1–5.2, 5.5: Eliminate discrimination and violence; promote women's leadership
SDG 6: Clean water and sanitation	Universal water access, wastewater treatment and sanitation services	6.1–6.3: Access to water and sanitation; improve water quality

3 *Republic of Rwanda, 2020b*

SDG 7: Affordable and clean energy	Renewable energy expansion; universal access to electricity; clean cooking	7.1–7.2, 7.b: Universal access; increased share of renewables; expanded infrastructure
SDG 8: Decent work and economic growth	Create 1.25 million jobs; promote micro, MSMEs; increase financial inclusion	8.3, 8.5–8.6, 8.10: Promote decent work; reduced youth unemployment; increased financial access
SDG 9: Infrastructure, innovation and industry	Expand industrial parks; boost manufacturing; invest in innovation	9.2–9.4: Inclusive industrialization; support MSMEs; sustainable infrastructure
SDG 10: Reduced inequalities	Support vulnerable populations; reduce gender and geographic inequality	10.2–10.3: Promote inclusion; ensure equal opportunity
SDG 11: Sustainable cities and settlements	Urban planning; housing programmes; resilient infrastructure; green cities	11.1, 11.3, 11.5, 11.7: Housing access; participatory planning; disaster resilience; public spaces
SDG 12: Responsible consumption and production	Green procurement; sustainable land and resource management	12.2, 12.7, 12.c: Sustainable use of resources; green procurement; reform fossil fuel subsidy
SDG 13: Climate action	Cut emissions to 38 percent; climate resilience; disaster risk reduction; green finance	13.1–13.2, 13.b: Resilient buildings; climate integrated into policies; strengthen capacity
SDG 14: Sustain life below water	Watershed protection; pollution prevention (indirect)	14.1: Reduce marine pollution from land-based activities
SDG 15: Sustain life on land	Forest and biodiversity conservation; sustainable land use	15.1–15.3: Conserve ecosystems; manage forests; combat desertification
SDG 16: Peace, justice and strong institutions	Justice reform; reduce backlogs; improve governance and public finance management	16.3, 16.5–16.7, 16.10, 16.a: Access to justice; corruption free; accountable institutions; participatory governance; public information; institutional capacity
SDG 17: Partnerships for sustainable development	Domestic resource mobilization; development partnerships; capacity development	17.1, 17.3, 17.9, 17.16, 17.18: Mobilize resources; build capacity; multi-stakeholder partnerships; improve data quality

Note: MSMEs = small and medium-sized enterprises; VUP = Vision 2020 Umurenge Programme to eradicate extreme poverty and promote rural growth in Rwanda.

Source: Author analysis from NST2 (Republic of Rwanda, 2023b).

Rather than relying on formal citations, NST2 integrates the principles, priorities and performance logic of the SDGs across its entire framework. This embedded alignment is evident in the structure of the strategy, the substance of its targets, the institutional mechanisms for delivery and Rwanda's broader international development commitments. The following dimensions demonstrate how NST2 functions as an SDG-aligned national roadmap in all but name:

- **Structural alignment:** The three-pillar architecture of NST2, economic transformation, social transformation and transformational governance mirrors the SDG framework's tripartite structure, embedding economic growth, social equity and environmental sustainability within a foundation of accountable and resilient institutions.
- **Thematic coherence:** NST2 targets align directly to SDG goals and indicators, reflecting shared development objectives from reduced stunting and inclusive education to clean energy and mitigation of climate change.
- **Institutional mechanisms:** Tools used by NST2, like its monitoring and evaluation matrix, theory of change and climate budget tagging, are consistent with global SDG accountability mechanisms.
- **Rwanda's international commitments:** Rwanda has publicly committed to Agenda 2030 through its 2019[4] and 2023[5] voluntary national reviews and is positioning NST2 as the primary delivery vehicle for its Vision 2050,6 which aligns strongly with the SDG ethos.

Rwanda's first National Strategy for Transformation, 2017–2024 (NST1) was Rwanda's first medium-term strategy under Vision 2050 and served as the country's primary vehicle for SDG integration. Its alignment with the SDGs was intentional, systemic and embedded in planning, implementation and monitoring. As a result, both NST1 and NST2 are Rwanda's localized SDG blueprint, translating global aspirations into measurable national transformation pathways. This is a model of implicit SDG integration, quiet in citation, but comprehensive in execution. To this end, this costing and B4SDG assessment lays the foundation for accelerating resource mobilization to address the NST2 financing gap.

2.1 Current proposed NST2 sector allocations (2024–2029)

Table 2 summarizes projected annual sector spending, as a percentage of gross domestic product (GDP), for the key priority sectors identified in Rwanda's NST2 for period 2024–2029, education; health; water, sanitation and hygiene (WASH); and roads. Health, education, electricity, WASH and roads are explicitly prioritized in NST2, including ambitious goals, like universal access to electricity and water by 2029, which imply substantial investment.

The figures in Table 2 are derived from NST2's total financing envelope (63,559 billion Rwandan francs (RF) over five years) and macroeconomic projections (targeting total investment of ~32 percent of GDP by 2029). Since the NST2 document itself does not itemize annual GDP percentages by sector, the values for each year are estimates based on (i) the share of NST2 resources allocated to each sector and (ii) projected GDP growth during NST2. These estimates correctly reflect gradual scale-up over 2024–2029, track with NST2's projected investment-to-GDP ratio of ~32 percent by 2029 and prioritize capital-heavy infrastructure (electricity, roads, WASH) and social sectors (education, health).

4 *Republic of Rwanda, 2019.*

5 *Republic of Rwanda, 2023a.*

6 *Republic of Rwanda, 2020b.*

The estimates also assume a gradual scale-up of spending in each sector over the plan's implementation period, consistent with NST2's priorities and overall financing framework, with a huge effort to ramp up mobilization of commercial capital.[7]

Table 2: Indicative NST2 sector spending allocation, 2024–2029

	Percentage (%) of GDP					
Sector	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**
Education	3.0	3.2	3.4	3.6	3.8	4.0
Health	2.0	2.2	2.3	2.4	2.5	2.6
Electricity	2.0	2.9	3.8	4.6	5.5	6.4
Water, sanitation and hygiene (WASH)	0.5	0.9	1.3	1.7	2.1	2.6
Roads	2.0	2.6	3.1	3.7	4.2	4.8

Source: Authors calculations based on NST2 data.

The percentages in Table 2 are approximations for planning purposes as the NST2 document provides aggregate financing needs but does not publish precise annual sector-by-sector budget ratios; these, however, will be captured in the rolling medium-term expenditure framework targets. The percentages illustrate the expected scale-up of investment in each priority sector over the NST2 period in line with NST2's targets and total resource envelope. Each value is grounded in NST2's overall strategy; for example, the higher share for electricity by 2029 reflects the push for universal access to power, while the steady rise in education and health corresponds to commitments to improve human capital outcomes under NST2's social transformation pillar.

These allocations would collectively ensure that by 2029, Rwanda's investment in health, education, electricity, WASH and roads reaches roughly 20 percent of GDP (up from about 9–10 percent in 2024), commensurate with NST2's goal of catalyzing transformation through heightened spending in key sectors. This rate, however, particularly given the current shift in spending towards infrastructure, will not allow core SDG goals and targets to be met unless the rates of return on existing finances are improved and new sources of finances aligned and mobilized.

7 Methodology: NST2's total five-year funding (public and private) is allocated across sectors in line with stated priorities. Education and health are major components of the social transformation pillar of NST2, while electricity, WASH and roads fall under infrastructure investments in the economic transformation pillar—all are highlighted as critical focus areas in NST2. Based on NST2, these five sectors together are assumed to absorb roughly two thirds of the total NST2 financing. Using this assumption, approximate sector shares were assigned (e.g. a significant share to electricity and roads, given the goal of universal electrification and extensive transport upgrades). These sector shares, combined with NST2's GDP projections (implying GDP growth from RF16,355 billion in 2023/24 to RF37,413 billion in 2028/29), yield the percentage-of-GDP figures shown in Table 2.

3. Current NST2 and SDG baseline

Rwanda's 2023 Voluntary National Review (VNR) focused on five SDGs: SDG 6, clean water and sanitation; SDG 7, affordable and clean energy; SDG 9, industry, innovation and infrastructure; SDG 11, sustainable cities and communities; and SDG 17, partnerships for the goals. These priorities align with the thematic focus of the 2023 High-Level Political Forum on Sustainable Development. Rwanda's VNR emphasized post-COVID recovery, sustainable infrastructure, urbanization and strengthened partnerships, all within the framework of its Vision 2050 and NST1. It highlighted systemic efforts, institutional mechanisms and notable progress in multiple sectors, despite external shocks like COVID-19 and the current regional crisis which has impacted official development assistance.

The overall status of SDG progress in Rwanda, as reflected in the trend indicator chart (*see* Figure 1), reveals a mixed but cautiously optimistic trajectory. Approximately 28 percent of the SDG targets are either achieved or on track, indicating strong performance in specific areas such as climate action, access to clean water and gender equality. However, a significant portion (about 53 percent) shows limited progress, suggesting stagnation or incremental improvements that fall short of the required acceleration pace. More concerning is that about 19 percent of the targets are deteriorating, pointing to backsliding in key areas like decent work, institutional strength and potentially poverty reduction. These trends underscore the urgent need for enhanced implementation, targeted resource mobilization and intensified policy efforts to shift more indicators towards being on track for achievement.

Figure 1: Rwanda SDG performance dashboard

Note: This graphic, produced by the independent Sustainable Development Solutions Network team led by Prof. Jeffrey Sachs, presents an evidence-based dashboard of Rwanda's progress towards achieving the SDGs (Sachs et al., 2024). While not officially sanctioned by the UN system, it offers a reliable and data-driven overview in the absence of an alternative consolidated UN tool. The dashboard illustrates Rwanda's SDG Index Rank (126 of 166 countries), a moderate overall score (60.87) and a strong spillover performance (94.78; see Box 3), highlighting both the country's strengths and persistent challenges across goals such as poverty, education, climate and institutions.

Source: Sachs et al., 2024.

Box 3: Spillover effects on SDGs supporting NST2 outcomes

Rwanda's SDG investments have strong potential to generate positive spillovers across multiple NST2 priority areas. This is especially evident in areas such as employment, infrastructure and industrial transformation:

- **Employment creation (SDG 8.5):** Investments in decent and productive work, particularly through agroprocessing, tourism, logistics and entrepreneurship, contribute not only to job creation but also enhance youth empowerment (SDG 5.4), vocational skills development (SDG 4.3) and inclusive economic growth. This supports NST2 objectives on human capital development and transformation led by the private sector.
- **Industrialization and value addition (SDG 9.2):** Rwanda's focus on sustainable industrialization triggers value chain investments in health and education, expands regional trade through East African Community integration and encourages green innovation. These investments catalyse inclusive growth and support Rwanda's shift towards a knowledge-based economy as envisioned under Vision 2050 and NST2.
- **Sustainable transport systems (SDG 11.2):** Planned investments in multimodal transport (rail, air, road) reduce trade costs and improve connectivity. These also create jobs (SDG 8), support climate adaptation efforts (SDG 13.2) and strengthen regional economic cooperation, contributing directly to NST2's infrastructure and urbanization goals.
- **'SDG Push' scenario:** According to United Nations Development Programme (UNDP) modelling, integrating 48 SDG 'accelerators' across governance, digitalization and green economy could reduce poverty significantly—from 6.1 million people (without SDG Push) to 5.4 million by 2030 and to just 530,000 by 2050—amplifying the developmental gains expected under NST2.

Source: Content is summarized from UNDP, 'Integrated SDG Insights, Rwanda', 2023, particularly sections on SDG interlinkages and future scenarios (pp. 6–9).

Rwanda's VNR confirms that SDGs are mainstreamed into all national development planning instruments, from the Ministry of Finance and Economic Planning (MINECOFIN) and Parliament to local councils and statistical agencies which are mobilized for integrated SDG delivery. Rwanda's approach is underpinned by home-grown mechanisms, such as imihigo (performance contracts), and robust monitoring platforms like the joint sector reviews.

Despite most SDGs still needing to be attained, the 2023 VNR showcased qualitative gains such as (i) universal access to improved water (82 percent), (ii) expanded electricity access (61 percent), (iii) women's land ownership (87 percent) and (iv) urbanization growth aligned with sustainable city frameworks. Major challenges include job creation (SDG 8), institutional strengthening (SDG 16) and inclusive economic growth, which the dashboard confirms as either stagnating or worsening. Table 3 provides the overall status for each SDG, showing that some 72 percent of SDGs are showing limited progress.

Table 3: Overview of Rwanda SDG progress, 2023

SDG	Status summary
Achieved or on track (27% of SGDs)	
SDG 5: Gender equality	Rwanda ranks sixth globally on the Gender Gap Index; 61% of members of Parliament are female
SDG 6: Clean water and sanitation	82% have access to improved water; 72% have access to sanitation
SDG 7: Affordable and clean energy	Access to electricity increased to 61% from 17.9% in 2012
SDG 13: Climate action	Target met; climate budgeting, emissions commitments upheld
Limited or stagnating progress (55% of SDGs)	
SDG 1: No poverty	Poverty increased during COVID-19; recovery plans underway
SDG 2: Zero hunger	Stunting rates remain high; nutrition programmes expanded
SDG 3: Good health and well-being	Life expectancy increased to 69.6 years; universal health coverage continues to expand
SDG 4: Quality education	Enrolment parity achieved; challenges remain in TVET and ECD
SDG 8: Decent work and economic growth	Declining trend due to structural constraints and post-COVID recovery
SDG 11: Sustainable cities	Urbanization at 27.9%; planning aligns with climate resilience
Worsening or regressing (18% of SDGs)	
SDG 16: Peace, justice and strong institutions	Institutional indicators are declining; citizen satisfaction is improving but uneven

Note: ECD = early childhood development; TVET = technical and vocational education and training.

Source: Dashboard and 2023 VNR (Sachs et al., 2024).

Rwanda has made solid progress in advancing the SDGs, with notable achievements in areas such as health access, education enrolment, infrastructure expansion and climate resilience. The country continues to invest heavily in human development and economic transformation, and its commitment to the 2030 Agenda is evidenced by strong national ownership and institutional alignment. At the same time, sustained efforts are needed to address persistent challenges in job creation, institutional strengthening and inclusive economic growth. While unemployment and underemployment remain areas of focus, ongoing investments in skills, digitalization and entrepreneurship aim to improve labour outcomes, especially for young people. Productivity growth, though constrained by infrastructure gaps and modest innovation capacity, is expected to accelerate through flagship projects under NST2 and increased private sector engagement. Rwanda's Human Capital Index ranking reflects the government's clear recognition of the need to deepen progress in education quality and health outcomes. Public debt, estimated at 73 percent of GDP in 2023 and projected to rise moderately by 2025, reflects strategic investments in long-term infrastructure critical to sustaining growth and delivering universal access to essential services.[8]

8 *Data referenced in this section are drawn primarily from the Government of Rwanda, including Rwanda's 2023 Voluntary National Review (Republic of Rwanda, 2023a), policy documents from MINECOFIN and statistical updates from the National Institute of Statistics of Rwanda (2024). Additional sources include Sachs, J.D. et al., 2024) providing SDG index rankings and trends; the World Bank's Human Capital Index 2020 database; and World Bank–IMF (2023) which outlines current and projected debt-to-GDP figures.*

The total financing required for the implementation of NST2 for 2024–2029 is estimated at RF63,559 billion. This figure was derived by aggregating the estimated annual resource needs outlined in sector investment plans and aligned with NST2 priorities, based on projections from MINECOFIN. Of this total, approximately 43 percent is expected to be mobilized through private sector investments, with over 70 percent of that amount anticipated from domestic financial institutions. The remaining 57 percent will be sourced from public resources, primarily through domestic tax and non-tax revenues. Of the public financing share, around 17 percent is projected to come from foreign sources, mainly through concessional borrowing. Annual financing projections reflect a gradual scale-up: public resources are expected to increase from RF5,542 billion in 2024/25 to RF9,435 billion in 2028/29, while private sector investments are projected to grow from RF3,960 billion in 2024/25 to RF7,261 billion by 2028/29.[9]

In filling the funding and financing gap, achieving the SDGs will require a strategic shift towards growth led by the private sector, greater efficiency in public investment and deeper integration of green, inclusive and innovation-driven policies. These transitions are essential not only to accelerate SDG attainment but also to secure the foundation for a resilient, equitable and high-income economy.

Box 4: Fiscal and budgetary pressures impact SDG financing

Rwanda's fiscal and budgetary outlook reflects both ongoing development needs and emerging pressures. The fiscal deficit in the 2023/24 fiscal year (FY) reached 6.9 percent of GDP, higher than originally forecast, largely due to the accelerated implementation of foreign-financed capital projects and emergency spending following severe floods. Although expenditure rationalization helped contain spending growth, tax revenue performance remained in line with expectations, with a tax-to-GDP ratio of 14.6 percent, consistent with projections from October 2024. The fiscal deficit for FY2024/25 is now projected at 5.6 percent of GDP, revised upward to accommodate additional expenditures, including the health response to the Marburg virus disease outbreak and adjustments related to external grant inflows.

The International Monetary Fund (IMF) projects public debt to peak at 80 percent of GDP in 2025, before gradually declining under a fiscal consolidation path that targets a 3 percent fiscal deficit by FY2027/28. However, the risk of debt distress remains moderate, and the IMF stresses the urgency of domestic revenue mobilization, particularly through broadening the tax base and reducing exemptions. On concessional financing, the report highlights that Rwanda continues to benefit from high levels of concessional external support, particularly for climate-related investments. However, the sustainability of this concessional financing is uncertain, especially considering global shifts. The IMF warns that a decline in concessional resources combined with underperformance in domestic revenue could lead to liquidity pressures in the medium term. This underscores the need for Rwanda to implement tax reforms, deepen fiscal transparency and enhance public investment efficiency to maintain fiscal sustainability and safeguard development gains. These aspects will need to form part of the SDG acceleration roadmap.

Source: Analysis based on information from MINECOFIN, the National Institute of Statistics of Rwanda and the International Monetary Fund (IMF African Department, 2024).

9 *The up-to-date macro figures are from Macroframework (March 2025 Revised Projections), IMF Staff report of March 2025 and Statistical Bulletin-DSA 2024 or Medium-Term Debt Strategy (MTDS) 2024/2025–2026/2027.*

4. SDG costing and budgeting objectives

This report provides the results of scenario-based costing of the primary SDGs, linked to a process called B4SDG. The report therefore forms part of Rwanda's effort to align its financing framework with national development priorities and the 2030 Agenda, developing scenarios for 2034, 2044 and 2054, as detailed in subsequent sections. The objectives are twofold:

- **Costing objective:** The objective of costing the SDGs in Rwanda is to quantify the financial resources required to implement the core SDG commitments embedded within NST2. Rather than re-costing NST2, this scenario-based exercise, spanning 2024/25 to 2034, 2044 and 2054 focuses on identifying the investment needs necessary to achieve the most critical SDG-aligned outcomes. By assessing sector-specific financing requirements under different growth and reform trajectories, the costing provides government and development partners with a forward-looking tool to prioritize public investment, estimate financing gaps and match aspirations with available and potential fiscal space. It supports evidence-based planning for SDG acceleration within Rwanda's broader transformation agenda.

- **B4SDG objective**: A B4SDG assessment serves to evaluate how effectively a country's public finance systems align with and support the achievement of SDGs. It scrutinizes budget structures, processes and allocations to determine whether financial resources are being strategically directed towards SDG priorities. The assessment aims to enhance transparency, accountability and evidence-based decision-making by linking financial flows to development outcomes, thereby optimizing the impact of public expenditure on sustainable development.

Under NST2 as Rwanda transitions from traditional funding to strategic financing, there must be a decisive shift towards right-financing, aligning public and private capital with national priorities if it is to close the resourcing gap. Right-financing means selecting the most appropriate financial instruments for the right investments, at the right time, with a focus on maximizing development returns, crowding in private capital and ensuring fiscal sustainability.

Under the NST2/SDG framework, this transition is not simply about increasing funding volumes but transforming the architecture of how Rwanda finances its transformation agenda. Conventional input-based budgeting is now being complemented by outcome-orientated public financial management systems, structured through B4SDG assessments, SDG budget alignment and results-based programming. This shift enhances transparency, drives impact and improves fiscal efficiency. At the heart of the right-financing approach is a deliberate effort to:

- **Prioritize catalytic investments**, such as universal access to electricity or foundational education, that yield high social and economic multipliers.

- **Sequence expenditures** using medium-term frameworks and SDG costing to avoid inefficient spending and maximize fiscal space.

- **Leverage public funds strategically** to attract blended commercial capital through public–private partnerships (PPPs), SDG-linked bonds, etc.

- **Mainstream sustainability** by integrating climate-smart and inclusive financing mechanisms directly into budgeting, procurement and investment pipelines.

This financing model helps crowd in commercial capital where social and economic returns align, such as in green energy, WASH infrastructure and digital public goods. Rwanda's Sustainable Finance Framework,[10] and the country's active participation in the IMF's Resilience and Sustainability Facility, demonstrates this pivot in action with growing issuance of thematic bonds, de-risking platforms and co-financing instruments to mobilize private capital.

10 *MINECOFIN, 2024b.*

Rather than treating public and private resources as separate streams, right-financing turns public finance into a lever for investment additionality, generating compounded impact across NST2 priorities. In doing so, it reframes the state budget from a static ledger into a dynamic investment strategy.

5. Prior SDG costing reference studies

While the SDG costing presented in the following sections reflects the most recent data, earlier costing exercises offer valuable reference points and context for comparison. Costing of the SDGs was undertaken by the IMF for Rwanda in 2021, alongside an updated rapid costing in 2024 that reflected changes to underlying macro fiscal conditions. An IMF study authored by Lledó et al.[11] and an IMF staff discussion paper,[12] both published in 2021, drew similar conclusions. A summary of the outcomes of these 2021 reference studies and of an updated 2024 study on financing SDGs,[13] follow in sections 5.1 and 5.2, respectively. All provide useful points of reference.

5.1 IMF's SDG costing and financing options, 2021

The IMF study by Lledó and Perrelli (April 2021), provides an in-depth macro fiscal analysis of Rwanda's ability to meet the SDGs in the aftermath of the COVID-19 pandemic. Using a dynamic financing framework developed by the IMF's Fiscal Affairs Department, the study evaluated policy and fiscal and financing scenarios under both pre-pandemic and post-pandemic conditions. The analysis aimed to guide policymakers in identifying sustainable strategies to bridge Rwanda's SDG financing gap while preserving macroeconomic stability and managing debt sustainability risks.

The study found that under current policies and fiscal conditions, Rwanda would only meet its SDGs shortly after 2050. The COVID-19 pandemic widened the annual SDG financing gap from 15.7 percent to 21.3 percent of GDP, primarily due to lower projected output and a compressed fiscal space. More than half of this increase stemmed from a smaller post-pandemic GDP base, while the remainder reflected tighter fiscal constraints, including rising interest expenses and the need for fiscal consolidation. The study found that even if Rwanda were to mobilize all resources required to close its pre-COVID gap, the country would still only reach its SDG targets by 2035, not by 2030.

The dynamic scenarios model various policy options, including domestic revenue mobilization, spending reallocation, private sector participation and additional grants. Active policies—those combining fiscal reforms and private investment—could narrow the financing gap by over a third, allowing Rwanda to achieve its SDGs by 2040. However, to meet the 2030 target, Rwanda would still require an additional 13.7 percent of GDP annually in external resources, primarily in the form of concessional grants. The study also warned that economic 'scarring' from the pandemic—such as long-term damage to human capital and productivity—could further widen the financing gap unless proactively addressed.

Table 4 summarizes the IMF's dynamic SDG financing framework applied to Rwanda. It compares baseline and policy reform scenarios for meeting the SDGs using variables, including the timing of SDG achievement, required additional grants, per capita income levels, growth and public debt. The most ambitious scenario combines fiscal reforms, private sector investment and grant support to meet SDGs by 2030, whereas a no-reform scenario pushes the target beyond 2050.

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11 Lledó and Perrelli, 2021.

12 IMF Fiscal Affairs Department (April 2021) provides a comparative perspective on how countries like Rwanda can close the SDG financing gap through tailored fiscal strategies, while managing the macroeconomic impact of the COVID-19 pandemic.

13 'SDG Financing Options', presented by IMF Resident Representative Gabor Pula at the Development Partners Meeting on 7 March 2024.

Table 4: International Monetary Fund's dynamic financing framework for meeting SDGs in Rwanda

Scenario	Year SDGs met	Additional grants (% of GDP)	2030 per capita income (US$)	2030 real GDP growth (%)	2030 public debt (% of GDP)
Pre-COVID baseline	2045	0.0	1,332	7.6	53.6
Domestic revenue mobilization	2039	0.0	1,333	7.7	53.6
Spending reallocation	2041	0.0	1,406	8.7	51.7
Combined fiscal measures	2037	0.0	1,410	8.9	51.5
Private sector participation	2044	0.0	1,375	8.2	52.5
Active policies without grants	2035	0.0	1,451	9.4	50.5
Baseline + grants	2030	15.7	1,491	9.0	50.1
Fiscal measures + grants	2030	9.5	1,524	9.9	49.1
Active policies + grants	2030	7.6	1,539	10.1	48.7

Source: Lledó and Perrelli, 2021

5.2 IMF's SDG financing options, 2024

Rwanda demonstrates strong institutional alignment with the SDGs, having integrated them into its Vision 2050 and NST2. Progress has been notable in areas like climate action, gender equality, water access and clean energy, yet substantial challenges remain in poverty reduction, decent work, institutional capacity and education outcomes. The SDG trend analysis, however, shows that only a small proportion of indicators are on track, with the majority experiencing limited progress or stagnation and several indicators regressing.

The IMF's dynamic SDG financing model allowed the quantification of fiscal resources and policy reforms needed to meet the SDGs by 2033. The framework used included macroeconomic simulations that assess trade-offs between growth, debt sustainability, public spending and private sector mobilization. The framework used evaluated the timeline for SDG attainment under different policy scenarios, highlighting the implications of inaction versus reforms in domestic resource mobilization, expenditure efficiency and concessional finance.

According to the presentation, Rwanda's post-COVID SDG financing gap is approximately 21.3 percent of GDP annually, up from 15.7 percent pre-pandemic. The gap is largely driven by output losses, changes in revenue forecasts and rising financing needs for social infrastructure and human capital. Without reforms, Rwanda would therefore be unlikely to meet the SDGs before 2045–2050. Even under improved domestic efforts, substantial external grant financing, which is threatened by the ongoing conflict in the Democratic Republic of Congo, is estimated at 7.6–15.7 percent of GDP annually and would still be required to meet the SDGs, alongside a huge increase in infrastructure spending and private sector participation. The analysis highlights a baseline and illustrative scenario and underscores that while Rwanda's SDG ambitions are institutionally grounded and aligned with policy, timely attainment depends on deepening fiscal reforms, crowding in private capital and securing reliable grant-based support. Table 5 provides a summary of the assumptions and impact of the baseline scenario, and the illustrative scenario with combined policy adjustments.

Table 5: Rwanda's SDG financing gap in the baseline and illustrative scenarios

Category 2023	Baseline (under current policies)			Illustrative (combined policy adjustment)			Policy adjustment description
	2033	2053	2023	2033	2053		
1. Government revenues (in US$	23.3	21.6	22.5	23.3	26.9	28.9	
Tax revenues	15.9	16.5	18.0	15.9	21.8	24.4	Medium-term revenue strategy 5 percentage points increase in tax-to-GDP ratio in 2024–2030
Grants (from donors)	4.8	2.1	1.0	4.8	2.1	1.0	
Other revenues	2.6	3.0	3.5	2.6	3.0	3.5	
2. Fiscal deficit (in US$)	-7.3	-3.2	-3.0	-7.3	-3.2	-3.0	Unchanged
Public debt (% of GDP)	69.5	64.1	44.8	69.3	60.5	40.2	
3. Government (non-interest) expenditures (in US$)	28.7	22.8	23.0	28.8	28.2	29.6	
SDG related	13.2	10.3	10.5	13.3	15.7	17.1	Spending reallocation: all new spending diverted to SDGs
Non-SDG related	15.5	12.5	12.5	15.5	12.5	12.5	
4. Spending efficiency (in US$)	0.6	0.6	0.6	0.8	0.9	1.0	Increased spending efficiency
5. Private sector participation (in US$)	0.0	0.0	0.0	2.0	2.0	2.0	Private sector financing of SDGs increased by 2% of GDP
6. Outcomes							
GDP per capita (in US$ 2022)	909	1,035	3,868	912	1,115	5,426	
GDP growth (in US$)	6.7	6.3	5.5	7.1	7.4	6.7	
Infrastructure capital in US$)	53	98	155	53	125	204	
Human capital (in US$)	100	132	190	100	144	254	
7. Year of reaching SDGs	2045			2038			
8. Financing needs to reach SDGs by 2030 (in US$)	19.5			14.5			

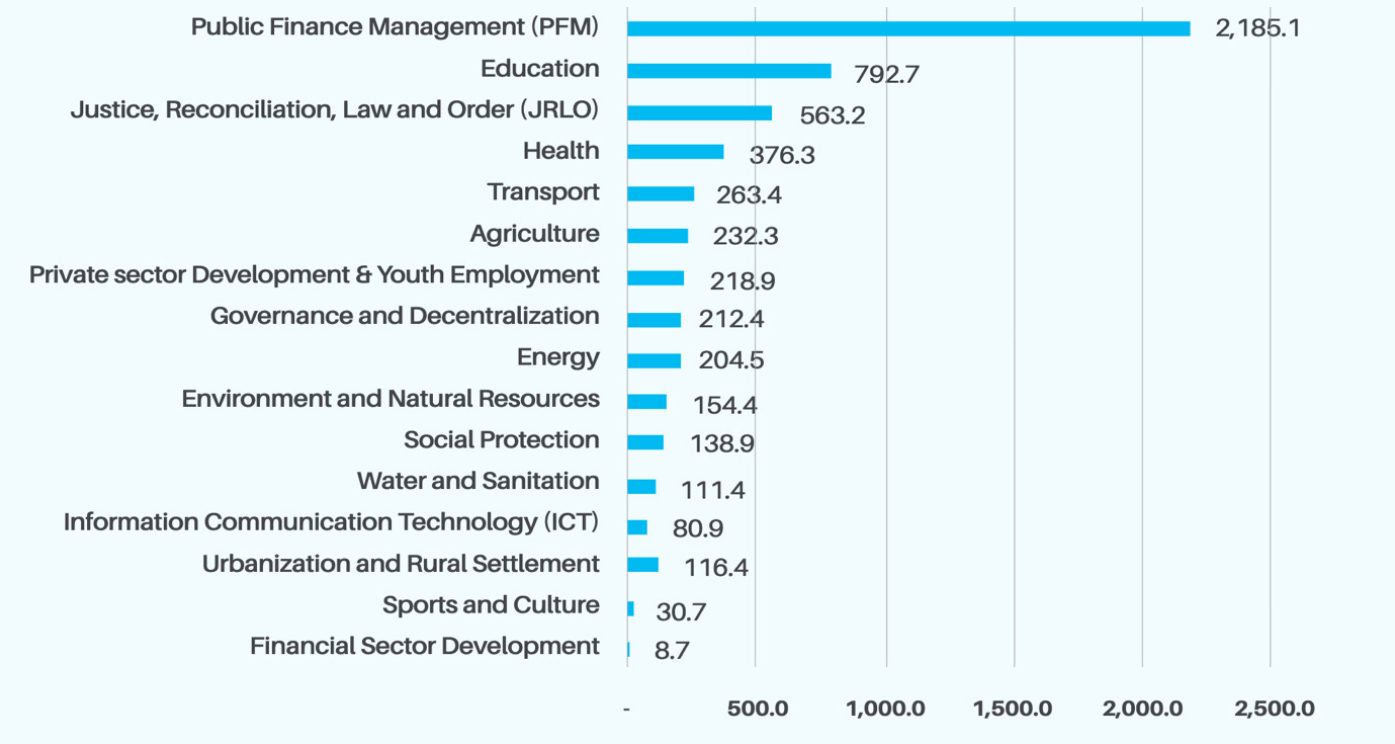
Source: 'SDG Financing Options' presented by IMF Resident Representative Gabor Pula at the Development Partners Meeting, 7 March 2024.

6. Current spending and macroeconomic context

Rwanda's economy has been growing robustly in recent years (8 percent of annual GDP), and while the government had previously prioritized social sectors, the largest budgetary increase is now focused on social transformation.

According to the revised budget from MINECOFIN, the total budget for the 2024/25 fiscal year is RF5,816.4 billion, reflecting an increase of RF700.9 billion (14 percent) compared with the 2023/24 revised budget of RF5,115.6 billion. Domestic resources are projected at RF3,691.7 billion, representing 63.5 percent of the total budget, while external resources amount to RF2,125.7 billion (37 percent). Combined, domestic and external resources account for 100 percent of the financing envelope, with external grants alone contributing 10.7 percent. Total expenditure in 2024/25 is projected at RF5,816.4 billion, comprised of recurrent spending of RF3,728.5 billion (64.1 percent) and capital spending of RF2,087.9 billion (35.9 percent). Additionally, projected expenditures include RF80.6 billion under equity and investment fund shares, RF50.1 billion in government policy lending, RF51.0 billion in other accounts payable and a projected increase in deposits. A breakdown of the budget by sector—aligned to NST2—is presented in Figure 2.

Figure 2: Original 2024/25 budget allocation by NST2 sectors (in billion Rwandan francs)



Note: This chart presents the original sectoral allocation as published by the Government of Rwanda at the start of the 2024/25 budget cycle. It is provided on an illustrative basis, based on official data made publicly available by MINECOFIN. A revised version of the national budget, including updated expenditure totals, was issued in early 2025. As actual sectoral allocations evolve through the annual budget cycle, these figures are subject to change and should be interpreted as indicative of initial priorities rather than final disbursements.

Source: Republic of Rwanda, 2024.

Table 6: Rwanda 2024/25 sector budget allocations

Sector	Allocation (RF billions)	Percentage (%) of total budget	Percentage (%) of GDP
Public finance management	2,185.1	38.40	11.63
Education	803.8	13.93	4.22
Justice, reconciliation, law and order	589.1	9.90	3.00
Health	376.3	6.61	2.00
Transport	263.4	4.63	1.40
Agriculture	232.3	4.08	1.24
Private sector development and youth employment	218.9	3.85	1.17
Governance and decentralization	223.6	3.73	1.13
Energy	222.3	3.59	1.09
Environment and natural resources	130.6	2.71	0.82
Social protection	165.6	2.44	0.74
Urbanization and rural settlements	116.4	2.05	0.62
Water and sanitation	111.4	1.96	0.59
Information and communications technology	102.3	1.42	0.43
Sports and culture	36.5	0.54	0.16
Financial sector development	8.7	0.15	0.05

Source: Republic of Rwanda, 2024.

These current spending levels fall short of what is needed to achieve the SDGs on the original timeline. Table 6 shows that in 2024/25, social priority sectors, education, health, social protection and WASH together account for approximately 25 percent of the budget (about 7.6 percent of GDP). Economic infrastructure sectors, such as energy, transport and agriculture, represent a further 12.3 percent of the budget (about 3.7 percent of GDP). While these allocations are significant, SDG investment needs are substantially higher. The sections that follow detail cost estimates by sector and compare them to current spending to quantify the financing gaps.

7. Methodological framework

The method deployed here, as agreed with MINECOFIN, use IMF's SDG costing and scenario-building model the SDG Financing Tool populated with Government of Rwanda macro fiscal and budgetary data to develop a baseline scenario (business as usual) and two other accelerated scenarios. Based on costing, the SDG Financing Tool has been used as a rapid way of evaluating the financing needs required to achieve the SDGs within a macroeconomically consistent and dynamic framework.[14] The tool enables the MINECOFIN to monitor progress towards the SDGs and assess the impact of various financing strategies, including accelerated options. The tool employs a structured costing methodology to provide detailed assessments of funding needs across various sectors.

Key components of the IMF's SDG costing methodology are:

- **Sectoral costing estimates:** The IMF's approach involves detailed calculations of the financial requirements for individual sectors pertinent to the SDGs, such as education, health, infrastructure and climate adaptation. These estimates are grounded in empirical data and tailored to the specific context of each country.
- **Baseline and target scenarios:** The methodology establishes a baseline scenario reflecting current expenditure and service levels. It then projects the additional investments necessary to meet SDG targets, allowing for a clear comparison between existing commitments and required efforts.
- **Dynamic modelling:** The SDG Financing Tool utilizes dynamic models that account for economic growth, demographic changes and technological advancements. This ensures that cost estimates remain relevant and adaptable to evolving national circumstances.
- **Integration with national planning:** The tool is designed to align with a country's national development strategy, facilitating the incorporation of SDG financing needs into broader fiscal planning and policymaking processes.

The IMF framework is designed to be both diagnostic and operational supporting reforms, sequencing interventions and integrating them into IMF-supported programmes. The NST2 focuses on all sectors, as a national strategy, whereas the IMF SDG Financing Tool focuses on education, health, electricity, roads and WASH. These sectors have a direct impact on five SDGs (3, 4, 6, 7 and 9) and an indirect impact on other SDGs (1, 2, 5, 8, 10, 11, etc.). Some important elements of the framework are explained:

- **At the foundation of the framework lies a rigorous SDG needs assessment.** This stage quantifies how much financing is required to meet priority goals, typically in areas such as health, education, climate adaptation and basic infrastructure. It draws on sectoral costing tools and collaborates with institutions, such as the World Bank and UNDP, to establish realistic and country-specific benchmarks. Once the gaps are understood, the focus shifts to how these needs can be financed and governed, benefiting from the proposals outlined in the Rwanda's Sustainable Financing Framework (2024) and INFF (2021).[15]
- **A critical pillar of the strategy is public financial management (PFM).** Effective PFM ensures that resources are allocated and used efficiently, and that the PFM system builds from the key recommendations made in the B4SDG assessment findings (see section 12). PFM actions will include strengthening budget credibility, improving procurement systems, enhancing fiscal transparency and developing medium-term budget frameworks, linked to improved SDG financing modalities and instruments. In essence, the proposed set of policy reforms is vital for ensuring that new spending aligns with long-term goals.

14 *IMF, 2022.*

15 *MINECOFIN (2024); MINECOFIN and UN Rwanda (2021).*

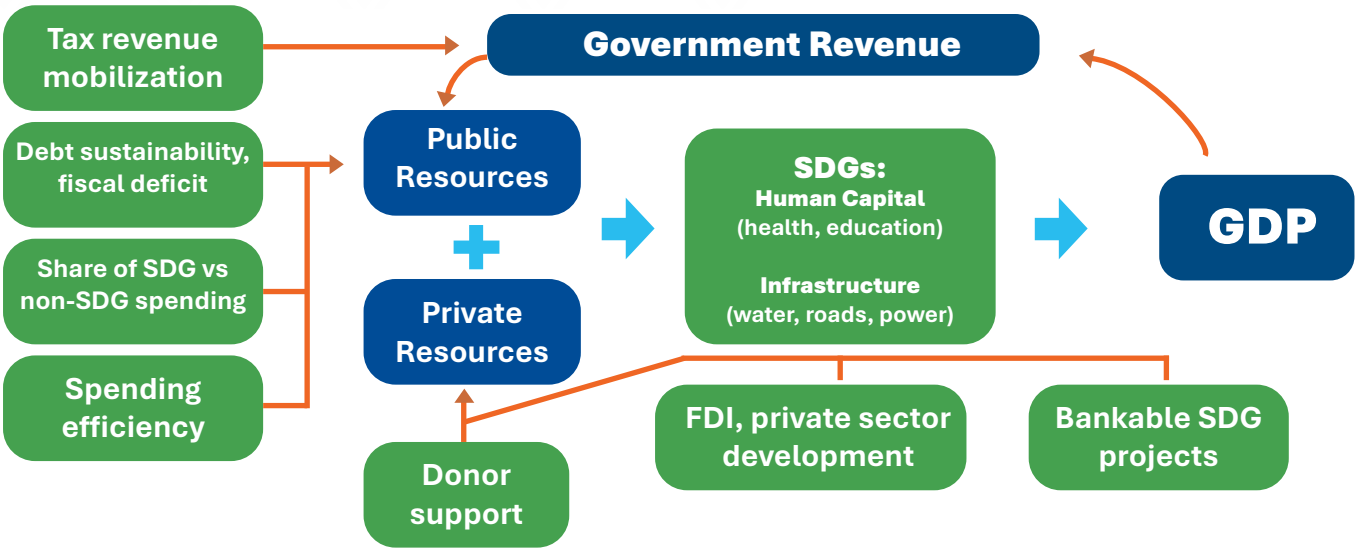
- **Revenue mobilization is another central element that the method addresses.** Though improving, Rwanda still faces a low tax-to-GDP ratio (15 percent) and struggles to generate the domestic resources needed to fund NST2 and SDG commitments. A focus going forward will therefore be on improving tax policy and administration, often through tools like the Tax Administration Diagnostic Assessment Tool (TADAT), with reforms not only aimed at boosting revenues, but also to ensure tax systems are equitable and growth-friendly, considering aspects such as the age of the emerging digital economy.
- **Ensuring efficient spending is just as important as raising revenue, leading to fiscal savings.** The government is therefore encouraged to reallocate from low-impact or regressive expenditures (such as inefficient subsidies) towards priority social spending. This B4SDG assessment identifies waste, strengthens public investment management and improves the targeting of social protection mechanisms. Given increasing exposure to external shocks, such as those related to climate, health, debt and regional conflict, the framework also emphasizes fiscal risk management allowing Rwanda to identify and mitigate fiscal risks through debt sustainability analyses and contingency planning. Resilience-building, including the use of disaster-linked financial instruments, can be integrated into national financing strategies.

Finally, the framework suggests the design of a comprehensive SDG-linked financing strategy, which is coupled to the B4SDG analysis. This strategy blends domestic revenues, concessional borrowing and, where appropriate, innovative instruments such as SDG bonds or blended finance to crowd in commercial capital where it adds value. The aim of the strategy is to define a realistic and sustainable fiscal path that aligns macroeconomic stability with NST2 goals. Incorporating all these elements, the method used becomes a tool for aligning development ambitions with credible fiscal planning, providing countries with a platform for coordinated engagement with international cooperation partners and more effective use of public funds.

Key elements of IMF's SDG financing framework, illustrated in Figure 3, are as follows:

- **SDG needs assessment:** Sectoral costing (health, education, infrastructure, climate) and estimation of financing gap using data from government and partners, such as the World Bank and UNDP
- **Revenue mobilization:** Tax system diagnostics and reform, and administrative capacity-building, (e.g. via TADAT)
- **Efficient spending:** Reallocation from low-impact to high-impact spending and improved targeting of social programme
- **Fiscal risk management:** Debt sustainability analysis and planning for climate and disaster risks
- **SDG-linked financing strategy:** Domestic and external financing blend with the integration of NST2 programmes and fiscal frameworks

Figure 3: The International Monetary Fund's SDG financing framework



Note: FDI = foreign direct investment.

Source: IMF, 2022

7.1 SDG costing method

Employing the top-down costing methodology from the IMF SDG Financing Tool provides the Government of Rwanda with actionable insights into the financial implications of achieving the SDGs, thereby supporting informed decision-making and effective allocation of resources. The overall method deployed here, as intimated above, is as follows:

- **Establish the baseline scenario:** Input data are entered based on Rwanda's current fiscal data, drawing on data from MINECOFIN and the National Institute of Statistics of Rwanda. This includes making long-term assumptions on GDP, revenues and other factors for the periods 2025–2034, 2034–2044 and 2044–2054.
- **Develop two comparison scenarios by adjusting financing options:** After setting the baseline, a comparison scenario is developed by modifying financing strategies. This allows evaluation of how different approaches, such as increased domestic revenue mobilization or augmented official development assistance, affect Rwanda's trajectory towards achieving the SDGs.
- **Review the dashboard and analyse outcomes:** Upon completing the scenarios, the tool's dashboard is used to review outcomes, presenting data and charts that visually depict the evolution of available resources, progress towards the SDGs and trends in selected macroeconomic variables. This analysis helps assess the consistency of the baseline and understand the implications of various financing options on the country's SDG path.

The tool focuses on five critical sectors aligned with the SDGs: (i) health, promoting healthy lives and well-being for all ages; (ii) education, ensuring inclusive and equitable quality education and lifelong learning opportunities; (iii) roads, providing access to safe, affordable and sustainable transport; (iv) electricity, ensuring access to affordable, reliable, sustainable and modern energy; and (v) WASH, ensuring availability and sustainable management of water and sanitation.

In addition to setting baselines, the method allows the generation of future policy scenarios (i.e. tax collection rate, levels of debt financing, levels of private sector participation, etc.) that incorporate different financing options, thereby enabling comparisons of various paths towards the SDGs within an internally consistent macroeconomic framework. The method allows for modification to the assumptions related to growth projections, public investment efficiency and private financing to evaluate their impact on the trajectory towards the SDGs and other macroeconomic variables. The tool, however, does not quantify the cost of achieving the SDGs; these costs are considered predetermined inputs. As the tool does not provide guidance on implementing different financing options or assessing the feasibility of these options given a country's economic circumstances, the subsequent work on SDG accelerators builds from the work on the INFF and B4SDG analysis. By following this method, MINECOFIN can effectively strategize and monitor NST2 and SDG implementation.

Table 7 provides a summary of the primary national data used for this method to determine Rwanda's costing and financing needs.

Table 7: Costing method data needs

Category	Variables
Macroeconomic indicators	
GDP	Real GDP growth rates, nominal GDP levels
Labour market	Labour force participation rate, unemployment rate
Inflation	Consumer price index, producer price index
Savings and investment	Private savings rate, gross capital formation
Fiscal data	
Government revenues	Tax revenues, non-tax revenues, grants received
Government expenditures	Current expenditures, capital expenditures, SDG-related spending (health, education, infrastructure)
Debt financing	Fiscal deficit, public debt levels, interest rates on debt, stock-flow adjustments
External sector data	
Balance of payments	Current account balance, net remittances, trade balance
Capital and financial account	Net foreign direct investment, private sector borrowing, foreign aid and loans
SDG costing data	
Sector-specific costs	Estimated costs to achieve SDGs in health, education, roads, electricity and WASH
Current spending levels	Existing expenditures in the above sectors
Demographic data	
Population statistics	Total population, population growth rate, age distribution
Advanced parameters	
Production function parameters	Total factor productivity, capital depreciation rates, elasticity parameters
Efficiency parameters	Public investment efficiency, human capital efficiency

Source: Author's elaboration

These data inputs have been essential for setting up both baseline and scenario analyses within IMF's SDG Financing Tool framework. Accurate and up-to-date information has ensured the model's outputs are reliable and reflective of Rwanda's economic context, though long-term assumptions have been made until 2054.

7.2 Costing variables

While predicting future demographic shifts is relatively easy, predicting future GDP, revenues, employment and official development assistance is highly speculative. That said, the greater the level of effort to meet NST2 and SDG targets by public and private sectors through an accelerated approach, the greater the possibility of attainment in fewer years. In this regard, Table 8 provides the variables at play in developing SDG costing scenarios (all of which interplay) in a world impacted by global trade wars and an artificial intelligence (AI) and cryptocurrency revolution set to reshape market outcomes.

Table 8: SDG costing variables

Variable	Description
Achievement date	Year of achieving SDGs
Demographic trends	Population growth, urbanization and age structure affecting demand for services
Economic growth rates	GDP projections and sectoral composition influencing fiscal space
Public finance and fiscal context	Domestic revenue, budget constraints and overall fiscal conditions
Private sector participation	Opportunities for co-financing through PPPs and market-based solutions
Baseline service coverage	Current access levels to health, education, water and other essential services
Unit cost of service delivery	Cost per facility, beneficiary or infrastructure unit
Geographic disparities	Cost differences between rural and urban areas
Policy ambition	Scope and speed of SDG target implementation
Governance and institutional capacity	Efficiency of institutions, corruption control and project execution ability
External financing assumptions	Projections for official development assistance, concessional finance and foreign direct investment
Technological innovation	Adoption of cost-saving technologies in service delivery
Climate and environmental risks	Vulnerabilities that increase adaptation and mitigation costs

Source: Author's elaboration

The analysis compares current spending levels to the estimated needs, identifies financing gaps and discusses potential public and private financing contributions. All figures used were the latest available data from Rwanda's 2024/25 national budget, IMF analyses and official statistics to ensure the analyses are up to date with Rwanda's macroeconomic framework and policy objectives. However, the scenarios developed are all based on a set of assumptions, a summary of which is provided in Table 9.

Table 9: Variables for which assumptions are made in scenario development

Category	Variable
Financing	• Revenues • Debt financing • Public expenditure • Private financing
Macroeconomics	• GDP • External sector • Allocative and operational efficiency • Labour force participation • Private savings rate • Current account balance • Capital and financial account • Inflation and interest rates • Exchange rates • Extent and sustainability of debt financing • Production functions • Physical capital stock • Human capital • Production rates of new capital
SDG budget allocations	SDG expenditure needs, projections and forecasts for: • Education • Health • Electricity • WASH • Roads • Climate
Time horizons	• 2024 • 2034 • 2054

Source: Author's elaboration

8. Costing scenarios

The costing scenarios that have been developed are based on Rwanda's national data and various assumptions as described in section 7. They reflect (i) a conservative trajectory to meet SDGs by 2054, 'Resilience First' investment scenario; (ii) staged SDG realization by 2044, 'Smart Sequencing' investment scenario; and (iii) accelerated SDG achievement by 2034, 'All-in Leap' investment scenario.

8.1 'Resilience First' investment scenario – SDG targets by 2054

A cautious, resilience-centred trajectory, this scenario represents business as usual and prioritizes stability and foundational investments, aiming for full SDG achievement by 2054. It accepts a much longer timeline in exchange for lower annual costs and risks. The focus is on building basic systems and buffers in education, health, climate adaptation, etc., before pursuing expansive growth or expensive projects. Progress on many targets is slow, especially through the 2020s and 2030s, but steady. By mid-century, Rwanda would realize the SDGs, having emphasized quality and sustainability over speed.

Core policy shift: Safety and risk reduction define this approach. Government would concentrate on resilience fiscal resilience (avoiding debt build-up), climate resilience (adapting to shocks) and human resilience (basic health and education), as the foundation on which future development will eventually be built. Broadly, this means core social services are protected and gradually improved, but big leaps or new initiatives are limited by tight budgets. Ambitious infrastructure projects are largely deferred unless they are low cost or financed by others (private or donors). The strategy deliberately paces itself to what domestic resources and minimal borrowing can support, ensuring high fiscal sustainability and the ability to absorb unforeseen shocks (like global economic downturns or climate disasters) without derailing basic services.

8.1.1 Allocative changes

- **Education:** Maintain and incrementally grow education spending to 5.2 percent of GDP. This level (slightly above current) is sustained throughout, allowing for slow but steady improvements in access and quality (e.g. gradual expansion of secondary and vocational education, modest improvements in student–teacher ratios). There is no dramatic surge in hiring or school construction; instead, the focus is on consolidating gains (like maintaining near-universal primary completion) and piloting cost-effective innovations (such as e-learning in remote areas) within a constrained budget.

- **Health:** Maintain health spending at 3.5 percent of GDP (approximately the current level). The priority is to *protect* the health budget from any cuts and ensure efficiency. Limited new initiatives are introduced, for example, strengthening community health worker networks or preventive care programmes, but large expansions (new hospitals, specialized care facilities) are held off until future decades. The health system's emphasis is on resilience: improving pandemic preparedness, basic maternal and child health and nutrition programmes to safeguard human capital even with slow growth.

- **Infrastructure, and water and sanitation:** There would be minimal expansion of public investment in infrastructure and WASH from the current level of 2–3 percent of GDP. Rather than broad national projects, investments are highly targeted. For WASH, priority is given to low-cost, high-impact projects (rural boreholes, rainwater harvesting, community latrines) to incrementally raise access while funded within existing budget limits. For transport and energy infrastructure, the government confines spending to maintenance of existing assets and completion of a few critical projects already in progress. Any large new infrastructure (major highways, railways, power plants) is pursued only via PPPs or external funding in economically viable corridors for instance, a toll road or a power project that might attract private investors because it will turn profit. By leaning

on the private sector for infrastructure, the government avoids large capital outlays. Overall, infrastructure and WASH budgets grow only marginally (if at all) as a share of GDP in this scenario. The consequence is that universal access goals for electricity, piped water, etc., are delayed until mid-century, but the state's limited funds are not overstretched.

- **Climate:** Climate adaptation and mitigation efforts are prioritized, but primarily through external resources and community-driven projects. The government ensures that whatever development spending does occur is 'climate proofed' (e.g. new school buildings must meet climate-resilient standards, agriculture extension emphasizes climate-smart techniques, etc.) but dedicated public funding for climate (beyond what is tagged in other sectors) remains small. Instead, Rwanda aggressively pursues international climate funds to support its adaptation programmes. The emphasis is on building local resilience: flood defences for high-risk villages, drought-resistant crops, reforestation, soil conservation, etc. These initiatives are relatively low cost and often financed through grants. In essence, climate action is advanced through policy and partnerships more than through large budget allocations in this scenario.

8.1.2 Financing modalities

- **Domestic revenue:** This scenario assumes minimal new revenue mobilization with only about 1–2 percent GDP growth in domestic revenues over the entire period; this is below that of the current medium-term revenue strategy. Tax efforts continue, but the pace is very slow and focused on incremental gains. For instance, the tax-to-GDP ratio might inch up by 0.1–0.2 percentage points per year through improved administration and natural growth, rather than big new taxes. By 2054, Rwanda's revenue base is larger (as the economy grows), but there is no major ramping up of taxation effort beyond current plans. This conservative revenue scenario keeps the tax burden manageable for the private sector, encouraging investment and compliance, but it also means government spending is tightly constrained by what little additional domestic money is raised. This is a worst-case scenario but would allow several shocks to be accommodated, such as future pandemics or conflict.

- **External public financing:** Avoidance of heavy borrowing is a cornerstone to this scenario. The government would continue to seek grants and highly concessional funds almost exclusively, but current conditions are against this outcome. Under this scenario, major debt-funded projects are eschewed. Outside of bilateral and multilateral flows, external support could come as performance-based grants (for achieving health or education benchmarks) from partners. If loans are taken, they are small and on soft terms, aimed at specific capacity-building or resilience objectives. The borrowing strategy is to take on minimal new debt, ensuring the debt-to-GDP remains very low.

- **Private sector and PPPs:** Given public funding limits, private finance is counted on wherever possible for development needs but, realistically, private involvement will only target projects with clear returns. The government encourages limited PPPs in sectors like renewable energy, commercial agriculture and urban infrastructure where investors can recoup costs. It improves the regulatory framework to reduce investor risk for example, offering guarantees or viability-gap funding for a few critical PPP projects such as a solar farm or a Kigali transit system. It also explores resilience bonds or other innovative instruments: these are bonds where payouts are linked to disaster risk reduction outcomes, potentially attracting impact investors to fund climate resilience projects (e.g. flood mitigation). Overall, however, private financing only covers a fraction of the gap because not all SDG areas can generate profits. The state's role is mainly to set the stage—policy stability and basic infrastructure in growth corridors and then let private sector take the lead on growth-driving investments, especially post-2040 as the business environment matures further.

- **Accelerators:** With constrained resources, this 'Resilience First' pathway leans on innovation and community engagement to maximize impact. For example, micro budgeting and community-led development programmes are used so local communities can identify and build the small-scale infrastructure they need most (bridges, water points) with technical support but minimal cost. This ensures relevance and local ownership. Tech-enabled service delivery is expanded in cost-effective ways: upgraded and new infrastructure; telemedicine to extend health care to remote areas without building new clinics; mobile monitoring for water systems to fix issues quickly; and e-learning platforms to reach students where schools are under-resourced. These technological solutions help improve outcomes despite low spending. The government also utilizes resilience bonds, as mentioned, tying financing to achievement of resilience metrics, which brings upfront capital in for prevention (like strengthening river embankments) that will save money in the long term by averting disaster costs. Overall, these accelerators are about doing more with less stretching limited funds through efficiency, innovation and by tapping non-traditional financing aligned with resilience goals.

8.1.3 Risk

The biggest drawback of this scenario is the very slow progress on many SDGs, with Rwanda potentially postponing core development dividends such as universal access to electricity, high-quality education and advanced health care until the 2040s or 2050s. Such delays could have cascading effects: improvements in human capital may come too late to drive sustained economic growth; job creation may stall; and current generations of children risk missing out on the full benefits of SDG-related investments.

While the scenario emphasizes fiscal stability and adaptability avoiding overcommitment and preserving space to respond to shocks it may underinvest in catalytic sectors that underpin inclusive development. For example, reducing stunting and undernourishment requires more than social safety nets; it demands targeted investments in agricultural productivity, post-harvest handling systems and food systems transformation. Similarly, boosting incomes will depend on job-rich sectors, entrepreneurship, infrastructure and economic diversification areas that could be crowded out under a conservative spending approach.

Furthermore, overreliance on external grants poses a vulnerability, especially as donor priorities shift as seen in 2025. A more balanced strategy would combine prudent fiscal management with proactive investments in foundational and productive sectors, ensuring that progress is not only fiscally sustainable but also developmentally irreversible.

In sum, while this scenario offers low risk and high resilience, it may fall short of holistically advancing Rwanda's SDG agenda. Without bold, well-targeted public investment, particularly in agriculture, infrastructure and human capital, the path to 2030 will remain elusive. A rebalanced approach is needed, one that safeguards fiscal space while driving strategic development outcomes.

Box 5: Core policy shift for the 'Resilience First' investment scenario

Core policy shift

The emphasis is '*safety first*'—a deliberate strategy of risk avoidance and foundational capacity-building. The government will prioritize fiscal, climate and human resilience, with an emphasis on long-term stability above rapid expansion. Major reforms or large projects are deferred in favour of gradual strengthening of essential systems like basic health, education and climate adaptation. The approach ensures development is climate proof and fiscally viable, even under stress.

Allocative changes

- Core services are preserved and modestly expanded. Maintain education at 5.2 percent and health at 3.5 percent of GDP, with gradual quality improvements (e.g. e-learning, community health worker networks) under constrained budgets.
- Climate and WASH is prioritized through low-cost, high-impact community projects, mostly funded through grants.
- Infrastructure investment is minimal from public funds with completion of existing projects; PPPs are pursued only in high-return corridors (e.g. toll roads, urban solar grids).

Financing modalities

- Domestic revenue grows slowly (1–2 percent of GDP over 30 years), driven by incremental tax administration improvements rather than new taxes.
- External finance focuses on grants and concessional loans only, avoiding significant new debt.
- Climate finance pursued aggressively via the Green Climate Fund, the Resilience and Sustainability Facility and bilateral sources to support adaptation and community resilience.
- PPPs are encouraged selectively in sectors with viable returns.

Accelerators

- Resilience bonds will front-load capital for disaster risk reduction projects (e.g. flood barriers, embankments).
- Community-driven development and micro budgeting tools will allow local identification and delivery of priority investments (e.g. boreholes, latrines).
- Technology enabled service delivery is scaled where cost-effective, mobile health services, e-learning, smart water systems, focusing on maximizing reach with minimal outlay.

Risk

Progress towards SDGs will be delayed to 2054, with some cohorts potentially missing out on key services. Economic take-off is postponed due to delayed infrastructure and human capital dividends. Reliance on volatile donor funding adds exposure. However, fiscal sustainability, flexibility and system resilience are significantly enhanced, preserving state capacity even in global downturns or climate shocks. The model trades speed for survivability and long-term control.

This conservative scenario focuses on slow and steady investments to protect fiscal sustainability. With GDP reaching RF80,000 billion by 2054, only RF4,420 billion (about 5.5 percent of GDP) would be spent annually on the five SDG sectors (see Table 10).

Table 10: Annual costs of the 'Resilience First' (2054) scenario

Sector	Annual cost (RF billions)	Annual cost (US$ billions)
Education	1,220.00	0.94
Health	700.00	0.54
Water, sanitation and hygiene	462.20	0.36
Infrastructure (electricity)	613.80	0.47
Climate	1,424.00	1.10
Total (all sectors)	**4,420.00**	**3.41**

Source: Author's elaboration

Table 11 provides the financing details of the 'Resilience First' (2054) scenario over the 31-year period 2024–2054. The scenario effectively constitutes a business-as-usual case; there are no major policy adjustments related to sectoral reallocation or private sector participation, for example. Charts in Figure 4 show the overall progression of the scenario from 2024 to 2054.

Table 11: Financing the 'Resilience First' (2054) scenario, 2024–2054

Macroeconomic Indicators	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054
GDP per capita (in USD 2022)	930.8	931.3	973.8	1020.2	1071.1	1127.4	1188.2	1254.4	1326.9	1406.3	1493.4	1601.5	1733.3	1876.7	2032.6	2202.2	2386.7	2587.1	2805.2	3042.6	3301.0	3582.3	3889.7	4224.6	4589.3	4986.7	5419.7	5895.0	6413.1	6978.1	4.3
Real GDP growth (in percent)	7.0	7.0	7.1	7.1	7.1	7.2	7.2	7.2	7.2	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	
Current account balance (in percent of GDP)	-9.5	-9.1	-8.8	-8.4	-8.0	-7.7	-7.3	-6.9	-6.6	-6.2	-5.8	-5.8	-5.8	-5.8	-5.8	-5.8	-5.8	-5.8	-5.8	-5.8	-5.8	-5.8	-5.8	-5.8	-5.8	-5.8	-5.8	-5.8	-5.8	-5.8	
Government finances (in percent of GDP)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054
Revenues and Grants	21.5	21.4	21.3	21.1	21.0	20.8	20.7	20.5	20.4	20.3	20.1	20.2	20.3	20.4	20.5	20.5	20.6	20.7	20.8	20.9	21.0	21.1	21.2	21.3	21.4	21.5	21.6	21.7	21.8	21.9	
Primary Expenditures	27.0	26.3	25.8	25.2	24.6	24.1	23.5	23.0	22.4	21.9	21.3	21.5	21.7	21.8	21.9	22.1	22.2	22.3	22.5	22.6	22.7	22.8	22.9	23.0	23.2	23.3	23.4	23.5	23.6	23.7	
SDG-Related	9.0	8.4	7.8	7.2	6.7	6.1	5.6	5.0	4.5	3.9	3.4	3.6	3.7	3.9	4.0	4.1	4.3	4.4	4.5	4.6	4.8	4.9	5.0	5.1	5.2	5.3	5.4	5.5	5.7	5.8	5.9
Other	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
Interest Expenditure	1.8	1.9	1.8	1.8	1.8	1.7	1.7	1.6	1.5	1.5	1.4	1.3	1.3	1.2	1.1	1.1	1.0	1.0	1.0	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Overall Balance	-7.3	-6.8	-6.3	-5.9	-5.4	-5.0	-4.5	-4.0	-3.6	-3.1	-2.6	-2.6	-2.6	-2.6	-2.6	-2.6	-2.6	-2.6	-2.6	-2.6	-2.6	-2.6	-2.6	-2.6	-2.6	-2.6	-2.6	-2.6	-2.6	-2.6	-2.6
General Government Debt	70.8	71.1	70.8	70.1	68.9	67.3	65.4	63.2	60.7	57.9	54.8	51.3	48.2	45.4	42.9	40.7	38.8	37.0	35.5	34.1	32.9	31.9	30.9	30.1	29.3	28.6	28.1	27.5	27.1	26.7	26.3
Chart data	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054
Real GDP per capita (in billions of national currency)	860.4	900.3	942.5	987.3	1035.1	1086.0	1140.2	1197.5	1258.6	1323.7	1393.1	1466.6	1544.2	1626.4	1713.6	1806.1	1904.1	2007.8	2117.9	2234.6	2358.4	2489.7	2629.8	2778.5	2936.3	3103.7	3281.4	3472.0	3674.4	3889.3	4117.6
Infrastructure capital (in per cent of GDP)	57.7	58.5	59.4	60.3	61.2	62.1	62.9	63.8	64.6	65.3	65.8	66.8	68.2	70.0	72.3	75.2	78.7	82.8	87.7	93.3	99.9	107.5	116.2	121.4	121.9	122.5	123.2	124.1	125.0	126.1	127.3
Human Capital accumulation (Index – 2023)	100.0	104.9	109.0	112.6	115.8	118.6	121.2	123.3	125.2	126.9	128.4	129.8	130.7	131.5	132.3	133.2	134.2	135.3	136.5	137.9	139.4	141.0	142.9	145.0	147.3	150.1	153.3	157.1	161.2	165.7	170.6

Note: Note: The Government of Rwanda employs a medium-term expenditure framework that projects fiscal and macroeconomic indicators over a maximum horizon of three years. While this provides robust short-term planning data for NST2 implementation, it does not extend to longer-term trajectories such as 2034, 2044 or 2054. For this reason, the SDG Financing Tool developed by the IMF has been used to generate long-range projections. The baseline scenario shown reflects the IMF's macro fiscal baseline after applying Rwanda-specific adjustments to growth, revenue and investment assumptions, as detailed in accompanying scenario narratives. The table is intended to be illustrative for the purpose of scenario development and does not represent official government or IMF staff projections beyond the medium term.

Source: Author's calculations from national data using IMF's SDG Financing Tool (IMF, 2022).

Figure 4: Overall progression of the 'Resilience First' (business-as-usual) investment scenario, costs and financing, 2024–2054

Macroeconomic Indicators	2024 BL | SC	2034 BL | SC	2054 BL | SC
GDP Per capita (in USD 2023)	961 | 961	1494 | 1494	2594 | 2594
Real GDP growth (in percent)	7.0 | 7.0	7.2 | 7.2	7.3 | 7.3
Current account balance (in percent of GDP)	-9.5 | -9.5	-5.8 | -5.8	-5.8 | -5.8

Government finances (in percent of GDP)	2024 BL | SC	2034 BL | SC	2054 BL | SC
Revenues and grants	21.5 | 21.5	20.1 | 20.1	22.0 | 22.0
Primary expenditure	27.0 | 27.0	21.3 | 21.3	23.8 | 23.8
SDG related	9.0 | 9.0	3.4 | 3.4	5.9 | 5.9
Other	18.0 | 18.0	18.0 | 18.0	18.0 | 18.0
Interest expenditure	1.8 | 1.8	1.4 | 1.4	0.8 | 0.8
Overall balance	-7.3 | -7.3	-2.6 | -2.6	-2.6 | -2.6
General government debt	70.8 | 70.8	54.8 | 54.8	25.3 | 26.3

Note: BL = baseline; SC = scenario

Source: Author's calculations from national data using IMF's SDG Financing Tool (IMF, 2022).

8.2 'Smart Sequencing' investment scenario – SDG targets by 2044

This moderate growth, sequenced investment scenario aims to fulfil the SDGs by 2044, a decade later than the next 'All-in Leap' scenario (presented in section 8.3). 'Smart sequencing' prioritizes and staggers interventions in phases, balancing ambition with fiscal prudence. Early efforts concentrate on social sectors and basic utilities, while high-cost infrastructure and economic transformation projects are delayed to later years. The approach smooths out expenditures over a 20-year horizon, reducing peak financing pressures and aligning with a realistic pace of absorption and reform.

Core policy shift: Balanced and phased SDG implementation characterize this scenario. The government adopts a '*first things first*' strategy investing in people and essential services in the late 2020s, then infrastructure and growth-enhancing projects in the 2030s to systematically build towards the SDGs by 2044. This is underpinned by controlled fiscal expansion and careful debt management. Efficiency reforms and better coordination (e.g. digital service delivery models through INFF) ensure value-for-money spending. The trade-off is that some targets are achieved later, but the approach safeguards macroeconomic stability and steady progress.

8.2.1 Allocative changes

- **Education:** There is a moderate increase in the education budget, rising to about 5.5 percent of GDP by 2044. This gradual scale-up allows for steady improvements in enrolment and education quality (such as teacher training and curriculum enhancement) without overtaxing the system. Early in the period (2025–2035), education and health see incremental boosts to lay the foundation for human capital.

- **Health:** Health spending stays roughly stable at about 3.5 percent of GDP through the 2020s, focusing on improving efficiency and outcomes (e.g. consolidating health insurance schemes, preventative care), rather than introducing large budget increases. Slight increases may occur in the 2030s as the population grows, but health's share of GDP remains within current levels initially.

- **Infrastructure, and water and sanitation:** There is a gradual rise in infrastructure and WASH investment to 4–5 percent of GDP by the mid-2030s, reaching about 6 percent by 2044. In the early years, only the most critical and high-return infrastructure projects (such as power generation, key highways, urban water systems) are funded, while others wait. For example, from 2025–2034 the focus is on completing ongoing energy and road projects and expanding basic water access; from 2035 onwards, more aggressive scale-up takes place allowing for major new transport links, advanced sanitation systems and universal service coverage. This sequencing ensures that heavy infrastructure spending peaks in the 2030s when the economy and revenue base are larger.

- **Climate:** Climate action is mainstreamed with a consistent allocation of about 1.5 percent of GDP for climate-related investments each year. Rather than a separate big push, climate spending is woven into sector budgets (e.g. climate-smart agriculture, resilient road design). This steady approach ensures Rwanda stays on track with its climate commitments (adaptation and mitigation) by 2044 without diverting disproportionate resources in any single year.

8.2.2 Financing modalities

- **Domestic revenue:** A moderate increase in domestic revenues of about 3 percent of GDP over the period supports the scaled-up spending. This assumes that increasing taxes will increase revenues without overly frustrating or discouraging investment and negatively impacting growth in the economy. Tax reforms must therefore balance increased collection with an improved enabling environment and incentives for growth. Tax reforms under the medium-term revenue strategy are

implemented gradually to widen the tax base, for instance, improving property tax and value added tax (VAT) collection and formalizing small businesses. By the mid-2040s, the tax-to-GDP ratio is higher, but annual increments are smaller and steadier than in the 'All-in Leap' scenario (section 8.3), for example by adding roughly 0.2 percent of GDP in revenue each year for 15–20 years. This avoids overburdening the economy or taxpayers in any single period, while still significantly boosting public resources by 2044.

- **External public financing:** This 'Smart Sequencing' path relies on a mix of concessional loans and selective grants and emphasises blending funds to maximize impact. Rwanda might establish a development blending facility in partnership with multilateral development banks to pool some donor grants de-risking them and attracting larger concessional loans for infrastructure and social programmes. External financing is on a more moderate scale than the 'All-in Leap' scenario; it is sufficient to supplement domestic funds but not so large as to risk debt distress. The government times external borrowing to coincide with later-phase projects (e.g. taking on loans in the 2030s for infrastructure, once earlier social investments have borne fruit in terms of higher growth and revenue). Overall, public debt grows modestly and stays within sustainable levels, thanks to the extended timeline for raising and deploying funds.

- **Private sector and PPPs:** Private co-financing and PPPs are more actively, but selectively, pursued. Early on, the government focuses on improving the policy and regulatory environment to encourage private investment (i.e. streamlining business regulations, strengthening the PPP legal framework). By the mid-2030s, Rwanda's national development bank is scaled up into a green investment bank, leveraging public funds to draw in private capital for green infrastructure and small and medium-sized enterprises. Key sectors for PPPs under this scenario include energy (independent power producers for renewable energy), housing and telecommunication. The PPP pipeline expands gradually, with the state co-investing or providing guarantees in projects that have clear economic returns. Over the medium to longer term, the private sector will need to fund a significant portion of commercially viable infrastructure (perhaps 30–40 percent of total infrastructure spend), easing the burden on public finances.

- **Accelerators:** To make the most of limited resources, this scenario emphasizes efficiency and institutional reforms. The government rolls out e-government budgeting and expenditure tracking tools by the late 2020s, increasing transparency and allowing mid-course corrections. Programme-based budgeting with performance triggers are adopted: ministries get funding increases upon meeting certain outcomes (e.g. education quality metrics), reinforcing accountability. The INFF is institutionalized, ensuring that all financing public, private and international is aligned to national priorities and tracked. Additionally, Rwanda's innovative Ireme Invest platform is expanded to crowd in more private green investment. These accelerators help stretch each Rwandan franc and keep the sequenced investments on schedule.

8.2.3 Risk

The primary risk of 'Smart Sequencing' is delayed impact on human development. By not front-loading investments in areas like education and nutrition, Rwanda foregoes some early gains, for instance, the workforce may only become fully skilled in the 2040s, potentially slowing the emergence of a knowledge-based economy. There is also a danger that future governments may face pressure to accelerate spending unsustainably if progress seems too slow (a political economy risk). However, this scenario's strength is fiscal and programmatic sustainability. It avoids the acute financing strains of the 'All-in Leap' path (section 8.3) and reduces dependency on any single source of funding. If executed faithfully, Rwanda would still achieve the SDGs, just on a longer timetable and with fewer volatility risks. The economy by 2044 would be stronger and more diversified, having grown in tandem with the staged investments.

Box 6: Core policy shift for the 'Smart Sequencing' investment scenario

This investment scenario offers balanced and phased SDG implementation anchored in controlled fiscal expansion. The government adopts a sequenced investment strategy prioritizing foundational human capital and energy systems from 2025 to 2034, followed by scaled-up infrastructure and WASH investments from 2035 to 2044. Efficiency reforms, stable external partnerships and institutionalized financing tools (e.g. INFF) ensure macro fiscal stability while enabling steady progress towards SDG fulfilment by 2044.

Allocative changes

- Education: Budget gradually rises to ~5.5 percent of GDP by 2044, supporting improvements in access and quality of education without overburdening the system.
- Health: Spending remains stable around 3.5 percent of GDP with emphasis on efficiency and consolidation of outcomes in the 2020s and modest growth in the 2030s.
- Infrastructure and WASH: Rising from ~4–5 percent of GDP by 2030 to a peak of ~6 percent by 2044, with early investments focused on energy access and critical roads and later phases on urban infrastructure and universal water and sanitation coverage.
- Climate: 1.5 percent of GDP is annually tagged across sectors for climate-aligned investments being integrated into agriculture, transport and urban resilience strategies rather than through standalone programmes.

Financing modalities

- Domestic revenue: Gradual increase in the tax-to-GDP ratio of ~3 percent over 20 years, through incremental reforms (e.g. VAT, property tax, formalization).
- External financing: Use of a development blending facility to pool grants and concessional loans, leveraging partnerships with multilateral development banks, for large infrastructure and social programmes. Borrowing remains within prudent limits and is timed to revenue growth and absorption capacity.
- Private finance and PPPs: Expanded post-2030, especially in energy, urban mobility and telecommunications, backed by legal and regulatory improvements. Co-financing mechanisms include viability-gap funding and guarantees, with PPPs eventually covering 30–40 percent of infrastructure investment.

Accelerators

- E-government tools rolled out for budget transparency, real-time tracking and mid-course corrections.
- Ireme Invest is scaled up into a national green investment platform, enabling blended climate finance and support of small and medium-sized enterprises.
- Programme-based budgeting is institutionalized, with performance-linked disbursements to enhance accountability and impact across ministries and in new financing instruments included in the procurement process to ramp up use of commercial capital.

Risk

The main downside is the deferred realization of human capital benefits, with early-phase underinvestment potentially slowing gains in education, health and workforce readiness. Political pressures may also arise to accelerate spending prematurely. However, the extended time horizon ensures fiscal sustainability, reduces reliance on volatile aid flows and allows Rwanda to build a stronger, more diversified economy in tandem with sequenced SDG delivery.

This scenario takes a phased approach, with investments spread over time. By 2044, with GDP projected at RF40,000 billion, Rwanda would allocate RF6,600 billion annually (16.5 percent of GDP) to the focus sectors to meet the SDGs by mid-century (see Table 12).

Table 13 provides the financing details of the 'Smart Sequencing' (2044) investment scenario over the 21-year period 2024–2044. Charts in Figure 5 show the overall progression of the scenario from 2024 to 2044.

Table 12: Annual costs of the 'Smart Sequencing' (2044) investment scenario

Sector	Annual cost (RF billions)	Annual cost (US$ billions)
Education	1,821.60	1.40
Health	1,029.60	0.79
Water, sanitation and hygiene	666.60	0.51
Infrastructure (electricity)	884.40	0.68
Climate	2,197.80	1.69
Total (all sectors)	**6,600.00**	**5.07**

Source: Author's elaboration

Table 13. Financing the 'All-in Leap' (2034) scenario, 2024–2034

Macroeconomic Indicators		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
GDP per capita (in USD 2022)	Baseline	930.8	932.8	976.4	1023.4	1074.7	1131.2	1192.3	1258.9	1332.1	1412.7	1501.5
	Scenario	930.8	931.3	973.8	1020.2	1071.1	1127.4	1188.2	1254.4	1326.9	1406.3	1493.4
Real GDP growth (in percent)	Baseline	7.0	7.2	7.2	7.1	7.1	7.2	7.2	7.2	7.3	7.3	7.4
	Scenario	7.0	7.0	7.1	7.1	7.1	7.2	7.2	7.2	7.2	7.3	7.3
Current account balance (in percent of GDP)	Baseline	-9.5	-9.2	-9.0	-8.7	-8.4	-8.2	-7.9	-7.6	-7.3	-7.1	-6.8
	Scenario	-9.5	-9.1	-8.8	-8.4	-8.0	-7.7	-7.3	-6.9	-6.5	-6.2	-5.8
Government finances (in percent of GDP)		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Revenues and grants	Baseline	21.5	21.8	22.0	22.2	22.4	22.6	22.9	23.1	23.3	23.5	23.8
	Scenario	21.8	22.6	23.4	24.3	25.1	26.0	26.8	27.7	28.5	29.4	30.3
Primary expenditure	Baseline	27.0	26.9	27.0	27.0	27.0	27.0	27.0	26.9	26.9	26.9	27.0
	Scenario	27.2	27.8	28.4	29.0	29.6	30.2	30.8	31.5	32.1	32.7	33.3
SDG-related	Baseline	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
	Scenario	9.2	10.2	11.2	12.2	13.3	14.3	15.3	16.3	17.3	18.3	19.3
Other	Baseline	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
	Scenario	18.0	17.6	17.2	16.8	16.4	16.0	15.6	15.2	14.8	14.4	14.0
Interest expenditure	Baseline	1.8	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
	Scenario	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0
Overall balance	Baseline	-7.3	-7.1	-6.8	-6.6	-6.4	-6.1	-5.9	-5.7	-5.5	-5.2	-5.0
	Scenario	-7.3	-7.1	-6.8	-6.6	-6.4	-6.1	-5.9	-5.7	-5.5	-5.2	-5.0
General government debt	Baseline	70.8	71.2	71.3	71.3	70.9	70.3	69.5	68.5	67.3	65.9	64.4
	Scenario	70.8	71.3	71.5	71.4	71.1	70.4	69.6	68.5	67.3	65.9	64.3
Chart data		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Real GDP per capita (in billions of national currency)	Baseline	860.4	901.8	945.0	990.4	1038.6	1089.7	1144.2	1201.9	1263.6	1329.7	1400.7
	Scenario	860.4	900.3	942.5	987.3	1035.1	1086.0	1140.2	1197.5	1258.6	1323.7	1393.1
Infrastructure capital (in percent of GDP)	Baseline	58.5	60.7	63.3	66.5	70.1	74.4	79.3	84.9	91.4	98.8	107.3
	Scenario	58.8	61.5	65.2	70.0	76.0	83.4	92.4	103.2	116.1	124.7	127.0
Human capital accumulation (index = 2023)	Baseline	100.0	104.7	108.6	111.9	114.8	117.4	119.8	121.8	123.8	125.6	127.5
	Scenario	100.0	104.7	108.6	112.1	115.2	118.1	120.9	123.5	126.1	128.9	132.1

Note: The Government of Rwanda employs a medium-term expenditure framework that projects fiscal and macroeconomic indicators over a maximum horizon of three years. While this provides robust short-term planning data for NST2 implementation, it does not extend to longer-term trajectories such as 2034, 2044 or 2054. For this reason, the SDG Financing Tool developed by the IMF has been used to generate long-range projections. The baseline scenario shown reflects the IMF's macro fiscal baseline after applying Rwanda-specific adjustments to growth, revenue and investment assumptions, as detailed in accompanying scenario narratives. The table is intended to be illustrative for the purpose of scenario development and does not represent official government or IMF staff projections beyond the medium term.

Source: Author's calculations from national data using IMF's SDG Financing Tool (IMF, 2022).

Figure 5: Overall progression of the 'Smart Sequencing' (2044) investment scenario, costs and financing, 2024–2054

Note: BL = baseline; SC = scenario.

Source: Author's calculations from national data using IMF's SDG Financing Tool (IMF, 2022).

8.3 'All-in Leap' investment scenario – SDGs by 2034

This high-ambition pathway targets Rwanda's full SDG attainment by 2034 through a bold fiscal and policy overhaul. It leverages an accelerated timeline to front-load investments in human capital and infrastructure. The approach requires significant resources upfront, but yields the fastest gains in SDG outcomes, with long-term spillover impacts and multipliers.

Core policy shift: Resources are mobilized aggressively, and expenditure is reallocated towards SDG priorities. This scenario necessarily assumes that external and domestic shocks do not occur during the investment period.

The government rapidly scales up public investment across all key sectors education, health, infrastructure, WASH and climate, in the second half of the 2020s, enabled by a surge in revenues and external financing. This entails difficult trade-offs (cutting or redirecting non-SDG spending) and ambitious reforms to maximize absorptive capacity. The ethos is 'leap ahead now, reap later', accepting higher short-term financing stress for long-term development pay-offs.

8.3.1 Allocative changes

- **Education:** Immediate leap in education spending to around 6.1 percent of GDP (up from ~4.22 percent currently) to achieve universal access and quality improvements by the early 2030s. However, increased spending must accelerate use of more impactful education systems, including development of digital service delivery models.
- **Health:** Increase to and maintain health expenditure at ~3.5 percent of GDP (current levels are around 2.0 percent of GDP) with a focus on quality and system strengthening (e.g. more health care workers, hospitals and improved service delivery) to hit health targets by 2034. There is a strong focus on scaling up private sector engagement in health, although this will be challenged by users' ability to pay.
- **Infrastructure, and water and sanitation:** For SDGs concerning water and sanitation to be met, nothing less than a massive scale-up, roughly a tripling of WASH and infrastructure budgets to a combined ~10.5 percent of GDP is required by 2034; current levels for WASH and energy are 0.59 and 1.09 percent of GDP, respectively. Rwanda's NST2/SDG Acceleration Plan (2025–2034) outlines how this could be done should political support be provided; however, a coordinated approach to urbanization would be essential to make this feasible, assuming the necessary funds are secured. This would fund universal access to clean water, modern sanitation, nationwide electricity access and major transport upgrades within a decade. Investments are front-loaded into large capital projects (roads, energy generation, water networks) with a particular focus on crowding in commercial capital in energy generation and distribution.
- **Climate:** Climate action is integrated across sectors. In addition to 'greening' all infrastructure and development projects, about 2 percent of GDP is specifically dedicated to climate-resilient infrastructure and mitigation measures (e.g. renewable energy, flood control systems) to ensure Rwanda meets its climate goals alongside SDGs.

8.3.2 Financing modalities

- **Domestic revenue:** A rapid increase in domestic revenue, by ~5–6 percent of GDP, is mobilized over the period via an aggressive uplift via tax reforms, improved compliance and new revenue streams. This is a substantial jump, requiring bold measures under the Medium-Term Revenue Strategy (currently at 5 percent annually) to expand the tax base and capture more value from growth sectors. The aim is to generate a much larger domestic funding pool for SDG spending by the early 2030s.

- **External public financing:** Front-loaded concessional financing is critical, although concessional lending will likely reduce over the medium to longer term, raising the cost of borrowing.[16] Approximately US$4 billion to US$5 billion per year in external grants and low-cost loans is envisioned in this scenario throughout the 2020s and early 2030s, though meeting this level of external public funding will be a considerable task. This includes significant support from multilateral development banks, bilateral aid and global funds. The government actively seeks grant-based funding to minimize debt, but given the scale, some borrowing (on soft terms) is anticipated to finance infrastructure and social programmes. Debt sustainability is closely managed by prioritizing concessional terms and high-impact projects.
- **Private sector and PPPs**: Blended financing solutions are maximized. A doubling of the PPP pipeline is pursued to leverage private investment in infrastructure, energy and other SDG-related projects. The Rwanda Development Board accelerates the PPP pipeline and procurement process, with a wider set of PPP modalities being integrated into the key sectors. Large-scale PPPs in the primary SDG sectors would be targeted.[17] Large-scale diaspora bonds and green bonds are issued to tap into private capital, both domestically and internationally, for development projects. The private sector is engaged through incentives and guarantees to invest in renewable energy plants, housing, industrial parks and service delivery innovations.
- **Accelerators:** To ensure efficiency and accountability under this massive scale-up, the 'All-in Leap' relies on innovation and reforms. Digital public financial management tools (including AI-driven budget planning and e-procurement) are deployed to optimize spending. Results-based financing mechanisms are expanded for example, payment upon outcomes in education (literacy gains) and WASH (new households with water access) to drive performance. The Rwanda Green Fund (FONERWA) is expanded into a blended finance hub to channel climate funds quickly into projects. Fast-track capacity-building and technical assistance help absorb the influx of funds and to implement projects on schedule.

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16 Rwanda's continued access to concessional borrowing hinges on its income status and creditworthiness. As of fiscal year 2024/25, the World Bank's International Development Association (IDA) sets the eligibility threshold for concessional financing at a gross national income (GNI) per capita of US$1,335. Countries exceeding this threshold and demonstrating the capacity to access international financial markets on a durable and substantial basis may graduate from concessional financing eligibility. Rwanda's GNI per capita was reported at US$2,427 in 2022, surpassing the IDA threshold. However, graduation from concessional financing is not automatic upon crossing the income threshold. The IMF and World Bank also assess factors such as market access and vulnerability to economic shocks. Countries facing significant short-term vulnerabilities or lacking substantial market access may continue to receive concessional financing despite higher income levels.

17 For example, the following large-scale PPPs are noted: (i) Ruzizi III Hydropower Project, a US$760 million regional PPP involving Rwanda, Burundi and the Democratic Republic of the Congo, aimed at generating 206 MW of renewable energy, which is currently facing delays due to regional security concerns; (ii) Kigali Innovation City is a mixed-use technology hub being developed through a PPP between the Government of Rwanda and Africa50, with an estimated investment of US$400 million; (iii) Nyabarongo II Multipurpose Dam is a US$214 million project under a build–own–operate–transfer (BOOT) model, funded by the Export–Import Bank of China; (iv) Karenge Water Supply System Expansion is a US$164.3 million initiative to enhance water supply capacity, financed through loans from multiple international development partners; and (v) Akanyaru Multipurpose Dam is a US$190 million joint project with Burundi focusing on water supply, irrigation and power generation.

8.3.3 Risk

This pathway carries high risks tied to external financing dependence and absorptive capacity. Rwanda would be heavily reliant on donor support and favourable global financial conditions; any shortfall in expected grants or loans could derail plans. Rapid scaling tests the country's institutions, if ministries and local governments struggle to spend funds effectively or projects face delays, the anticipated SDG gains might not materialize despite spending. Debt distress could emerge if growth or revenue falls short. However, if managed well, this scenario yields fastest SDG gains, putting Rwanda on a trajectory for strong human capital and infrastructure by 2034, accelerating the move towards middle-income status.

Box 7: Core policy shift for the 'All-in Leap' investment scenario

This scenario requires a bold fiscal and policy transformation centred on aggressive domestic revenue mobilization (targeting a 5–6 percent of GDP uplift), full expenditure reprioritization towards SDG-linked sectors and a proactive embrace of private sector participation. The government will double down on PPPs, fast-track regulatory reforms and front-load concessional financing to support universal service delivery and infrastructure expansion. The strategy is designed to leapfrog development by 2034, accepting higher short-term fiscal stress for long-term national gains.

Allocative changes

- Education: Immediate scale-up to 6.1 percent of GDP, enabling universal access and quality improvements across all education levels.
- Health: Sustain 3.5 percent of GDP with strong investments in systems strengthening, infrastructure and workforce scale-up.
- Infrastructure and WASH: Combined spending surges from 2.9 percent to 10.5 percent of GDP, funding nationwide water access, energy expansion and a major transport network upgrade.
- Climate: Mainstreamed across sectors with an additional 2 percent of GDP earmarked for climate-resilient infrastructure and targeted mitigation actions.

Financing modalities

- Private sector participation is significantly expanded through tax incentives, risk-sharing mechanisms and sector-specific PPP schemes. Rwanda actively invites private investment into renewable energy, housing, agribusiness and service innovation.
- Front-loaded concessional and grant financing of US$4 billion to US$5 billion annually is anchored by partnerships with multilateral development banks, bilateral donors and global funds.
- FONERWA is expanded into a full-fledged blended finance platform, unlocking fast-track capital for climate-smart development.
- Diaspora and green bonds are issued at scale, targeting global investors interested in high-impact sustainable development projects.
- The PPP pipeline is doubled, with approval and procurement processes streamlined, increasing private capital flows into SDG-aligned infrastructure.

Accelerators

- Blended finance instruments are mobilized across key sectors to de-risk private investment and crowd in commercial finance.
- AI-driven budget planning and e-procurement tools are deployed for precision targeting, real-time monitoring and fiscal efficiency.
- A sovereign SDG bond strategy is developed to attract institutional and philanthropic investors into Rwanda's national development plan.
- Results-based financing is mainstreamed, with outcome-linked disbursements across education, WASH and health driving both impact and accountability.

Risk

This pathway entails high external financing exposure and places substantial pressure on institutional capacity and public sector absorptive ability. Delays or shortfalls in grants, loans or private commitments could jeopardize execution. There is also elevated risk of debt stress if revenue targets or growth rates falter. However, if well-managed, Rwanda will achieve full SDG realization by 2034 and catalyse its transition to middle-income status within a decade.

This scenario involves the highest and most front-loaded investment to achieve the SDGs by 2034. With a projected GDP of RF20,000 billion, annual investment across the five key sectors would total RF8,960 billion, reflecting rapid scale-up in both social and infrastructure spending (see Table 14).

Table 14: Annual costs of the 'All-in Leap' (2034) investment scenario

Sector	Annual cost (RF billions)	Annual cost (US$ billions)
Education	2,472.96	1.90
Health	1,397.76	1.08
Water, sanitation and hygiene	904.96	0.70
Infrastructure (electricity)	1,200.64	0.92
Climate	2,983.68	2.30
Total (all sectors)	8,960.00	6.90

Source: Author's elaboration

The costing produces three financing scenarios to target full SDG achievement by 2034, 2044 and 2054, calibrating investment requirements, pacing and financing strategies accordingly. The three scenarios; 'All-in Leap' (2034), 'Smart Sequencing' (2044) and 'Resilience First' (2054), outline distinct pathways and, beyond sector spending, each scenario impacts assumptions made in relation to the variables for IMF's SDG Financing Tool model. Each scenario details sector-by-sector investment trajectories, financing modalities and risks, providing a comparative perspective for policymakers and development partners. All figures as a share of GDP have been adjusted to reflect the longer time frames based on government data, with more gradual annual increases in the extended scenarios to ensure consistency with realistic absorption and fiscal capacity. Financing the 'All-in Leap' investment scenario is provided in Table 15.

Table 15. Table 15: Financing the 'All-in Leap' (2034) scenario, 2024–2034

Macroeconomic Indicators		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
GDP per capita (in USD 2022)	Baseline	930.8	932.8	976.4	1023.4	1074.7	1131.2	1192.3	1258.9	1332.1	1412.7	1501.5	1612.3	1747.9	1896.0	2054.2	2224.8	2412.5	2618.4	2844.3	3092.2	3363.9
	Scenario	930.8	931.3	973.8	1020.2	1071.1	1127.4	1188.2	1254.4	1326.9	1406.3	1493.4	1601.5	1733.3	1876.7	2032.6	2202.2	2386.7	2587.1	2805.2	3042.6	3301.0
Real GDP growth (in percent)	Baselilne	7.0	7.2	7.2	7.1	7.1	7.2	7.2	7.2	7.3	7.3	7.4	7.4	7.5	7.5	7.3	7.3	7.4	7.4	7.5	7.5	7.6
	Scenario	7.0	7.0	7.1	7.1	7.1	7.2	7.2	7.2	7.2	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3
Current account balance (in percent of GDP)	Baseline	-9.5	-9.2	-9.0	-8.7	-8.4	-8.2	-7.9	-7.6	-7.3	-7.1	-6.8	-6.7	-6.6	-6.5	-6.4	-6.3	-6.2	-6.1	-6.0	-5.9	-5.8
	Scenario	-9.5	-9.1	-8.8	-8.4	-8.0	-7.7	-7.3	-6.9	-6.5	-6.2	-5.8	-5.7	-5.6	-5.5	-5.4	-5.3	-5.2	-5.1	-5.0	-4.9	-4.8
Government finances (in percent of GDP)		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Revenues and grants	Baseline	21.5	21.8	22.0	22.2	22.4	22.6	22.9	23.1	23.3	23.5	23.8	23.9	24.0	24.2	24.3	24.4	24.6	24.7	24.9	25.0	25.2
	Scenario	21.8	22.2	22.6	23.1	23.5	24.0	24.4	24.9	25.3	25.8	26.3	26.6	27.0	27.4	27.8	28.1	28.5	28.9	29.3	29.7	30.0
Primary expenditure	Baseline	27.0	26.9	27.0	27.0	27.0	27.0	27.0	26.9	26.9	26.9	27.0	27.1	27.2	27.4	27.5	27.6	27.8	27.9	28.0	28.1	28.3
	Scenario	27.2	27.4	27.6	27.8	28.0	28.2	28.4	28.7	28.9	29.1	29.3	29.6	30.0	30.3	30.7	31.0	31.4	31.7	32.1	32.4	32.8
SDG-related	Baseline	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.1	9.3	9.4	9.6	9.7	9.8	9.9	10.1	10.2	10.3
	Scenario	9.3	9.7	10.2	10.6	11.1	11.6	12.0	12.5	13.0	13.4	13.9	14.3	14.7	15.1	15.5	15.9	16.3	16.7	17.1	17.5	17.9
Other	Baseline	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
	Scenario	18.0	17.7	17.4	17.2	16.9	16.7	16.4	16.1	15.9	15.6	15.4	15.3	15.3	15.2	15.2	15.1	15.1	15.0	15.0	14.9	14.9
Interest expenditure	Baseline	1.8	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9
	Scenario	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2
Overall balance	Baseline	-7.3	-7.1	-6.8	-6.6	-6.4	-6.1	-5.9	-5.7	-5.5	-5.2	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
	Scenario	-7.3	-7.1	-6.8	-6.6	-6.4	-6.1	-5.9	-5.7	-5.5	-5.2	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
General government debt	Baseline	70.8	71.2	71.3	71.3	70.9	70.3	69.5	68.5	67.3	65.9	64.4	62.1	60.0	58.1	56.6	55.2	54.0	52.9	51.8	50.9	50.1
	Scenario	70.8	71.3	71.5	71.4	71.1	70.4	69.6	68.5	67.3	65.9	64.3	62.1	60.1	58.4	56.8	55.4	54.2	53.1	52.1	51.3	50.5
Chart data		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Real GDP per capita (in billions of national currency)	Baseline	860.4	901.8	945.0	990.4	1038.6	1089.7	1144.2	1201.9	1263.6	1329.7	1400.7	1476.6	1557.2	1643.1	1731.8	1824.6	1924.7	2032.1	2147.4	2271.0	2403.3
	Scenario	860.4	900.3	942.5	987.3	1035.1	1086.0	1140.2	1197.5	1258.6	1323.7	1393.1	1466.6	1544.2	1626.4	1713.6	1806.1	1904.1	2007.8	2117.9	2234.6	2358.4
Infrastructure capital (in percent of GDP)	Baseline	58.5	60.7	63.3	66.5	70.1	74.4	79.3	84.9	91.4	98.8	107.3	116.9	127.9	135.2	139.3	144.0	149.5	155.7	162.8	171.0	180.3
	Scenario	58.8	61.3	64.5	68.4	73.2	79.0	85.9	94.1	103.6	114.7	126.3	128.9	132.0	135.5	139.6	144.3	149.7	155.9	162.9	170.9	180.1
Human capital accumulation (index = 2023)	Baseline	100.0	104.7	108.6	111.9	114.8	117.4	119.8	121.8	123.8	125.6	127.5	129.4	130.9	132.4	134.3	136.8	139.6	143.0	146.9	151.0	155.6
	Scenario	100.0	104.7	108.6	112.0	115.0	117.7	120.2	122.5	124.7	126.9	129.1	131.5	134.2	137.4	141.3	145.7	150.6	156.1	162.0	168.4	175.2

Note: The Government of Rwanda employs a medium-term expenditure framework that projects fiscal and macroeconomic indicators over a maximum horizon of three years. While this provides robust short-term planning data for NST2 implementation, it does not extend to longer-term trajectories such as 2034, 2044 or 2054. For this reason, the SDG Financing Tool developed by the IMF has been used to generate long-range projections. The baseline scenario shown reflects the IMF's macro fiscal baseline after applying Rwanda-specific adjustments to growth, revenue and investment assumptions, as detailed in accompanying scenario narratives. The table is intended to be illustrative for the purpose of scenario development and does not represent official government or IMF staff projections beyond the medium term.

Source: Author's calculations from national data using IMF's SDG Financing Tool (IMF, 2022).

9. Sector investment needs or gaps

The feasibility and implications of each of the three scenarios can be better understood by examining the costs and gaps in key sectors under the different timelines. This section provides a breakdown of Rwanda's current status and the investments needed in education, health, infrastructure, WASH and climate to reach the SDGs through acceleration by 2034, and how these needs change if the timeline is extended to 2044 or 2054. All figures have been adjusted for the new target years. Generally, a longer timeline reduces the annual financing requirements (as investments can be spread out) but prolongs the period before benefits are realized. Conversely, the shortest path demands higher spending now and carries larger financing gaps in the near term. All numbers provided here are from Rwanda's revised 2024/25 national budget plan,[18] though actual spending may differ based on final budget out-turns.

9.1 Education sector

9.1.1 SDG targets

Rwanda aims to achieve inclusive, quality education for all (SDG 4). This includes universal access to primary and secondary schooling, improved learning outcomes and expanded tertiary and vocational training by 2034. By 2044, the education system should support an upper middle-income economy meaning a higher secondary completion rate, greater tertiary enrolment and a workforce with advanced skills. By 2054, Rwanda envisions a highly skilled workforce on a par with high-income economies, with lifelong learning systems in place. These targets build on each other: first ensure basic education for all (2030s), then broaden higher education and skills (2040s) and finally attain world-class human capital (2050s).

9.1.2 Current spending and progress

According to the revised 2024/25 national budget, the government currently spends about 4.22 percent of GDP on education (2024/25 financial year), amounting to RF803 billion. This substantial investment (around 13.93 percent of the national budget) has yielded near-universal primary enrolment and significant improvements in literacy. However, secondary school enrolment remains about 40 percent, indicating a large dropout after primary. Furthermore, quality challenges persist at all levels—learning outcomes need improvement. Rwanda's NST1 (2017–2024) prioritized education, leading to steady budget increases. Still, to reach SDG 4, further scale-up and efficiency gains are needed, especially to expand secondary access and improve educational quality, including teacher training, infrastructure and materials.

18 *Source: Rwanda's revised 2024/25 National Budget Plan*

9.1.3 Cost to meet education SDGs

To achieve universal quality education by 2034, Rwanda needs to invest an estimated 5.5–6.0 percent of GDP per year in education over the next decade. In practical terms, this means increasing education spending by roughly an additional 0.5–1.0 percent of GDP per year above current levels. For context, by 2034 this would equate, approximately, to RF1,100 billion to RF1,200 billion per year dedicated to education (given the expected economic growth). That is a sizable jump—more than RF200 billion each year than currently spent. This represents the financing 'gap' to be filled for the 2034 ('All-in Leap') scenario. If the timeline is extended, the required effort eases somewhat. To meet the targets by 2044, Rwanda could aim for an average of about 5 percent of GDP per year on education through the 2020s and 2030s, allowing a more gradual build-up of the system. To meet the targets by 2054, current trajectories (with only incremental budget increases and ongoing reforms) might eventually achieve near-universal education and improved quality. However, the 2054 slow path delays the gains in human capital by two decades or more, meaning the economy would also wait longer to benefit from a fully educated workforce. In short, accelerating the education SDG timeline requires significantly higher annual spending now, whereas a delayed timeline reduces annual pressure but postpones the societal benefits.

9.1.4 Public vs. private contributions

Education in Rwanda is predominantly financed by the public sector, especially for primary and secondary levels. Private actors (households, religious organizations, private schools) contribute to certain subsectors; for instance, a number of secondary schools and most universities are privately run or require student fees. Under the SDG financing strategies, the government is expected to carry the bulk of the additional load, particularly for basic education. The government's strategy (as outlined in NST1 and sector plans) anticipated roughly a 60:40 split between public financing and private contributions for the broader human capital sector. Private contributions include tuition and fees at private schools, schools run by non-profit and faith-based organizations and donor-funded programmes. Going forward, to fill the education financing gap, increasing public expenditure is crucial, primarily through higher domestic revenues and budget reallocation to education. Nonetheless, there is scope to expand partnerships with the private sector. For example, encouraging more technical and vocational education and training through public–private programmes, leveraging technology companies for educational technology solutions and tapping into philanthropic funding for education can supplement public efforts. Such partnerships and innovations can help improve education outcomes (and potentially lower costs), but they are not a substitute for substantial public funding. In all scenarios, maintaining and modestly increasing the government's education budget is fundamental to achieving SDG4.

9.2 Health sector

9.2.1 SDG targets

Key health targets (SDG 3) for Rwanda include universal health coverage, ending preventable maternal and child deaths and controlling infectious diseases by 2034. Additionally, Rwanda aims to strengthen its health systems to address the growing burden of non-communicable diseases (NCDs) by 2044 (as lifestyles change and the population ages), and to sustain a high life expectancy and quality health care access by 2054. In practical terms, this means by the mid-2030s Rwanda should have robust primary health care for all, low maternal and infant mortality rates and diseases like HIV/AIDS, malaria and tuberculosis well under control. By the 2040s, the health system must also effectively manage chronic conditions like diabetes, hypertension and cancers, with more specialized care available domestically. By mid-century, Rwanda's health outcomes would be on a par with upper-income countries, with an adaptable system resilient to pandemics and climate-related health risks.

9.2.2 Current spending and progress

Government health spending, according to the revised 2024/25 budget,[19] is about 2.0 percent of GDP (around RF376.3 billion in 2024/25), which accounts for roughly 6.61 percent of the total government budget. This funding, alongside donor support and a pioneering community-based health insurance scheme, has driven remarkable health gains. Rwanda's health care system is often cited as a success in Africa, primary health care access is widespread, over 90 percent of the population has some form of health insurance and health outcomes have improved dramatically (e.g. child mortality has fallen sharply over the past two decades). Still, challenges remain; there was a slight dip in health's share of the budget in recent years, and the system faces strains from a growing population, persistent malnutrition in some areas and emerging NCD challenges. The government has emphasized efficiency (getting more health impact per franc spent) and is working to maintain donor support as Rwanda transitions towards middle-income status (which can reduce eligibility for some grants).

9.2.3 Cost to meet health SDGs

Somewhat counterintuitively, the health sector's financing gap is smaller (in percentage terms) than it is in other sectors. Estimates (including an IMF SDG costing analysis pre-pandemic)[20] suggested Rwanda needed to allocate an ~2.2 percent of GDP per year to health to achieve SDG 3 by 2030 (and similarly by 2034). Since Rwanda is already spending roughly that amount or more from its budget, the country is on track in terms of spending levels, the key is to sustain and slightly improve this over time. In practice, this means increasing to around 3 percent of GDP in public health spending to 2034 to hit most health targets, provided the money is well-targeted (e.g. towards primary care, maternal health, preventative services). The 'financing gap' in health is thus more about quality and efficiency than sheer volume of money. Rwanda must protect its health budget from cuts and ensure funds are used effectively (e.g. strengthening supply chains for medicines, increasing health worker productivity and focusing on cost-effective interventions). If these conditions are met, major increases in health spending might not be necessary to achieve SDG 3 by 2034. By 2044 and 2054, as the population grows, health spending will need to rise in absolute terms (more clinics and more doctors will be required for a larger and older population), but as a share of GDP it may stabilize around 3–5 percent. Economic growth and improvements in health system efficiency could allow Rwanda to expand services (for NCDs, elderly care, etc.) without health taking a much larger slice of GDP. In the slow scenario, if Rwanda maintains ~3.5 percent of GDP on health consistently, it will likely achieve SDG targets before 2054, although quality improvements (like progressive treatments, advanced diagnostics) might take longer to become widely available.

9.2.4 Public vs. private contributions

The public sector and donors finance most health expenditures in Rwanda, especially for primary care and preventive services. Households contribute mainly through insurance premiums (the community-based insurance scheme charges a small fee scaled by income) and some out-of-pocket payments for services or medicines not fully covered. The private health sector in Rwanda is relatively small but growing it includes private clinics, hospitals (mostly in Kigali) and pharmacies and health care services provided by non-governmental organizations. To bridge any health financing gaps, the government will rely on a combination of strategies: increasing domestic funding (tied to overall revenue growth) and seeking donor grants for capital-intensive needs like hospital construction or major equipment. The private sector's role can be expanded in areas such as pharmaceutical supply (encouraging local or regional manufacturing and distribution), specialized medical services (to treat those who can pay or have private insurance, which can relieve pressure on public hospitals) and health technology (telehealth start-ups, health information technology systems). Importantly, Rwanda's emphasis on equity means public financing will remain the cornerstone for essential health services and ensure even the poorest have access. Notably, analyses indicate that channelling any additional tax revenues into health (and/or education) yields high returns in Rwanda's context because these investments strongly boost human capital and long-term growth. This reinforces the policy direction to keep public health spending up in all scenarios.

19 *MINECOFIN, Revised National Budget 2024/2025*

20 *IMF SDG Financing Options in Rwanda: A Post-Pandemic Assessment, 2021*

9.3 Infrastructure

9.3.1 SDG targets

Rwanda's infrastructure goals are tied to SDG 9 (industry, innovation, infrastructure) and SDG 7 (affordable and clean energy). Specifically, the targets include universal access to reliable electricity, expanded access to clean cooking energy and an extensive transport network that enables economic transformation. By 2034, the aim is to dramatically increase electricity access (from around 47 percent of households in 2022 to nearly 100 percent by the mid-2030s) and to substantially upgrade national road networks for connectivity (paving rural feeder roads, improving national highways and enhancing urban transport). By 2044, infrastructure should robustly support a modern, industrialized economy, this implies sufficient power generation capacity (with a majority from renewable sources) to meet industry and urban needs, and regional transport links (including major roads, potential rail connections and efficient cross-border trade routes) in place. By 2054, Rwanda envisions a fully developed infrastructure base: universal access to electricity (all from clean sources and with high per-capita consumption), a national road and rail system integrated into regional networks, high-speed digital infrastructure nationwide and modern public transport in cities. These are ambitious milestones, as infrastructure development is capital-intensive and time-consuming.

9.3.2 Current spending and status

In the 2024/25 financial year, Rwanda's revised budget allocated roughly RF263.4 billion to transport and RF204.5 billion to energy which together comprise about 2.49 percent of GDP (about 8 percent of the budget). These funds support ongoing programmes like rehabilitation of rural feeder roads, maintenance of highways, expansion of the national electricity grid and investments in new power generation (hydropower plants, solar mini grids, etc.). The country has made notable progress; for example, road connectivity has improved, and electricity access has nearly doubled over the past decade. Nonetheless, significant gaps remain. Many rural communities still lack paved roads, increasing transport costs and hindering market access. As of 2022, about 53 percent of households had no electricity connection. Even where infrastructure exists, quality and reliability can be issues (e.g. power outages, road quality deterioration due to heavy rains). Infrastructure bottlenecks are frequently cited by businesses as a constraint on growth with inadequate transport raising logistics costs and limited power supply affecting manufacturing and service delivery.

9.3.3 Cost to meet infrastructure SDGs

Achieving Rwanda's infrastructure targets on an accelerated timeline is a major financial challenge. To meet the goals by 2034, estimates suggest annual investments in the order of 5.0–5.5 percent of GDP would be required in the infrastructure sector (transport and energy combined). This breaks down to 3.5–4.0 percent of GDP for roads and transport (to build and upgrade roads and bridges and possibly initiate a rail or bus rapid transit system) and 1.5–2.0 percent of GDP for electricity systems (generation, grid extension, off-grid solutions). In monetary terms, that could translate to RF1,100 billion to RF1,200 billion per year through the 2020s and early 2030s being devoted to—almost three times the current level. The implied financing gap is huge: currently ~2.2 percent of GDP is spent, so an additional ~3 percent of GDP per year (roughly RF600 billion to RF700 billion annually) would need to be mobilized for the next decade. If, instead, Rwanda spreads the effort to 2044, the annual requirement might moderate to around 4 percent of GDP on average through the 2020s and 2030s. This is still a very large commitment, but it allows a somewhat more gradual development; for example, electrification could progress steadily to reach a near-universal by the late 2030s and road improvements could be sequenced over 20 years. Under a resilience trajectory (achievement by ~2054), the country might only fully meet its infrastructure SDGs around mid-century. That current trajectory implies making incremental improvements each year—for instance, adding a few percentage points to electricity access annually, paving a certain number of kilometres of road each year, without any big leaps. While this minimizes

immediate costs, it is not an ideal outcome because it prolongs infrastructure deficits that constrain growth and welfare in the interim. In summary, Rwanda faces a stark choice in infrastructure: either assemble unprecedented levels of investment in the short term (with external help and private capital) to reach goals by the 2030s or accept a slow build-up with some targets not reached until the 2050s.

9.3.4 Public vs. private contributions

Alone, the Government of Rwanda cannot shoulder the entire infrastructure financing burden. Thus, leveraging private sector investment is a cornerstone of all scenarios, especially for costly projects. The government expects the private sector to fund a significant portion, roughly 40 percent or more of infrastructure investments, primarily through PPPs and foreign direct investment. For example, power generation has been a focus of PPPs with independent power producers (often foreign investors) building solar farms or hydropower plants, then selling electricity to the national utility through long-term power purchase agreements. Similar approaches are being taken in road development (e.g. potential toll roads or expressways), housing (private developers for affordable housing with government incentives) and telecommunications (where the private sector already leads). The IMF has noted that if Rwanda could boost foreign direct investment inflows to levels comparable with top African performers, it might attract an extra ~2.7 percent of GDP in private investments annually, which could cover perhaps one-tenth of the overall SDG financing gap.

Much of that would likely flow into infrastructure (energy, transport, urban development) as those are sectors with revenue potential. However, not all needed infrastructure will interest private investors (e.g. neither rural roads nor grid extension to poor, remote areas are profitable). These will still require public financing, ideally through concessional loans or grants. In practice, closing the infrastructure gap by 2034 will require a strategy combining financing options: sharply increased public capital spending (leveraging cheap external loans for big projects), aggressive mobilization of private investment via improved PPP frameworks and risk-sharing instruments and continued donor support for non-commercial needs. Extending the timeline to 2044 eases the annual pressure but still hinges on consistent private sector involvement each year and better public investment management to ensure every Rwandan franc builds the intended infrastructure. Rwanda's approach includes enhancing its capacity to prepare and execute projects (so both public and PPP projects do not face delays or cost overruns) and creating incentives (like viability gap funding, credit guarantees) to attract private partners. The bottom line: significant infrastructure development will not happen without substantial external and private financing, given the scale relative to Rwanda's GDP.

9.4 Water and sanitation

9.4.1 SDG targets

Under SDG 6, Rwanda's goal is universal access to safe drinking water and adequate sanitation by 2034. That means every household should have a source of clean water nearby and facilities for hygienic sanitation (toilets or improved latrines), effectively ending open defecation and drastically reducing water-borne diseases. By 2044, the aim is to achieve higher service standards for instance, piped water supply available in all urban and peri-urban areas and advanced sanitation services (like sewer networks or faecal sludge treatment) in cities. By 2054, Rwanda would target full compliance with high-income standards: continuous potable water supply for all, and modern wastewater treatment covering even secondary cities. These stepped targets recognize that the 'last mile' of WASH (e.g. full sewerage systems) can be extremely expensive and may come later, but basic access for health and dignity is an urgent priority.

9.4.2 Current spending and situation

The WASH sector (water supply, sanitation and hygiene) in Rwanda currently receives about RF111.4 billion based on the revised 2024/25 budget, which is only ~0.59 percent of GDP and under 2 percent of the total budget. This modest allocation funds a range of projects: drilling boreholes and wells in rural areas; expanding rural aqueducts; upgrading some urban water treatment facilities; and constructing sanitation infrastructure, like public toilets and simple sewage treatment, in pilot areas. Rwanda has made commendable progress in recent years. According to national statistics, about 87 percent of the population has access to basic clean water and around 86 percent to basic sanitation (which usually means an improved latrine). However, 'basic' often implies communal water points or protected wells (not necessarily piped water at home) and basic pit latrines (not flush toilets or sewage treatment). Gaps persist especially in rural regions, where the remaining unserved population is hard to reach, and in the quality and/or reliability of service (some water sources are seasonal or low-yielding, and many rural households still share latrines). Urban areas face challenges of keeping up with growing demand and addressing wastewater; Kigali, for example, is only now developing centralized sewage treatment. The current spending level is low relative to the capital-intensive nature of WASH infrastructure; pipes, treatment plants and extensive networks require heavy upfront investment.

9.4.3 Cost to meet water, sanitation and hygiene SDGs

The world Bank (2020) indicate that 4.5 percent of GDP per year is required to achieve universal water and sanitation access by the earlier 2030 target and similarly by 2034 given inflation and population growth. This makes WASH one of the largest sectoral burdens in terms of financing needs relative to current spending. In absolute terms, 4.5 percent of GDP is on the order of RF700 billion to RF800 billion per year (around US$700 million to US$800 million at current exchange). That is over six times the current spending on the sector. The annual financing gap, therefore, is immense: about 3.8–4.0 percent of GDP (approximately RF600+ billion) more each year than Rwanda is currently allocating. To put it plainly, achieving universal water and sanitation by 2034 would require a massive scale-up: hundreds of new or expanded water systems, extension of piped networks to remote communities, large-scale rainwater harvesting and water storage projects, construction of wastewater treatment plants in all cities and complete coverage of rural sanitation through modern latrines or sewer alternatives. If Rwanda cannot mobilize this level of resources by 2034, the timeline will stretch.

Hitting the target by 2044 might involve sustaining around 3 percent of GDP on WASH for two decades—an arduous, but slightly less front-loaded, effort—which will be challenging to maintain for so long. By 2054, universal water and sanitation access would eventually be achieved as the economy grows and investments accumulate, but this slow path means an additional generation might live without full access to safe water and decent sanitation. The health implications (continued water-borne diseases, stunting from poor sanitation) and opportunity costs (especially for women and girls who often bear the burden of water collection and of not having adequate sanitation facilities) of delaying WASH targets are significant. Thus, the WASH financing gap stands out as vast and the urgency to address it is high, yet the absorptive capacity in this sector through many small projects nationwide could allow rapid progress if funding is available.

9.4.4 Public vs. private contributions

Historically, WASH services in Rwanda have been funded and largely provided by the public sector, non-governmental organizations and donors. The nature of WASH (as a basic public good with typically low user fees) makes it less attractive for private investors, though there are niche opportunities. Going forward, Rwanda is exploring ways to involve the private sector more for instance, by contracting private operators to manage rural water systems for a fee or engaging firms via output-based aid (where the company is paid per household connected or per volume of water delivered). In urban areas, PPP models could be tried for large infrastructure like water treatment plants or waste treatment facilities, where a private company builds and/or operates the facility with guarantees of repayment via government or tariff revenues. However, it is expected that the bulk of WASH financing will have to come from public funds and international development partners.

Such financing includes government budget allocations (ideally boosted by external loans or grants dedicated to WASH) and donor-financed programmes (through the World Bank, African Development Bank, United Nations Children's Fund, etc., all of which have supported water projects in Rwanda). Rwanda's INFF has identified innovative financing options[21] for example, blended finance where philanthropic or climate funds are used to leverage private money and development impact bonds for sanitation but these are likely to play a supplementary role. The sheer scale of the gap means that without a significant increase in public allocation (possibly diverting funds from lower priority areas) and external aid, the 2034 WASH goal is at severe risk. Improving spending efficiency is also critical; for instance, adopting lower-cost technologies (like community filtration systems instead of full treatment plants, where feasible, or modular sanitation systems) can help stretch resources. Additionally, maintenance of existing infrastructure must not be neglected; it is usually cheaper to maintain and upgrade a water system than to build a new one if a system fails due to poor upkeep. Summing up, while private sector involvement in WASH should be pursued (especially in service delivery and maintenance), Rwanda will rely on a major public financing push, supported by donors, to close the water and sanitation gap.

9.5 Climate action

9.5.1 SDG targets

Climate action (SDG 13) is a cross-cutting priority that affects all sectors of Rwanda's development. The country's climate targets are principally defined in its Nationally Determined Contribution (NDC) under the Paris Agreement.[22] Rwanda commits to an ambitious mitigation goal: by 2034 (adjusted from the original 2030 NDC timeline), achieve approximately a 38 percent reduction in greenhouse gas emissions relative to business-as-usual levels, contingent on international support. Concurrently, Rwanda aims to implement wide-ranging adaptation measures by 2034 to protect its people, agriculture and infrastructure from the impacts of climate change (such as more frequent droughts and floods). By 2054, Rwanda aspires to be a climate-resilient, low-carbon economy. This entails that by mid-century, the nation has adapted its infrastructure and land use to the changing climate (e.g. all communities protected from extreme flood risk, agriculture fully climate-smart, etc.) and that economic growth is decoupled from carbon emissions (with the bulk of energy from renewables, forests preserved and expanded and efficient technologies in industry and transport).

9.5.2 Current spending and initiatives

Rwanda is recognized as a leader in integrating climate considerations into national planning despite its low emissions. The 2024/25 budget tags about 10 percent of public spending as climate-related roughly RF472 billion. This includes both mitigation and adaptation activities embedded in various ministries (e.g. sustainable land management in agriculture, flood control infrastructure in transport and green urbanization in housing). Rwanda's dedicated environment and climate (green) fund, FONERWA, has been instrumental in channelling finance into projects like forest restoration, renewable energy mini-grids and community climate adaptation initiatives. Additionally, Rwanda is one of the first countries to access the IMF's Resilience and Sustainability Facility (RSF) which is providing US$319 million in affordable financing, specifically to support climate-related investments and policy reforms. Despite these efforts, climate-related needs are growing the country faced severe floods and landslides in 2022 and 2023 that caused loss of life and significant economic damage, underscoring the urgency of resilience-building.

21 *MINECOFIN and UN Rwanda, 2021.*

22 *Republic of Rwanda, 2020a.*

9.5.3 Cost to meet climate goals

Rwanda's updated NDC action plan for 2020–2030 (now 2020–2034) was estimated to cost around US$11 billion in total. Mitigation measures (estimated at approximately US$5.7 billion) are initiatives aimed at reducing greenhouse gas emissions, while adaptation measures (estimated at around US$5.3 billion) allow vulnerable sectors to adapt to the impacts of climate change.[23] This averages to roughly US$0.8 billion to US$1.0 billion per year over the period for climate mitigation and adaptation projects, which is equivalent to ~7–8 percent of Rwanda's GDP in 2023 a substantial figure. Out of the US$11 billion needed, Rwanda had mobilized about US$4.5 billion for 2020–2025 through a combination of domestic resources and committed external support, leaving a gap of around US$6.5 billion to be filled for the remainder of the period (2026–2034). This gap equates to roughly RF6.5 trillion (about RF650 billion per year on average) in additional financing needed to fully implement Rwanda's desired climate actions by the early 2030s.

Notably, there is overlap between climate investments and other sectors' SDG investments; for example, a hydropower plant counts towards energy infrastructure and climate-change mitigation and an irrigation project improves agriculture and climate adaptation. When considering extended timelines, if full climate action is delayed to 2044 or 2054, the annual investment needed might be somewhat lower (since efforts are spread out), but the cumulative costs and damages are likely to be higher. In other words, slower action could mean more years of climate-vulnerable growth, resulting in greater losses from extreme weather and ultimately requiring costly retrofits and disaster responses later. The consensus among experts is that investing early in climate resilience is highly cost-effective. Rwanda's long-term low-carbon strategy through 2050 (now 2054) will require sustained funding beyond the NDC time frame. Ideally, by 2054 the country will have fully adapted its infrastructure and communities to the climate challenges and achieved near net-zero emissions, but getting there will require continuous effort and funding.

9.5.4 Public vs. private contributions

Climate finance is an area where international support and private sector engagement are critical, given the global public good nature of climate mitigation and the scale of adaptation needed. Rwanda is actively formulating an integrated Climate Finance Strategy[24] to pull in resources from all possible sources. On the public side, the government is committed to mainstreaming climate into its budget (as evidenced by the 10 percent climate-tagged spending), essentially making sure a slice of every relevant project is contributing to resilience or low-carbon outcomes. However, domestic public funds alone (especially with fiscal constraints) cannot cover the US$6 billion (plus) climate financing gap. Thus, Rwanda is seeking increased grants and concessional funds from international climate funds (like the Green Climate Fund and Adaptation Fund), bilateral donors and programmes such as the World Bank's climate financing facilities. In 2023, Rwanda announced a new Climate Cooperation Framework with development partners, which aims to coordinate and boost climate finance inflows. On the private side, Rwanda leverages facilities like Ireme Invest (a green investment facility under the Development Bank of Rwanda) to provide concessional loans and guarantees to businesses for green projects, which encourages banks and investors to put money into renewable energy, energy-efficient manufacturing, etc., by reducing risk.

23 *Ministry of Environment, n.d.*

24 *MINECOFIN, 2024a*

The government is also planning to upgrade its PPP framework to attract climate-smart private investments: examples include inviting private companies to build solar farms or waste-to-energy plants, supporting public transport upgrades through private concessions and promoting green building construction by private developers. Additionally, green bonds (potentially sovereign or corporate) could be issued, targeting global investors who seek climate-friendly investments. Overall, success in climate financing will depend on Rwanda's ability to present bankable projects and effectively absorb funds, as well as on global actors fulfilling their financing pledges. The alignment of climate objectives with development objectives in Rwanda's plans makes it easier to justify using external support in a synergistic way (e.g. a donor grant that builds flood defences also protects agricultural productivity). In summary, Rwanda's climate action will be financed through a mix of domestic budget (mainstreamed more than 10 percent), external climate funds and private sector investments with innovative mechanisms, like resilience bonds and green investment platforms, playing an increasing role. The country's proactive stance and good governance record put it in a strong position to attract these resources, but if international financing falls short, climate goals may need to be scaled back or delayed which will have serious repercussions.

9.6 Comparative scenario summary

Table 16 summarizes the key allocations and financing modalities for each of the three scenarios, highlighting how each path allocates resources across sectors, raises funds and the primary risks. This comparative view underscores the trade-offs: the 'All-in Leap' scenario requires the highest immediate spending and external support but achieves SDGs fastest; the 'Resilience First' scenario minimizes fiscal strain but prolongs many deficits; and the 'Smart Sequencing' scenario represents a middle ground.

These estimates highlight the trade-offs between speed, scale and sustainability. The 'All-in Leap' path demands bold early investment but offers faster returns on human capital and growth. The 'Resilience First' route prioritizes long-term fiscal stability, but risks delayed social and economic gains. 'Smart Sequencing' offers a calibrated middle ground, balancing ambition with absorptive capacity.

Table 16: Summary overview of Rwanda's three SDG costing scenarios

Scenario	Target Year	Education (% of GDP)	Health (% of GDP)	WASH & Infrastructure (% of GDP)	Climate Focus	Domestic Revenue Effort	Borrowing Strategy	Private Sector & PPPs	Key Risks/Trade-offs
All-In Leap	2034	~6.1% (immediate leap)	~3.5% (maintain & improve quality)	~10.5% combined (massive scale-up by 2034)	+2% of GDP dedicated to green infrastructure (mitigation & adaptation integrated)	+5–6% of GDP (aggressive mobilization)	Front-loaded grants & concessional loans (≈$4–5 billion/year); managed increase in debt within sustainable bounds	Double PPP pipeline in infrastructure and energy; diaspora bonds and green bonds to tap private capital; fast-track PPP approvals via new agency	High external dependency, potential absorptive capacity overload; debt risks if growth falters, but yields fastest SDG gains and economic dividends if successful.
Smart Sequencing	2044	~5.5% (gradual rise by 2044)	~3.5% (stable, efficiency-focused)	~4–5% by mid-2030s, peaking ~6% by 2044 (phased investments)	~1.5% tagged in all sectors (mainstreamed climate action)	+3% of GDP (moderate, phased increases)	Moderate borrowing with blended finance approach; utilize a Development Blending Facility; keep debt moderate with some concessional loans	Selective PPPs in priority areas (energy, select highways); expand green investment via Ireme Invest (national green bank); incremental private co-finance with risk-sharing	Slower initial progress (SDGs only met by 2044); delayed human capital returns could slightly dampen early growth. However, there is a much lower strain on budget and institutions than All-In; more sustainable pace and lower risk of fiscal instability.

Scenario	Target Year	Education (% of GDP)	Health (% of GDP)	WASH & Infrastructure (% of GDP)	Climate Focus	Domestic Revenue Effort	Borrowing Strategy	Private Sector & PPPs	Key Risks/Trade-offs
Resilience First	2054	~5.2% (maintain current level, incremental improvements)	~3.5% (maintain current level)	Minimal increase (public share ~2–3% of GDP, rely on targeted projects); new infrastructure only if PPP-funded	Climate initiatives via external finance (Green Climate Fund, etc.; ensure all projects climate-proofed)	+1–2% of GDP (very gradual growth via improved tax collection)	Minimal new borrowing; prioritize grants (e.g. climate funds); preserve debt at low levels; possibly small IMF RSF-type loans for resilience	Limited PPPs (only in financially viable projects like renewable energy or toll roads); encourage private sector-led growth and resilience bonds, but scale is modest	Very slow SDG progress (many targets not met until 2050s); an entire generation may wait for full services. High fiscal sustainability and resilience to shocks (low debt, low deficits) and flexibility if conditions improve. Little margin for error if climate shocks hit sooner, given tight budgets.

Note: Sector spending figures in the scenarios include estimated off-budget contributions from development partners and private actors, where applicable. GDP figures for 2034, 2044 and 2054 are presented in constant 2024 prices for scenario modelling purposes; these differ from the nominal GDP assumptions used for NST2 financing ratios.

Source: Author's elaboration

In summary, Rwanda's SDG financing challenge remains substantial under any scenario. To meet all SDGs by 2034, Rwanda must nearly double its current annual SDG-related spending (from roughly 9–10 percent of GDP now, to around 18 percent at peak) and secure unprecedented levels of external support and private investment. The financing gap in this ambitious 'All-in Leap' scenario is in the order of 8–9 percent of GDP per year in the short term, a gap that would need to be filled through the combination of domestic revenue hikes, donor funds and private capital as described. The 'Smart Sequencing' scenario spreads out this effort. By 2034, some SDGs (like health and primary education) would be largely achieved, but others (infrastructure and WASH) would still have a moderate gap, being expected to close by 2044. This scenario partially fills the gap through steady reforms and incremental financing increases, reaching most targets a decade later with less risk. Under the 'Resilience First' scenario, Rwanda largely follows its current trajectory with only slight enhancements. By 2034, a large portion of SDG targets would be unmet with significant gaps in infrastructure, WASH, secondary education, etc.; achievement of all SDGs would only be expected by 2054. This small gap approach avoids fiscal stress but at the cost of prolonged deficiencies in services.

For the Government of Rwanda and its development partners, these scenarios illustrate critical policy choices. Depending on appetite for risk, available financing and development priorities, the country can adjust its course between a bold 'leap' and a cautious 'crawl'. In practice, Rwanda may blend elements of each scenario for instance, front-loading certain 'no-regret' investments (like in education and climate resilience, which yield high returns) while sequencing others more slowly. The data and analysis provided here offer a foundation for those strategic decisions, ensuring that any path chosen is informed by realistic cost estimates and an understanding of the trade-offs involved. The goal remains the same: to achieve Rwanda's development vision and the SDGs in a manner that is financially sustainable, equitable and transformative for Rwandans

Lastly, in combining the sector analyses, Rwanda faces a significant SDG financing gap. For Rwanda to meet all these SDGs by 2030, total spending in the order of 15–19 percent of GDP per year needs to be dedicated to SDG sectors; this is roughly twice the current spending level. Under current policies, Rwanda's own Voluntary National Review suggested it would only meet the SDGs sometime after 2050 on the existing trajectory.[25] The IMF's dynamic model confirms this: under a post-pandemic baseline, Rwanda would meet its SDG goals beyond 2050.

25 *MINECOFIN, Rwanda Voluntary National Review, 2023*

10. SDG sector costs under different financing scenarios

The annual costs for key SDG sectors were estimated for each scenario (*see* Table 17). To do this, Rwanda's GDP was projected for the target year of each scenario (2034, 2044, 2054). All calculations started from Rwanda's 2024/25 GDP of RF18,789 billion. IMF-projected GDP growth rates were then applied to forecast Rwanda's GDP in the target year. Finally, the sectoral expenditure shares (as a percent of GDP), defined by each scenario, were applied to calculate annual costs per sector in Rwandan francs. The steps are as follows:

- **GDP projection:** MINECOFIN's forecasts predict Rwanda's real GDP grew at 8.3 percent in 2024/25 and is expected to grow ~7.3 percent annually in the mid-2020s. Using these rates, Rwanda's GDP is projected to reach roughly RF37,000 billion by 2034**,** RF72,800 billion by 2044 and RF143,200 billion by 2054. (The longer the time frame, the larger the economy due to compounding growth.)
- **Sector share application:** Each financing scenario specifies what share of GDP must be spent on education, health, infrastructure, WASH and climate action to achieve the SDGs by the target year. In applying these percentage targets to the projected GDP for that year the annual cost in Rwandan francs is identified. For example, in the 'All-in Leap' scenario, education spending is set at 6.1 percent of GDP; applying that to the 2034 GDP yields the cost in Rwandan francs for education in 2034 under that scenario.

Table 17: Projected GDP and annual costs for key sectors in each of the three scenarios

	Scenario		
	All-in Leap	**Smart Sequencing**	**Resilience First**
Year SDGs achieved	**2034**	**2044**	**2054**
Projected GDP (RF billions)	37,000	72,800	143,200
Education			
% of GDP	6.1	5.5	5.2
RF billions	2,257	4,003	7,444
Health			
% of GDP	3.5	3.5	3.5
RF billions	1,295	2,547	5,010
Infrastructure			
% of GDP	5.9	4.0	2.2
RF billions	2,183	2,911	3,149 (via PPPs)
Water, sanitation and hygiene			
% of GDP	4.5	2.0	1.5
RF billions	1,665	1,455	2,147 (externally funded)
Climate			
% of GDP	2.0	1.5	0.5
RF billions	740	1,092	716 (externally funded)

Note: Figures reflect incremental spending relative to the 'Resilience First' baseline (business-as-usual) scenario, unless otherwise noted.

Source: Author's elaboration

10.1 Comparative analysis of scenarios

Each scenario represents a trade-off between the speed of SDG attainment and annual investment burden:

- **'Resilience First' (SDGs by 2054) scenario:** This cautious scenario emphasizes fiscal sustainability, relying on minimal increases in domestic spending and more on private and external financing. Education and health spending remain around 5.2 percent and 3.5 percent of GDP, respectively (similar to current levels). Infrastructure investment is largely left for PPPs in viable projects, implying the government's direct spending stays around a low ~2 percent of GDP. WASH and climate programmes are 'prioritized within tight limits' and mainly leveraged through external climate funds here, assumed at ~1.5 percent of GDP for WASH and ~0.5 percent for climate from domestic budgets in 2054. Because the time frame extends 30 years, Rwanda's GDP by 2054 is very large, so even small percentages yield high absolute costs. For example, education at 5.2 percent of GDP in 2054 means about RF7,444 billion by far the highest education spending of the three scenarios, even though the policy priority for education is lowest here. Similarly, infrastructure and WASH annual costs (~RF3,149 billion and ~RF2,147 billion, respectively) exceed those in the faster scenarios, despite their limited priority, simply due to the much larger GDP in 2054. This scenario carries the lightest burden on the budget in relative terms each year and prioritizes stability and external financing tools (like the Green Climate Fund and resilience bonds), but it also delays SDG achievements. Most targets will not be fully met until the 2050s, and early economic and social benefits are forgone in exchange for lower immediate spending pressure.

- **'Smart Sequencing' (SDGs by 2044) scenario:** This scenario takes a staged approach, ramping up investments gradually. By 2044, education spending reaches ~5.5 percent of GDP and infrastructure and WASH spending combined reaches ~6 percent of GDP (assuming ~4 percent on infrastructure and ~2 percent on WASH by that year). Climate-related spending is maintained at ~1.5 percent of GDP in a mainstreamed way. Thanks to an extra decade of economic growth, Rwanda's GDP in 2044 is nearly double that of 2034. As a result, even with slightly lower sector percentages than the 'All-in Leap' scenario, the absolute expenditures in Rwandan francs are higher in many cases. For instance, annual education spending in the 'Smart Sequencing' scenario (~RF4,003 billion) is almost twice that in the 'All-in Leap' scenario, due to the larger 2044 GDP base. The 'Smart Sequencing' approach eases the relative fiscal pressure each year with a smaller percent of GDP than the 'All-in Leap', but achieves SDGs later, by which time the economy can more comfortably fund these larger absolute amounts.

- **'All-in Leap' (SDGs by 2034) scenario:** This ambitious scenario requires the highest share of GDP devoted to SDG sectors in the short term. For example, Rwanda would spend ~6.1 percent of GDP on education and a combined ~10.5 percent on infrastructure and WASH annually. Despite the large share of a smaller GDP, the absolute annual costs in 2034 are the lowest among the scenarios (e.g. ~RF2,257 billion for education). This is because the economy in 2034 is still relatively small, so even a big percentage of GDP translates to a moderate sum in Rwandan francs. Achieving the SDGs a decade from now demands an intense funding effort (including ~2 percent of GDP specifically for climate-friendly infrastructure), but it results in fast-tracking development outcomes.

In summary, the 'All-in Leap' scenario front-loads investments to hit the SDGs by 2034, demanding the highest share of national output each year, whereas the 'Resilience First' scenario spreads out and minimizes domestic spending at the cost of significantly delaying SDG attainment to 2054. The 'Smart Sequencing' scenario strikes a middle path, achieving the goals by 2044 with moderate annual effort. The contrast is evident in the annual cost figures. Sectors like infrastructure and WASH require more than RF3,800 billion per year combined until 2034 in the 'All-in Leap' approach, but if Rwanda waits until 2054, even a cautious approach implies over RF5,000 billion per year for the same sectors (thanks to GDP growth). Policymakers must weigh these trade-offs between fiscal effort and timeline: accelerating SDG progress means higher spending now on a smaller GDP, while a slower approach

lowers the percentage of GDP spent each year but ultimately entails much larger absolute expenditures and delayed benefits. Each strategy has its risks and rewards, from fast gains with heavy financing needs (All-in Leap) to steady, sustainability-focused progress with deferred outcomes (Resilience First), with 'Smart Sequencing' in between. The table and figures in this report highlight how both the scale of Rwanda's economy, and the prioritization of sectors, dramatically affect the annual cost required to achieve the SDGs under each scenario. If such support is not mobilized, Rwanda's realistic trajectory is to meet the SDGs later (by 2044with strong policies, or by 2054 with current trends).

11. Potential for innovative financing mechanisms

Drawing from Rwanda's INFF and its Sustainable Finance Framework,[26] it is evident that Rwanda's ambition to close the NST2 and SDG financing gap hinges increasingly on the mobilization and scaling of innovative financing modalities, with a particular focus on private financing and debt instruments. Both reports recognize the need to go beyond traditional sources such as domestic tax revenue and official development assistance and adopt a more integrated, diversified approach to development finance. The INFF diagnostic estimates Rwanda requires an additional 21.3 percent of GDP annually to meet SDG- and NST-related targets, and underscores the importance of blending public, private, domestic and international flows through instruments that offer leverage, catalytic impact and financial additionality.

The Sustainable Finance Framework further provides a blueprint for how Rwanda will access new pools of finance by issuing green, social and sustainability bonds and loans, linked to national climate and development goals. In tandem, institutions such as FONERWA, Ireme Invest and the newly launched Intego Facility are tasked with aggregating and channelling concessional, philanthropic and commercial funding into scalable projects. The framework also proposes adoption of climate budget tagging, a pipeline of environmental, social and governance-aligned investments and structuring tools to enable the government to use public funds as a strategic anchor to crowd in external capital. Table 18 provides a list of such innovative right-financing mechanisms, their objectives and potential for leverage.

Table 18: Summary of innovative right-financing mechanisms and instruments

Instrument or facility	Objective	Potential for scaling and leverage
Green bonds	Finance climate adaptation, renewable energy and conservation projects	High: Aligns with Rwanda's NDC targets and can attract ESG investors
Social and sustainability bonds	Support health, education and social protection programmes	Medium: Emerging interest from development finance institutions
FONERWA	Channel climate funds to public and private low-carbon projects	High: Mobilized US$216 million; strong track record for scaling with donor and MDB support
Ireme Invest	De-risk and co-finance private green ventures via value chain approach	High: Raised US$104 million; structured to catalyse private sector entry
Intego Facility	Finance public sector adaptation projects at central and local levels	Medium: Focused on DRM, renewable energy, forestry, sustainable cities
Diaspora bonds	Mobilize capital from Rwandans abroad for national development	Medium: Significant untapped potential with proper regulatory support

26 *MINECOFIN and UN Rwanda (2021); MINECOFIN (2024b).*

PPPs and blended finance	Leverage public funding to attract private investment in infrastructure	High: Suitable for roads, energy and urbanization; needs robust legal frameworks
Development impact bonds	Link repayments to measurable outcomes in health, education and jobs	Medium: Innovative but requires strong outcome monitoring systems
Climate budget tagging	Track and align expenditures with climate objectives	High: Enhances transparency; essential for climate finance accountability
Sustainability-linked bonds (SLBs)	Tie financing costs to progress on climate or gender targets	High: The Development Bank of Rwanda issued its first SLB; strong potential for replication across sectors
Remittance-linked instruments	Structure diaspora remittances for national development impact	Medium: Could mobilize flows via matching grants or diaspora mutual funds
South-South and triangular financing	Leverage technical and financial partnerships with developing countries	Medium: Enabled through Rwanda Cooperation Initiative for shared development
Climate guarantees and insurance instruments	De-risk private green investments via guarantees and risk transfer tools	High: Strong potential under Ireme Invest and FONERWA for SME scaling
Multilateral climate fund blends	Use grants, equity and concessional debt to co-finance major projects	High: GCF, GEF and CTF provide ready platforms for large-scale mobilization
Agaciro Development Fund	Enhance domestic resource mobilization and finance priority sectors such as education, health, infrastructure and green economy initiatives	High: Potential for scaling with high upside if reforms and innovations are pursued.

Note: CTF = Clean Technology Fund; DRM = domestic resource mobilization; ESG = environmental, social and governance; GCF = Green Climate Fund; GEF = Global Environment Facility; MDB = multilateral development bank; SME = small and medium-sized enterprises.

Source: Author's elaboration

As Rwanda transitions towards middle-income status, a significant reduction in access to concessional lending is expected, raising the cost of borrowing and narrowing fiscal space for long-term investments. This shift underscores the urgency of using public funds more strategically, not as the primary source of financing, but as a catalytic enabler to attract and de-risk private, philanthropic and blended capital. In this context, official development assistance must also adapt shifting from direct budget support to more innovative applications that generate financial additionality, such as first-loss capital, guarantee mechanisms, or to technical assistance that strengthens bankable project pipelines. As concessional windows shrink, Rwanda must actively engage non-traditional development partners, including impact investors, diaspora networks, regional sovereign funds and South-South cooperation platforms. These actors bring capital, as well as flexible financing tools and sector-specific expertise critical to sustaining momentum for achieving NST2 and SDG targets. Making this transition work requires an institutional shift from spending to leveraging. This must be anchored in strong public financial management, a transparent climate and SDG tagging and policy credibility that signals readiness for partnership at scale.

12. Budgeting for SDG implementation

Given the current dominance in public spending, the potential for crowding in commercial capitals by adopting a 'right-financing' approach, the alignment of public funds to the SDGs and mechanisms for mobilization of private capital are critical to closing the financing gap. This calls for the Government of Rwanda to adopt a funding-to-financing transitional approach, thereby signalling the critical importance of leveraging in commercial capital to align with NST2 and the SDGs.

SDG Costing and B4SDG are two complementary tools used here to enable this transition. SDG Costing provides the structured estimate of the financial resources needed to deliver measurable progress across sectors such as health, education and climate resilience. B4SDG, on the other hand, helps align Rwanda's national budget with SDG targets, mapping expenditures to goals and identifying policy areas with the greatest impact in support of new financing modalities. When integrated, these tools enable policymakers to pinpoint where resources are falling short, which policy measures can yield the highest returns and how to prioritize reforms that contribute directly to closing the SDG financing gap. This integrated approach not only enhances transparency and accountability but also creates a strategic platform for engaging development partners, mobilizing domestic revenues and structuring SDG-aligned investment frameworks.

Implementing B4SDG findings can play a pivotal role in shifting Rwanda's broad development planning to strategic resource allocation and use that directly supports the 2030 Agenda. By institutionalizing NST2 and the SDGs within the budgeting process, B4SDG can help MINECOFIN demonstrate precisely how public resources contribute to specific targets and policy outcomes. This integration transforms the national budget from a transactional ledger into a powerful development tool one that reflects and advances national commitments to inclusive growth, equity and resilience.

Through this process, B4SDG also supports the broader funding-to-financing transition. It encourages the government to move from a dependence on external and concessional financing to structured, scalable financing approaches that combine public, private and concessional resources. B4SDG supports this transition by showing where catalytic public investments when carefully aligned with NST2 priorities can de-risk sectors and attract commercial capital. For instance, public investments in water infrastructure or digital public goods can be structured to crowd in blended finance or private sector partnerships, increasing the leverage of every public franc spent.

Another key advantage of applying B4SDG to Rwanda lies in its capacity to improve government efficiency and transparency. As governments adopt digital tools, such as e-budgeting, public finance dashboards and real-time monitoring systems, they can link budget execution data directly to SDG indicators. This digital backbone enhances policy coherence, shortens feedback loops and allows for real-time assessment of development progress, creating the conditions for more responsive and adaptive fiscal policy. It also reduces waste and duplication, increasing fiscal space without requiring additional revenue.

Improving sector public investment planning including the bankability of projects not only enhances internal efficiency but also signals to external financiers that the government has a coherent, measurable plan, creating confidence for co-financing arrangements and new instruments. Key contributions of B4SDG to closing the financing gap of NST2 and the SDGs are as follows:

- Fiscal planning shifts from funding (input-focused) to financing (outcome-orientated) by linking public spending to crowd-in strategies.
- Enables identification and reallocation of inefficient or non-priority expenditures through SDG-tagging and expenditure reviews.
- Enhances government efficiency through digital public finance tools, improving real-time tracking and results measurement.
- Positions Rwanda to attract commercial capital by using public resources for leverage, ensuring catalytic use of funds and generating additionality through co-investment models.

Table 19 provides a summary of the overall financing landscape to inform NST 2 and SDG costing and B4SDG options.

Table 19: Key features of Rwanda's current financing landscape

Category	Key insights
Fiscal stress and debt pressure	Fiscal deficit reached 6.9% of GDP in the 2023/24 fiscal year due to revenue shortfalls and high capital spending. Public debt is projected to peak at 80% of GDP in 2025, with 67.5% external debt.
Underperforming domestic revenue mobilization	Tax-to-GDP ratio at 14.6% is below the NST1 target of 20.4%. Requires an annual increase of 7% of GDP through 2029 to close the gap.
Heavy reliance on external financing	External financing constitutes 20%–25% of the national budget reflecting continued dependency on official development assistance and concessional loans with increasing donor risks.
Private sector and financial market potential	Private and foreign investment remain below potential. Opportunities exist through PPPs, blended finance, diaspora bonds and the Kigali International Financial Centre.
Climate finance and catalytic instruments	Successful completion of reviews for IMF's Resilience and Sustainability Facility introduced climate budget tagging and green taxonomy. The climate finance gap of US$6.5 billion to 2030 presents both risk and opportunity.
Digitalization and efficiency gains	Ongoing fiscal digitalization (IFMIS, e-tax) and SDG budget tagging improve budget alignment and transparency. Tools, like UNECA's Integrated Planning and Reporting Toolkit, are proposed to link NST2, SDGs and Vision 2050.
Financing gap for NST2 and SDGs	Achieving NST2 and the SDGs requires an additional 21.3% of GDP per year. Emphasis must be on leveraging all sources—public, private and international—for maximum impact.

Note: IFMIS = Integrated Financial Management Information System; UNECA = United Nations Economic Commission for Africa.

Source: Author's elaboration

12.1 Current budgetary performance

The latest Public Expenditure and Financial Accountability (PEFA) assessment (2022) and the Public Investment Management Assessment (PIMA) provide a comprehensive overview of Rwanda's budget process and its capacity to deliver public investments.[27] The 2022 PEFA assessment of Rwanda highlights a mixed trajectory in public financial management performance since 2016. While there have been improvements in certain areas, such as an increase in the number of 'B scores' from 3 to 8, there has also been a decline in 'A scores' from 7 to 5, indicating some regression in top-tier performance. The assessment underscores strengths in fiscal discipline, supported by a robust legal framework and reliable revenue and expenditure out-turns. However, challenges persist, including delays in budget reporting, unapproved budget ceilings prior to formulation and limited public access to performance information. These issues hinder efficient service delivery and strategic resource allocation. The report suggests that while Rwanda has made strides in certain aspects of public financial management, addressing these shortcomings is crucial for enhancing overall budget credibility and effectiveness. Documented strengthens are summarized as follows:

- **Strategic resource allocation:** Rwanda maintains a robust budget classification system, ensuring transparency and comprehensiveness. This facilitates effective tracking and reporting of resource allocations. The presence of strong macroeconomic and fiscal forecasts and a clear fiscal strategy and medium-term budgeting perspective enable the government to plan resource allocations in line with priorities. Timely legislative approval of annual budget estimates further ensures that resources are utilized for planned service delivery programmes.

- **Public investment management:** The country has a sound public investment management framework. Major investment projects undergo economic analysis and are prioritized based on published guidelines. This framework provides reasonable assurance that scarce public resources are utilized effectively, strengthening resource allocation.

- **Climate-responsive planning:** Rwanda performs strongly in integrating climate change considerations into national and sectoral planning processes. The government has developed climate assessment and prioritization criteria to facilitate the selection of new investment projects, ensuring alignment with climate change mitigation and adaptation goals.[28]

12.2 Integration into budget cycles

Rwanda's budget cycle follows an annual process anchored in a medium-term expenditure framework, guided by national priorities outlined in NST2. The process begins with the issuance of the first Budget Call Circular (BCC) by MINECOFIN, typically released in October to December, which provides ceilings, policy guidelines and performance expectations for ministries, departments and agencies (MDAs). These MDAs then prepare and submit their costed action plans aligned with sector strategic plans and performance targets. These proposals are consolidated into the draft budget which undergoes internal review and is submitted to Parliament by June 15 for approval. Once enacted, the budget is implemented on 1 July. Quarterly reporting, in-year revisions if needed and end-of-year auditing are overseen by the Office of the Auditor General. Throughout the budget cycle (*see* Table 20), fiscal discipline, strategic allocation and performance-based budgeting are emphasized to ensure efficient resource use and alignment with Rwanda's development goals.

27 *Government of Rwanda, 2022; IMF Fiscal Affairs Department, 2023.*

28 *Government of Rwanda, 2022.*

Table 20: Rwanda's budget-cycle calendar

Stage	Key activity	Indicative timeline
Fiscal framework update	Macro fiscal projections, resource envelope updates	September–October
Submission of planning and budgeting outlook paper	MINECOFIN submits a Planning and Budgeting Outlook paper for Cabinet consideration, including indicative ceilings	November
Budget revision	MINECOFIN revises the budget and submits to Cabinet and Parliament for approval	December
First Planning and Budget Call Circular (PBCC) issued	MINECOFIN issues the first PBBC with ceilings and policy guidelines	October–December
Second Budget Call Circular (BCC) issued	MINECOFIN issues the second BBC with ceilings and policy guidelines	January–February
MDA budget preparation	MDAs prepare proposals aligned with ceilings and policy priorities	December–March
Submission of budget proposals	MDAs submit draft budget estimates to MINECOFIN	By end-February
Submission of Budget Framework Paper to Cabinet	MINECOFIN submits the Budget Framework Paper to Cabinet and Parliament	By April
Budget consolidation and hearings	Review, budget hearings and integration into national budget	May
Cabinet approval of draft budget	Cabinet approves the draft Finance Law	May
Budget submitted to Parliament	Finance Lae tabled in Parliament for review and debate	June
Parliamentary review and enactment	Budget discussed and approved by Parliament	Mid end of June
Start of fiscal year	New budget implementation begins	1 July
Quarterly performance reporting	MDAs submit quarterly budget execution and performance reports	October, January, April, July
Annual financial statements	Preparation and submission of end-of-year financial reports	By 30 September
External audit	Office of the Auditor General audits government accounts	October–December
Presentation of Auditor General's report	Audit report submitted to Parliament	By March of following year

Source: Author's elaboration

As demonstrated earlier in this report, the SDGs are systematically integrated into the national budget process through their alignment with NST2, which serves as the central framework for implementing both national and global development priorities. The NST2 explicitly maps national objectives to SDG targets, ensuring that sector strategies and policy interventions are inherently linked to the global agenda. Ministries, departments and agencies are required to align their sector strategic plans with NST2 outcomes, which incorporate SDG-related indicators and targets.

The Budget Call Circular (BCC) process includes both the First Planning and Budget Call Circular (PBCC) and the Second BCC, which are key tools for communicating with MDAs throughout the budget preparation cycle. The PBCC provides strategic guidance and action plans for the MDAs and alignment of priorities to NST2, the SDGs and macroeconomic assumptions. The second BCC follows by communicating indicative ceilings which are prepared in medium-term expenditure framework and are aligned with the planning priorities that were agreed upon during planning and budget consultations; this helps ensure that budget submissions are focused, realistic and results orientated. Rwanda's use of programme-based budgeting further facilitates this integration by linking budget programmes to outputs and outcomes, many of which correspond to SDG indicators. This allows for clear tracking of the impact of public spending on development goals.

Rwanda's integrated results-based management framework supports the SDG–budget nexus by connecting planning, budgeting and performance monitoring. Through this system, SDG achievements can be tracked in parallel with national development results. Complementary strategies such as the development cooperation and resource mobilization strategy and INFF enhance this integration by ensuring that external and domestic financing flows are aligned with SDG priorities. Budget documentation submitted to Parliament also reflects sectoral alignment with SDGs, enabling oversight bodies and civil society to monitor progress and demand accountability. Rwanda's model ensures that the budget process is a direct driver of SDG delivery, in an integrated process with important elements:

- **Strategic alignment:** Rwanda's NST2 implicitly integrates SDGs through clearly delineated pillars of economic, social and transformational governance. This structure mirrors the comprehensive approach of SDGs to sustainable development.
- **Sectoral integration:** Priority sectors like education, health, electricity, WASH and roads are explicitly costed, aligning with SDG targets and facilitating coherent planning and resource allocation.
- **Monitoring and evaluation:** Rwanda employs robust monitoring and evaluation tools, including climate budget tagging, nutrition tagging, joint sector reviews and a clear theory of change, to ensure accountability in and effectiveness of SDG implementation.
- **Public–private partnerships:** NST2 financing projections clearly specify the roles of public (57 percent) and private (43 percent) sectors, creating clarity in mobilization strategies and reflecting the guideline's emphasis on leveraging multiple financing sources.

12.3 Reforms proposed in the Integrated National Financing Framework

Rwanda's INFF proposed integrating new measures and innovative financing instruments into the national budget process, based on the following measures:

- **Public investment planning and PPPs:** The INFF proposes strengthening the Public Investment Committee to attract private capital into national development through PPPs, especially at subnational levels. It recommends establishing a PPP Secretariat within the Local Administrative Entities Development Agency and utilizing a value chain approach to monitor and incentivize investment performance.

- **Capital market development:** It proposes expanding capital market instruments by introducing corporate debt instruments, consolidating current treasury offerings and creating a diaspora bond. These steps aim to deepen the equities market and integrate East African Community stock exchanges onto a unified platform, akin to a regional Nasdaq.
- **Digital economy and taxation:** The INFF supports the development of a digital services tax aligned with Rwanda's ambitions under the Kigali International Financial Centre to capture revenue from emerging digital platforms and peer-to-peer business models.
- **Research and development financing:** It recommends establishing a coordinated research and development framework to encourage private sector investment, leveraging the presence of global universities and incubators in the Kigali Innovation City.
- **SDG budgeting and a development finance assessment dashboard:** The INFF calls for consolidating SDG integration into the national budget through improved linkages between Vision 2050, NST and medium-term planning. It proposes deploying the Integrated Planning and Reporting Toolkit and a development finance assessment dashboard to better align financing with national goals.
- **Disaster financing instruments:** A national disaster response fund is proposed as a fast-disbursement vehicle for financing post-disaster reconstruction, modelled as a trust fund to overcome bureaucratic delays.
- **Monitoring financial flows:** The INFF outlines a proposal to establish an integrated financing dashboard to track all public, private, domestic and international flows, ensuring real-time monitoring and data-driven decision-making.
- **Fiscal rules and debt management:** The INFF supports the enforcement of fiscal deficit limits (e.g. 3 percent of GDP in the long-term), increased use of concessional loans and improved debt management tools like the United Nation Trade and Development's (UNCTAD's) Debt Management and Financial Analysis System to ensure sustainability.

Rwanda has made tangible progress on several key proposals outlined in its INFF. In the area of climate finance integration, the government has developed Rwanda's Sustainable Finance Framework[29] to support green bond issuance and climate-responsive budgeting and is on track to meet its commitments under the IMF's Resilience and Sustainability Facility. On digital economy and innovation, investments have strengthened Rwanda's digital infrastructure, including government email systems, electronic health records and e-Notary services, while the Kigali International Financial Centre launched their Rwanda Sustainable Finance Roadmap (2022) to channel private sector finance into priority areas.[30] In terms of PPPs, Rwanda is operationalizing blended finance platforms such as Ireme Invest and has initiated calls for co-financing high-impact private projects. Finally, on budgeting and planning reforms, there is progress in mainstreaming gender-responsive and climate-sensitive approaches, supported by the deployment of the Integrated Planning and Reporting Toolkit to better align national budgets with SDG and NST2 targets.

12.4 Rwanda's Sustainable Finance Framework

Another useful reference point for the costing is the Rwanda's Sustainable Finance Framework (2024).[31] This framework integrates green, social and sustainability instruments—including green and social bonds and loans—into the national budgeting process. These instruments are designed to mobilize additional public and private resources in line with Rwanda's Vision 2050, its Nationally Determined Contribution and the Green Growth and Climate Resilience strategy.[32]

29 MINECOFIN, 2024b.
30 Kigali International Financial Centre, 2022.
31 MINECOFIN, 2024b.
32 Republic of Rwanda, 2020b, 2020a and 2022.

At the core of the framework is a set of principles aligned with international market standards (e.g. the International Capital Market Association's Green Bond Principles, Social Bond Principles), ensuring that proceeds are transparently allocated to eligible green and social projects. These include investments in climate adaptation and mitigation, renewable energy, disaster risk reduction, biodiversity conservation, food security, human capital development and access to infrastructure and essential services. The framework supports a coordinated, rule-based approach that links public investment with sustainability outcomes, supported by rigorous project evaluation, budgeting and audit mechanisms.

Rwanda's strategy is deeply integrated into national systems. Projects are selected through the Public Investment Committee based on alignment with NST2 and the SDGs, environmental and social impact assessments and their compliance with defined exclusion criteria. Allocation and tracking of funds are embedded in the Integrated Financial Management Information System and the entire process is subject to annual reporting and external review, including audits by the Office of the Auditor General and second-party opinions from independent rating agencies.

The Sustainable Finance Framework significantly enhances the operational and institutional environment for conducting a robust SDG costing exercise. By defining eligible project categories, selection criteria, monitoring tools and reporting obligations, it provides a ready-made fiscal and accountability architecture into which SDG-costed interventions can be embedded. This enables the SDG costing to move beyond theoretical financing gaps and tie directly into implementable budgets. Moreover, the framework's integration of climate budget tagging, performance-based project evaluation and consolidated reporting requirements ensures that the results of an SDG costing exercise can be translated into practical, measurable and fundable investment plans. In essence, the Rwanda's Sustainable Finance Framework not only supports the credibility of the SDG costing effort but also enhances its utility by linking it to real financing instruments and policy processes, thereby positioning Rwanda to attract blended finance, green capital and concessional flows in pursuit of its transformation goals.

12.5 Suggested B4SDG and right-financing action

The SDGs are fully integrated into NST2's budget and monitoring and evaluation system. SDG budget tagging is therefore not necessary, and will not close the resource gap, but obviate it. Several perceptive findings emerge from the costing and rapid B4SDG assessment, that if made right-financing choices will help maximize resource potential, additionality and catalytic impact; such factors that can diminish the time required to meet SDG goals and targets.

Given resource constraints, right-financing becomes essential to unlocking more optimal investment choices. Rather than dispersing funds across multiple competing priorities, the right-financing approach calls for a deliberate sequencing of interventions based on their catalytic potential and strategic relevance. It enables governments to move beyond *what to fund* towards *how best to fund it*—matching the most pressing needs with the most appropriate and cost-effective financing instruments. For instance, improved investment prioritization within the medium-term expenditure framework ensures that investments deliver the highest returns against SDG-linked targets. Strategic financing choices can also shift the balance from reliance on public resources to crowding in private capital through tailored instruments and partnerships.

When sustainability factors, such as lifecycle costs, long-term maintenance and environmental or social multipliers, are integrated in advance, investments become not only more resilient but also more efficient. Over time, this leads to a compounding effect: fewer delays, lower transaction costs and faster achievement of national goals. By embedding impact monitoring into the financing process, governments can generate feedback loops that reinforce accountability and redirect underperforming investments. Ultimately, right-financing transforms the national budget from a ledger of expenditures into a blueprint for sustainable transformation. Egypt provides an example of right financing its SDGs (*see* Table 21).

Table 21: Right-financing Egypt's SDGs

Right-financing pillar	Objective	Considerations
Improved investment prioritization	Identify the most optimal sequence of activities for a given investment over the medium term via the medium-term expenditure planning framework.	Based on fiscal space analysis and government policy priorities, NIS goals and targets will be prioritized by the level of urgency and impact on strategic objectives.
Most optimal source of financing	Identify the most strategically advantageous source of financing for the proposed National Investment Strategy (NIS) bankable investment, crowding in private capital wherever feasible and desirable.	Consider integrated solutions from domestic public, domestic private, international public and international private financing to implement a new taxonomy in national investment.
Preferred modality and partnerships	Identify the preferred financing modality and strategic partnerships for the intended investment, based on a ranking of variants.	Evolve an extensive national sustainable financing and PPP taxonomy to lay the foundation for an expansion of existing as well as new and hybrid instruments and partnerships.
Focus on sustainability financing	Consider the sustainability of the proposed investment, including financing costs, associated level of risk, long-term operations and maintained costs and social, gender and environmental multipliers.	Consider the long-term sustainability of the investment once project funds are withdrawn. This would include project governance, operating costs, revenues, a social cost–benefit analysis and net present value analysis, as appropriate, as well as a transition to green and brown budgeting.
Monitoring investment policy impact	Establish output, outcome and impact indicators for the investment, so that one can assess impact.	Link goals, outcomes and outputs to the national budget process, allowing NIS investment impacts to be clearly established.

Source: UNDP Strategic Budgeting Guidance Note, 2022

Effective integration of innovative and sustainable financing instruments into sector-level planning, budgeting and procurement processes is critical for the successful implementation of Rwanda's NST2 and broader SDG objectives. Sector plans must explicitly incorporate innovative financial modalities—such as green bonds, blended finance, results-based financing and PPPs—to ensure financial sustainability, mobilize additional resources and enhance investment efficiency.

Guidance within Rwanda's Budget Call Circular should explicitly translate national sustainable financing strategies into actionable, bankable investment initiatives at the sector level. This would include:

- clear instructions on identifying, designing and budgeting innovative finance modalities and instruments tailored to sector-specific priorities and risks.
- standardized criteria and templates for feasibility assessments and financial structuring to enhance the bankability and attractiveness of sector investments to private capital; and
- capacity development initiatives targeting sector procurement teams, enabling efficient and transparent execution of projects involving innovative financing instruments.

Embedding sustainable finance principles and tools into sector-level planning, budgeting and procurement frameworks, Rwanda will not only achieve improved resource mobilization and allocation but also enhance overall developmental impact, resilience and sustainability of its investment portfolios.

12.6 Policy recommendations

Rwanda's commitment to the SDGs is strong, but the financing challenge is enormous. By 2030, the country would need to roughly double its annual spending on SDG-critical sectors (from ~10 percent of GDP to 18–19 percent of GDP) to achieve all targets, an effort that exceeds the government's current means. Under more realistic scenarios, with aggressive domestic reforms and partial success in attracting private investment, Rwanda can substantially close the gap, enabling it to meet the SDGs by around 2040. To accelerate to the 2030 timeline would require unprecedented levels of external support (in the order of multi-billion US dollars annually) and this is not available.

Policy trade-offs

Meeting the SDG financing needs will require Rwanda to carefully balance macroeconomic stability with development spending. The government has a fiscal rule targeting a deficit that stabilizes debt (previously, a 5.5 percent of GDP deficit ceiling, now adjusted post-pandemic). Scaling up spending too quickly could threaten debt sustainability, especially as grants decline.

MINECOFIN thus faces a trade-off: How does it front-load SDG investments without accumulating unsustainable debt? The solution advocated by analysts is a combination of gradual fiscal expansion tied to revenue gains, plus higher reliance on concessional funds. If grant financing does not materialize (which currently seems likely), Rwanda may need to prioritize 'quick wins' (e.g. vaccination, basic education, critical infrastructure and PPPs) and sequence other goals more slowly. Each sector's investment also has growth feedback, spending on health and/or education boosts human capital and growth, which enlarges the revenue base over time. Likewise, infrastructure investments spur private sector activity. These growth effects mean that closing part of the financing gap now, makes it easier to finance the rest later (a virtuous cycle of positive reinforcement). Rwanda's challenge is enduring an interim period of tight budgets and efficient spending until those gains are realized.

12.7 Financing strategy and policy implications

Given the magnitude of the SDG funding needs, Rwanda's strategy is to maximize domestic resource mobilization, improve spending efficiency and catalyse private and external financing. Key components of the strategy would logically include:

- **Domestic revenue mobilization:** Rwanda is implementing its Medium-Term Revenue Strategy to raise its tax-to-GDP ratio.[33] Tax reforms (streamlining VAT exemptions, improving compliance, digitalizing tax administration) are underway to boost revenues. The aim is to create budget space for SDG spending while maintaining fiscal sustainability. Higher domestic revenues can directly fund sectors like education and health. The government is committed to increasing tax revenue to support NST2 goals. Over the next decade, even a 5 percentage-point increase in the revenue-to-GDP ratio (from ~18 percent to ~23 percent) could provide a big chunk of the financing required for SDGs (although would not be enough alone).

- **Expenditure reallocation and efficiency:** The government has been reorientating expenditure towards priority sectors. Under NST1, budgets for education and social protection grew while less productive spending was restrained. Continued spending reallocation to SDGs is, however, needed for example, prioritizing water, sanitation and infrastructure in budget planning. Additionally, improving efficiency (value-for-money) would stretch resources. For instance, using technology

33 *MINECOFIN, 2021.*

and better management in infrastructure projects could reduce unit costs. Public investment management reforms (supported by IMF's Resilience and Sustainability Facility programme) aim to ensure climate and infrastructure projects are executed efficiently. Every franc saved through efficiency gains, is a franc available for other SDG projects.

- **Expanded use of public–private partnerships and private sector mobilization:** Rwanda is actively engaging the private sector to contribute to development financing. The authorities expect around 40 percent of SDG investment costs to be borne by the private sector. Steps to facilitate this include improving the legal framework for PPPs, offering guarantees or de-risking instruments to encourage private investment in sectors like energy and housing, and leveraging the Kigali International Financial Centre to attract impact investors for green projects. The success of this approach can notably reduce the financing gap; for example, private firms investing in power plants, toll roads or water services can deliver infrastructure without immediate public outlays. Nonetheless, PPPs must be managed carefully to ensure value and to avoid excessive contingent liabilities for the government.

- **External financing and grants:** Despite Rwanda's aim to be self-reliant, external support remains crucial, especially for the most challenging gaps (WASH and climate). The need for concessional financing to complement Rwanda's efforts is stressed in NST2. Rwanda is benefiting from facilities like the World Bank's International Development Association, global funds for health and climate, and bilateral aid. Closing the climate financing gap (US$6.5 billion) will largely depend on global climate finance mechanisms and donor support, which would appear to be in decline with the United States Administration withdrawing from Agenda 2030 and the Paris Climate Agreement. Likewise, large water and sanitation projects may require donor grants (since these do not generate financial returns for private investors). However, while the IMF Working Paper SDG costing scenarios showed that, with additional grant aid of 14 percent of GDP per year, Rwanda could accelerate SDG achievement to 2030, official development assistance grants are in rapid decline globally. While that level of aid is unlikely, international grants of even a few percent of GDP annually, coupled with domestic reforms, could bring 2044 targets closer to 2034. Rwanda is part of international initiatives, like the G20 Compact with Africa, which aim to attract investment and aid.

- **Climate finance strategy:** As highlighted, a dedicated climate finance strategy is in progress. This will identify how to mobilize the required US$6 billion (plus) to 2030. It involves tapping multilateral climate funds, encouraging carbon market financing and promoting private green ventures. For example, Rwanda secured €50 million from Agence Française de Développement (AFD) and others as budget support for climate reforms and aims to crowd in €300 million in private climate investment. Effective climate finance will alleviate pressure on the budget by funding adaptation externally, thereby freeing domestic funds for other sectors.

Encouragingly, Rwanda has adopted new financing strategies for climate and development and has a track record of using funds effectively. The current spending gaps by sector highlight priority areas: WASH and infrastructure need major investment surges; education needs a steady increase to sustain human capital gains; health must be maintained and improved in quality; and climate action demands specialized financing. The government is expected to finance core social services (education, health) largely through domestic budgets, with some donor help, whereas infrastructure and climate action will rely more on public–private collaboration and external finance. Overall, the financing mix to achieve Rwanda's SDGs will be roughly 60 percent public and 40 percent private on average, but with substantial international support required on the public side (through grants and loans) to supplement limited domestic resources. By adopting innovative financing solutions and maintaining its prudent yet forward-looking fiscal management, Rwanda stands a fighting chance to bridge the SDG funding gap and ensure that the remarkable development progress of the last two decades continues unabated. The costs are high, but the costs of inaction in lost human potential, lives and climate vulnerabilities are higher.

13. Entry point for acceleration

Rwanda's macro fiscal environment, characterized by constrained fiscal space and evolving external financing dynamics, necessitates a strategic and context-specific investment approach to accelerate the achievement of NST2 and the SDGs. Building upon recent assessments and leveraging Rwanda's commitment to innovation and sustainability, the following acceleration entry points are proposed:

- **Enhance domestic revenue mobilization through digitalization and AI integration:** Capitalize on the Rwanda Revenue Authority's initiatives to digitize tax systems and incorporate artificial intelligence, to improve efficiency, broaden the tax base and increase compliance.
- **Align strategic sectoral budget allocation with SDG priorities:** Implement evidence-based budgeting to incrementally increase allocations to critical social sectors, such as health, education and social protection, ensuring alignment with SDG targets and maximizing impact.
- **Adopt a right-financing approach for public investments:** Prioritize investments that offer high returns on development outcomes by utilizing tools like cost–benefit analysis and aligning with the country's 2023 National Investment Policy to ensure efficient resource utilization.
- **Integrate innovative financing instruments into sector plans:** Leverage instruments such as blended finance, green bonds and social impact bonds to attract private capital into public sector projects, particularly in areas of climate resilience and infrastructure.
- **Scale up digital service delivery models to improve efficiency:** Expand digital platforms in health, education, water and agriculture to enhance 'last mile' service delivery, reduce overheads and free up fiscal space for reinvestment in priority SDG sectors.
- **Promote private sector participation through a wider set of PPP modalities:** Facilitate private investment in key sectors by developing a robust PPP framework, enhancing the investment climate and providing risk mitigation mechanisms to attract and retain investors.
- **Optimize external public financing for catalytic impact:** Align external financing with national priorities, ensuring that such funds are used to catalyse additional investments and drive systemic changes in sectors critical to sustainable development.
- **Implement expenditure rationalization and value-for-money practices:** Conduct regular expenditure reviews to identify inefficiencies, reallocate resources to high-impact areas and ensure that public spending delivers maximum value in advancing SDG objectives.
- **Establish robust monitoring and adaptive management mechanisms:** Develop comprehensive monitoring systems to track investment outcomes, enabling timely adjustments to strategies and ensuring that interventions remain effective and responsive to emerging challenges.
- By focusing on these targeted entry points, Rwanda can effectively navigate its fiscal constraints, attract diverse financing sources and accelerate progress towards its national development goals.

14. Conclusion and key insights

This SDG costing exercise marks a critical milestone in aligning Rwanda's financial planning with its transformation agenda under NST2 and Vision 2050. The analysis reveals that achieving the SDGs within meaningful timelines requires a significant scale-up in investment, as much as 20 percent of GDP in key sectors by 2029. This is particularly pressing in foundational sectors such as education, health, energy, WASH and infrastructure that are central to both SDG attainment and inclusive economic transformation.

The scenario-based costing, comprising three pathways ('Resilience First' (goals by 2054), 'Smart Sequencing' (goals by 2044) and 'All-in Leap' (goals by 2034)), demonstrates the trade-offs between speed, financing effort and institutional capacity. The 'All-in Leap' scenario, while ambitious, is feasible through a combination of right-financing reforms, efficient public investment, private sector leverage and expanded access to concessional and climate-linked finance. Conversely, the business-as-usual 'Resilience First' trajectory will delay SDG achievement to mid-century and risks deepening development gaps, particularly in rural areas. Key insights emerging from this costing exercise include:

- **Persistent financing gap:** Even with projected increases in domestic revenue and private sector participation, a substantial SDG financing gap remains, estimated at over 20 percent of GDP annually under current policies. Without decisive reforms, Rwanda risks falling short of its SDG targets.
- **Need for right-financing:** The report strongly advocates for a right-financing approach, allocating resources strategically to high-impact areas, using public funds to crowd in private capital and integrating climate, gender and equity considerations throughout budget processes.
- **Efficiency and institutional reform are imperative:** Achieving the SDGs is not only about mobilizing more resources but also about better spending. The report recommends strengthening public financial management, enhancing budget credibility, improving investment planning and embedding results-based financing mechanisms such as the B4SDG framework.
- **Innovative financing instruments must be scaled up:** Rwanda should deepen its engagement with blended finance, thematic bonds (e.g. green or SDG bonds) and PPPs. It must also leverage platforms like IMF's Resilience and Sustainability Facility and SDG-aligned capital markets to unlock long-term finance.
- **Integration of climate and resilience into development financing:** Climate risks and external shocks are built into the costing models, emphasizing the importance of resilient infrastructure, adaptive services and environmental sustainability as preconditions for long-term fiscal and development stability.
- **Institutional coordination and data systems:** Successful implementation will hinge on robust coordination between MINECOFIN, line ministries, district authorities and development partners. Strengthened data systems, integrated monitoring frameworks and performance-based budgeting are critical enablers for tracking SDG financing effectiveness.

15. Policy recommendations

From this costing exercise five policy recommendations are made:

- **Implement fiscal reforms to broaden the tax base and enhance revenue collection without undermining equity.** To close the SDG financing gap, Rwanda must accelerate domestic resource mobilization by pursuing comprehensive fiscal reforms. This includes broadening the tax base by formalizing informal economic activities, reducing excessive tax exemptions and enforcing compliance through improved tax administration systems. Measures such as digitizing tax services, enhancing taxpayer education and expanding property and environmental tax regimes can yield sustainable revenues. However, these reforms must be implemented in a progressive and equitable manner, ensuring that taxation policies do not disproportionately affect low-income populations. Special attention should be given to enhancing revenue collection at subnational levels where service delivery is focused and integrating gender-responsive and green tax policies that promote inclusion and environmental sustainability.

- **Prioritize expenditure towards SDG sectors with high returns and multiplier effects.** Strategic reallocation of public spending is crucial to maximize development impact. The government should channel more resources towards sectors with strong social and economic multipliers, particularly education, health, WASH and climate-resilient infrastructure. These sectors are central to improving human capital, reducing poverty, increasing productivity and enhancing resilience. Investing in foundational learning, universal health coverage and access to clean energy will not only accelerate SDG achievement but also stimulate inclusive growth. Budget prioritization must be guided by cost–benefit analyses and impact evaluations to ensure that every franc contributes meaningfully to Rwanda's transformation goals. Expenditure efficiency must be improved through better planning, procurement and public investment management, particularly at the district level where disparities are most pronounced.

- **Expand innovative financing mechanisms and deepen public–private partnerships to close the investment gap.** Achieving the SDGs by 2034 or 2044 will not be possible through public financing alone. Rwanda must scale up the use of innovative financing instruments such as SDG-linked bonds, climate and green bonds, blended finance facilities and results-based financing. These tools can attract private capital into critical development sectors by de-risking investments and enhancing financial returns. Strengthening the enabling environment for PPPs, including regulatory clarity, risk-sharing mechanisms and transparency protocols, will be essential to crowd in commercial capital, especially in infrastructure, clean energy and digital services. The government should also actively engage institutional investors, development finance institutions and philanthropic actors to co-invest in transformative SDG interventions that are aligned with Rwanda's national priorities and its 2024 Sustainable Finance Framework.

- **Institutionalize the Budgeting for SDGs (B4SDG) framework across planning and budget cycles.** To ensure that national budgets effectively deliver on SDG commitments, Rwanda should fully institutionalize the B4SDG framework within its public financial management systems. This involves integrating SDG targets and indicators into the planning and budgeting processes, tagging, execution and monitoring processes at all levels of government. MINECOFIN should strengthen its collaboration with line ministries and local administrations to align sector budgets with SDG outcomes through medium-term expenditure frameworks. Climate budget tagging, gender-responsive budgeting and participatory budget oversight by Parliament and civil society should be scaled up to enhance accountability and inclusiveness. Establishing a feedback loop between SDG results and future budget allocations will support continuous learning and performance-based financing.

- **Adopt scenario-based planning for long-term SDG financing within the Integrated National Financing Framework.** Given fiscal constraints and economic uncertainties, Rwanda should adopt scenario-based planning to assess alternative SDG financing pathways. The use of dynamic tools such as the IMF's SDG Financing Tool and INFF allows policymakers to simulate different combinations of public and private financing strategies, assess their macroeconomic implications and plan accordingly. By aligning scenarios with INFF, Rwanda can coordinate donor support, align domestic policies with financing strategies and strengthen cross-sectoral coherence. Scenario planning also enhances risk management by factoring in climate shocks, pandemics and regional instability. Institutionalizing this approach will enable Rwanda to maintain strategic agility while pursuing fiscal discipline, debt sustainability and development acceleration.

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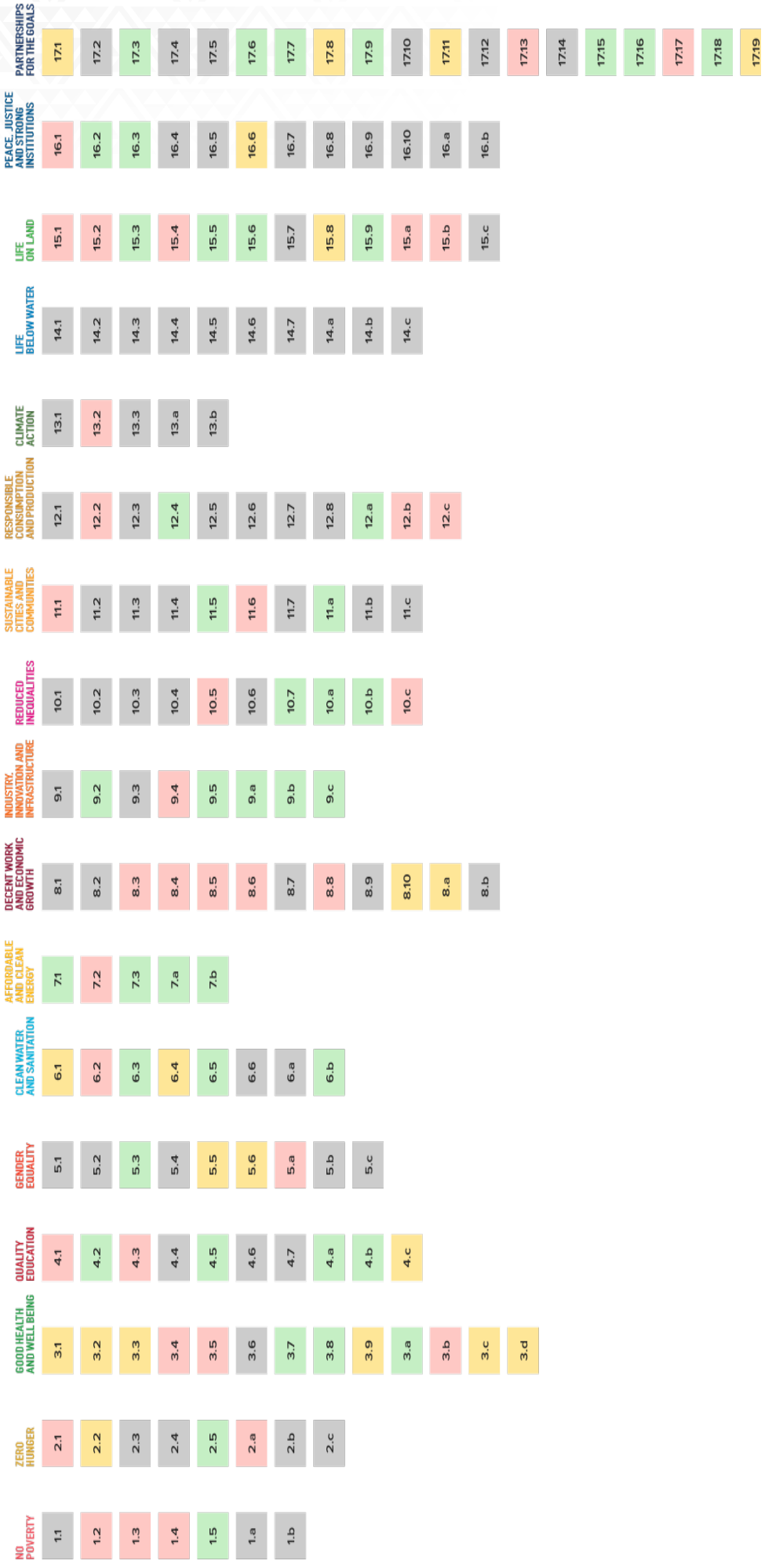
Annex 1: SDG linkages, synergies and trade-offs

The SDGs do not exist in silos. Understanding the interactions across social, economic and environmental elements of sustainable development is essential to move forward on achieving SDGs. SDG interlinkages show how actions directed towards one SDG can influence others. Uncovering and understanding these interactions helps in achieving the 2030 Agenda and avoiding the unintended deterioration of the SDGs and their 169 associated targets. The target-level interlinkages are based on the latest available methodology by KnowSDGs.[34] A first literature review,[35] was updated and expanded in 2021/22 by a team of researchers who retrieved and analysed all relevant scientific and grey literature on SDG interlinkages, using Scopus and Google Scholar.

34 KnowSDGs is a web-based platform of the European Commission that organizes knowledge on policies, indicators, methods and data to support evidence-based implementation of the SDGs.

35 Miola, Apollonia, and Fritz Schiltz. "Measuring sustainable development goals performance: How to monitor policy action in the 2030 Agenda implementation?" Ecological economics 164 (2019): 106373.

Figure 6: SDG interlinkages in Rwanda



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