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Fiscal Space Analysis for Social Sectors in Rwanda

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List of abbreviations

CBHI	Community Based Health Insurance
CCRT	Catastrophe Containment and Relief Trust
COFOG	Classification of the Functions of Government
DSSI	Debt Service Suspension Initiative
DPs	Development Partners
ECD	Early Childhood Development
ERP	Economic Recovery Plan
EU	European Union
FCDO	Foreign, Commonwealth and Development Office (UK)
FPF	Financial Programming Framework
FSA	Fiscal Space Analysis
GDP	Gross Domestic Product
GOR	Government of Rwanda
GPE	Global Partnership for Education
IFMIS	Integrated Financial Management Information System
IMF	International Monetary Fund
INFF	Integrated National Financing Framework
MDA	Ministries, Departments and Agencies
MICE	Meetings, Incentives, Conferences and Exhibitions
MINCOFIN	Ministry of Finance and Economic Planning
MINEDUC	Ministry of Education
MININFRA	Ministry of Infrastructure
MINISANTE	Ministry of Health
MTRS	Medium Term Revenue Strategy
NCDA	National Child Development Agency
NGO	Non-Governmental Organisation

NST-1	National Strategy for Transformation
ODA	Official Development Assistance
OOP	Out of Pocket
OPM	Oxford Policy Management
PER	Public Expenditure Review
PPP	Public Private Partnerships
RDB	Rwanda Development Board
RRA	Rwanda Revenue Authority
RWF	Rwandan Franc
SDGs	Sustainable Development Goals
SDR	Special Drawing Rights
SIB	Social Impact Bond
SIDA	Swedish International Development Cooperation Agency
TOR	Terms of Reference
UNICEF	United Nations Children's Fund
USD	United States Dollar
WASH	Water, Sanitation, and Hygiene
WHO	World Health Organisation

Executive summary

To reach national and international social sector goals Rwanda needs to invest more in social sectors. Climate Change; Early Childhood Development (ECD); Education; Health; Nutrition; Social Protection; and Water, Sanitation, and Hygiene (WASH) have been identified as seven social sectors that require Fiscal Space Analysis (FSA). Over the past four years (2017/18 to 2020/21) spending within the seven sectors has risen nominally, and as a share of GDP, but relative to non-social sectors it has declined as a share of General Government Expenditure (GGE). The same trends hold for child-focused social sectors, although the GGE share has remained stable.

However, the impact of the COVID-19 pandemic, and the war in Ukraine, has put the National Strategy for Transformation (NST-1) social transformation agenda off track. Now is the time to reassess and reprioritise these sectors to ensure that NST-1 targets can be met in the medium term, and SDGs in the longer term. The FSA aims to identify financing gaps and options for the seven sectors.

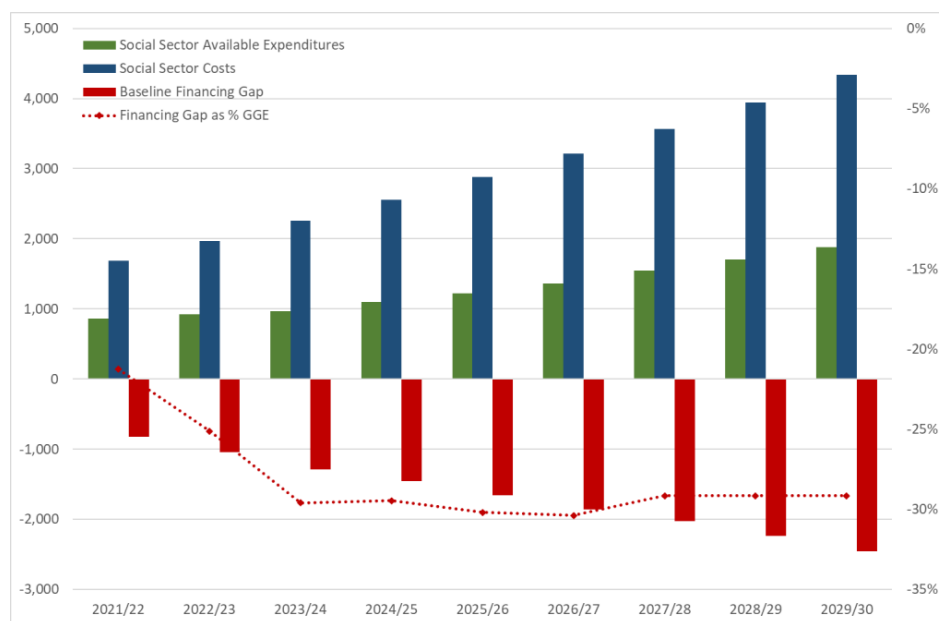
This analysis uses a Financial Programming Framework (FPF) to model the impact of the COVID-19 crisis and the Economic Recovery Plan (ERP) on available government expenditures for social sectors up to 2030. Country-specific data and projections from government and IMF are used. The FSA considers the available government expenditures against the costs of achieving country goals (NST-1) and international goals (SDGs). Various financing options are then considered in an attempt to close the financing gap. One limitation in this work is the lack of a true country-specific costing for each social sector. The report first discusses the FSA for the seven social sectors in their entirety, it then goes on to isolate expenditures, costs, and a gap for children only. This is done by isolating certain budget lines or making assumptions based on what proportion of spending would accrue to children in each sector.

What do projections look like if there is no policy change?

This analysis took the seven social sectors as a whole and provided projections that suggest if the status quo is not changed the gap in achieving NST-1 and SDGs will only widen further over time. This means that the government's budgetary allocation is currently insufficient to meet these needs. The main findings are:

- The financing gap rises from 830 billion RWF in 2021/22, to 2,460 billion in 2029/30.
- This equates to an average of 28% of GGE and 8% of GDP each year.
- To reach NST-1 and SDGs the government needs to spend over 100,000 RWF (90 USD) per person more each year on social sector services.

Projected Financing Gap for Social Sectors (Billion Rwf)

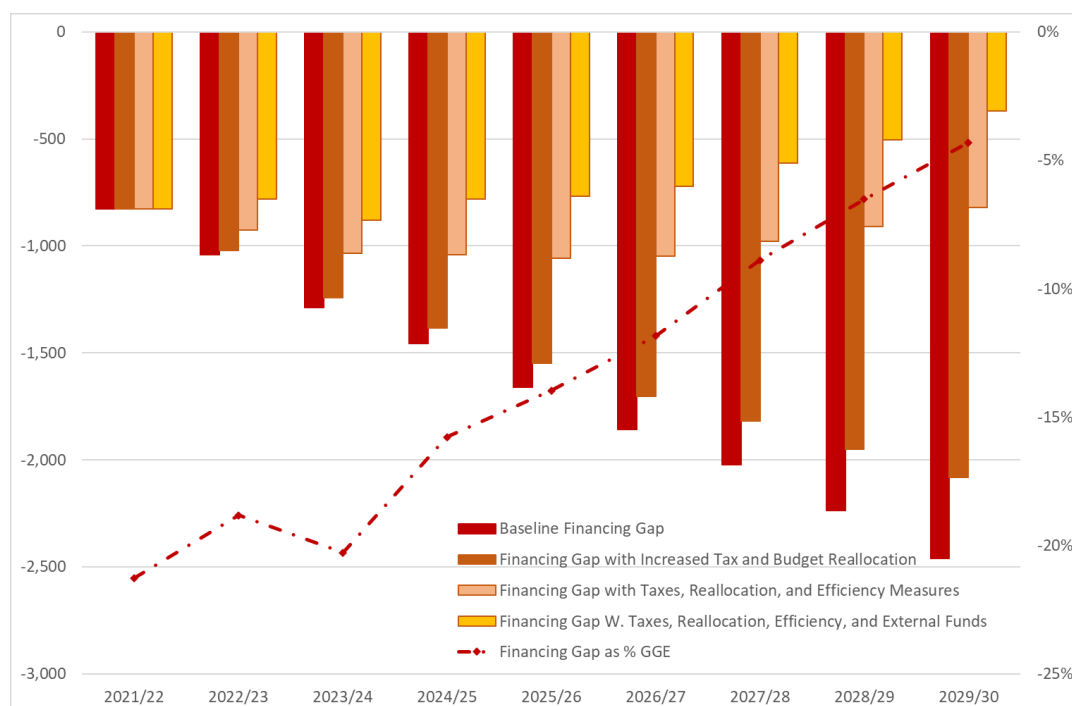


Source: Authors'.

What could be achieved if social sectors were prioritised, and financing options are available?

Using a number of financing options could almost close the financing gap by 2030. This is most likely an overly optimistic scenario where the government prioritises all additional fiscal space to the social sectors. However, it is an illustration that if this was the case closing this gap could be possible.

Potential Fiscal Space for Social Sectors (Billion RWF and as a % of GGE)



Source: Authors'.

1. The original financing gap (red bar chart) is the resultant gap under scenario 1: business as usual. By 2030 the gap is projected to reach 2,460 billion RWF (2 billion USD) and 29% of GGE. This equates to 150,000 RWF per person (123 USD).
2. The next bar chart (orange) shows how the gap can be reduced by raising tax by 0.3 percentage points a year (from 2027/28) and raising the allocation of social sectors by 0.5 percentage points a year (from 2022/23). This would reduce the gap by 15% by 2030. The gap remains at 2,080 billion RWF, 24% of GGE. This equates to 128,000 RWF per person (104 USD).
3. The third bar chart (beige) shows the sum of the tax and budget increase (in 2 above) with the implementation of efficiency measures across all social sectors. These two initiatives could reduce the financing gap to 820 billion RWF in 2030, equivalent to 10% of GGE. This equates to 50,000 RWF per person (41 USD).
4. The fourth bar chart (bright yellow) starts from scenario 3 above and adds in the fiscal space from external finance – debt relief and additional ODA. This would reduce the financing gap to 370 billion RWF by 2030, equivalent to only 5% of GGE. This equates to 22,800 RWF per person (18 USD).
5. The resultant reduced gap – 4% of GGE – could be filled by innovative funds that have not been quantified here.

Given the fact that there could potentially be enough funds by 2030 is optimistic given the substantial financial, technical, and political effort it would require to achieve all these financing options. However, it shows that if focus was placed on a mix of these initiatives - budgetary share, efficiencies, external finance for social sectors, as well as general tax reforms and debt relief – that fiscal space can be found without detriment to fiscal deficit and macro instability. It might not be possible to do it all, but some action will inevitably be worthwhile to achieve social sector goals.

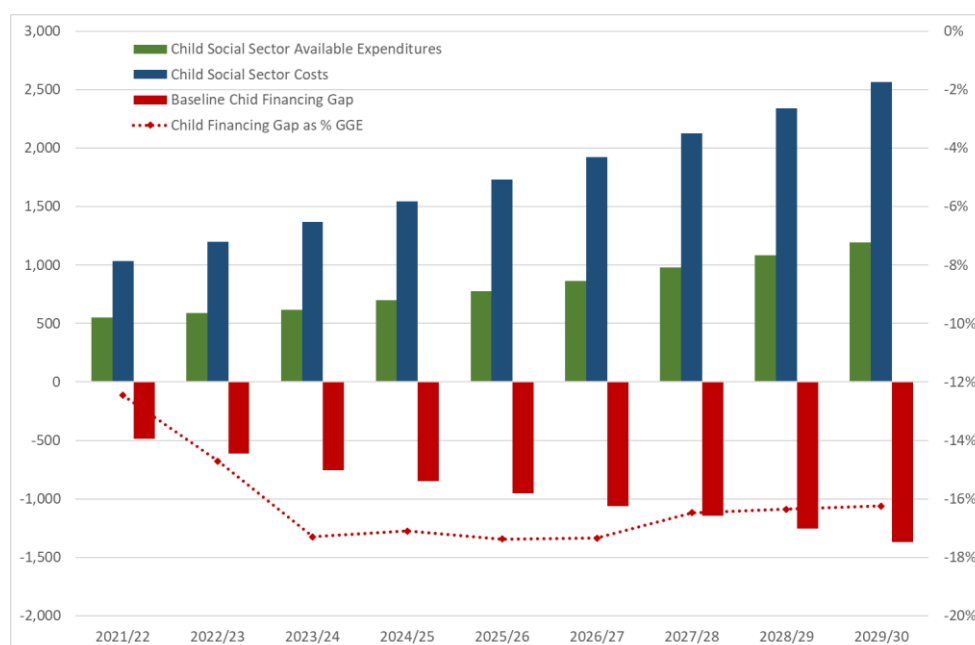
Results for Child-focused social sectors

For all seven social sectors together for children, the key points are as follows:

- Child financing gap rises from 484 billion RWF in 2021/22, to 1,370 billion in 2029/30.
- This equates to an average of 16% of GGE and 5% of GDP each year.
- To reach NST-1 and SDGs the government needs to spend over 137,000 RWF (117 USD) per child more each year on child-focused social sector services.

This suggests that if the recent level of investment in social services for children – around 14.2% of GGE – continues over the medium to longer term there will be a widening financing gap over time. This infers that it will be more difficult to reach the NST-1 social transformation targets and SDGs as this underinvestment continues.

Projected Child Financing Gap for Social Sectors (Billion Rwf)

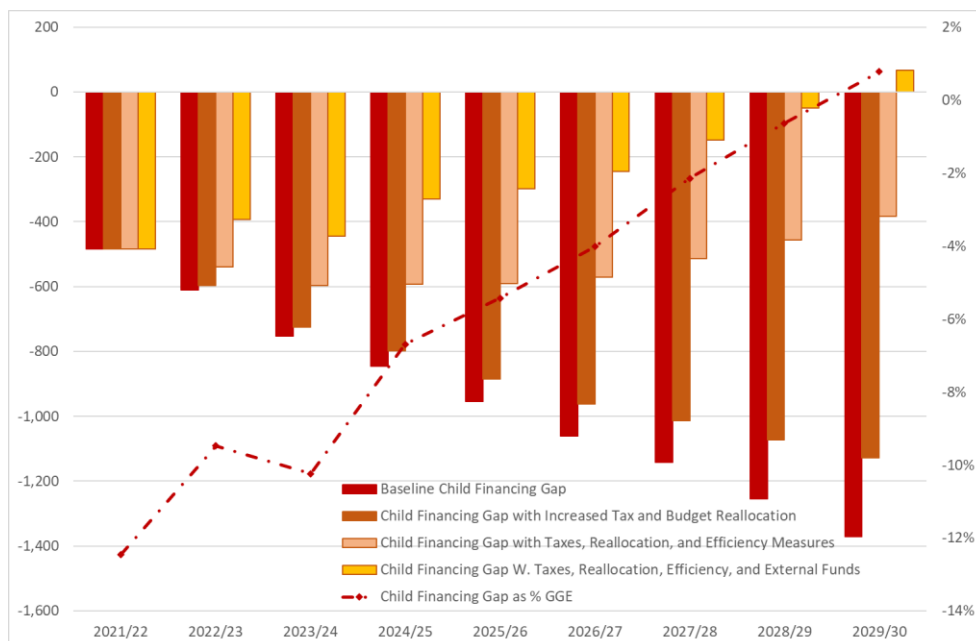


Source: Authors'.

Summing all these initiatives together could close the financing gap by 2030. This is, it is an illustration that if there was political will then child social sector needs could be met:

1. The original child financing gap (red bar chart) is the resultant gap under scenario 1: business as usual. By 2030 the gap is projected to reach 1,370 billion RWF (1.1 billion USD) and 16% of GGE. This equates to 191,000 RWF per child (155 USD).
2. The next bar chart (orange) shows how the child financing gap can be reduced by raising tax by 0.3 percentage points a year (from 2027/28) and raising the allocation of social sectors by 0.5 percentage points a year (from 2022/23). This would reduce the gap by 18% by 2030. The gap remains at 1,130 billion RWF, 4% of GGE. This equates to 158,000 RWF per person (128 USD).
3. The third bar chart (beige) shows the sum of the tax and budget increase (in 2 above) with the implementation of efficiency measures across all child-focused social sectors. These initiatives could reduce the child financing gap to 380 billion RWF in 2030, equivalent to 10% of GGE. This equates to 54,000 RWF per person (43 USD).
4. The fourth bar chart (bright yellow) starts from scenario 3 above and adds in the fiscal space from external finance – debt relief and additional ODA. This would reduce the child financing gap entirely and move to a surplus of 60 billion RWF by 2030, equivalent to 1% of GGE.
5. To speed up the closure of the child financing gap sectors could use innovative or blended financing, however, the level of potential funding has not been quantified.

Potential Fiscal Space for Child-focused Social Sectors (Billion RWF and as a % of GGE)



Source: Authors'.

General Recommendations

Undertake Sector-specific and Comprehensive Costing – The lack of comprehensive costing limits analysis, i.e. it does not give a coherent base for measuring what Rwanda needs to invest to achieve its social goals, there is not a true comparator for the expenditures. If this is not improved, it will limit the ability to repeat this exercise for future FSA of social sectors. Having the newly formed agency for ECD and mainstreaming of Nutrition will require to have some form of cost to negotiate with for budget allocation. Other sectors will also benefit from this. Moreover, there needs to be some consideration of the cross-cutting complementarity of costs in achieving social sector targets.

Secure Exemptions and Higher Taxation – Whilst social sectors are not responsible for general taxation policy there is an area that these sectors can work towards, this is in terms of ensuring their continued tax exemptions. It will be important to be able to prove that the benefits of the exemptions are greater than the costs to the sector / beneficiary and the multiplier effects of the taxation. Impact analysis on these areas is required. For MINECOFIN there is a long list of possible tax reforms and there needs to be an assessment of the optimal taxation measures, (lowering CIT rate but broadening the base, making PAYE more equitable, reassessing exemptions, etc). This should consider the real options for tax growth based on: Technical feasibility - ease or implementation and magnitude of revenues; Economic feasibility - knock on effects to wider economy; Political feasibility - what will citizens accept and what is supported by politicians; and Social-welfare impacts - what are the equity implications of different taxes.

Create Evidence-Based Advocate for Greater Budget Allocation – Within the current tight fiscal environment an evidence-based advocacy plan will be necessary to convince MINECOFIN to increase budget allocation to social sectors. Need to build on existing international evidence around benefits of investing in children and social sectors with strong Rwandan M&E to show impact of policies and continued improvement in achieving targets. There is the possibility also that budget allocation could be linked to improved efficiency assuming the sector showed that its spending was increasingly more impactful.

Strengthen Efficiency Analysis to Improve Public Resource Allocation - Findings from key informant interviews and secondary data show that fiscal space can be gained in social sectors becoming more efficient in their targeting methods and by reducing costs, etc. However, this must be done in an evidence-based systematic way to ensure that output and outcomes are not harmed. This will require much analytical work and research before new plans can be implemented. Efficiency analysis can be done over each social sector and achievements linked to budget allocation.

Securing Near-Term ODA before DPs Depart – As Rwanda moves towards middle-income status ODA is expected to reduce. Mapping of all ODA will provide a picture of future gaps and give a strong advocacy tool for negotiating with DPs and Government for more funding. Mapping and analysis of stakeholders should work towards advocacy and solutions to bring existing DPs to invest more in Rwanda, bring new DPs to Rwanda, sector-specific underfunded priorities that can benefit from niche donor assistance. It should also cover international advocacy topics such as the ongoing debt relief debate, And the longer-term implications of becoming a middle-income country for the longer-term ODA trends.

Investigate Compatibility of Innovative Financing – Given the tight macro-fiscal environment there is a movement towards non-traditional resource mobilisation, or innovative financing such as blended finance where public, private, ODA, and philanthropic funding is mixed. The benefits and risks to SIBs, PPPs, and climate / green bonds have been outlined. More sector specific, and possibly even project specific analysis needs to be carried out to assess the applicability of these new financing mechanisms.

General Recommendations Implementation Timelines and Responsibilities

	Priority	Implementation Timeframe	Responsible Institutions
Costing	High	One year to develop. Revised annually or with each new medium-term strategy / mid-term review	All Ministries with MINECOFIN providing guidance and support - potentially need TA specialists
Secure Exemptions	High	Six months to a year. Thereafter, check each revision of MTRS	All Ministries with MINECOFIN backing
High Taxation	High	Medium term. Ongoing	RRA and MINECOFIN

	Priority	Implementation Timeframe	Responsible Institutions
Creation of evidence-based advocacy for greater budget allocation	High	Few months in some instances where data is available, longer if require new information sources. Ongoing each year, possibly organised around budget negotiations for greatest impact.	All Ministries for negotiation with MINECOFIN - potentially need TA specialists
Efficiency Analysis	High	Medium term. Ongoing	All Ministries - potentially need TA specialists
Secure near-term ODA	High	Mapping and advocacy can take six months to produce. To be updated on an ongoing basis.	All Ministries
Investigate Compatibility of Innovative Financing	High	Six months to a year for initial findings. Then another six months to a year to implement recommendations.	All Ministries - potentially need TA specialists

Source: Authors'

Sector-specific funding recommendations:

Climate Change - Receives little in terms of budget allocation each year, significantly less than the proposed costs to achieve SDGs. Strong evidence-based arguments will need to be made to gain any rise in allocation from MINECOFIN. In terms of innovative financing, preference in this sector is for climate or green bonds. It is expected that this will continue. Little is known about this sector's (in)efficiency, therefore, analysis into this would be useful.

ECD –The budget has grown but is insufficient to meet needs. This sector is relatively new but has political support. This should be taken advantage of international and Rwandan evidence for investing in ECD for long term economic benefits should be used. The sector could improve its M&E for more impact assessment style analysis. Little is known about this sector's (in)efficiency, therefore, analysis into this would be useful. There could be some opportunities to engage with the private sector through infrastructure needs using PPP, or utilising SIBs. Some evidence is already forthcoming in terms of private sector engagement in employer-supported childcare, this should be emphasised as best practice as it requires little government funding but can have significant positive social and economic impacts. Further investigation is necessary, including the possibility of it working in certain niche areas and of having an interested DP in the sector.

Education – Receives a large share of the budget and meets international agreements on share of budget to the sector. This infers that there may be limited additional public funding to receive, and the focus should be on efficiency, i.e. where it spends, on what, etc. For example, considering how to improve outcomes with more targeted programmes, or analysing a sub-set of underperforming indicators to design more effective service delivery. This could have substantial impact on fiscal space and achieving greater outcomes with the same funding levels. The sector has stated an interest in engaging the private sector for infrastructure needs. This would need to be backed up by strong contract management and M&E. SIBs could be useful for improving

drop out and repetition rates given the possibility that an adaptive intervention may be required.

Health – Projections suggest an upcoming reduction of ODA in a heavily donor-dependant sector. This coupled with the growing international evidence around why investing in child health is economic and socially beneficial should underpin advocacy to raise domestic budget allocation. Mapping of DPs and their funding plans over the medium term can help provide a base of information. The sector has begun working on efficiency in terms of redesigning the CBHI but more analysis could be carried out to see where the health sector can improve. In terms of innovative financing the sector has a system in place via RDB and attracting health investors. PPPs seem to be the most popular, however, there could be an opportunity for SIBs to be useful for reaching targets around maternal and child health – ante-natal visits being missed for example is niche enough with a clear mandate to implement M&E and outcomes for.

Nutrition – The budget has grown but remains insufficient to meet needs. The sector has political support, this should be taken advantage of and use evidence for investing in nutrition for long term economic benefits. The sector could improve its M&E for more impact assessment analysis. Little is known about this sector's (in)efficiency, therefore, analysis into this would be useful. The idea to create incentives for the private sector in manufacturing fortified foods in Rwanda is interesting and could be assisted with some further investigative analysis as to whether this could work using PPP or SIB. Due to the linkages with health, the nutrition sector could benefit from learning best practice from MINISANTE and RDB for engaging with the private sector.

Social Protection – A highly donor dependant sector with limited government funding. Much needs to be accomplished with advocacy to allow MINECOFIN to understand the long-term productive nature of investing in social protection. However, the sector needs much work to become more efficient, but there is no impact assessment made on the interventions put in place. M&E of these high impact interventions will be crucial to be able to continually adjust plans and budget for the greatest impact on children.

WASH – Receives little in terms of budget allocation each year, significantly less than the proposed costs to achieve SDGs. Again, strong evidence-based arguments will need to be made to gain any rise in allocation from MINECOFIN. However, the internal budget allocation for WASH should be considered in terms of efficiency – spending more on staff to send invoices / collect unpaid fees, and on the maintenance of infrastructure could reduce in efficiencies. The sector seems comfortable using PPP for its infrastructure needs. Improved M&E around the implementation and impact would be useful to see how productive these collaborations are. Some greater focus on geographical inequalities in service delivery would be beneficial and attracting private sector to engage in less well-serviced areas. There is also the potential that the WASH sector could benefit from climate / green bonds as they also deal with water supply.

Summary of Financing Options by Sector

	Climate Change	ECD	Education	Health	Nutrition	Social Protection	WASH
Taxation & Retention of Exemptions	Increasing domestic tax base most sustainable, however, generally out of social sectors control (RRA and MINECOFIN). Social sectors should secure their current exemptions						
Budget Allocation	Requires much evidence-based advocacy in tight fiscal environment - link with efficiency efforts						
Efficiency	A potentially large source of fiscal space - requires much analysis planning and monitoring						
Debt Relief*	Unlikely, but if so, will increase available resources from reduced interest payments						
ODA	Short to medium term only as Rwanda becomes middle income country - sector specific development partners and their headquarter plans						
PPP							
Social Impact Bonds							
Climate / Green Bonds							

Source: Authors'

Key: **Green** – strong chance of success, **Amber** – Will need effort to ensure success, **Red** – Unlikely to occur

1. Introduction

This work considers the way in which the Rwandan Government can find fiscal space to finance national (and international) social sector targets. Given the recent global turmoil due to the COVID-19 pandemic and the war in Ukraine the macroeconomic impact has derailed the medium- and longer-term development path. Rwanda has had lower revenue, higher expenditures, and increased debt levels as a result of COVID-19 which has restricted investment in social sectors. Indeed, IMF estimates suggest that as *“the country returns to its pre-pandemic potential growth rate over the medium term, Rwanda potentially faces a permanent output loss of approximately 10 percent. Reflecting lower nominal GDP and reduced fiscal space, the pandemic is estimated to have increased Rwanda’s SDG needs gap by 5.5 percentage points of GDP, to 21.3 percent of GDP.”*¹ This, coupled with the rising global food and energy prices as a result of the war in Ukraine, is expected to have longer term impacts on the ability of the government to increase investments in social services in Rwanda².

The Government of Rwanda (GOR) and UNICEF have requested analysis into seven social sectors: Climate Change; Early Childhood Development (ECD); Education; Health; Nutrition; Social Protection; and Water, Sanitation, and Hygiene (WASH).

Given the way in which national and international targets are set up around these sectors the report will first consider these sectors holistically – the entire seven together and inclusive of all spending within these sectors. At this level, the analysis relies greatly on the Rwanda-specific research that has already been undertaken by institutions such as the IMF and the Integrated National Financing Framework (INFF) Assessment and Diagnostic report³. This will consider recent public sector expenditure in these sectors, costs to reach national targets, the financing gap, and financing options to close this gap.

After considering fiscal space at this higher level the analysis moves toward more sector specific and child-focused expenditures. This provides a more Rwanda-focused sector specific set of recommendations.

The remainder of the report is as follows: **Chapter 2** provides an overview of the methodology and data sources. **Chapter 3** outlines the macro fiscal background and projections and places the current social sector spending trends within this context. It also outlines the costing associated around achieving NST-1 and SDGs. **Chapter 4** brings the findings of chapter 3 into a fiscal space analysis, offering a business-as-usual scenario for the social sector in total. It then offers financing options in a theoretical manner with some elements of Rwanda. **Chapter 5** provides the child-focused analysis with sector-specific financing recommendations. **Chapter 6** concludes and gives a summary of recommendations.

¹ Cited in MINECOFIN (2022).

² See IMF Article IV June 2022.

³ IMF Article IV January 2022 and WEO database Oct 2021, and for INFF see MINECOFIN (2022).

2. Methodology

This chapter provides the methodology and data sources used within the analysis. This includes the historic data and projections for the macro-fiscal indicators, the social sector expenditure groupings, costing of social sector interventions, and Fiscal Space Analysis (FSA). In addition to the data the consultancy team met with key stakeholders to discuss the situation in each sector and potential for financing options. The list of interviewees is set out in Annex A.

2.1. Financial Programming Framework

This analysis uses a Financial Programming Framework (FPF) to model the macro-fiscal indicators for the Rwandan economy over time. This models the impact of the COVID-19 crisis and the Economic Recovery Plan (ERP) on available government expenditures for social sectors up to 2030. Country-specific data and projections from IMF and government sources are used.

Historical trends were considered as a baseline to projections. For the macro-fiscal data, these covered the last five years from 2016/17 to 2020/21 and data was taken from the latest available IMF WEO April 2022 and the IMF Article IV report - June 2022⁴. For the social sector expenditures budget execution data was received from the Ministry of Finance and Economic Planning (MINECOFIN) for the years 2017/18 to 2020/21⁵. At the time of writing the 2021/22 actual outturn for expenditures was not finalised⁶.

Macro-fiscal projections were taken from IMF WEO April 2022 up to the year 2026/27. These data are in agreement with GOR. Thereafter the authors' projections are used. These are based on a reading of the GORs' macro-fiscal pledges – such as to reduce the fiscal deficit and public debt. In the initial scenario social sector budget allocations over time are set to remain stable at their average share of General Government Expenditure (GGE) over the past four years. This infers a future projected scenario where government remains on its current policy track with no significant shifts in budget allocations and spending across sectors.

2.2. Social Sector Expenditure Breakdown

The social sectors are not readily available within the current expenditure classifications of the budget. Therefore, adjustments were made to the data, as set out in **Table 1**. This uses two types of expenditure classification: first the Classifications of

⁴ IMF (2022b) and IMF (2022c).

⁵ MINECOFIN Website -

https://www.minecofin.gov.rw/1/publications/reports?tx_filelist_filelist%5Baction%5D=list&tx_filelist_filelist%5Bcontroller%5D=File&tx_filelist_filelist%5Bpath%5D=%2Fuser_upload%2Fminecofin%2Fpublications%2FREPORTS%2FNational_Budget%2FBudget_Execution_Reports%2F&cHash=05f32bf76fe1d00a141ad469aebc9bf9.

⁶ MINECOFIN Budget Departments states it will not be available until after August 15th.

the Functions of Government (COFOG) and, second the deeper classification of expenditures by programme and sub-programme.

The methodology is limited due to access to data. MINECOFIN allowed the consultants access to actual expenditures online⁷. These are published at COFOG, programme and sub-programme level only. When interviewed, the budget experts at MINECOFIN stated that to get an exact listing of all social sector spending by sector an Integrated Financial Management Information System (IFMIS) request would be required as there can be a view down to the project level of spending. The cross-cutting nature of these sectors means that many different projects are implemented through different agencies. For example, some sub-programmes in agriculture include projects that are related only to agricultural production at district level, whilst some are linked to climate change or social protection (soil conservation and one cow per family for example). The table notes where these limitations are.

To create child-specific social sector expenditures there also needs to be adjustments to estimate the level of expenditure within these sectors for those aged 18 and under. As for most sectors there is spending for the general population to benefit from rather than a sub-group.

To gain seven distinct expenditure trends for each of the social sectors the following methodology was applied:

Climate Change – Uses the COFOG expenditure classification number 705 for Environmental Protection. It adds in expenditure under BO Meteorological Operations and EG01 on Sustainable Diversification and Climate Crop Production, as recommended by MINECOFIN budget expert. To adjust for child-focused expenditure the most appropriate methodology is to simply take a share of the expenditure in line with the proportion of children in the population.

ECD – Has no COFOG distinct classification, so the methodology uses the subprogramme 2604 for the National Early Childhood Development Program. There is cross over between ECD, Nutrition and WASH as ECD includes budget line EQ01 Nutrition and Hygiene Coordination. Therefore, there may be some underestimation in WASH and Nutrition as some expenditures are carried out by NECDP. This sector is 100% child-focused so 100% of the expenditures are taken for child-sensitive analysis.

Education – Uses the COFOG expenditure classification number 709. To adjust for child-focused expenditure the most appropriate method is to remove COFOG classifications: 7093 Post-Secondary; and 7094 Tertiary Education. This would adjust for expenditure associated with over 18's in education.

Health - Uses the COFOG expenditure classification number 707. However, this will include some elements of nutrition and hygiene (WASH) which need to be removed to avoid double counting – specifically: EI03 Nutrition in maternal and child health, Ministry of Health (MINISANTE), and EM08 Hygiene in MINISANTE. These will instead be

⁷ MINECOFIN website: <https://www.minecofin.gov.rw/>

presented in the Nutrition and WASH sectors, respectively. To adjust for child-focused expenditure the most appropriate method is to simply take a share of the expenditure in line with the proportion of children in the population.

Nutrition – Has no COFOG distinct classification, so uses the subprogramme EG03 Nutrition Sensitive Agriculture, and EI03 Nutrition (within health). This is an underestimate as there is additional nutrition spending under ECD not included here. The nutrition component within health has been removed from the health total to avoid double counting. This sector is 100% child-focused so 100% of the expenditures is taken for child-sensitive analysis.

Social Protection – Uses the COFOG expenditure classification number 710. ECD spending under budget line 2604 is removed to avoid double counting, as recommended by budget expert. To adjust for child-focused expenditure COFOG lines 7103 Survivors and 7105 Unemployment need to be removed as these are not relevant to children⁸. COFOG lines 7101 Sickness and Disability, and 7109 Social Protection are taken as a percentage of the child population. All expenditure under COFOG line 7104 Family and Children is used.

WASH – Uses the COFOG expenditure classification number 7063 Water Supply and adds subprogramme EM08 Hygiene (from health). To adjust for child-focused expenditure a share of the expenditure in line with the proportion of children in the population is taken.

These seven sectors sum to what this analysis will classify as social sector expenditures.

⁸ Budget expert states that under 7103 there are some expenditures relating to survivors' children's school fees. However, the budget data available did not allow disaggregation to this point.

Table 1: Social Sector Expenditure Classification Method

	STEP 1			STEP 2	STEP 3
	COFOG budget lines		Adjustments needed	Sub-Programme budget lines	Adjustments needed for children
Climate Change	705	Environmental Protection	Underestimate, does not include cross cutting issues: cannot add 3601 and 3602 as unknown project values for climate change.	Add: BO - Meteorological Operations (Meteorology Agency) EG01 - Sustainable, Diversified and Climate Smart Crop Production and Productivity (Agricultural Board)	Take as % child population
ECD	N/a	Not listed	N/a	2604 - National ECD Programme BUT this is included in Social Protection 710 - need to remove from there AND includes EQ01 - Nutrition & hygiene coordination => leave within ECD and make note in Nutrition and WASH	100% Children Note: ECD includes nutrition and hygiene exp not included within Nutrition and WASH
Education	709	Education	N/a	N/a	Adjusted to remove over 18-year-olds Remove 7093 - Post-Secondary and 7094 - Tertiary
Health	707	Health	Will include some Hygiene (WASH) and Nutrition need to remove to avoid double counting	Remove: EI03 - Nutrition Exp MINISANTE EM08 - Hygiene Exp MINISANTE	Take as % child population

	STEP 1			STEP 2	STEP 3
Nutrition	N/a	Not listed	N/a	EG03 - Nutrition-Sensitive Agri Agricultural Board EI03 - Nutrition MHC Rwanda Biomedical Centre <i>Underestimate as additional Nutrition exp within ECD</i>	100% Children <i>Note: Additional Nutrition exp within ECD</i>
Social Protection	710	Social Protection	Remove ECD to avoid double counting. <i>Underestimate, cannot add One Cow and Public Works as unknown project values at this budgeting level.</i>	Remove 2604 - ECD	Need to remove support directed at over 18-year-olds: 7103 - Survivors and 7105 - Unemployment Take as % population: 7101 - Sickness & disability and 7109 - Social protection Keep at 100%: 7104 Family & Children
WASH	7063	Water Supply <i>[within 706 - Housing and community amenities]</i>	Need to add infrastructure and other WASH areas from sub-programmes.	EM08 - Hygiene Exp MINISANTE <i>Underestimate as additional Hygiene exp within ECD and districts</i>	Take as % child population <i>Note: Additional Nutrition exp within ECD</i>

Source: Author's own – in conjunction with Budget Department MINECOFIN

Note: Methodology for 2020/21 differs slightly as budget classification was changed – some codes are different for the subprogrammes, but the process remains the same.

2.3. Costing

Costing refers to the estimation of the financial needs to achieve a policy target. For this work, it would be the social sector goals within the governments' medium-term and longer-term plans – National Strategy for Transformation (NST-1) and Vision 2050, respectively. However, neither of these have any sector-specific disaggregated costing. Each of the sector strategies has an associated cost to deliver the policy commitments. However, the costing has gaps, and have not been used in the NST-1, only an estimation of investment requirements not total costs; i.e. the costs do not fully reflect the sector needs.

Interviews with sector experts revealed that although there is a costing base in the NST-1 sector strategies these end in 2024⁹. Moreover, they reflect the cost of affordable planned policies and programmes as opposed to policy goal targets such as universal health coverage, etc. In other words, they are linked to the available budget and subject to prioritisation process rather than a true reflection of what it would cost to achieve NST-1 goals. Finally, these costs do not consider the cross-cutting complementarity of activities.

This lack of comprehensive costing limits the analysis, i.e. it does not give a coherent base for measuring what Rwanda needs to invest to achieve its social goals, there is not a true comparator for the expenditures. If this is not improved, it will limit the ability to repeat this exercise for future FSA of social sectors.

The Government's recent INFF diagnostic report examines the financing needs around Rwanda's development priorities¹⁰. It reports that the original cost estimate within the NST-1 has now been reassessed due to the impact of COVID-19. The INFF report considers various costings¹¹:

- Government's original NST-1 public sector costs of around 30% of GDP a year over the seven years. This refers to the total cost of the whole strategy, not just social sectors.
- IMF's pre-COVID estimation to achieving SDGs by 2030 shows a need for an additional 15.7% of GDP per year on top of NST-1. And this has now been raised post-COVID to 21.3%. This refers to investment in infrastructure, health, and education.
- The World Bank's WASH costing model estimates that 4.5% of GDP per year spending would achieve water and fixed-point latrines to all households.
- The INFF report itself decided to use a financing gap (additional cost) of 21.3% of GDP to meet the NST-1 and SDGs by 2030 (as per IMF estimates).

⁹ Interviews with Planning Department in MINECOFIN, as well as the individual sectors.

¹⁰ MINECOFIN (2022).

¹¹ Ibid.

- The INFF report estimates the budget allocation for NST-1 Pillar 2 - Social Transformation for the next two years (2022/23 and 2023/24) at 10% of GDP, and that an additional 5.9% will be needed each year for health and education SDGs.

The relevant social sector SDGs are included in NST-1 social pillars and so using international norms around SDG costing is a useful way in which to gain a rough estimation of the costs for each social sector. This will also somewhat align with IMF and INFF. The costs set out in Table 2, and discussed below (and full details are within Annex C):

Table 2: Costs for Social Sectors (NST-1 and SDGs)

Sector/Sub Sector	Needs (Percent of GDP per year)
Climate Change	2.5%
ECD	Included in Education
Education	9.8%
Health	5.0%
Nutrition	Included in Health
Social Protection	2.9%
WASH	4.5%
Total	24.7%

Source: Authors' own based on various sources detailed in text.

Note: Further adjustments will be made in the next draft to account for child-focused costs.

Climate Change – Uses the updated Nationally Determined Contribution (NDC) estimates for the period 2022 to 2030¹² of 3.4 billion USD, which averages 2.5% of GDP per year.

Education including ECD – IMF analysis showed that Rwanda required an additional 7% of GDP spent per year on education to reach SDGs¹³. Rwanda has been spending 2.8% of GDP a year on education (2017/18 – 2020/21). This equates to a total cost of 9.8% a year. (The Incheon Declaration and Framework for Action, and the Addis Ababa Action Agenda call for 6% of GDP to be spent on education for low-income countries¹⁴.)

Health including Nutrition – IMF analysis showed that Rwanda required an additional 2.2% of GDP spent per year on education to reach SDGs. Rwanda has been spending 2.0% of GDP a year on education (2017/18 – 2020/21). This comes to almost 5% which is also the international norm for public primary health care spending as per international analysis¹⁵.

¹² Republic of Rwanda (2020b).

¹³ IMF (2019a).

¹⁴ UNESCO, UNPFA and UNICEF (2015).

¹⁵ McIntyre and Meheus (2014).

Social Protection – The ILO considered how to achieve SDG 1.3 and found that a low-income country could do this year on year raising financing from the average of 0.8% of GDP (found in 2019) to 3.8% of GDP by 2030 in order to meet SDG 1.3 by 2030¹⁶.

WASH - The World Bank’s WASH costing model estimates that 4.5% of GDP per year spending would achieve water and fixed-point latrines to all households¹⁷.

The sum of these estimations is a total cost for social sectors of 24.7% of GDP. As the relevant social sector SDGs are included in NST-1 social pillars this method should provide an inclusive cost for national and international needs.

In lieu of any other information, the methodology to create a child-focused costing for social services will take a share of these costs that are linked to the proportion of children in the population – other than education which removes a proportion of costs for over 18-year-olds. See Annex C for further information and data on costs per sector for children.

2.4. FSA

The primary question the study aims to answer is, what is the scope for allocating additional resources to the priority social sectors over the medium-term time horizon, based on the overall macroeconomic environment and medium-term outlook. The term “fiscal space” is understood in a variety of contexts. It might be interpreted as expressing the overall potential for governments to raise revenue and allocate it across competing priorities. This reflects the economic structure and growth rate of the country, the degree to which government is able to collect taxes, and perhaps more importantly, the social choices that are represented by the way in which the revenue is allocated. These choices are mediated through a complex sequence of political processes that are influenced by a variety of institutional interests that are required to compete for limited resources, and the structure of the allocations may not be easy to change radically in the short run.

Fiscal space is however often understood in a narrower context as the potential to increase the allocation to a specific sector or set of linked priorities in the short or medium term. Our approach seeks to embed the analysis within a coherent macroeconomic framework that ensures a consistent consideration of possible future scenarios that includes their possible effect on the wider economy. The fiscal space analysis will essentially involve three steps:

- **Available Resources** – Projected public social sector expenditures equate to the available resources. These have been assessed through analysing the recent execution and current budget allocation. Using these provides a baseline to project likely budget allocation to the social sectors.
- **Estimated Cost** - The needs of the population and national goals will dictate the demands on social spending, and this leads to the costing side of the analysis. Where

¹⁶ Durán Valverde et al (2019).

¹⁷ Cited in MINECOFIN (2022).

available, national costed plans will provide the basis for costing of the targets. Where they are not available international norms will be used.

- **Financing Gap** - Bringing costs and resources together will provide a baseline scenario for financing projections for social sectors.

Underpinning this is a consistent macro-fiscal FPF. This allows us to construct baseline and normative projections of likely fiscal space for social sector allocations.

A second scenario will incorporate estimates of the potential for further revenue generation through additional taxation, reprioritisation, or efficiencies. A summary of potential revenue mobilisation sources is set out below:

- **Reprioritisation** - The potential of reprioritisation (which is not a source of additional government revenue) will be assessed.
- **Additional taxation** - In some cases, there is potential for increasing revenue through expanding the tax base.
- **Donor and other external financing including debt relief** - External financing is often expressed as a residual between the allocations that are needed (the resource need), and the sum of all other sources – government, private sector, foundations, Non-Governmental Organisations (NGOs) and private individuals. COVID-19 required increased debt to pay for emergency needs in health and social protection. Therefore, consideration of debt levels in Rwanda and what international players are considering in relation to debt relief and what may be most useful for Rwanda over the medium to long term.
- **Innovative funding / blended finance** – When interviewed stakeholders in Rwanda spoke about the potential of relatively new financing sources such as involving the private sector, entering into Public Private Partnerships (PPP), green or climate bonds, and Social Impact Bonds (SIB).

The potential financing sources will be projected, and the resultant smaller gap will be presented.

3. Macro-Fiscal and Social Sector Spending Trends

This section will provide a short overview before focusing on the social sector expenditures.

3.1. Macro-Fiscal Environment

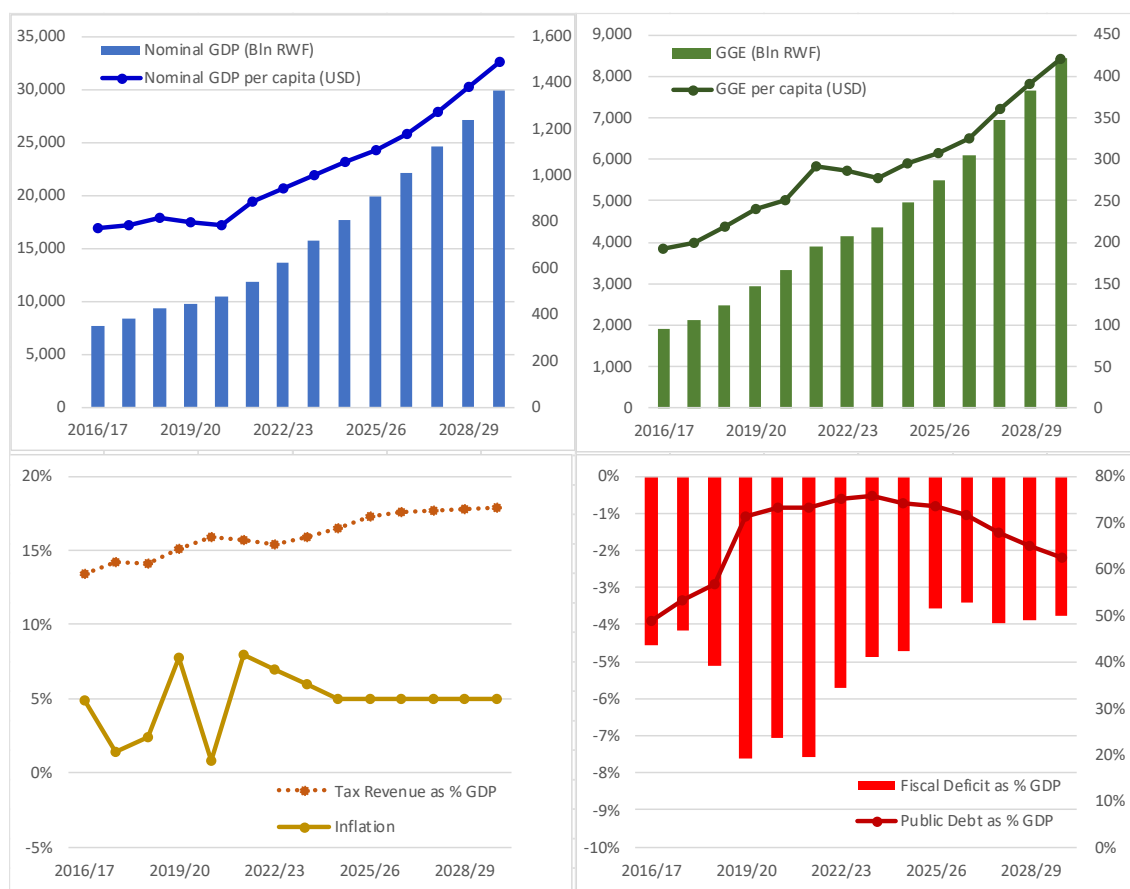
The four charts in Figure 1 show that Rwanda has weathered the storm relatively well through the external shock of the COVID-19 pandemic, and the economy may be rebounding – nominal growth estimated to have risen to 13.1% in 2021/22 from 4.6% and 7.1% in 2019/20 and 2020/21, respectively. The main indicators provide a base line for projections (GDP growth, tax to GDP ratio, historic government expenditure and fiscal deficit). Using these trends, we make assumptions and over the time period up to 2030 the following can be said:

- Nominal GDP growth could average 12% a year up to 2030, leading to a movement from low to lower-middle income status by 2025/26.
- Despite a dip in growth in 2019/20 the government managed to raise GGE per person and is expected to continue to do so over the medium to longer term.
- Tax revenue growth slowed but remained upward over the COVID-19 period. Continuation of the upward trajectory in terms of the tax to GDP ratio is expected over the next eight years.
- However, inflation has been erratic (although averaging around 4% over the past few years) and expected to be high in the near term (8% in 2021/22 and 7% in 2022/23). This will need to be contained to ensure the nominal growth and tax revenues can be invested to lead to real improvements in livelihoods.
- Moreover, the government has a larger fiscal deficit and debt burden to contend with than prior to the pandemic¹⁸. The fiscal deficit rose to above 7% in 2019/20 and has remained so up to 2021/22, this is from levels of around 4.5% previously. The fiscal projections call for a gradual reduction to less than 4% by 2025/26. The debt situation is similar with a reduction in debt to GDP ratio to 57% by 2018/19, now reaching 73%. This is expected to peak in 2023/24 at 76% before declining to around 63% by 2030.

The extra debt will be a burden on the budget, reducing the available expenditures for social sectors due to a need to pay off interest payments. IMF projections show interest payments will account for 7% of GGE on average each year (from 2020/21 to 2026/27)¹⁹.

¹⁸ This higher debt has been contracted on concessional terms and is sustainable.

¹⁹ IMF (2022c).

Figure 1: Macroeconomic and Fiscal Trends and Projections

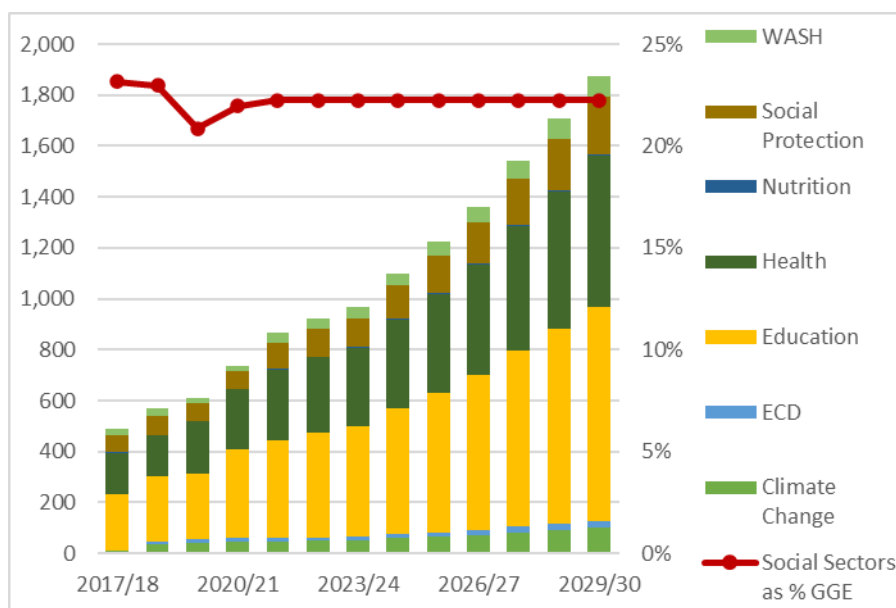
Source: Authors own based on IMF WEO and Article IV data.

3.2. Social Sector Spending: Available Expenditures

Based on the methodology set out in chapter 2 the level of expenditures for social sectors – historically and projections – are shown in Figure 2. This is for the full expenditures in each social sector.

The total spending for social sectors has grown from 490 billion RWF in 2017/18 to 734 billion RWF in 2020/21. Social sector spending as a proportion of GDP has also grown, from 5.9% to 7.0% over this period. However, as a share of GGE this has declined from 26.4% to 24.5% over this time period. This suggests that the rise in government spending has been primarily led by non-social sector spending.

Considering the spending per capita there has been a rise from 40,000 RWF in 2017/18 to 55,000 RWF in 2020/21 – equivalent to an increase from 46 to 55 USD per person. Full details for the past four years are set out in Annex B.

Figure 2: Social Sector Expenditures (Billion Rwf)

Source: Authors own based on MINECOFIN Budget Execution Data.

Figure 2 shows that education and health account for the majority of social sector spending at 45% and 32%, respectively. Allocations to the social protection sector accounts for 12%; climate change 5%; WASH 4.5%; ECD 1.5%; and nutrition 0.3%. However some budget for nutrition also falls within ECD interventions.

Over the longer term, the share of GGE allocated to social sectors remains stable at the four-year average of 22.2%. This provides us with a business-as-usual scenario for the level of available public expenditures for social sectors. However, this does not account for the significant rise in government funding to finance the rise in teacher salaries in the education sector²⁰. This took place in a Cabinet meeting on 22nd July 2022 with no prior announcement in the budget negotiation process. It is not known at this stage how much this will increase the education budget.

3.3. Costing: Resource Needs

The costs come from the methodology chapter section 2.3 where the resource needs for achieving NST-1 and SDGs were calculated. This is for the full resource needs in each social sector.

The sum of these estimations is a total cost for social sectors of 24.5% of GDP per year, and 85% of GGE, i.e. the budget would have to almost double to pay for this. This equates to 44,700 billion RWF (38.1 billion USD) in total, or 4,970 billion RWF (4.2 billion USD) a year from 2021/22 to 2029/30. Full details are within Annex C.

²⁰ MOE (2022). The rise in salaries vary depending on teacher qualification from 40% to 88% of net starting salary. It is expected to be implemented from August 2022.

However, the NST-1 states that the public sector will be accountable for 59% of all investments, and the remaining 41% is to be financed through private sector resources. In this case the public sector costs are 14% of GDP, and 50% of GGE, on average each year. 26,400 billion RWF (23 billion USD) in total, or 2,930 billion RWF (2.5 billion USD) a year on average from 2021/22 to 2029/30.

4. Social Sector FSA

This chapter brings together the projections for available public social sector expenditures and public resource needs. It compares and provides a business as usual, or baseline, financing gap. This is for all social sector expenditures.

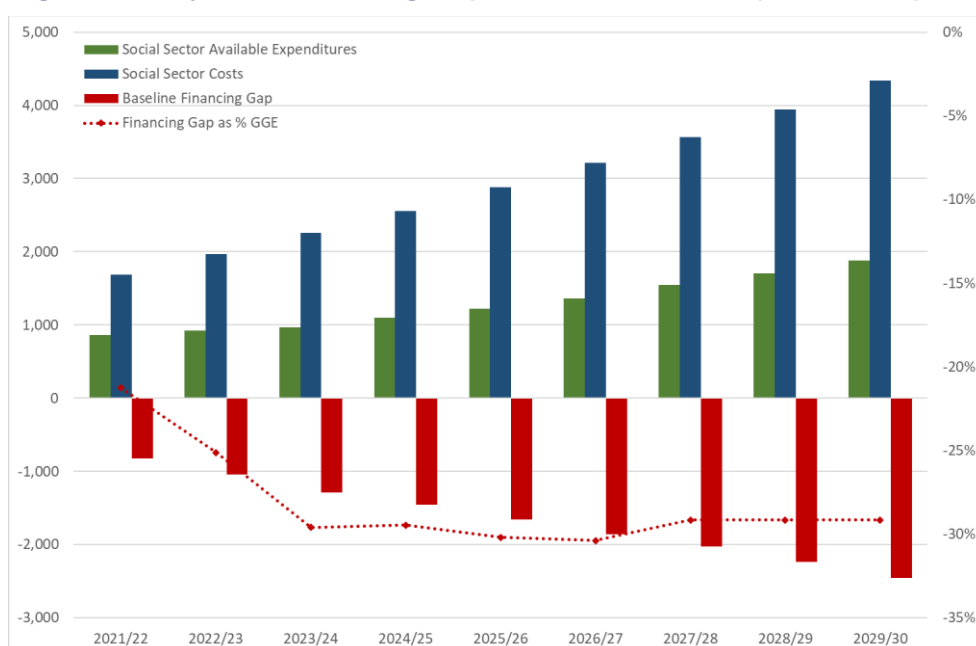
After this first scenario, financing options will be considered, thereafter a second scenario will be presented to see if there can be enough fiscal space to close the financing gap.

4.1. Business as Usual Scenario

Using the projections for available expenditures and resource needs presented above gives us the baseline scenario shown in Figure 3. For all seven social sectors together, the key points are as follows:

- The financing gap rises from 830 billion RWF in 2021/22, to 2,460 billion RWF in 2029/30.
- This equates to an average of 28% of GGE and 8% of GDP each year.
- To reach NST-1 and SDGs the government needs to spend over 100,000 RWF (90 USD) per person more each year on social sector services.

Figure 3: Projected Financing Gap for Social Sectors (Billion Rwf)



Source: Authors'.

This suggests that if the recent level of investment in social services – around 22.2% of GGE – continues over the medium to longer term **there will be a widening financing gap over time**. This infers that it will be more difficult to reach the NST-1 social transformation targets and SDGs as this underinvestment continues.

4.2. Financing Options

For the government to reach the national and international social sector goals there needs to be a greater level of investment in social sectors than is the current norm. The INFF report considers a multitude of financing options in great detail. At this point this work concentrated on the areas requested within the TORs. These focus on public sector initiatives as opposed to private sector ones – and this links to the costing that is linked to public sector share of costs. The areas for financing options are as follows:

- **Domestic resource mobilisation and allocation** - Considering domestic taxation reforms for the general budget, and budget reallocation towards social sectors²¹.
- **Improving efficiency** – Includes improvements to planning, prioritisation, a focus on value for money, and reducing waste, in addition to cross-cutting savings from simultaneous multi-sector investments.
- **External funding** - Debt refinancing / relief, and Official Development Assistance (ODA).
- **Innovative funding / blended finance** – PPPs, green or climate bonds, and SIBs.

4.2.1. Domestic Resource Mobilisation and Allocation

Rwanda has invested heavily in its tax authority over the past 20 years. It has successfully raised its tax to GDP ratio from 10% to 15.5% - a consistent growth of around 0.3 percentage points a year²². Currently Rwanda has a Medium-Term Revenue Strategy (MTRS) covering 2021/22 to 2023/24. This aims to continue the steady growth to reach 21.5% by 2035 and 34% by 2050 (aligned with upper-middle- and high-income country tax to GDP ratios)²³. This will require the tax to GDP ratio to grow even faster at 0.4 percentage points a year from now until 2035. The MTRS aims to achieve this by broadening the tax base, improving compliance, reducing evasion and reducing tax rates – See Box 1 for more details²⁴.

The INFF report carried out analysis around the tax system and identified that there were some inefficiencies around tax collection particularly in light of the number of tax exemptions provided. The report cites VAT as an example where the collection is estimated to be only 30% of its potential. However, this is problematic as VAT is a more regressive tax than others. Therefore, more examination of these ideas for raising domestic revenues through taxation needs to be undertaken. Considering what is technically possible is important, however in addition the political feasibility elements as well as the social-economic impacts needs to be addressed. If the aim is to invest more in social sectors but the taxes are doing more to harm vulnerable populations than any

²¹ Note: When interviewed MINECOFIN explicitly said they would not consider earmarked / hypothecated taxes.

²² IMF data.

²³ Cited in MINECOFIN (2022).

²⁴ Ibid.

cash transfers are providing assistance, then the net impact will be negative. There also needs to be an assessment of the knock-on effect to economic growth – raising VAT could reduce consumer demand as prices rise for example. This is also important when considering taxing existing and nascent industries more (agriculture, real estate, and ICT are mentioned).

Box 1: Overview of the Medium-Term Revenue Strategy

The MTRS covers the fiscal years 2021/22 to 2023/24 and aims to raise the tax to GDP ratio by 1 percentage point between July 2021 and June 2024. This will be done via two main measures:

- 1) **Administrative reform** – Greater tax revenues are expected primarily from compliance improvement. Additionally, from improvements in valuation and classification at customs as well as reassessing the VAT rebate scheme to move informal businesses to the formal taxable sector.
- 2) **Policy reform** – Increased tax revenues from excise duty reforms in the main as well as Corporate Income Tax (CIT) reforms. Specifically, excise on alcohol and sugar will be considered as they link to negative health impacts. For CIT lowering the rate whilst broadening the base is the plan, as well as some incentives to increase investment.

There is a focus on human development, social sectors, and equality too, for example:

- **To improve progressivity** of the tax system the plans include altering the PAYE rate structure to ensure that those earning higher incomes make a greater contribution.
- **To support subsistence farmers** and provide support to agriculture and livestock production VAT exemptions will be maintained in these sectors.
- **To bolster access to affordable housing** zero-rating VAT will be applied to construction of new low-income household homes.
- **To reduce pollution** there is consideration of increasing excise tax on most polluting vehicles.

Source: MINECOFIN (2021b)

As Rwanda will move into middle income territory in the medium term it is well placed to increase its tax to GDP ratio through various measures – whether that be new tax measures or improving efficiency and compliance. Therefore, as the INFF suggests a deeper analysis of these taxation ideas should be undertaken by experts with a wholistic view of the economy and poverty reduction elements.

The near term rebound in tax revenues suggests a growth rate of 0.5 percentage points a year from 2022/23 to 2025/26. However, within the baseline / business as usual scenario this rebound falls back to 0.1 percentage points per year. Given the past capacity to raise the ratio and assuming an emphasis on reforms, this scenario will raise the 2026/27 to 2029/30 projections to the MTRS goals with a slight reduction – 0.3 percentage points a year as opposed to the ambitious 0.4 percentage points growth a year. This is more in line with past achievements and capabilities in Rwanda. It also suggests that if there is more emphasis on tax reforms more could be accomplished. As such it is a cautious estimate for the tax to GDP growth over time.

The government has a choice as to what to do with these extra funds: 1) pay off more fiscal deficit keeping expenditures as business-as-usual plans, or 2) increase expenditures whilst keeping the fiscal deficit as per business-as-usual plans.

Within this scenario of increased tax revenues this analysis raises the budget allocation towards social sectors. Budget reallocation is the simplest, largest, and most sustainable method of raising fiscal space by increasing the share of the total budget going to social sectors. However, in Rwanda this will not be the simplest task to undertake given the current climate of investing in non-social sector needs such as urbanization and MICE (Meetings, Incentives, Conferences and Exhibitions). It is worth noting that the reallocation of budget towards social policies doesn't necessarily mean a one-off reallocation of the budget for social policies – which would mean a 28% reallocation given the size of the financing gap. It is understood that budgets need time to be planned given medium term development goals, as well as sectors needing time to ensure they can effectively absorb the additional funding.

Therefore, a budget allocation increase has been imputed into a second scenario which raises the funding going to social sectors incrementally over a number of years. This has been set as an additional 0.5 percentage points of GGE each year.

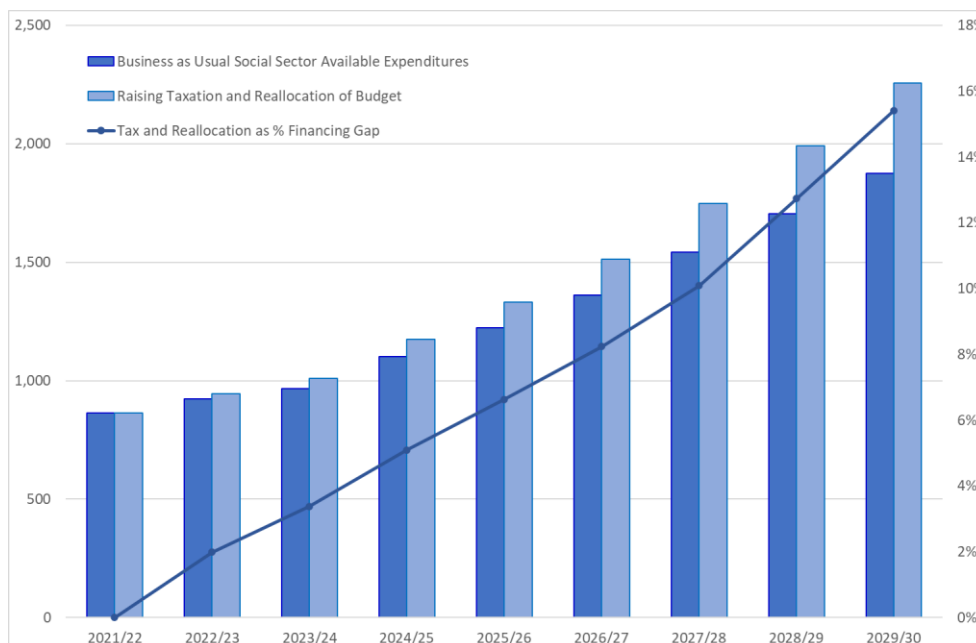
The results of the tax increase and reallocation are set out in Figure 4. This shows that with a focus on increased domestic tax revenues and a small annual reallocation done consistently over time can provide an additional 1,270 billion RWF over the next eight years. It could close the financing gap by 15% by 2030, however, throughout the time period this is only closing the gap by 8% on average.

The extent to which this is realistic is limited. Interviews with the Tax Unit in MINECOFIN brought about agreement that although ambitious it is within the realms of what Rwanda plans to achieve and so it is aligned with MTRS over the longer term. However, if there was additional fiscal space through taxation measures the government would probably spread this around according to wider priorities and possibly social sectors would only receive a share proportional to their current budget allocation. This would be 22.2% of the 0.5 percentage points of tax to GGE each year – 0.1 percentage points. So, a fifth of what is shown here. Indeed, an interviewee mentioned that with the upcoming election investments around electrification, roads, and social protection may be the priority rather than social sectors in general²⁵.

This slow building of available resources through budget reallocation is necessary to ensure fiscal stability. Although it provides the best long-term sustainability for financing for social sectors, it is clear that it is not bringing sufficient money fast enough to these sectors to be able to implement policies needed in the short term. The achievement of social sector SDGs will need more front-loaded funding if successes are to be built in the short to medium term.

²⁵ Interview with BRD.

Figure 4: Raising Taxation and Reallocation of Budget to Social Sectors (Billion RWF and as % Financing Gap)



Source: Authors'.

Given the current fiscal consolidation to reduce the deficit and debt levels, prioritisation is crucial in budget allocation given the competition for more funding across all sectors. **Therefore, an evidence-based advocacy plan will be necessary to convince MINECOFIN to increase budget allocation to social sectors.** Strong M&E is needed to show impact of policies and continued improvement in achieving targets.

In terms of taxation, the MTRS aims to reduce exemptions. Social sectors benefit a lot from tax exemptions – see Box 2. A recommendation to the social sectors is to ensure they do not lose these tax exemptions. Tax specialists are considering simplification, inequality, and efficiency. Therefore, it will be important to be able to prove that the benefits of the exemptions are greater than the costs to the sector / beneficiary and the multiplier effects of the taxation. Impact analysis on these areas is required.

Box 2: Social Sector Tax Exemptions

Some examples of current tax exemptions benefitting the social sectors:

Climate Change – Policy exemption on electric vehicles new this year, all batteries and charging, solar panels exempt, any renewable energy exempt.

Education – VAT exemptions on books, computers, etc. and TVET tax free supplies for mechanics for example.

Health – Input and output goods and services mostly exempt. Zero duty and zero VAT on medicines, goods for hospitals, etc.

Nutrition – Africa Improved Foods (AIF) World Food Programme special status, no taxes.

WASH – Provision of water has a VAT exemption, but not for construction. Tax paid on construction of public constructs, but ODA funds are zero-rated (can claim back).

Source: Interview with Tax Unit, MINECOFIN.

4.2.2. Efficiency

Simply defined, inefficiency refers to a failure to fully exploit available resources. At its most basic level, efficiency gains can be thought of as achieving one of two things:

- Better outcomes for the same level of investment; or
- The same outcomes at a reduced level of investment.

The gains that are to be made by improving efficiency are those that would result from closing the gap between coverage levels and outcomes that are currently achieved and those that could potentially be achieved with the same resources were they to be used more efficiently. Thus, what is important for efficiency is not simply the cutting of costs but increasing the impact of spending and improving the efficiency with which funds are spent. The emphasis, therefore, is fundamentally on value for money, i.e. containing or reducing costs without reducing outcomes or, better yet, achieving better outcomes for the same level of investment. Efficiency, therefore, includes a measure of both the quality and the quantity of outputs (i.e. outcomes or services) for a given level of input (i.e. cost).

In this way, while inefficiency is traditionally thought of as involving excessive spending it may, counterintuitively, result from insufficient spending. For example, low salaries for public sector workers can result in these workers supplementing their income with second jobs during the hours of their primary employment, detrimentally affecting the quality of care delivered by the public system. Another example from Rwanda itself relates to the way in which WASH allocates funds within its budget. The concentration of spending on capital and operational expenditures are highly correlated with ‘non-functionality’ water (such as leakages) and ‘non-revenue’ water (not billing for use)²⁶. These inefficiencies are growing because insufficient funds are allocated to support functions such as maintenance (fixing leakages) and staffing (collecting fees). This highlights the importance of knowing how different ongoing needs must be adequately financed if new investments are made. If these functions are not funded, it leads to inefficiencies in the system.

A further component to efficiency is those gains to be derived from improving the global architecture. Development Partners (DPs) can reduce the fragmented way that their funds are delivered and that countries are asked to report on their use. DPs could also reduce duplication. Rwanda has a relatively well coordinated DP sector, however, the monitoring of their performance shows that in 2019/20 most of their targets were not met²⁷. This suggests there is room for improvement in management and efficiency of ODA.

²⁶ MININFRA (2022). The report also estimates that non-revenue water is rising and is currently at 56%.

²⁷ MINECOFIN (2021a) – see table 17 for DPAF Aggregate Scores.

A limitation with this type of solution is that it is heavily dependent on data. Data on how efficient a system currently is compared to how efficient it could be, and then how do you move along the trajectory to become more efficient. However, there are some top level 'knowns' from international literature that can start off a discussion on this.

4.2.3. Efficiencies in Education and Health

There is little social sector-specific empirical data available which transforms assumptions about efficiencies into financial figures. However, there is some international evidence for education and health.

The methodology used to estimate inefficiency is based on international comparative performance (see Annex D for more details)²⁸. In short, this method measures the performance of a country's health and education systems against the most efficient systems, globally. The results of this analysis show that Rwanda is relatively efficient in terms of its inputs into education (ninth out of 88 countries surveyed), but less so for health (with bottom half of surveyed countries) as compared to other countries:

- **Primary education** received an efficiency input score of only 59%, this means that inputs into primary education could be reduced by 41% "without a marked reduction in the output".
- **For health**, an efficiency input score of 63% was found. This implies that inputs into health could be reduced by 37% "without a marked reduction in the output". This tallies with the finding of the World Health Organisation (WHO) that suggests between 20 and 40% of all health sector resources are wasted²⁹.

The efficiency scores for outputs were relatively high, at around 90%, meaning a need to improve by 10% only. Therefore, we will concentrate on the substantial gains that could be made in inputs. These input scores have been converted into a monetary value. This will show how much the government could 'save' if it focused on making health and education inputs more efficient. The assumptions are that for health and primary education Rwanda can move to 100% efficiency by 2030. This is an ambitious aim and as such, the projections here are a maximum value possible.

At this point we do not have the explicit costs for health and education to reduce by these amounts. Therefore, we take the average of these and put into the wider social sector context which is discussed below.

4.2.4. Efficiencies in reaching SDGs

The costs to reach social sector targets in NST-1 and the SDGs are large. However, there is an argument for the reduction of costs due to the intersectoral relationships within

²⁸ Kapsoli and Teodoru (2017).

²⁹ WHO (2010).

social sectors. This analysis has an overarching assumption that to achieve each social target will not be accomplished if done in isolation. Working holistically throughout all the social sectors will be required if Rwanda is to achieve its NST-1 aims and SDGs. One reason for this is that the base level of social services is low in Rwanda. To achieve certain goals will need much investment and change over a wide range of elements not just one service area.

Additionally, a recent analysis has assessed how each different SDG can impact another³⁰. The approach works on the basis that the SDGs are interconnected: “*Actions to drive progress towards one target can influence progress towards many others*”³¹. They also warn that “*unmanaged negative interactions can slow or even undo progress*”³². In other words, SDGs have cross cutting impacts, some cannot be achieved without investment in different areas. This equally applied to NST-1 social transformation pillars. For example:

- Can’t lower U5MR / MMR without training midwives, doctors, nurses.
- Can’t meet health SDGs without WASH and nutrition investments.

Bearing this overarching assumption in mind the costs that are set out in this analysis are costs for sector-wide needs, not only the individual NST-1 targets / SDGs. These costs are set to achieve international norms for each sector. For example: Universal Health Coverage, Universal Basic Education, Universal Access to Basic WASH Infrastructure, etc. This is along the lines of existing research by Sustainable Development Solutions Network under Jeffrey Sachs et al³³.

The practical implication of this is that Rwanda needs to invest holistically in social services to gain maximum benefit and to achieve specific social sector targets. Importantly, this will require the government to work tirelessly on improving coordination to improve effectiveness of interlinkages between sectors.

One qualification to this analysis is that no level of financing is going to automatically lead to reaching these targets. This analysis needs strong evidence-based policy behind any rise in expenditure. This evidence must be focused on improving access for all and quality of services. Most of the findings refer to ensuring access only, whilst quality is more difficult to quantify. Determining the right policy interventions and where to spend additional budget requires in-depth assessments, and evidence from implementation. Whilst it is not known exactly how much could be achieved through improving efficiencies there are some findings that show that efficiencies can be found when working holistically working to achieve SDGs. The recent work on this state that there are almost 30,000 possible interactions between the targets – see [Box 3](#)³⁴.

³⁰ Weitz et al (2019).

³¹ Ibid, page 1.

³² Ibid, page 1.

³³ Sustainable Development Solutions Network (2019).

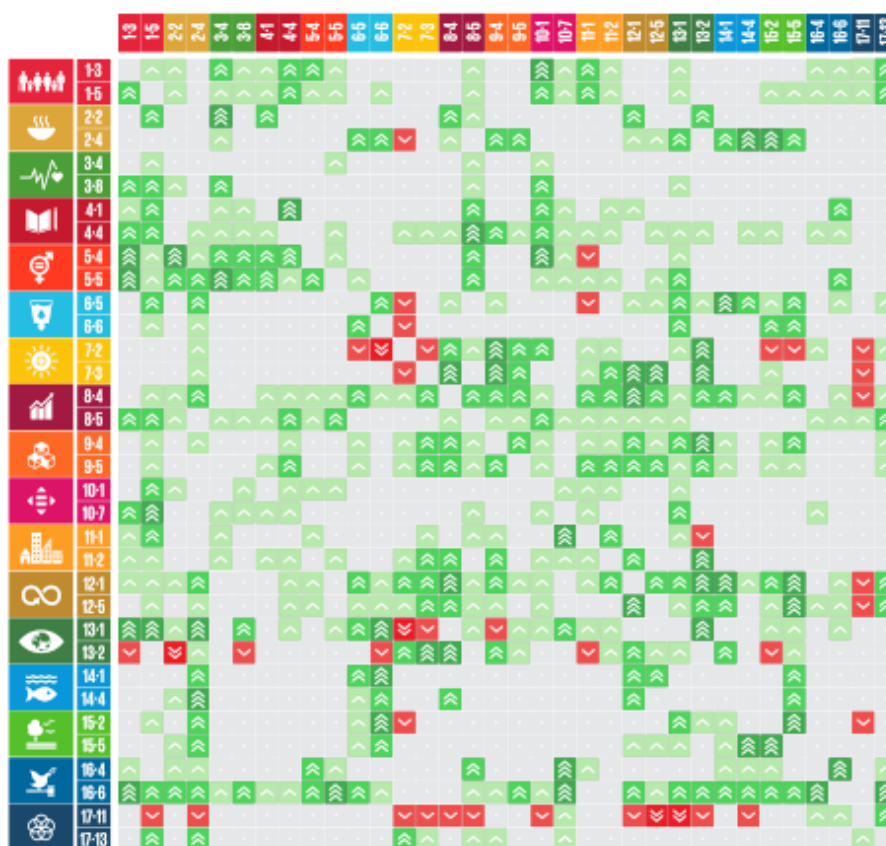
³⁴ Weitz et al (2019).

Box 3: SDG Target Interactions

The picture below sets out a sub-set of SDG target interactions.

Key: Green indicates positive interactions, red negative interactions, with shading and chevrons indicating the score. Interaction scores relate to the impact of progress towards the target listed on the left on progress towards the target listed along the top. For example:

- Raising the 'proportion of population covered by social protection floors/systems' (Target 1.3) would promote progress towards 'achieving UHC' (Target 3.8). But progress towards 'achieving UHC' (Target 3.8) would have a stronger positive effect on Target 1.3.
- Working to raise the 'number of youth and adults who have relevant skills' (Target 4.4) has a strong knock-on effect towards raising the 'income growth of the bottom 40% of the population' (Target 10.1), but the reverse is a weaker relationship.



Source: Weitz et al (2019).

This can easily be replicated for the social sectors in Rwanda. However, it needs much analysis and coordinated policy discussion to identify the specific interactions in Rwanda. And, essentially, synchronized implementation is required for success. If done well it can result in a cost-effective method of achieving social sector targets in NST-1 and the SDGs.

Whilst it is not possible to accurately estimate the monetary value of these potential efficiencies, it would not be overly ambitious to think that **at least a quarter of all costs could be reduced when working towards the social sector targets in this holistic way.**

Why a quarter? – We’ve seen that the evidence for education and health suggests somewhere around 40% can be reduced and these two sectors account for the majority of social spending. If realised this would result in a 11% reduction in the overall financing gap. It is not unrealistic to assume that other sectors could see inefficiencies. However, we will take a smaller share than the 40% given that there will be many challenges to identify inefficiencies and design and implement appropriate policies to overcome these.

The projection results are set out in Figure 5 **Error! Reference source not found.**, this implies that each year the government makes efforts to analyse, identify, and overcome inefficiencies. Using this aim of reducing inefficiencies in all sectors by 25% over the next ten years could reduce costs by over 600 billion RWF a year over the time period. This would increase slowly. It would take time to undertake analysis to identify and consider ways in which to overcome inefficiencies. Some gains may be made in 2022/23, and if efforts continued the potential savings would rise as more inefficiencies are resolved. If achieved these endeavors could close the financing gap by 30% each year on average.

Figure 5: Potential Efficiency Gains for Social Sectors (Billion RWF and as % Financing Gap)



Source: Authors’.

Findings from key informant interviews and secondary data show that fiscal space can be gained in social sectors becoming more efficient in their targeting methods and by reducing costs, etc. However, this must be done in an evidence-based systematic way to ensure that output and outcomes are not harmed. This will require much analytical work and research before new plans can be implemented.

However, as was seen in the budget reallocation, efficiencies will take time to implement. These two domestic financing sources have little impact in the near-term. This is crucial as financing needs to flow to begin analysis, planning, and implementing policies that can have strong impacts on social services and achieving goals.

From interviews there seemed to be little comprehension around the meaning of efficiencies and improving effectiveness of policies. For example, when asked most sectors responded with the fact that their execution rates were high. Those who did comprehend the complexity of the task at hand were concerned that there was not the M&E and data to be able to focus and implement efficiency measures well. A soon to be published Public Expenditure Review (PER) by the World Bank will state that efficiency gains are possible, but this will need to be done in conjunction with increased budget³⁵. Some examples were provided around where efficiencies are being made currently and where more can be done, see Box 4.

One possible solution for the sectors is to have a formal budgetary agreement with MINECOFIN that if the sector improves its efficiency, they will gain greater budget allocation. Ministries of Finance are often more inclined to increase budgets to sectors that can prove their efficient use of public funds. This would require deep dive analysis of inefficiencies within the system, a credible plan to tackle inefficiencies over time, and then to link this performance with annual budget allocation. A description is set out in Annex E.

Finally, it is important to note that there are general inefficiencies within the PFM system that can impede effective implementation of social services. For example: the Public Investment Committee (PIC) project selection could be improved. There is not a standardized or effective selection criteria, and so best, (most growth-enhancing, socially beneficial, or urgently needed) projects are not necessarily selected³⁶. Moreover, there are weaknesses in the procurement cycle where there is limited capacity in contract management especially³⁷. Here government loses money on construction contracts, electricity tariff contracts, and water too. This seems pervasive throughout government agencies, ministries, and at decentralized levels³⁸.

³⁵ Interview with World Bank staff working on the upcoming PER.

³⁶ World Bank currently carrying out a Public Investment Management Assessment (PIMA) which should provide more information.

³⁷ Ibid.

³⁸ From interviews with Government staff and Development Partners.

Box 4: Thoughts from Stakeholders on Efficiency in Social Sectors

Considerations of current efficiency measures in the social sectors:

ECD – Using home-based and community-based ECD centres where official ECD centres are not available.

Education – Focusing on two key areas of failed performance: 1) Investing in training teachers to improve the qualified teacher to pupil ratios, employing 200 new teachers from Zimbabwe, and raising teacher salaries, and 2) Investigating reasons for dropout rates to come up with a practical evidence-based solution.

Health – Recent reconstruction of the Community Based Health Insurance (CBHI) scheme has focused on making it more efficient and more sustainable. The management has been moved to the Rwanda Social Security Board (RSSB). It is planned to have capitation payments introduced by end of 2022 with the aim to move the budget risk to health facilities rather than the insurance scheme. Changes are expected to reduce inefficiency such as providing direct cash flow to facilities and overcome delays in payments from central insurance body.

Nutrition – NCDA mainstreaming nutrition as a form of efficiency as it mitigates duplication of efforts across multiple sectors. Also, NCDA is focusing on high-impact interventions including implementing new M&E (although not formalised the cross-sectoral collaboration and mainstreaming is expected to help build towards more evaluation and impact assessments).

WASH – Ministry of Infrastructure's (MININFRA) focus on efficiency is PPP. Thinking is that WASH needs to retain government to ensure affordability but use private sector to reduce costs. For example, Kigali Water Ltd working with government on a water treatment plant. The Sustainable WASH Financing Strategy (MININFRA 2022) recommends improving billing compliance and asset management to reduce inefficiencies around non-revenue water, and non-functionality water, respectively.

Social Protection – An increase in technology can improve efficiency. For example, mobile money pilot in Rwanda, should scale up and involves the private sector. However, a significant problem is the current fragmentation of the sector across multiple agencies and programmes as opposed to an individual life cycle approach. This would streamline beneficiaries over time and would reduce operational costs, and avoid duplication, by merging programmes and integrating schemes in one agency. A social protection system that is more coherent and coordinated will contribute to quicker poverty reduction. There has been discussion around harmonising transfer values of the support schemes. The current situation requires improvements in tracking beneficiaries and harmonising databases could lead to identifying and classifying beneficiaries in a way to allow for spending funding more efficiently. Currently there are different ways in which funds are spent on social protection, it is decentralised with no coherent reporting / recording.

Source: Various interviews.

4.2.5. External Funding: Debt Rescheduling and ODA

Rwanda gains external financing through a variety of channels. Here we consider debt and Official Development Assistance (ODA).

Rwanda has an increased debt burden as compared to pre-pandemic levels. Whilst this is manageable and assigned a risk classification 'sustainable' with a 'moderate' risk of

debt distress by the IMF the general fiscal plan is to reduce this over time³⁹. Therefore, it would not be a place to argue for increased borrowing to fund social sector spending.

However, Rwanda has benefitted from some debt-service relief initiatives born out of the COVID-19⁴⁰:

- **The IMF's Catastrophe Containment and Relief Trust (CCRT)** provides grants for debt relief for the poorest and most vulnerable countries hit by catastrophic natural disasters or public health disasters⁴¹. CCRT has provided 35 billion RWF in 2020/21 and 32 billion RWF for 2021/22. Equivalent to an additional 1.4% and 1.1% of revenues, respectively.
- **The IMF's issuance of Special Drawing Rights (SDR)** international reserve asset, created by the IMF in 1969 to supplement its member countries' official reserves⁴². Rwanda received their share in August 2021, Rwanda's share being 219 million USD, equivalent to 1.9% of GDP⁴³. It is expected to be used for budget financing, much of which is focused on social protection and social sector investment projects. Spending on projects financed by SDRs is projected at 156 billion RWF in 2021/22, 4.1% of expenditure.

There are other initiatives that could open up fiscal space for Rwanda. For example, the World Banks' **Debt Service Suspension Initiative (DSSI)** was also offered where bilateral official creditors are, during a limited period, suspending debt service payments from the poorest countries (73 low- and lower middle-income countries) that request the suspension⁴⁴. Rwanda is not part of this initiative⁴⁵. In an interview, the Macro Unit at MINECOFIN stated that Rwanda did not join because only a limited value was applicable, and ratings agencies would view this as a default and so this would have a negative impact on ratings. Therefore, more sensible to pay the interest because if they don't then this would increase cost of debt, and new debt would be more expensive in future.

However, there is an argument that these initiatives do not go far enough. A recent study looking into the impact of various debt relief initiatives found that none of those currently on offer provide significant relief post-COVID, i.e. the amount of debt relief on offer equates to a very insignificant proportion of the debt⁴⁶. The study further examines the effectiveness of a more HIPC-style / MDRI debt relief and found that this resulted in the best longer term financing options for health and HIV, and *"achieving SDG 3.3 along with*

³⁹ IMF (2022c).

⁴⁰ IMF (2022a).

⁴¹ IMF (2021c).

⁴² IMF (2021d). This most recent allocation was to address the long-term global need for reserves, and help countries cope with the impact of the COVID-19 pandemic.

⁴³ IMF (2022a).

⁴⁴ [https://www.imf.org/en/About/FAQ/sovereign-debt#:~:text=to%20the%20IMF%3F-,What%20does%20the%20Debt%20Service%20Suspension%20Initiative%20\(DSSI\)%20mean%3F,countries%20that%20request%20the%20suspension.](https://www.imf.org/en/About/FAQ/sovereign-debt#:~:text=to%20the%20IMF%3F-,What%20does%20the%20Debt%20Service%20Suspension%20Initiative%20(DSSI)%20mean%3F,countries%20that%20request%20the%20suspension.)

⁴⁵ "Rwanda is eligible for the DSSI but decided not to participate" <http://www.sais-cari.org/debt-relief>.

⁴⁶ Izazola-Licea et al (forthcoming).

*a host of other targets within the SDG framework*⁴⁷. It concludes that “*Policymakers must come together to consider options that stray beyond current thinking; more radical and drastic options need to be considered, even beyond the HIPC Initiative ... current dialogue around debt relief barely scratches the surface of what is needed to safeguard health and HIV outcomes in most of the African countries studied*”⁴⁸.

As mentioned in chapter 3, interest payments will account for 7% of GGE each year over the medium term⁴⁹. This is 7% of public funding that could be used for social services delivery if these payments can be rescheduled, reduced, or consolidated in some way. Whilst not all of the debt stock would be eligible for debt relief, we could make the estimate of 2% relief based on the growth of the debt stock over the COVID period (from 57% to 73% debt to GDP ratio). This 2% of GGE will be reallocated from interest payments to social sector spending – see Figure 6.

Multilateral and bilateral talks on debt can be linked with social sector needs and international goals around SDGs. Linking the reallocation of debt relief may be possible – as per the previous HIPC / MDRI.

On-budget external funding has remained relatively stable since 2016/17 and is expected to remain so up to 2030. Currently the average is 5% of GDP, accounting for 20% of government revenues, and paying for 18% of expenditures. Much of the external aid funding is focused on social sector development in Rwanda, as driven by the NST-1 agenda. However, the INFF states that increasingly Official Development Assistance (ODA) is being channelled through the private sector rather than the government⁵⁰. Whether this funding is on or off budget, ensuring that new ODA is aligned with national priorities is crucial for these funds to be used effectively to reach government goals.

Over the longer-term reductions in ODA can be expected (as can eligibility for debt relief). As Rwanda gains middle income status (possibly by 2025/26) some bilateral institutions will place priority on low income and especially fragile states. This fact should provide an incentive for Rwanda to push for a greater advocacy agenda to gain greater commitments from DPs in the near term. One new area of funding that will remain open is climate finance and a diaspora fund (as discussed in the INFF report).

Given this environment there may be limited longer term external financing options that are grant-based as Rwanda transitions to a lower middle-income country. As such the projections associated with this and debt are cautious. Along with the 2% of GGE reallocated from interest payments, we have added 0.5% of GDP from other ODA sources. Projections in the baseline remain at 4% of GDP a year, Rwanda will become a middle-income country (and this rate is higher than the average middle-income ODA received), and climate finance can cover climate change sector but there needs only account for 2.5% of GDP (5% of all social sector spending). This rise would not take

⁴⁷ Ibid.

⁴⁸ Ibid.

⁴⁹ Ibid.

⁵⁰ MINECOFIN (2022).

place until 2024/25 as the external funds for 2022/23 and 2023/24 are already higher than average and will have been negotiated and committed already.

Findings are set out in Figure 6 where these assumptions suggest that with some stronger advocacy on debt relief and increased ODA support Rwanda could gain 300 billion RWF per year. This would close the gap by 17% a year on average.

Figure 6: Potential External Support for Social Sectors (Billion RWF and as % Financing Gap)



Source: Authors'.

The extent to which this is realistic is limited. If there was additional fiscal space through ODA and debt relief it would most likely be distributed according to wider priorities and possibly social sectors would only receive a share proportional to their current budget allocation. This would be 22.2% of the 2% of GGE from debt relief and 22.2% of the 0.5% GDP from ODA each year, (a fifth of what is shown here).

COVID-19 did produce a surge in ODA for social sectors – especially health, social protection, and education⁵¹. However, from interviews, the outlook from key donors is to reduce funds to the social sectors which is a problem for these donor-dependant sectors. Indeed, data shows that prior to COVID-19 ODA to health and social protection were declining from 2015/16 to 2019/20, whilst education and WASH rose⁵². Moreover, development partners are moving away from grants and budget support – in 2015/16 grants accounted for 66% of ODA, in 2019/20 this was down to 42%⁵³. Some examples

⁵¹ Interview with EFU MINECOFIN.

⁵² MINECOFIN (2021).

⁵³ Ibid.

from interviews are set out in Box 5. This shows the variety of experiences across the sectors and development partners.

Box 5: Varying Prospects for ODA in the Near Term

European Union (EU) – Reduced levels of funding over time and moving away from budget support / grants. This includes *climate change*, *health*, and *vaccinations*.

UK Foreign, Commonwealth and Development Office (FCDO) – Funding on plan and on budget but the global funding has reduced, and this has impacted the Rwandan allocation and so social sector programmes. FCDO provides support to *education*, *nutrition*, and *social protection*. Funding reduced by such a degree this year that the social protection programme had to be supplanted by the **Swedish International Development Cooperation Agency (SIDA)** to fill the financing gap otherwise the programme would not have been able to be continued.

World Bank – Supports *social protection*, *education*, and *health*, amongst other social sectors. Human Development sector will continue to be priority, but unsure whether budget support will be ongoing.

Health-specific development partners are expected to reduce their support and possible even remove themselves from the sector over the next 5 years. Institutions such as **Global Fund**, **Bill and Melinda Gates Foundation**, **USAID Centre for Disease Control**, and **PEPFAR**.

AfDB (concessional) loans and **Japanese** grants - Currently implemented large programmes in *WASH*. MININFRA report increases in DP funds.

Source: Various interviews.

Given the general projected trend for reduced ODA support but a variability of in sector-specific experience it would be useful for each sector to carry out a mapping exercise. Although the Rwandan government has a very strong Development Partner relationship and data sharing practices it will become increasingly important to have up to date information on next year or three-year allocations. This will help sectors identify upcoming financing gaps and be able to use this information to lobby MINECOFIN to plan for greater budget allocation in the near terms as ODA reduces. MINEDUC has instigated this type of mapping exercise within its sector working group⁵⁴. It will include international agencies as well as NGOs and civil society organisations. It will attempt to

⁵⁴ Interview with MINEDUC.

map financial support as well as in-kind support such as supply of training and learning materials.

4.2.6. Innovative Finance

Given that Rwanda is undergoing fiscal consolidation, meaning fewer public funds available for budget, both taxation growth and efficiency measures take time, and the country is moving towards middle income status and so less ODA will be available, stakeholders are considering new innovative ideas for social sector financing. These include blended finance options such as PPPs, SIBs, and green / climate bonds where there is a mix of investors - government, private sector, philanthropy, ODA, etc. These instruments have different costs and benefits and suit certain sectors and projects more than others. This section discusses some elements of best practice and limitations of these innovative funding mechanisms. Thereafter, it connects this with the view of Rwandan stakeholders around how they wish to use these financing mechanisms.

A Social Impact Bond (SIB) is “a contract with the public sector or governing authority, whereby it pays for better social outcomes in certain areas and passes on part of the savings achieved to investors. A social impact bond is not a bond, per se, since repayment and return on investment are contingent upon the achievement of desired social outcomes. If the objectives are not achieved, investors receive neither a return nor repayment of principal”.⁵⁵

Pros and Cons to SIBs⁵⁶:

- **Not necessarily a source of new finance but a way in which to use funding more efficiently** - The investor brings initial funding but the contractor (government, or DP) must repay the return on investment. Still using domestic or external finance.
- **Requires an adaptive decision-making environment with strong data** - Investor and service provider must have close performance management relationship.
- **Can be complex to set up** – Requires dual contract agreements on outcomes and returns.
- **How you achieve outcomes is not prescribed** – Only achieving the outcomes is important. Therefore, there is flexibility in delivery model.

Factors to make successful⁵⁷:

⁵⁵ <https://www.investopedia.com/terms/s/social-impact-bond.asp>

⁵⁶ This section draws from interview with Manager from Social Finance – experts in SIBs.

⁵⁷ Ibid. And see database of successful SIBs here: <https://golab.bsg.ox.ac.uk/knowledge-bank/case-studies/>, and <https://golab.bsg.ox.ac.uk/knowledge-bank/indigo/>.

- **Hard to reach areas or portions of the population, not general service delivery** – Providing a new alternative delivery for these areas or populations, SIBs provide a reduced risk environment to try out adaptive approached and innovate.
- **Appropriate level of uncertainty** - Scaling up proven interventions are not suited to SIBs, but neither is an untested theory. There is a middle ground of uncertainty that suits SIBs where there is evidence that something can work but still too risky for government to invest, and so use investors and risk their money.
- **Using social outcomes not infrastructure outcomes or PPP** - For example, 20% more girls retained in education.
- **Sectors most common / successful** - Trainings, education, ECD, sexual reproductive health.

Public Private Partnership (PPP) involves “*collaboration between a government agency and a private-sector company that can be used to finance, build, and operate projects*”.⁵⁸

Pros and Cons to PPPs⁵⁹:

- **Private sector can be more efficient** – This can be doing more with less but also the private sector can provide skills and ideas that can improve outcomes.
- **Can be useful to service niche markets** - For example, where public services are geographically inaccessible, unaffordable, or of poor quality, or in extreme cases where certain social groups are not eligible for social services.
- **However, there is some evidence that PPPs are actually more costly than traditional procurement methods** - Cross-country evidence shows health PPPs are more costly than traditional procurement methods, reduced quality, and very complex. An example from a high-income country is the UK where the House of Commons Treasury Committee report found that the cost of capital in such projects was twice what would have been incurred if the government had borrowed instead. The private finance had no clear evidence of savings or benefits to offset this higher cost. And the projects had lower quality builds with less flexible and more costly procurement procedures. The Committee recommended that these projects should be used as sparingly as possible.

Factors to make successful:

- **Government needs to ensure equal access, safety, and ensure trust** - Integrating the private sector successfully into social sectors requires much focus and effort from the government to ensure citizens can gain equal access, safety, and

⁵⁸ <https://www.investopedia.com/terms/p/public-private-partnerships.asp>

⁵⁹ Draws from OPM (2016).

are confident to uptake new private services. For example, can the population afford private services, is it regulated and safe, and can people trust in the providers?

- ***Private sector can bring large sums of money for infrastructure projects but needs strong contract management*** – Limited contractual management can be high risk and costly if they fail. For example, a new hospital and three filter clinics were built under a PPP agreement in Lesotho, signed in 2009. The 18-year contract also covers employment of health workers, after that time period the hospital and clinics become government owned. However, review of the PPP finds that the PPP has not improved the financial situation of hospital treatment or health outcomes⁶⁰.

A Climate or Green Bond is a “*type of fixed-income instrument that is specifically earmarked to raise money for climate and environmental projects*”.⁶¹ This can include renewable energy, sustainable resource use, conservation, clean transportation, clean water, and adaptation to climate change. It can be used for climate change but also WASH.

Pros and Cons to Climate / Green Bonds:

- ***Loan at lower rate than other debt, but government still needs to repay*** - Popular as easy to access (compared to climate carbon credit). However, the debt will add to the debt stock and require to be repaid over time.
- ***Must be earmarked for climate change investments / expenditures*** – Need detailed reports on the investment and the environmental nature of the projects being finance. This requires a planned pipeline of projects to invest in.
- ***Development of M&E and reporting framework*** – Key performance indicators required that demonstrate green impact.

Factors to make successful:

- ***Requires the impact of the bond to be greater than the cost of the debt*** – To be beneficial for the government need underpinning debt sustainability analysis and macroeconomic analysis to ensure the bond will be best use of funds over time.
- ***Requires strong legal framework*** – Lack of regulation and government guidelines can be impediments to green bonds.

Through the interviews with stakeholders here was general support and interest in these types of innovative financing mechanisms. In the main these were related to PPPs and climate / green bonds – see Box 6. Indeed, there has been much success in the area of green / climate bonds, with the Rwanda Green Fund having “*committed investments of*

⁶⁰ Oxford (2014).

⁶¹ <https://www.investopedia.com/terms/g/green-bond.asp>

just under USD 40 million to 35 projects. ... In total, the Fund has raised approximately USD 130 million for strategic climate resilience investments in Rwanda”⁶².

However, there was limited understanding of the challenges they may bring. For example, many stakeholders informed the team of the upcoming issuance of a green bond, but in reality, this is about 3 to 4 years away from Rwanda receiving the funding due to a lack of private sector pipeline of viable projects.⁶³ However, Rwanda has been identified as a country for priority in terms of climate change financing and authorities are implementing new regulations and requirements for this⁶⁴.

In general, Rwandan authorities will need to improve their contract management capacities and M&E to ensure any benefits arise from increased collaboration with the private sector and use of new innovative financing mechanisms. Moving towards greater engagement with the private sector in health should be taken cautiously. Clear goals, agreements, and strong oversight are essential.

⁶² <https://unfccc.int/climate-action/momentum-for-change/financing-for-climate-friendly-investment/rwanda-green-fund-fonerwa>

⁶³ Interview with CEO BRD.

⁶⁴ Interview with Macro, MINECOFIN.

Box 6: Sector Stakeholders Preferences and Ideas for Innovative Financing Mechanisms

Climate Change – FONERWA (National Fund for the Environment) and Ministry of Environment consider green bonds as having great potential to supply substantial funding. The Rwanda Green Fund has committed investments of just under USD 40 million to 35 projects.

ECD – May require private sector cooperation to build facilities for pre-primary needs. Currently there is ongoing private sector engagement for ECD services in industries such as tea, rice, mining, and services sectors. This has been in conjunction with UNICEF who have produced a business case for ECD in the tea sector and a guide for private companies to set up and run ECD services (UNICEF (2021b) and UNICEF (2022), respectively). The business case finds that there is a “*marked increase in productivity of workers who have access to employer-supported childcare*”. Moreover, this does not require much financial investment and can lead to quick wins both on the side of human capital development as well as the economic returns.

Education - Want to include private sector especially for construction and teachers.

Health – Interest from private sector investors, and they are increasingly requesting PPPs. This is usually carried out through the Rwanda Development Board (RDB) who have specialists in health. There is a MINISANTE and RDB paper available online to guide investors into health.

Nutrition – Idea to attract private sector to manufacture fortified foods or micronutrients. This could reduce costs and create jobs. NCDA in conjunction with UNICEF has a new initiative to bring private sector CEOs to think about child development in Rwanda.

WASH – Currently involved in multiple PPP to reduce costs. For example, Kigali Water Ltd: invested in infrastructure constructed a water treatment plant and operate for 25 years. Set tariff, distribute infrastructure (pipes), paid by government. Also need PPPs to help fill the rural supply gap – private managers and distributors. The Sustainable Finance Plan for WASH (MININFRA 2022) suggests using performance-based loans and microfinance. It also proposes utilising green climate funds to make WASH infrastructure and services climate resilient, as well as pooled fund mechanisms to fund maintenance and rehabilitation through VAT on water bills.

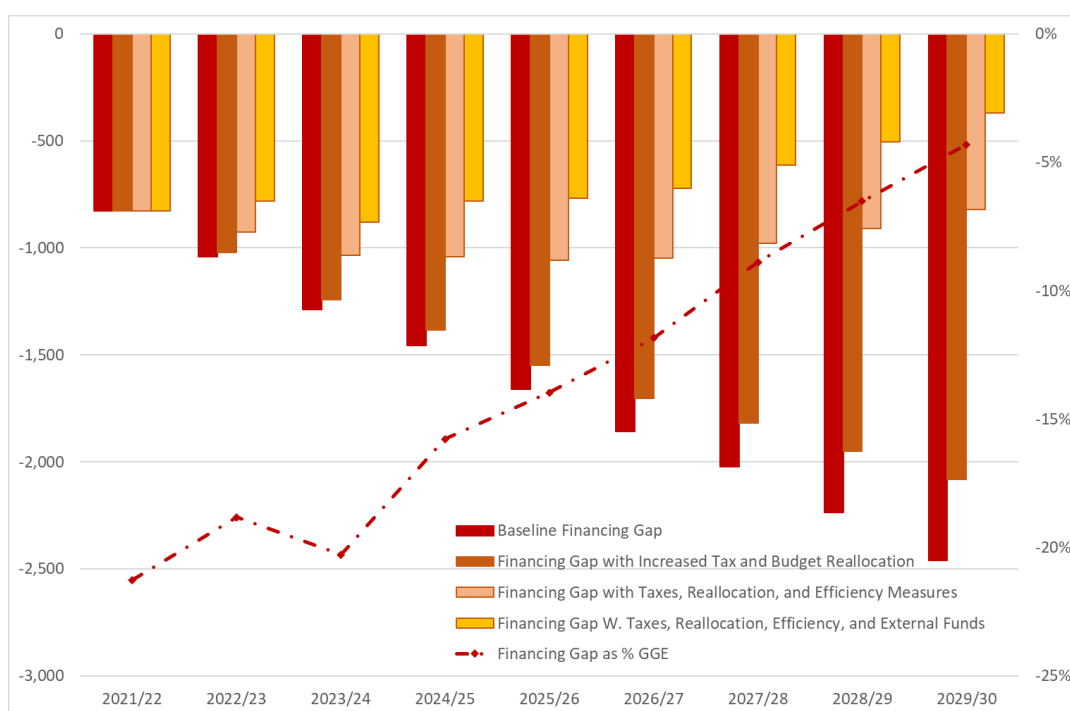
4.3. Maximising Fiscal Space Scenario

Summing all these initiatives together would come close to closing the financing gap by 2030. As noted, this is most likely an overly optimistic scenario where the government

prioritises all additional fiscal space to the social sectors. However, it is an illustration that if there was political will then social sector needs could be met. This is illustrated in Figure 7. The figures can be explained as follows:

1. The original financing gap (red bar chart) is the resultant gap under scenario 1: business as usual. By 2030 the gap is projected to reach 2,460 billion RWF (2 billion USD) and 29% of GGE. This equates to 150,000 RWF per person (123 USD).
2. The next bar chart (orange) shows how the gap can be reduced by raising tax by 0.3 percentage points a year (from 2027/28) and raising the allocation of social sectors by 0.5 percentage points a year (from 2022/23). This would reduce the gap by 15% by 2030. The gap remains at 2,080 billion RWF, 24% of GGE. This equates to 128,000 RWF per person (104 USD).
3. The third bar chart (beige) shows the sum of the tax and budget increase (in 2 above) with the implementation of efficiency measures across all social sectors. These two initiatives could reduce the financing gap to 820 billion RWF in 2030, equivalent to 10% of GGE. This equates to 50,000 RWF per person (41 USD).
4. The fourth bar chart (bright yellow) starts from scenario 3 above and adds in the fiscal space from external finance – debt relief and additional ODA. This would reduce the financing gap to 370 billion RWF by 2030, equivalent to only 5% of GGE. This equates to 22,800 RWF per person (18 USD).
5. The resultant reduced gap – 4% of GGE – could be filled by innovative funds that have not been quantified here.

Figure 7: Potential Fiscal Space for Social Sectors (Billion RWF and as a % of GGE)



Source: Authors'.

Given the fact that there could potentially be enough funds by 2030 is optimistic given the substantial financial, technical, and political effort it would require to achieve all these financing options. However, it shows that if focus was placed on a mix of these initiatives - budgetary share, efficiencies, external finance for social sectors, as well as general tax reforms and debt relief – that fiscal space can be found without detriment to fiscal deficit and macro instability. It might not be possible to do it all, but some action will inevitably be worthwhile to achieve social sector goals.

5. Child-focused Social Spending

This chapter replicates the methodology for total population FSA for social sectors but focuses on child-specific expenditures only (see chapter 2 and annexes for method). A quick overview of the findings are shown and then a discussion around what financing options are best suited to each social sector.

5.1. Child-focused Social Sector FSA

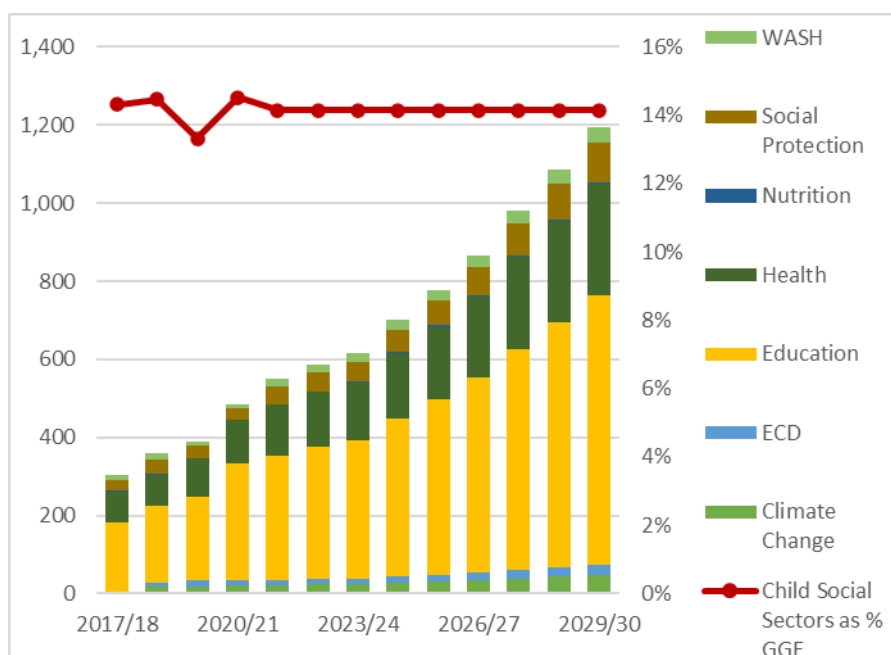
This subsection presents the estimations and projections for child-focused expenditures and costs for social sectors and the resultant financing gap.

5.1.1. Available Public Sector Expenditures for Child-focused Social Sectors

The total estimated expenditures for children within social sectors have grown from 302 billion RWF in 2017/18 to 485 billion RWF in 2020/21 – see Figure 8. Child-focused social sector spending as a proportion of GDP has also grown, from 3.6% to 4.6% over this period. However, as a share of GGE this has remained relatively stable rising only slightly from 14.3% to 14.5% over this time period.

Considering the spending per child there has been a rise from 51,000 RWF in 2017/18 to 77,000 RWF in 2020/21 – equivalent to an increase from 59 to 77 USD per person. Full details for the past four years are set out in Annex B.

Figure 8: Child-focused Social Sector Expenditures (Billion Rwf)



Source: Authors own based on MINECOFIN Budget Execution Data.

Figure 8 shows that education and health account for the majority of social sector spending at 58% and 24%, respectively. Allocations to the social protection sector accounts for 8%; climate change 4%; WASH 3%; ECD 2%; and nutrition 0.5%. However some budget for nutrition also falls within ECD interventions.

Over the longer term, the share of GGE allocated to child social sectors remains stable at the four-year average of 14.2%. This provides us with a business-as-usual scenario for the level of available public expenditures for child-focused social sectors.

5.1.2. Child-focused Costs for Social Sectors

The estimation of child-focused costs for social sectors is 14.7% of GDP per year, and 51% of GGE. This equates to 26,800 billion RWF (22.9 billion USD) in total, or, 2,980 billion RWF (2.5 billion USD) a year from 2021/22 to 2029/30. Full details are within Annex C.

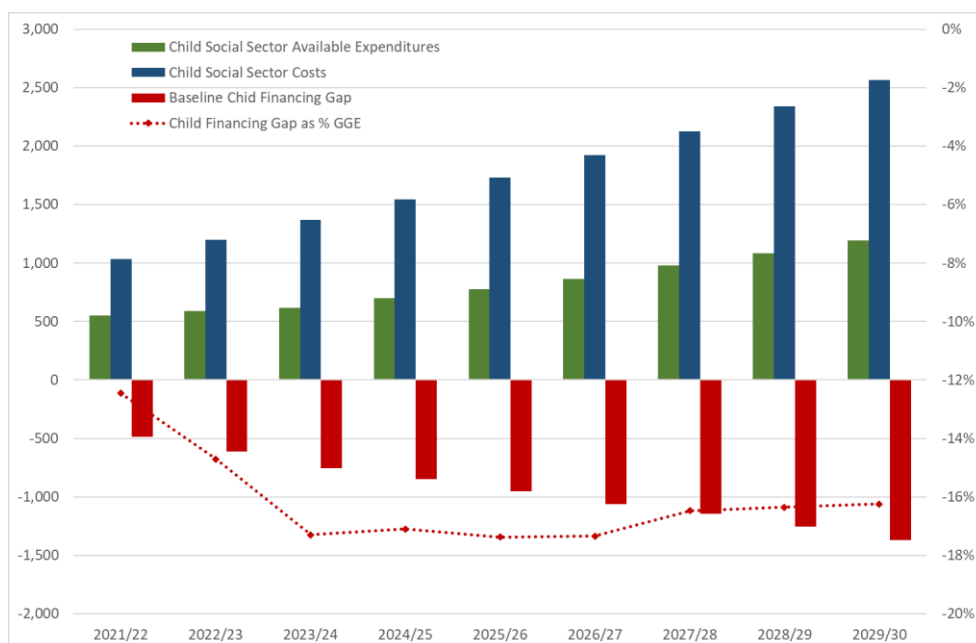
However, the NST-1 states that the public sector will be accountable for 59% of all investments, and the remaining 41% is to be financed through private sector resources. In this case the public sector costs are 9% of GDP, and 30% of GGE, on average each year. 15,800 billion RWF (13.5 billion USD) in total, or 1,760 billion RWF (1.5 billion USD) a year on average from 2021/22 to 2029/30.

5.1.3. Business as Usual FSA for Child-focused Social Sectors

Using the projections for available expenditures and resource needs presented above gives us the baseline scenario shown in Figure 9. For all seven social sectors together for children, the key points are as follows:

- The child financing gap rises from 484 billion RWF in 2021/22, to 1,370 billion in 2029/30.
- This equates to an average of 16% of GGE and 5% of GDP each year.
- To reach NST-1 and SDGs the government needs to spend over 137,000 RWF (117 USD) per child more each year on child-focused social sector services.

This suggests that if the recent level of investment in social services for children – around 14.2% of GGE – continues over the medium to longer term there will be a widening financing gap over time. This infers that it will be more difficult to reach the NST-1 social transformation targets and SDGs as this underinvestment continues.

Figure 9: Projected Child Financing Gap for Social Sectors (Billion Rwf)

Source: Authors'.

5.2. Financing Options for Child-Focused Social Sector

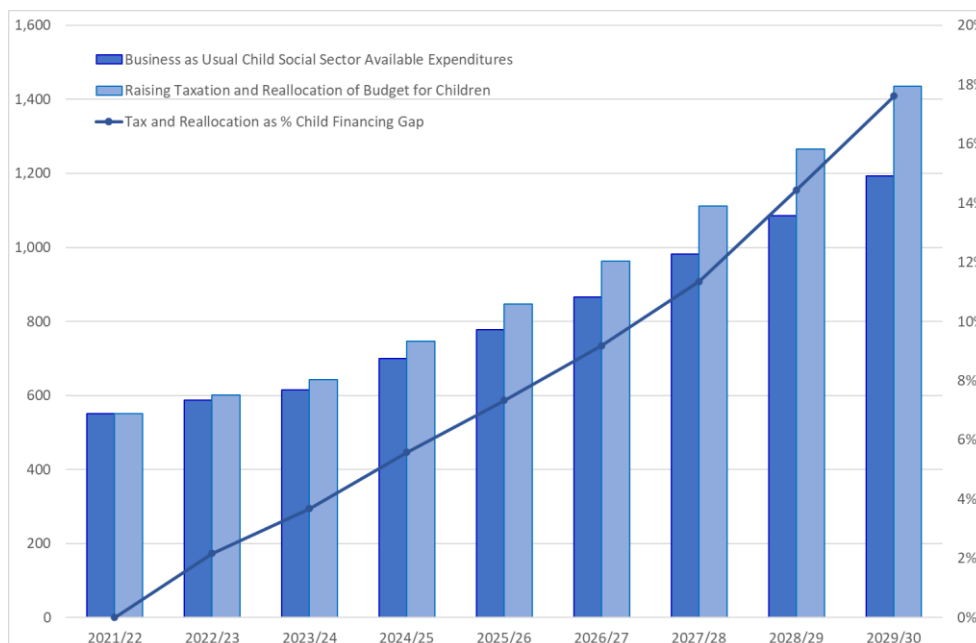
The method used above for total population is replicated here for children. However, the benefits of each financing option are directed solely on child-focused social sector to increase their available funding. After the quantitative overview some discussion by sector will place this data in context and offer sector-specific financing options.

5.2.1. Domestic Resources

A higher tax to GDP ratio and a greater budget allocation has been imputed which raises the funding going to child-focused social sectors incrementally over a number of years. This has been set as 0.3 percentage point of the tax:GDP ratio and an additional 0.5 percentage points of GGE each year. The results of the tax increase and reallocation are set out in Figure 10.

This shows that with a focus on increased domestic tax revenues and a small annual reallocation done consistently over time can provide an additional 808 billion RWF over the next eight years. It could close the financing gap by 18% by 2030, however, throughout the time period this is only closing the gap by 9% on average.

Figure 10: Raising Taxation and Reallocation of Budget to Child-focused Social Sectors (Billion RWF and as % Child Financing Gap)



Source: Authors'.

Domestic Resources: Sector Specific Recommendations

The Human Capital Investment Ranking Report in 2018/19 provided evidence that government needs to invest in children at an early age to have a strong impact on growth and development⁶⁵. This has resulted in support from MINECOFIN as well as the Prime Ministers' Office and the Presidents' Office for ECD, nutrition and social protection⁶⁶. Due to the interdependent nature of social services all need to be supported to have a strong economic and social impact.

Education already receive the Global Partnership for Education (GPE) recommended budget allocation – 20% (once debt and other non-negotiable spending, e.g., peacekeeping, are accounted for)⁶⁷. Therefore, it may be difficult for the education sector to argue for greater budget allocation.

Health however does not receive its recommended share of the budget as per the Abuja Declaration which suggests 15% of GGE should be allocated to health⁶⁸. Given the long-term benefits of early health interventions, there is strong economic arguments around why a government should invest in health, especially that of children, e.g. vaccinations. This public funding need is becoming more important as other health-specific DPs may be removing support from Rwanda as it becomes a middle-income country. For example, Global Fund, USAID CDC, and PEPFAR. Indeed, the level of dependency in

⁶⁵ World Bank (2019).

⁶⁶ From interview with NCDA.

⁶⁷ Interview with DG MINEDUC.

⁶⁸ <https://apps.who.int/iris/bitstream/handle/10665/341162/WHO-HSS-HSF-2010.01-eng.pdf?sequence=1>

the health sector is high, for example in 2019/20 the health sector in total took 16% of all ODA in Rwanda⁶⁹. Therefore, once DPs depart there will be a serious financing gap to contend with.

ECD, nutrition, and social protection for children are relatively new sub-sectors and growing in support from government as well as development partners. International evidence around the importance of investing in children within these sectors for developing a strong human capital based for future growth is expanding – particularly post-COVID where attention was brought to the special role social development can play. There has been recent Rwanda-specific analysis carried out to highlight the importance of these child-focused sectors this has resulted in some amendments to the flagship VUP programme for social protection, and an investment case for ECD is being carried out⁷⁰. It would be recommended for these sectors to continue building on this international and national evidence and gain more support from Parliament, Cabinet, and MINECOFIN to invest in early childhood needs in these areas.

Nutrition sector could also use the findings of the 2020 Nutrition Expenditure Review to monitor progress and use as evidence in advocating for more funding⁷¹. The review found that the nutrition sector was receiving too little funding from the government, and also that it had insufficient M&E of expenditures due to lack of disaggregation of expenditure lines. Following up on these and other challenges and recommendations could be a solid base to set standards and requests for funding.

Social protection needs to increase coverage and increase transfer values, but the current budget allocation is not sufficient. The GOR wants to increase coverage but also needs to ensure benefits to HHs is adequate – the longer-term goal is universal coverage within a life-cycle approach. The current level of direct support is around 150,000 RWF a year, and the poverty line is 159,000 RWF. Public works support is 70-75,000 RWF, around half the poverty line and the household sizes are generally much bigger than those households receiving direct support. With the onslaught of high inflation these ratios of support to needs will worsen this year and next, emphasising the need for more government funding.

Climate change and **WASH** receive little in terms of budget allocation each year, significantly less than the proposed costs to achieve SDGs. Indeed, MININFRA state that their major challenge is funding, stating they need around three times as much as their budget allocation⁷². Strong evidence-based arguments will need to be made to gain any rise in allocation from MINECOFIN.

⁶⁹ MINECOFIN (2021).

⁷⁰ VUP currently with Parliament to take decisions, UNICEF and NCDA carrying out the investment case.

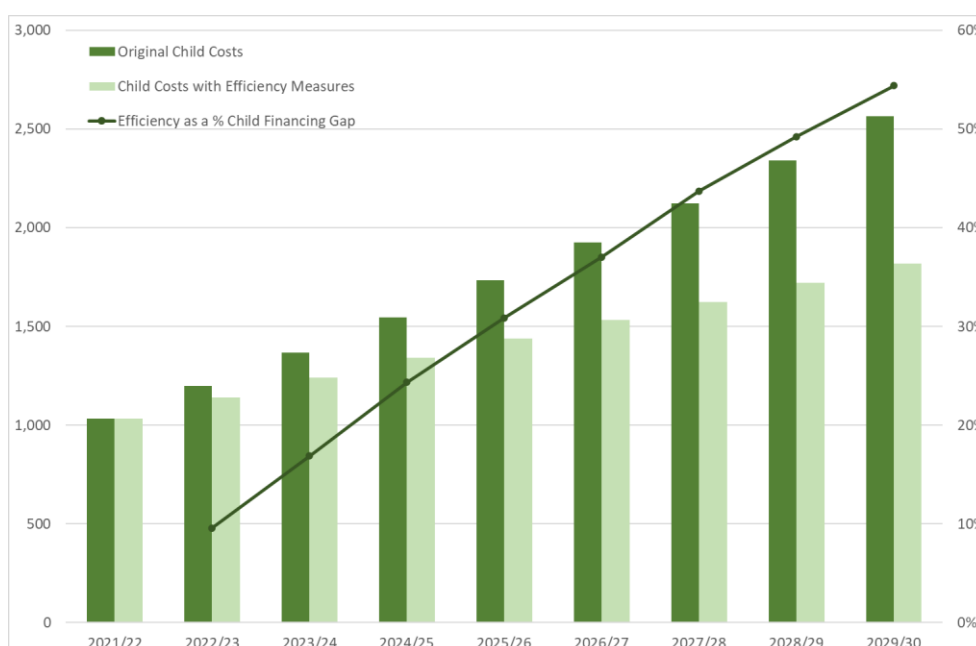
⁷¹ World Bank and Global Financing Facility (2020).

⁷² Interview with MININFRA DG WASH.

5.2.2. Efficiency

The projection results are set out in Figure 11 **Error! Reference source not found.**, this implies that each year the government makes efforts to analyse, identify, and overcome inefficiencies. Using this aim of reducing inefficiencies in all child-focused social sectors by 25% over the next ten years could reduce costs by over 330 billion RWF a year over the time period. This would increase slowly. It would take time to undertake analysis to identify and consider ways in which to overcome inefficiencies. Some gains may be made in 2022/23, and if efforts continued the potential savings would rise as more inefficiencies are resolved. If achieved these endeavors could close the financing gap by 25% each year on average.

Figure 11: Potential Efficiency Gains for Child-focused Social Sectors (Billion RWF and as % Child Financing Gap)



Source: Authors'.

Efficiency: Sector Specific Recommendations

All sectors can benefit from focusing on overcoming inefficiencies and becoming more efficient. And given the lack of focus on this at present there could be substantial gains to be made in this policy area in all sectors. All sectors would need to carry out an in-depth efficiency analysis – as described in Annex E. This could then be used as evidence-based advocacy for gaining more budget for proven improvements in efficiency. Strong M&E and technical skills would be required for this to happen, as well as strong political will in each sector to overcome inefficiencies.

ECD and Nutrition are being better coordinated through the new NCDA. They are working across the budget cycle – from planning, budgeting, to M&E – to improve the way in which they can deliver funding to services. The NDCA is bringing cross cutting implementing agencies together to plan better – DPs and NGOs too. This includes

prioritising high impact interventions to try to get the most output of the limited funds they have. They are also working on mainstreaming nutrition through the budget. This will allow a clearer view of what money is being spent where and what the gaps look like. This will be implemented in the 2022/23 budget. However, there is no impact assessment made on the interventions put in place – the sector should consider this to gain evidence and expand their database for analyzing inputs to impact. M&E of these high impact interventions will be crucial to be able to continually adjust plans and budget for the greatest impact on children.

Education will need to focus on identifying and overcoming inefficiencies within the education system to make headway on improving outcomes and meeting targets. These have been mentioned in section 4.2 and include high repetition and dropout rates, teacher training, etc. Some work has begun on analyzing why drop out and repetition rates are high. But this type of analysis can be widened to an education-wide efficiency analysis. This would consider allocative and technical efficiency across the board and could set out a roadmap for implementing change with monitoring success. For example, some interviewees mentioned that tertiary education gets relatively more as opposed to other levels of education, and that teacher allocation across geography should be looked at. This type of allocation is usually seen as an unequal use of public expenditure.

Health can improve its internal allocative efficiency by placing more funding on primary health care. Quality of care at this level is low – the sector is ‘off-track’ in terms of meeting its NST-1 targets around nutrition (chronic malnutrition (stunting) among under five year old’s is measured at mid-term review as 33% whilst the targets are 29.9% by 2020/21 and 19% by 2023/24), and maternal mortality (measured at 203 per 100,000 compared to targets of 168 for 2020/21 and 126 in 2023/2024)⁷³. The Mid-Term Review of NST-1 suggests that progress in certain health areas are ‘plateauing’ and the approach to ‘the last mile’ may require more specifically targeted interventions⁷⁴. In-depth health efficiency analysis can be carried out to identify the key areas for improvement and how to overcome the inefficiencies within these areas. This will consider both allocative and technical efficiency within the health system.

Social protection suffers from fragmentation and lack of harmonization – multiple different schemes across various implementing agencies⁷⁵. This is generally to be expected as a country moves towards an income level where they can afford a more generous life-cycle type of social safety net. The various forms of social protection have been growing but there needs to be a more organized system. Interviewees suggested that there needs to be better M&E to better target the most vulnerable, alignment of benefit levels, merging of agencies, and harmonization of schemes. This will help reduce administrative costs, ensure policies are benefiting the most vulnerable and are effective. Additionally, there should be a movement away from payment in kind and public works

⁷³ MINECOFIN (2021c).

⁷⁴ Health Specialists discussion and comments from the DHS 2019/20 launch.

⁷⁵ This paragraph on social protection draws from multiple interviews from government and DP agencies.

as evidence proves that cash transfers are much more efficient and effective way of reducing poverty⁷⁶. These actions will take time but can make the sector more efficient.

WASH has a current focus on improving efficiency via the use of PPPs. MININFRA believes the private sector is more efficient than the public sector (in terms of greater skills, achieving goals at a reduced cost, and more speedily than the public sector, etc.). This is their particular belief when they consider building infrastructure for water treatment plants and pipes etc. This may be valid, however, it was noted that the GOR does not have a strong skill set in terms of contract management. Therefore, if the sector does invest more in PPPs they should also ensure that they have the procurement and contracting skills to manage this well. However, there also needs to be wider considerations of allocative efficiency. Interviewees noted that most funding – government and ODA – goes to urban rather than rural needs, and there are substantial geographical inequalities⁷⁷.

5.2.3.External Funding

Figure 12 shows the results for assumptions around stronger advocacy on debt relief and increased ODA support. This suggests that Rwanda could gain 300 billion RWF per year. This would close the gap by 29% a year on average.

Figure 12: Potential External Support for Child-focused Social Sectors (Billion RWF and as % Child Financing Gap)



Source: Authors’.

⁷⁶ Both in-kind and public works are more costly / less efficient mechanisms to help support the vulnerable in society as compared to cash transfers.

⁷⁷ Interview with UNICEF WASH sector expert.

External Funding: Sector Specific Recommendations

Social sectors are dependent on ODA to a varying degree in Rwanda, but projections suggest that all will likely incur a reduction in ODA over the next ten years. Therefore, the time for advocacy is now given this likely reduction and that other domestic financing options will take time to implement.

In 2019/20 health received 16% of all ODA, education 10%, WASH 5%, and social protection 4%⁷⁸. All social sectors are heavily donor dependant due to government focusing on what they would classify as 'productive' sectors, and DPs are at ease to fill the gaps in the social sectors. Indeed, half of social protection cash transfers are financed by the FCDO and World Bank⁷⁹. However, this is not sustainable especially given the movement towards middle income status. It is recommended that each sector carry out a mapping over the next five years of ODA commitments or intentions. This would include the source of income, intended purpose, timeline of support, and when the funding can be expected to end. This can be compared to projected budget allocations from government and gaps can be identified. The mapping can be used for advocacy with existing DPs and potential DPs (it can also be used to negotiate budget allocations with MINECOFIN). The mapping linked with plans and budgets can show the immediate problems and how the lack of funding can impact on the ability to implement policies and will result in lack of service delivery and failure to meet targets.

Some sectors will find this easier than others. For example, in health there are DPs like GAVI and the Global Fund where their three-year commitments are readily accessible online with commitments per vaccine or health areas (HIV or malaria) for example. Difficulties will lie in understanding what USAID funding will be as they publish only one year in advance. However, Rwanda has the benefit of strong DP-government relations organised under sector working groups that can aid communication and information sharing.

5.2.4. Innovative Finance

There have been no attempts at quantification of SIBs, PPPs, and climate / green bonds. However, there are some recommendations for each sector from what we know.

Innovative financing: Sector Specific Recommendations

Climate Change – Preference in this sector is for climate or green bonds. Rwanda has been success and has even had other countries come to learn to replicate Rwanda's success⁸⁰. It is expected that this will continue.

Education and ECD – Have stated an interest in engaging the private sector for infrastructure needs. This would need to be backed up by strong contract management

⁷⁸ MINECOFIN (2021).

⁷⁹ Interview with UNICEF.

⁸⁰ <https://unfccc.int/climate-action/momentum-for-change/financing-for-climate-friendly-investment/rwanda-green-fund-fonerwa>

and M&E. SIBs could be useful for improving drop out and repetition rates given the possibility that an adaptive intervention may be required. Some further investigation could be useful, including the possibility of it working and of having an interested DP in the sector. As mentioned in Box 6, there are ongoing initiatives to engage the private sector in ECD. These have proven successful in sectors such as the tea industry⁸¹. To wider this nascent initiative would not require substantial funding from government, rather more support and guidance. Indeed, guidance in terms of a 'how to' toolkit for companies has been produced already with the support of UNICEF⁸². One benefit of this proposal is the limited amount of public sector funding required for the private sector to set their employer-supported childcare scheme, especially with the support of ODA in developing the initiative.

Health – Has a system in place via RDB and attracting health investors. PPPs seem to be the most popular and the usual requirements around contract management hold. However, there could be opportunity for SIBs to be useful for reaching targets around maternal and child health – ante-natal visit being missed for example is niche enough with a clear mandate to implement M&E and outcomes for.

Nutrition – The idea to create incentives for private sector in manufacturing fortified foods in Rwanda is interesting and could be assisted with some further investigative analysis as to whether this could work using PPP or SIB. Due to the linkages around nutrition and health, the nutrition sector could benefit from learning best practice from MINISANTE and RDB for engaging with the private sector.

WASH – The sector seems comfortable using PPP for its infrastructure needs. Improved M&E around the implementation and impact would be useful to see how productive these collaborations are. Some greater focus on geographical inequalities in service delivery would be beneficial and attracting private sector to engage in less well-served areas. There is also the potential that the WASH sector could benefit from climate / green bonds as they also deal with water supply.

5.2.5. Maximising Fiscal Space for Children

Summing all these initiatives together could close the financing gap by 2030. This is most likely an overly optimistic scenario where the government prioritises all additional fiscal space to child-focused social sector activities. However, it is an illustration that if there was political will then child social sector needs could be met, see Figure 13. The figures can be explained as follows:

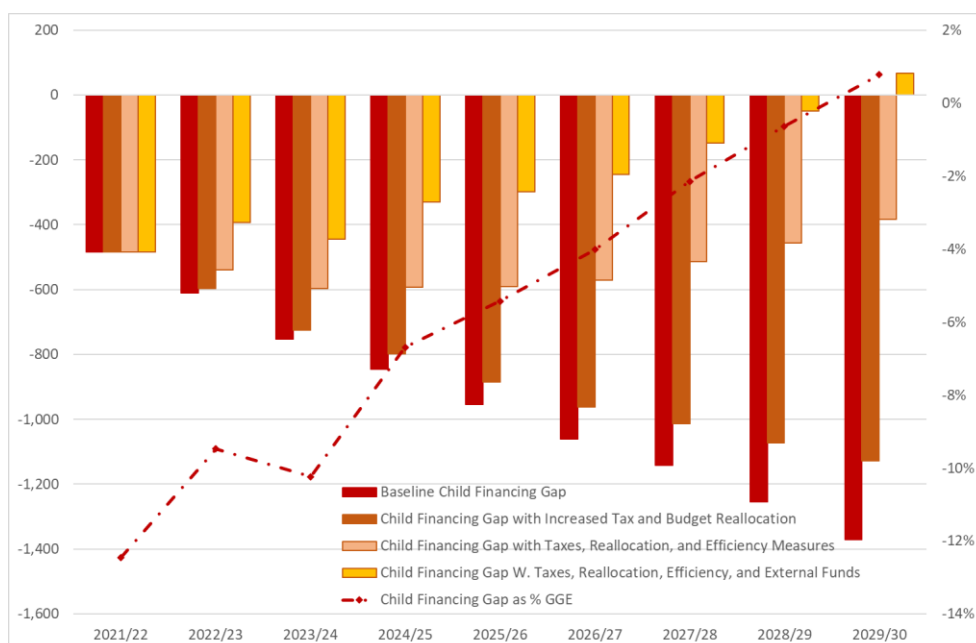
1. The original child financing gap (red bar chart) is the resultant gap under scenario 1: business as usual. By 2030 the gap is projected to reach 1,370 billion RWF (1.1 billion USD) and 16% of GGE. This equates to 191,000 RWF per child (155 USD).

⁸¹ UNICEF (2021b).

⁸² UNICEF (2022).

2. The next bar chart (orange) shows how the child financing gap can be reduced by raising tax by 0.3 percentage points a year (from 2027/28) and raising the allocation of social sectors by 0.5 percentage points a year (from 2022/23). This would reduce the gap by 18% by 2030. The gap remains at 1,130 billion RWF, 4% of GGE. This equates to 158,000 RWF per person (128 USD).
3. The third bar chart (beige) shows the sum of the tax and budget increase (in 2 above) with the implementation of efficiency measures across all child social sectors. These initiatives could reduce the child financing gap to 380 billion RWF in 2030, equivalent to 10% of GGE. This equates to 54,000 RWF per person (43 USD).
4. The fourth bar chart (bright yellow) starts from scenario 3 above and adds in the fiscal space from external finance – debt relief and additional ODA. This would reduce the child financing gap entirely and move to a surplus of 60 billion RWF by 2030, equivalent to 1% of GGE.
5. To speed up the closure of the child financing gap sectors could use innovative or blended financing, however, the level of potential funding has not been quantified here.

Figure 13: Potential Fiscal Space for Child-focused Social Sectors (Billion RWF and as a % of GGE)



Source: Authors'.

Given the fact that there could potentially be enough funds by 2030 is optimistic given the substantial financial, technical, and political effort it would require to achieve all these financing options. However, it shows that if focus was placed on a mix of these initiatives - budgetary share, efficiencies, external finance for social sectors, as well as general tax reforms and debt relief – that fiscal space can be found without detriment to fiscal deficit and macro instability. It might not be possible to do it all, but some action will inevitably be worthwhile to achieve social sector goals.

6. Conclusions and Recommendations

To reach national and international social sector goals Rwanda needs to invest more in these sectors. Over the past four years (2017/18 to 2020/21) spending within the seven sectors has risen nominally, and as a share of GDP, but relative to non-social sectors it has declined as a share of General Government Expenditure (GGE). The same trends hold for child-focused social sectors, although the GGE share has remained stable.

The impact of the COVID-19 pandemic, and the Ukraine war too, has put the NST-1 social transformation agenda off track. Now is the time to reassess and reprioritise these sectors to ensure that NST-1 targets can be met in the medium term, and SDGs in the longer term.

Much has been discussed and analysed around the costs associated with reaching these targets - by the IMF, INFF report consulting team, World Bank, and estimated here for the seven in full. It is clear that the available domestic resources are insufficient to cover these.

This analysis took the seven social sectors as a whole and provided projections that suggest if the status quo is not changed the gap in achieving NST-1 and SDGs will only widen further over time.

Set out below are a set of general recommendations with an idea of the implementation timelines of each and which institution would be responsible included in Table 3. Also, the recommendations for each sector, which are also summarised in Table 4.

General Recommendations

Undertake Sector-specific and Comprehensive Costing – The lack of comprehensive costing limits analysis, i.e. it does not give a coherent base for measuring what Rwanda needs to invest to achieve its social goals, there is not a true comparator for the expenditures. If this is not improved, it will limit the ability to repeat this exercise for future FSA of social sectors. Having the newly formed agency for ECD and mainstreaming of Nutrition will require to have some form of cost to negotiate with for budget allocation. Other sectors will also benefit from this. Moreover, there needs to be some consideration of the cross-cutting complementarity of costs in achieving social sector targets.

Secure Exemptions and Higher Taxation – Whilst social sectors are not responsible for general taxation policy there is an area that these sectors can work towards, this is in terms of ensuring their continued tax exemptions. It will be important to be able to prove that the benefits of the exemptions are greater than the costs to the sector / beneficiary and the multiplier effects of the taxation. Impact analysis on these areas is required. For MINECOFIN there is a long list of possible tax reforms and there needs to be an assessment of the optimal taxation measures, (lowering CIT rate but broadening the base, making PAYE more equitable, reassessing exemptions, etc). This should consider the real options for tax growth based on: Technical feasibility - ease or implementation and magnitude of revenues; Economic feasibility - knock on effects to wider economy; Political feasibility - what will citizens accept and what is supported by

politicians; and Social-welfare impacts - what are the equity implications of different taxes.

Create Evidence-Based Advocate for Greater Budget Allocation – Within the current tight fiscal environment an evidence-based advocacy plan will be necessary to convince MINECOFIN to increase budget allocation to social sectors. Need to build on existing international evidence around benefits of investing in children and social sectors with strong Rwandan M&E to show impact of policies and continued improvement in achieving targets. There is the possibility also that budget allocation could be linked to improved efficiency assuming the sector showed that its spending was increasingly more impactful.

Strengthen Efficiency Analysis to Improve Public Resource Allocation - Findings from key informant interviews and secondary data show that fiscal space can be gained in social sectors becoming more efficient in their targeting methods and by reducing costs, etc. However, this must be done in an evidence-based systematic way to ensure that output and outcomes are not harmed. This will require much analytical work and research before new plans can be implemented. Efficiency analysis can be done over each social sector and achievements linked to budget allocation.

Securing Near-Term ODA before DPs Depart – As Rwanda moves towards middle-income status ODA is expected to reduce. Mapping of all ODA will provide a picture of future gaps and give a strong advocacy tool for negotiating with DPs and Government for more funding. Mapping and analysis of stakeholders should work towards advocacy and solutions to bring existing DPs to invest more in Rwanda, bring new DPs to Rwanda, sector-specific underfunded priorities that can benefit from niche donor assistance. It should also cover international advocacy topics such as the ongoing debt relief debate, And the longer-term implications of becoming a middle-income country for the longer-term ODA trends.

Investigate Compatibility of Innovative Financing – Given the tight macro-fiscal environment there is a movement towards non-traditional resource mobilisation, or innovative financing such as blended finance where public, private, ODA, and philanthropic funding is mixed. The benefits and risks to SIBs, PPPs, and climate / green bonds have been outlined. More sector specific, and possibly even project specific analysis needs to be carried out to assess the applicability of these new financing mechanisms.

Table 3: General Recommendations Implementation Timelines and Responsibilities

	Priority	Implementation Timeframe	Responsible Institutions
Costing	High	One year to develop. Revised annually or with each new medium-term strategy / mid-term review	All Ministries with MINECOFIN providing guidance and support - potentially need TA specialists
Secure Exemptions	High	Six months to a year. Thereafter, check each revision of MTRS	All Ministries with MINECOFIN backing
High Taxation	High	Medium term.	RRA and MINECOFIN

	Priority	Implementation Timeframe	Responsible Institutions
		Ongoing	
Creation of evidence-based advocacy for greater budget allocation	High	Few months in some instances where data is available, longer if require new information sources. Ongoing each year, possibly organised around budget negotiations for greatest impact.	All Ministries for negotiation with MINECOFIN - potentially need TA specialists
Efficiency Analysis	High	Medium term. Ongoing	All Ministries - potentially need TA specialists
Secure near-term ODA	High	Mapping and advocacy can take six months to produce. To be updated on an ongoing basis.	All Ministries
Investigate Compatibility of Innovative Financing	High	Six months to a year for initial findings. Then another six months to a year to implement recommendations.	All Ministries - potentially need TA specialists

Source: Authors'

Sector-specific funding recommendations:

Climate Change - Receives little in terms of budget allocation each year, significantly less than the proposed costs to achieve SDGs. Strong evidence-based arguments will need to be made to gain any rise in allocation from MINECOFIN. In terms of innovative financing, preference in this sector is for climate or green bonds. It is expected that this will continue. Little is known about this sector's (in)efficiency, therefore, analysis into this would be useful.

ECD –The budget has grown but is insufficient to meet needs. This sector is relatively new but has political support. This should be taken advantage of international and Rwandan evidence for investing in ECD for long term economic benefits should be used. The sector could improve its M&E for more impact assessment style analysis. Little is known about this sector's (in)efficiency, therefore, analysis into this would be useful. There could be some opportunities to engage with the private sector through infrastructure needs using PPP, or utilising SIBs. Some evidence is already forthcoming in terms of private sector engagement in employer-supported childcare, this should be emphasised as best practice as it requires little government funding but can have significant positive social and economic impacts. Further investigation is necessary, including the possibility of it working in certain niche areas and of having an interested DP in the sector. **Education** – Receives a large share of the budget and should focus on efficiency: where it spends, on what, etc. This could have substantial impact on fiscal space and achieving greater outcomes with the same funding levels. The sector has stated an interest in engaging the private sector for infrastructure needs. This would need to be backed up by strong contract management and M&E. SIBs could be useful for improving drop out and repetition rates given the possibility that an adaptive intervention may be required.

Health – Projections suggest an upcoming reduction of ODA in a heavily donor-dependant sector. This coupled with the growing international evidence around why

investing in child health is economic and socially beneficial should underpin advocacy to MINECOFIN to raise budget allocation. Mapping of DPs and their funding plans over the medium term can help provide a base of information. The sector has begun working on efficiency in terms of redesigning the CBHI, but more analysis could be carried out to see where the health sector can improve. In terms of innovative financing the sector has a system in place via RDB and attracting health investors. PPPs seem to be the most popular, however, there could be an opportunity for SIBs to be useful for reaching targets around maternal and child health – ante-natal visits being missed for example is niche enough with a clear mandate to implement M&E and outcomes for.

Nutrition – The budget has grown but remains insufficient to meet needs. The sector has political support, this should be taken advantage of and use evidence for investing in nutrition for long term economic benefits. The sector could improve its M&E for more impact assessment analysis. Little is known about this sector's (in)efficiency, therefore, analysis into this would be useful. The idea to create incentives for the private sector in manufacturing fortified foods in Rwanda is interesting and could be assisted with some further investigative analysis as to whether this could work using PPP or SIB. Due to the linkages with health, the nutrition sector could benefit from learning best practice from MINISANTE and RDB for engaging with the private sector.

Social Protection – A highly donor dependant sector with limited government funding. Much needs to be accomplished with advocacy to allow MINECOFIN to understand the long-term productive nature of investing in social protection. However, the sector needs much work to become more efficient, but there is no impact assessment made on the interventions put in place. M&E of these high impact interventions will be crucial to be able to continually adjust plans and budget for the greatest impact on children.

WASH – Receives little in terms of budget allocation each year, significantly less than the proposed costs to achieve SDGs. Again, strong evidence-based arguments will need to be made to gain any rise in allocation from MINECOFIN. However, the internal budget allocation for WASH should be considered in terms of efficiency – spending more on staff to send invoices / collect unpaid fees, and on the maintenance of infrastructure could reduce in efficiencies. The sector seems comfortable using PPP for its infrastructure needs. Improved M&E around the implementation and impact would be useful to see how productive these collaborations are. Some greater focus on geographical inequalities in service delivery would be beneficial and attracting private sector to engage in less well-served areas. There is also the potential that the WASH sector could benefit from climate / green bonds as they also deal with water supply.

Table 4: Summary of Financing Options by Sector

	Climate Change	ECD	Education	Health	Nutrition	Social Protection	WASH
Taxation & Retention of Exemptions	Increasing domestic tax base most sustainable, however, generally out of social sectors control (RRA and MINECOFIN). Social sectors should secure their current exemptions						
Budget Allocation	Requires much evidence-based advocacy in tight fiscal environment - link with efficiency efforts						
Efficiency	A potentially large source of fiscal space - requires much analysis planning and monitoring						
Debt Relief*	Unlikely, but if so, will increase available resources from reduced interest payments						
ODA	Short to medium term only as Rwanda becomes middle income country - sector specific development partners and their headquarter plans						
PPP							
Social Impact Bonds							
Climate / Green Bonds							

Source: Authors'

Key: **Green** – strong chance of success, **Amber** – Will need effort to ensure success, **Red** – Unlikely to occur

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Annex A Stakeholder Interviews

Government

MINECOFIN

Richard Mushabe

Jean Bosco Ndayisenga

Emmanuel Nyirimana

Bernard Harerimana

Rehemah Namutebi

Jeanette Rwigamba

Donnah Mbabazi

Pascalie Mukarukundo

Emilienne Uwase

Christophe Bunzinya

Benjamin Kabandanda

Amina Rwakunda

Israel Bikorimana

Elysee Nyuzwenimana

Harshil Parekh

Gerald Mugabe

Ag. Head of National Planning

Head of Monitoring

National Investment

Planning and Research

Head of National Budget

Head of Budget Management

Specialist

Social Protection Budget Specialist

Health (Nutrition) and Education (ECD) Budget Specialist

WASH Budget Specialist

Climate Change Budget Specialist

Head of Macro

Tax Policy Directorate

Tax Policy Directorate

Tax Policy Directorate

External Finance Unit

MINEDUC

Christophe

Nsengiyaremye

DG Planning and M&E

MINISANTE

Zachee Iyakaremye

PS

MININFRA

Marcelline Kayitesi

Leoncia Mukamwiza

Hategikimana Uwitoze

Bova

Hassani Yahaya

DG WASH

Policy and Research Development Expert

WASH Economist

WATSAN SWAP Secretariat Coordinator

LODA

Claudine Nyinawagaga

Saidi Sibomana

DG

Division Manager for Planning, M&E

NCDA

Gilbert Munyemana

Jean Claude Kagaba

Fred Mukombozi

Irene Uwonkunda

Deputy DG

Director of Finance

TA in Budget & Planning

Head of Nutrition

FONERWA

Bright Ntare

Head of Business Development

Rwandan Development Bank (BRD)

Kampeta Sayinzoga

CEO

DPs

UNICEF

Charlotte Taylor

Emmanuel Munyemana

Emmanuel Manzi

Murtaza Malik

Charles Avelino

Chief of Social Policy

Social Protection

Health

WASH

Education

Leon Muwoni	Child Protection
Vincent Gahamanyi	Social Protection

UNDP (INFF)

Francis Mugisha	INFF Consultant
Alexis Ndayisaba	UNDP
Osten Chulu	Senior Economist (UNDP)

FCDO (UK)

Benon Talemwa	Economist
Anna Hanssen	Social Development Adviser

EU

Thibaut Moyer	Economist
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World Bank

Silas Udahemuka	Human Development Specialist / Social Protection Inclusive Growth
Ramya Sundaram	Senior Economist

Annex B Available Social Sector Public Expenditures

This annex provides further details on the social sector expenditures for the total population and children-only.

Historic Estimates for Social Sector Public Expenditures (Total Population)

	2017/18	2018/19	2019/20	2020/21
Total Social Sectors (Billion RWF)	489.0	571.3	611.7	734.3
Climate Change	8.8	36.4	41.0	47.6
ECD	0.4	10.4	13.6	13.2
Education	221.5	253.2	258.6	346.9
Health	162.3	164.2	203.9	235.0
Nutrition	4.5	0.7	0.8	0.4
Social Protection	65.9	72.2	69.6	71.3
WASH	25.5	34.2	24.4	19.9
Social Sectors - Exp per Person (RWF)	39,695	45,212	47,229	55,307
Climate Change	717	2,883	3,165	3,584
ECD	31	823	1,049	995
Education	17,978	20,035	19,965	26,131
Health	13,179	12,993	15,739	17,696
Nutrition	366	55	59	28
Social Protection	5,351	5,716	5,371	5,371
WASH	2,074	2,707	1,882	1,501
Social Sectors - Exp per Person (USD)	46.1	50.3	50.1	55.1
Climate Change	0.8	3.2	3.4	3.6
ECD	0.0	0.9	1.1	1.0
Education	20.9	22.3	21.2	26.0
Health	15.3	14.4	16.7	17.6
Nutrition	0.4	0.1	0.1	0.0
Social Protection	6.2	6.4	5.7	5.3
WASH	2.4	3.0	2.0	1.5
Sectors as % GGE	23.2%	23.0%	20.8%	22.0%
Climate Change	0.4%	1.5%	1.4%	1.4%
ECD	0.0%	0.4%	0.5%	0.4%
Education	10.5%	10.2%	8.8%	10.4%
Health	7.7%	6.6%	6.9%	7.0%
Nutrition	0.2%	0.0%	0.0%	0.0%
Social Protection	3.1%	2.9%	2.4%	2.1%
WASH	1.2%	1.4%	0.8%	0.6%
Sectors as % GDP	5.9%	6.1%	6.3%	7.0%
Climate Change	0.1%	0.4%	0.4%	0.5%
ECD	0.0%	0.1%	0.1%	0.1%
Education	2.7%	2.7%	2.7%	3.3%
Health	2.0%	1.8%	2.1%	2.3%
Nutrition	0.1%	0.0%	0.0%	0.0%
Social Protection	0.8%	0.8%	0.7%	0.7%

	2017/18	2018/19	2019/20	2020/21
WASH	0.3%	0.4%	0.3%	0.2%

Source: Authors own based on MINECOFIN Budget Execution Data.

Historic Estimates for Social Sector Public Expenditures (Children only)

	2017/18	2018/19	2019/20	2020/21
Child Sector Expenditure (Billion RWF)	302.3	359.4	390.7	485.0
Climate Change	4.3	17.5	19.6	22.6
ECD	0.4	10.4	13.6	13.2
Education	177.8	198.3	215.3	297.0
Health	78.4	78.9	97.5	111.5
Nutrition	4.5	0.7	0.8	0.4
Social Protection	24.6	37.1	32.3	30.8
WASH	12.3	16.4	11.7	9.5
Social Sectors - Exp per Child (RWF)	50,824	59,188	63,060	76,958
Climate Change	717	2,883	3,165	3,584
ECD	64	1,714	2,193	2,096
Education	29,898	32,662	34,746	47,131
Health	13,179	12,993	15,739	17,696
Nutrition	758	114	124	59
Social Protection	4,134	6,116	5,212	4,890
WASH	2,074	2,707	1,882	1,501
Social Sectors - Exp per Child (USD)	59.0	65.8	66.9	76.6
Climate Change	0.8	3.2	3.4	3.6
ECD	0.1	1.9	2.3	2.1
Education	34.7	36.3	36.8	46.9
Health	15.3	14.4	16.7	17.6
Nutrition	0.9	0.1	0.1	0.1
Social Protection	4.8	6.8	5.5	4.9
WASH	2.4	3.0	2.0	1.5
Child Sectors as % GGE	14.3%	14.5%	13.3%	14.5%
Climate Change	0.2%	0.7%	0.7%	0.7%
ECD	0.0%	0.4%	0.5%	0.4%
Education	8.4%	8.0%	7.3%	8.9%
Health	3.7%	3.2%	3.3%	3.3%
Nutrition	0.2%	0.0%	0.0%	0.0%
Social Protection	1.2%	1.5%	1.1%	0.9%
WASH	0.6%	0.7%	0.4%	0.3%
Child Sectors as % GDP	3.6%	3.9%	4.0%	4.6%
Climate Change	0.1%	0.2%	0.2%	0.2%
ECD	0.0%	0.1%	0.1%	0.1%
Education	2.1%	2.1%	2.2%	2.8%
Health	0.9%	0.8%	1.0%	1.1%
Nutrition	0.1%	0.0%	0.0%	0.0%
Social Protection	0.3%	0.4%	0.3%	0.3%
WASH	0.1%	0.2%	0.1%	0.1%

Annex C Needs Projections and Costing Norms

This annex provides further information around how costs of social sectors were calculated for the total population and children only. The two tables show the results.

Total Population Costs - International Costing Norms

Education

The UNESCO-led Incheon Declaration and Framework for Action focusses on the implementation of SDG 4 to “Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all” by 2030⁸³. It reaffirms the encouragement of the Addis Ababa Action Agenda to set nationally appropriate spending targets for education. National contexts are diverse, but the following international and regional benchmarks are crucial reference points: allocating at least 4% to 6% of GDP to public education expenditure. The Incheon Declaration urged adherence to these benchmarks and expressed determination to increase public spending on education in accordance with country contexts.

It suggests that least developed countries need to reach or exceed the upper end of these benchmarks if they are to achieve the targets laid out in this framework. This is also confirmed by another UNESCO analysis of the cost of achieving universal pre-primary, primary and secondary education in low and lower middle-income countries by 2030, which projects an increase from US\$149 billion in 2012 to US\$340 billion, on average, between 2015 and 2030.⁸⁴

Whilst classed by the World Bank as a low-income economy, Rwanda’s economy looks set to move into the lower-middle income grouping in the next few years. In accounting for this, this paper will adopt the upper-end of the benchmark for public education spending – 6 percent – when evaluating Rwanda.

Health

A review and analysis by McIntyre and Meheus (2014) seeks to establish more firmly grounded targets for the proportion of government spending to be allocated to health. According to their framework, ‘Countries should strive over time to achieve government health spending levels of at least 5% of GDP, supplemented by a minimum target of \$86 per capita government and donor funding in low-income countries in order to ensure

⁸³ UNESCO, U., UNPFA, U., & UNICEF, U. (2015). Incheon declaration and framework for action for the implementation of sustainable development goal 4.

⁸⁴ UNESCO. 2015. Pricing the right to education: The cost of reaching new targets by 2030. EFA GMR Policy Paper 18. <http://unesdoc.unesco.org/images/0023/002321/232197E.pdf>

basic PHC [primary health care] services in cases where meeting the 5% target alone would be insufficient’.

McIntyre and Meheus take as their basis for this 5% target the following results of their analysis:

- Significantly improving health status indicators (e.g. reducing the average infant mortality rate to 10 per 1,000 live births) requires government spending of more than 5% of GDP.
- Reducing financial catastrophe and impoverishment to negligible levels generally requires limiting OOP payments to 15–20% of THE, which, in turn, requires government spending to exceed 5% of GDP.
- Promoting access to needed health care (using as proxies: 90% immunisation coverage, 90% of deliveries by skilled birth attendants and a global average of 44 core medical professionals per 10,000 population) requires government spending of at least 5% of GDP.

McIntyre and Meheus also quote World Health Report 2010, noting that ‘it is difficult for countries to get close to universal [health] coverage at less than 4–5% of GDP, although for many low- and middle-income countries, reaching [even] this goal is aspirational in the short term and something to plan for in the longer run’.⁸⁵

While setting a target of government spending at least 5% of GDP on health, the authors are quick to note that the amount of US\$ 86 per capita will fund an almost (though not fully) comprehensive minimum level of PHC services but only if the US\$ 86 is devoted fully to PHC services ‘(and not, for example, spent on high-cost tertiary services) and if these limited resources are used efficiently.’

Moreover, the authors note that no low-income country and a significant number of lower-middle-income countries that devoted 5% of government spending to health could afford the minimum resource requirement of US\$ 86 per capita (2012 prices) that it would take to fund basic PHC services for the entire population.

Finally, the authors make the point that were low-income countries to fund government spending on health at a level of US\$ 86 per capita from entirely domestic government sources, this would account for an average of nearly 15% of GDP. Such a level is ‘clearly unrealistic’.⁸⁶

The implication of this is that, if countries are able to meet the target of domestic public spending on health of 5% of GDP and that this then exceeds US\$ 86 per capita of government spending on health, then countries will be able to gradually increase the range of health services provided to their populations, since the US\$ 86 per capita

⁸⁵ WHO (2010).

⁸⁶ McIntyre and Meheus (2014).

threshold is for providing ‘an almost (though not fully) comprehensive minimum level of PHC services’.

Social Protection

An ILO report estimated global and regional financing gaps in social protection for achieving SDG target 1.3 by 2030, which urges countries to “[i]mplement nationally appropriate social protection systems and measures for all, including floors...”.⁸⁷ The cost of a social protection floor comprised of four benefit areas and administrative costs. In order of their relative share of the project cost of the universal package at a global level, these four are: old-age, disability, children and maternity.

The report suggests that the cost of a universal package of social protection benefits in 2019 for low-income countries was 5.9% of GDP. However, they suggest that this should be done incrementally. A low-income country could do this year on year raising financing from the average of 0.8% of GDP (found in 2019) to 3.8% of GDP by 2030 in order to meet SDG 1.3 by 2030.

Costs - Adjustments for Child-Only Social Sector Needs

In lieu of any real child-specific costing the following methodology was implemented to the above total population methodology:

Climate Change – Taken the proportion of children in population as the share of the total population costs.

Education including ECD – Taken the proportion of under 18 education expenditure in the Rwanda budget – averaging 82% from 2017/18 to 2020/21⁸⁸. Used this share as a proxy for the costs for under 18’s.

Health including Nutrition - Taken the proportion of children in population as the share of the total population costs.

Social Protection - Taken the proportion of children in population as the share of the total population costs.

WASH - Taken the proportion of children in population as the share of the total population costs.

The child costs from this method account for 60% of all social sector costs.

⁸⁷ Durán Valverde, F., Pacheco-Jiménez, J. F., Muzaffar, T., & Elizondo-Barboza, H. (2019). *Measuring financing gaps in social protection for achieving SDG target 1.3 Global estimates and strategies for developing countries* (No. 995051092202676). International Labour Organization.

⁸⁸ From MINECOFIN official execution data.

Total Population Resource Needs for Social Sectors in Rwanda (Billion USD and as % GDP)

	2022	2023	2024	2025	2026	2027	2028	2029	2030
Nominal GDP (Billion USD)	12	13	14	15	17	18	20	22	24
Climate Change	3.4	Total USD for period							
In inception report quotes the NDC value of \$11 billion	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Of which \$4.115 billion they Gov't will pay for (Unconditional)	3.1%	2.8%	2.6%	2.4%	2.3%	2.1%	1.9%	1.7%	1.5%
As % GDP	2.3%	Av for remaining period							
Education including ECD	15.2	Total USD for period							
Incheon Declaration and Framework for Action SDG-4 and Addis Ababa Action Agenda	9.8%	9.8%	9.8%	9.8%	9.8%	9.8%	9.8%	9.8%	9.8%
Between 4-6% of GDP for education / IMF = additional 7%	1.2	1.3	1.4	1.5	1.6	1.8	1.9	2.2	2.4
Rwanda currently spending 2.8% (2017/18 - 2020/21)	9.8%	Av for remaining period							
Health including Nutrition	7.8	Total USD for period							
McIntyre and Meheus (2014) = 5% GDP	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Rwanda currently spending 2.0% (2017/18 - 2020/21)	0.6	0.7	0.7	0.8	0.8	0.9	1.0	1.1	1.2
IMF says needs an Additional 2.2%	5.0%	Av for remaining period							
Social Protection	4.8	Total USD for period							
ILO SDG 1.3	1.9%	2.2%	2.5%	2.8%	3.0%	3.2%	3.4%	3.6%	3.8%
Low-income country 0.7% of GDP to 3.8% of GDP	0.2	0.3	0.4	0.4	0.5	0.6	0.7	0.8	0.9
Rwanda currently spending 0.8% (2017/18 - 2020/21)	2.9%	Av for remaining period							
WASH	7.0	Total USD for period							
World Bank - Rwanda study	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%
4.5% of GDP per year spending	0.5	0.6	0.6	0.7	0.7	0.8	0.9	1.0	1.1
would achieve water and fixed-point latrines to all households.	4.5%	Av for remaining period							
TOTAL Needed for Social Sectors (As % GDP)	24.3%	24.3%	24.4%	24.5%	24.6%	24.6%	24.6%	24.6%	24.6%
	24.5%	TOTAL Needed for Social Sectors				38.1	Billion USD		

Child-Only Resource Needs for Social Sectors in Rwanda (Billion USD and as % GDP)

	2022	2023	2024	2025	2026	2027	2028	2029	2030
Nominal GDP (Billion USD)	12	13	14	15	17	18	20	22	24
Climate Change	1.5	Total USD for period							
Take % child pop	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
As % GDP	1.5%	1.3%	1.2%	1.1%	1.0%	0.9%	0.8%	0.8%	0.7%
Average for the period	1.0%								
Education including ECD	12.5	Total USD for period							
Take share of exp for <18's	1.0	1.1	1.1	1.2	1.3	1.4	1.6	1.8	1.9
As % GDP	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
Average for the period	8.0%								
Health including Nutrition	3.5	Total USD for period							
Take % child pop	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5
As % GDP	2.4%	2.3%	2.3%	2.3%	2.3%	2.3%	2.2%	2.2%	2.2%
Average for the period	2.3%								
Social Protection	2.2	Total USD for period							
Take % child pop	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.4	0.4
As % GDP	0.9%	1.0%	1.2%	1.3%	1.4%	1.5%	1.5%	1.6%	1.7%
Average for the period	1.3%								
WASH	3.2	Total USD for period							
Take % child pop	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.5
As % GDP	2.1%	2.1%	2.1%	2.1%	2.1%	2.0%	2.0%	2.0%	2.0%
Average for the period	2.1%								
TOTAL Needed for CHILD Social Sectors (% GDP)	14.8%	14.8%	14.8%	14.8%	14.8%	14.7%	14.7%	14.6%	14.6%
14.7% TOTAL Needed for Child Social Sectors					22.9 Billion USD				

Annex D Efficiency Scores

Countries have differing levels of spending efficiency. If they can become more efficient the country will need less money to provide the same levels of service, or with the same amount of money would be able to provide more services.

The potential for each country to improve its efficiency rates has been calculated using a benchmarking analysis using an efficiency frontier. The most efficiency countries work at the efficiency frontier. Those less efficient work a measurable distance from this. As such, this method measures the performance of all units (in our case, countries health and education systems) against their relative distance from the efficiency frontier. The analysis was carried out by Kapsoli and Teodoru (2017). The dataset covers 88 countries, results for Rwanda set out in the table below.

The measurable inputs used were per capita public spending and teachers per 100 pupils for education. Education outputs used data on years of schooling (for those over 15 years old), and net enrolment rates.

For health the measurable inputs were per capita public spending and private spending on health. The outputs were based on health adjusted life expectancy.

Efficiency Scores for Rwanda

	PE In	PE Out	Health In	Health Out
Rwanda	0.590	0.915	0.632	0.887

Source: Kapsoli and Teodoru (2017)

Annex E Efficiency Analysis

Overview of type of deep-dive efficiency analysis needed across all social sectors using education as an example.

