Rwanda

Risk-sensitive Budget Review

Building Disaster Resilience in Sub-Saharan Africa

An initiative of the African, Caribbean and Pacific Group of States funded by the European Union

SENDAI FRAMEWORK
FOR DISASTER RISK REDUCTION 2015-2030

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UNDRR Country Reports on Public Investment Planning for Disaster Risk Reduction

This series is designed to make available to a wider readership selected studies on public investment planning for disaster risk reduction (DRR) in cooperation with Member States.

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Front cover photo credit: Photo by CIF Action. The Barotse floodplain in western Zambia is becoming a more difficult place to live and farm as climate change impacts worsen and an old canal system no longer functions. New funding aims to make exposed communities like the ones on the Barotse floodplain more resilient to the effects of climate change.

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List of acronyms

CIMA	Centro Internazionale in Monitoraggio Ambientale
DAC	Development Assistance Committee
DRR	Disaster risk reduction
FAO	Food and Agriculture Organization (UN)
GCAP	Ghana Commercial Agriculture Project
GDP	Gross domestic product
MDA	Ministries, departments and agencies
MIDIMAR	Ministry of Disaster Management and Refugee Affairs
MIGEPROF	Ministry of Gender and Family Promotion
MINADEF	Ministry of Defence
MINALOC	Ministry of Local Government
MINEACOM	Ministry of Trade, Industry and East Africa Affairs
MINECOFIN	Ministry of Finance and Economic Planning
MINIAGRI	Ministry of Agriculture
MINICT	Ministry of ICT
MININFRA	Ministry of Infrastructure
MININTER	Ministry of Internal Security
MINIRENA	Ministry of Environment
MINISANTE	Ministry of Health
MNEDUC	Ministry of Education
MYICT	Ministry of Youth and ICT
NDMEC	National Disaster Management Executive Committee
NDMTC	National Disaster Management Technical Committee
NDRMP	National Disaster Risk Management Plan
NPDRR	National Platform for Disaster Risk Reduction
ODA	Official development assistance
OECD	Organisation for Economic Co-operation and Development
RSBR	Risk-sensitive budget review
SDMC	Sector Disaster Management Committees
UNDRR	United Nations Office for Disaster Risk Reduction

Acknowledgements

UNDRR wishes to express its profound appreciation for the support provided by the national authorities for disaster risk reduction/disaster risk management and by the United Nations Country Teams in the respective countries.

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UNDRR particularly thanks the country experts and DRR specialists for their comments on and review of two draft versions of the analysis, specifically: Edson Fernando (Angola), Nkosiyabo Moyo (Botswana), Mariatou Yap and Celestin Kegne (Cameroon), Dr. Touré Kader and Paul Kaman (Côte d'Ivoire), Gabriel Ngua Ayecaba (Equatorial Guinea), Russell Dlamini (Eswatini (The Kingdom of)), Hortense Togo (Gabon), Sanna Dahaba and Kawsu Barrow (Gambia (The)), Koranteng Abrokwah (Ghana), Alsau Sambu, Elisio Gomes Sá, Justino Fernandes and Domingos Gomes da Costa (Guinea-Bissau), Charles Owino (Kenya), Japheth Litenge (Namibia), Jean-Baptiste Nsengiyumva (Rwanda), Carlos Dias (São Tomé and Príncipe), Charles Msangi (Tanzania (United Republic of)), Lengandji Sikaona (Zambia).

Produced with support from Development Initiatives.

Published in January 2020.

Executive summary

This report analyses public investment planning for disaster risk reduction (DRR) in Rwanda and estimates the level of public investment in DRR in the country. It does this through a risk-sensitive budget review, which uses the Organisation for Economic Co-operation and Development (OECD) Development Assistance Committee (DAC) DRR policy marker to evaluate and assess the extent to which the government has budgeted for and/or invested in DRR in the 2016/17, 2017/18 and 2018/19 financial years.

Key findings

- Although disaster risk management (DRM) is not explicitly documented in the programmes and activities of the national budget, use of the OECD DRR marker points to 284 programmes relevant to DRR in 11 ministries and 31 districts.
- Over the period considered, the overall estimate of all DRR investments is about 8.5% of the national budget, comprising $24.3 million in principal investments (0.9% of the budget) and $199.8 million in significant investments (7.6% of the budget).
- The largest proportions of principal DRR investments were channelled through the Ministry of Infrastructure (41.8%), the Ministry of Health (23.0%), the Ministry of Agriculture (18.0%) and the Ministry of Local Government (6.8%). The dedicated Ministry of Disaster Management and Refugee Affairs received 3.8% of total DRR investments, as its role is mostly formulation, coordination, control and direction of DRM policies.
- Domestic resources comprise the larger portion of DRR investments, with 54% ($119.9 million) of total DRR investments on average over the three financial years considered, while external resources contributed 46% ($104.2 million). Dividing DRR investment further into principal and significant components, however, reveals that external sources finance nearly twice as much in principal DRR investments as domestic resources.
- Almost all DRR investments (98%) were targeted at pre-disaster activities and less at post-disaster activities. The bulk of DRR investments go to risk preparedness, which accounted for 86% on average over the three years considered.

1. Introduction

In 2013, the European Union (EU) and the African, Caribbean and Pacific Group of States (ACP) signed an agreement focused on strengthening the ACP Member States' regional integration and inclusion in the global economy. Furthermore, the agreement addressed challenges related to climate change, agriculture and rural development.

Under this agreement, a programme titled "Building Disaster Resilience to Natural Hazards in sub-Saharan African Regions, Countries and Communities" was launched in July 2015. Its aim was to provide a comprehensive framework for disaster risk reduction (DRR) and disaster risk management (DRM), and their effective implementation across sub-Saharan Africa.

To support DRR in the region, the €80 million programme covered a period of five years and focused on five key results: strengthening regional DRR monitoring and coordination; enhancing DRR coordination, planning and policy advisory capacities of Regional Economic Communities; improving the capacity of national and Regional Climate Centres for weather and climate services; improving risk knowledge through disaster databases for future risk modelling; and developing disaster risk financing policies, instruments and strategies at regional, national and local levels.

The programme contributed to broader efforts aiming to assist African countries in building capacity in risk-sensitive investment planning and supporting initiatives to increase public investment in DRR. Furthermore, referring to the Sendai Framework for Disaster Risk Reduction (2015–2030), the programme sought to assist countries in estimating potential disaster impacts, including economic losses. Subsequently, it provided tools for countries to optimize their investment plans in order to address disaster risk and reduce future losses.

As part of the programme, UNDRR has developed risk-sensitive budget review reports for 16 countries in sub-Saharan Africa: Angola, Botswana, Cameroon, Côte d'Ivoire, Equatorial Guinea, Eswatini (The Kingdom of), Gabon, Gambia (The), Ghana, Guinea-Bissau, Kenya, Namibia, Rwanda, São Tomé and Príncipe, Tanzania (United Republic of) and Zambia.

The analysis uses the DRR policy marker, developed by the Organisation for Economic Co-operation and Development (OECD) Development Assistance Committee (DAC). The methodology has been used widely to provide information about DRR mainstreaming. Nevertheless, the tracking of planned and actual expenditures related to DRR is an area that is still evolving.

This report provides information on public investment planning for DRR in Rwanda and presents the findings of a RSBR analysis of the country's budget from 2016/17 to 2018/19. The analysis which follows was presented and discussed during a series of country-level workshops – conducted in 2018, in each of the 16 countries – and additional feedback and input from country experts was sought to improve the analysis.

The report is organized as follows: following this introductory section, section 2 presents Rwanda at a glance (key statistics), while section 3 examines the country's risk profile and the structure and governance of its DRM institutions. Section 4 explains the methodological basis of the OECD DAC DRR policy marker and its application by UNDRR across 16 country analyses, and then presents the findings of the RSBR for Rwanda. The report concludes with a summary of the findings and recommendations for further action.

2. Rwanda at a glance

POPULATION

2018 estimate
12.1
(million people)

2050 projection
22.23
(million people)

GDP

2018 estimate
9.5
(billion $)

2050 projection
133.1
(billion $)

Area: 26.338 km^2

Population Density: 459 people/km^2

Human Development Index: 0.498

Agriculture: 30.9% of GDP

Services: 51.5% of GDP

Industry: 17.6% of GDP

Poverty rate ($1.90 per day): 56%

Sources: Data from: African Development Bank (2019); Central Intelligence Agency; International Institute for Applied Analysis; United Nations, Department of Economic and Social Affairs; Population Division (2019); United Nations Development Programme (2019); United Nations, Statistics Division; and World Bank.

Rwanda is a small and landlocked country located in the East Africa region. Its population was estimated at 12.1 million people in 2018, when 29.8% of the population lived in urban areas. Its annual growth rate has ranged between 1.5% and 2.7% since 2002. The population is projected to grow, reaching 23 million by 2050.

Rwanda's economy is mainly agrarian, with about 70% of the population engaged in this sector. Agriculture thus represents 30.9% of the country's gross domestic product (GDP), with services accounting for 51.5% and industry for 17.6%. Tea and coffee are the major exports while plantains, cassava, potatoes, sweet potatoes, maize and beans are the most widely produced crops. The country has registered solid economic growth since the 2000s, with an average annual growth rate of nearly 8.0%. This growth performance is driven mainly by the agriculture and industry sectors.

Typically, fiscal revenues represent about 14% of national GDP. The budget deficit, which has averaged -2.85% of GDP since 2006, has increased in recent years from 1.5% in 2007 to nearly -4.3% in 2018, due to fiscal containment measures aimed at reducing the impact of external shocks from declines in aid and export receipts. Public investment has shown steady growth over time, from 6% in 2000 to 11% in 2012.

Although poverty levels (under $1.90 per day) are quite high – estimated at 55.5% of the population in 2017 – they have decreased substantially over time, from 77% in 2000. Similarly, the Human Development Index in Rwanda reached 0.54 in 2018, up from 0.32 in 2000.

3. Disaster risk reduction in Rwanda

3.1. Past disasters and losses

Rwanda has been exposed to a variety of natural hazards over the years. The EM-DAT: International Disaster Database reports droughts, earthquakes, epidemics, floods, landslides and storms, with the most frequent type of disaster being floods, followed by epidemics. Less frequent disasters include droughts, landslides, storms and earthquakes, but these have high associated mortality rates and have affected large numbers of people (Table 1). Rwanda's National Disaster Risk Management Plan (NDRMP) of 2013 also reports disasters including volcanic activities and wildfire. Over the past decade, the frequency and intensity of natural hazard-induced disasters, particularly floods and droughts, have increased significantly, worsening the toll of human casualties as well as economic and environmental losses.

Table 1: Disasters and losses, 1974–2018

Hazard	Occurrences	Deaths	People affected	Damage ($ millions)
Drought	6	237	4,156,545	–
Earthquake	2	81	2,286	–
Epidemic	12	322	7,399	–
Flood	16	305	2,012,150	22
Landslide	5	117	11,949	28
Storm	2	3	6,553	–

Source: EM-DAT: The International Disaster Database.

Extreme events such as droughts have had dramatic impacts across the key economic sectors of agriculture, infrastructure and health. Droughts have affected the highest number of people in Rwanda, and have occurred most recently in 2016 and 2017. Rwanda's high reliance on rain-fed agriculture poses a risk to its economic outlook, and despite its fertile ecosystem food production often does not keep pace with demand, requiring food to be imported.[1] In certain regions of the country, particularly in the east, periodic droughts have undermined agricultural production in the past:[2] for example, severe droughts were recorded in 1999/2000 and 2005/06.

Floods have been the hazard responsible for the second highest mortality rate in the past 45 years, just behind epidemics, and have affected more than two million people. In 2005, the government estimated the considerable impact that floods have on the population, with an average of about 12,000 people affected every year, concentrated mostly in Western and Southern provinces.[3] Major floods occurred in 1997, 2006, 2007, 2008, 2009 and 2011, with heavy rainfall resulting in damage to infrastructure, fatalities and injuries, landslides, losses and damages to agricultural crops, soil erosion and environmental degradation.[4]

1 FAO (2016).
2 Republic of Rwanda, Ministry of Disaster Management and Refugee Affairs (2013).
3 UNDRR and CIMA (2018).
4 GCAP (2014).

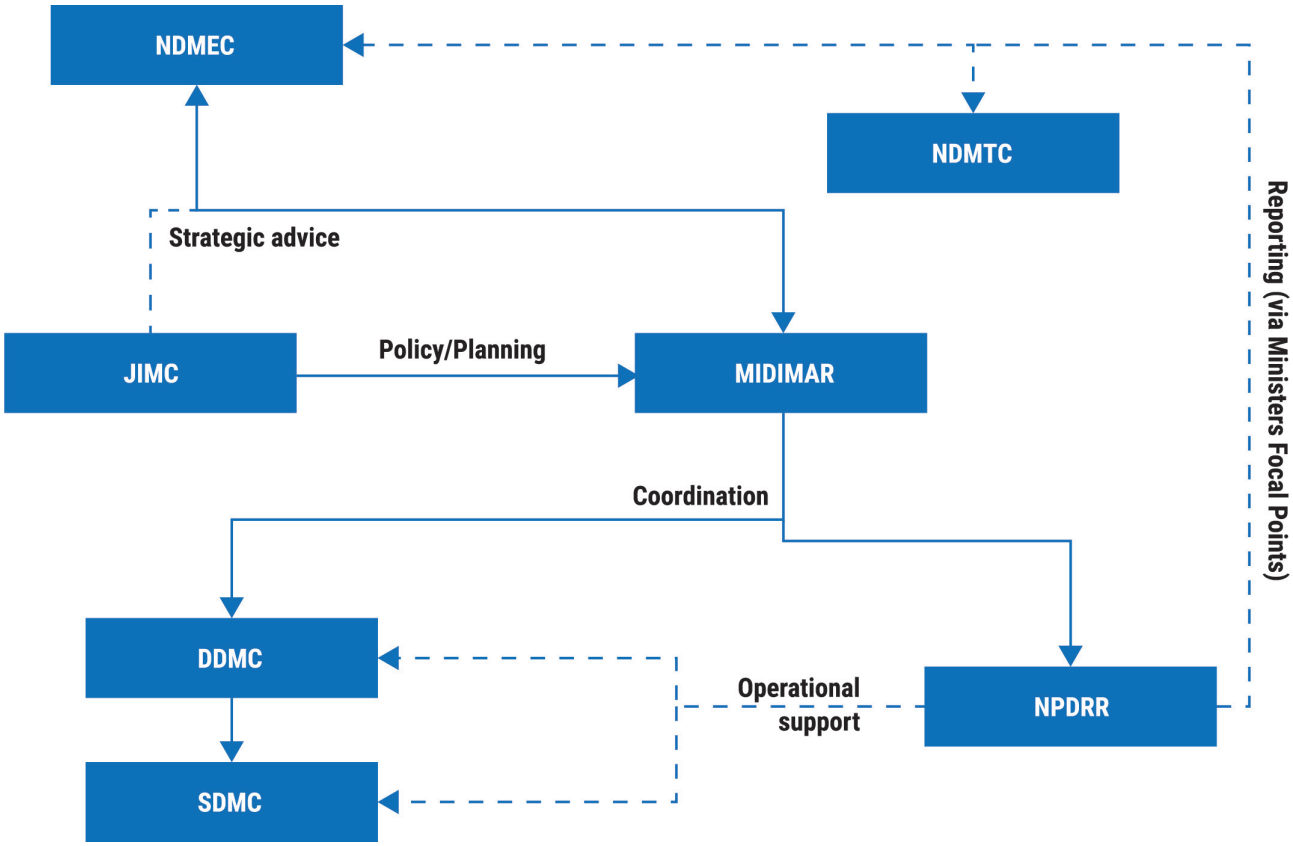
3.2. Disaster risk governance

To reduce disaster risk, the country has put in place the following DRR governance and management structures, which are supported by legislation and institutional frameworks.

- **Disaster Management Policy (2012):** This guides the Government of Rwanda for all disaster management issues. It outlines the objectives, strategies, roles and responsibilities of every institution that intervenes in disaster management in order to achieve an effective disaster management system.[5] The policy is an in-depth revision of the 2009 DM Policy. It guides Rwanda towards a more integrated, coherent and coordinated approach to disaster management.
- **The five-year strategic plan of the Ministry of Disaster Management and Refugee Affairs (MIDIMAR):** The ministry was established by an order of the Prime Minister in 2011. Its strategic plan for the period 2012–2017 provided the overall framework for a holistic approach to disaster management in Rwanda. It covered DRR, preparedness, response, recovery and rehabilitation, as well as refugee and returnee affairs.
- **National Contingency Matrix Plan (2016):** This guides the country's response mechanisms and operations during emergencies. It outlines responsibilities and roles of partnering institutions. It is also designed to provide common understanding among institutions involved in disaster response and recovery.
- **National Disaster Risk Management Plan (NDRMP):** This describes in detail the Disaster Management Policy in operational terms, including the roles, functions and responsibilities of the main actors involved in DRM. Revised on a regular basis, the NDRMP aims to further develop and strengthen national preparedness, response and recovery capabilities.
- **Disaster Management Law (2015):** The law sets out procedures, roles and responsibilities related to DRM and the facilitation and regulation of international disaster assistance provided to Rwanda in the event of a disaster on its territory, as well as for international disaster assistance transiting through Rwanda's territory to aid a neighbouring country affected by a disaster (Republic of Rwanda, 2013).

5 Republic of Rwanda, Ministry of Disaster Management and Refugee Affairs (2012).

Figure 1: Rwanda's disaster management and governance framework



Source: Republic of Rwanda, Ministry of Disaster Management and Refugee Affairs (2012).

Notes: DDMC: district disaster management committees; JIMC: Joint Intervention Management Committee; MIDIMAR: Ministry of Disaster Management and Refugee Affairs; NDMEC: National Disaster Management Executive Committee; NDMTC: National Disaster Management Technical Committee; NDRMP: National Disaster Risk Management Plan; SDMC: sector disaster management committees.

According to disaster management policy documents, Rwanda has a response coordination mechanism that incorporates all possible relevant sectors and institutions of government.[6] The policy documents envisage that a lead organization from the relevant sector is mandated to coordinate the response (Table 2).

6 Republic of Rwanda (2013).

Table 2: Disaster clusters/sectors matched with lead government institutions

Disaster sector	Lead institutions
Camp coordination and management	Ministry of Disaster Management and Refugee Affairs
Recovery	Ministry of Finance and Economic Planning
Education	Ministry of Education
Emergency shelter	Ministry of Local Government
Emergency telecommunication	Ministry of ICT
Food security	Ministry of Agriculture
Health and nutrition	Ministry of Health
Logistics	Ministry of Disaster Management and Refugee Affairs, Ministry of Defence
Protection	Ministry of Internal Security
Water and sanitation	Ministry of Infrastructure
Search, rescue and evacuation	Ministry of Defence

Source: National Disaster Management Policy, Government of Rwanda.

4. Risk-sensitive budget review

4.1. Methodology

The OECD DAC DRR policy marker is a quantitative tool used to identify spending activities that target DRR as a policy objective. An activity should be classified as linked to DRR if it promotes the targets of the Sendai Framework for Disaster Risk Reduction 2015–2030 to achieve "substantial reduction of disaster risk and losses in lives, livelihoods and health and in the economic, physical, social, cultural and environmental assets of persons, businesses, communities and countries".[7]

According to the OECD DAC policy marker document,[8] a DRR-related activity focuses on preventing new risks, and/or reducing existing disaster risks and/or strengthening resilience through "the implementation of … measures that prevent and reduce hazard exposure and vulnerability to disaster and increase preparedness for response and recovery with the explicit purpose of increasing human security, well-being, quality of life, resilience, and sustainable development".

In addition, a DRR-related activity must meet at least one of the four priorities for action of the Sendai Framework,[9] namely: (1) understanding disaster risk; (2) strengthening disaster risk governance to manage disaster risk; (3) investing in DRR for resilience; or (4) enhancing disaster preparedness for effective response and to "Build Back Better" in recovery, rehabilitation and reconstruction.[10]

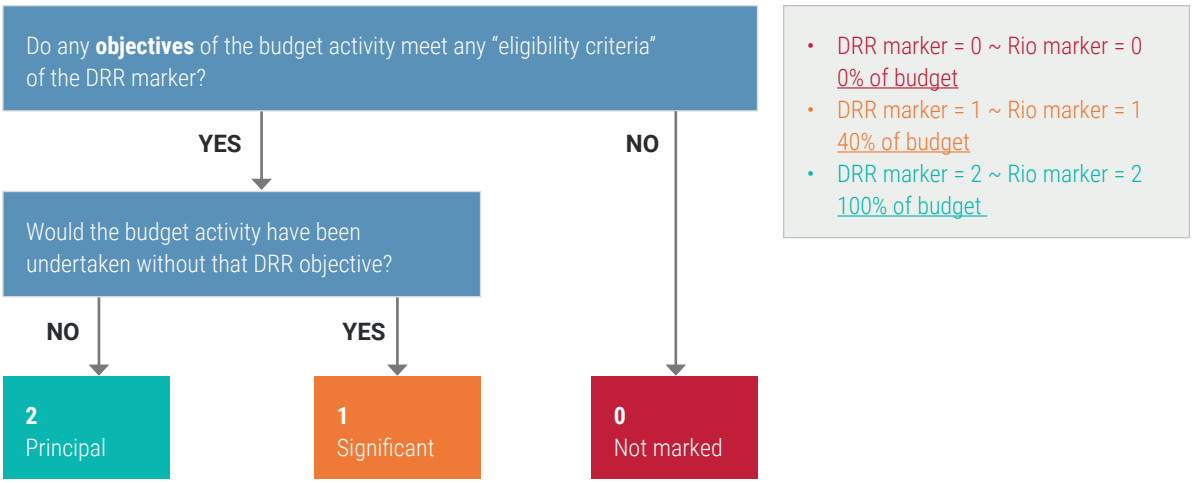
The risk-sensitive budget review (RSBR) is simply the application of the OECD DAC DRR policy marker to country budgets to identify and mark public expenditures that have a DRR objective. By doing this, the extent to which the government has planned or invested implicitly or explicitly in DRR can be identified. Spending activities targeting DRR are screened, marked and weighted as follows:

- Activities are marked as "principal" (marked as 2) when DRR is their principal objective and it is fundamental in the design of and motivation for the activity. These budget activities are then weighted as 100% of the planned or spent allocations which underpin them.
- Activities are marked as "significant" (marked as 1) when their DRR objective is explicitly stated but is not a fundamental motivation for undertaking and designing the activity. These budget activities are weighted as 40% of the planned or spent allocations which underpin them.
- Activities are not marked (marked as 0) when they have no DRR-related objective. These budget activities are weighted as 0% of the planned or spent allocations which underpin them.[11]

The total of principal and significant marked budget allocations is counted as DRR-focused planned or spent budgets or, put simply, DRR investments. Figure 2 illustrates the marking and scoring procedure for the OECD DRR policy marker and how funding allocated to DRR objectives is accounted for.

7 UNDRR (2015), p. 12.
8 OECD (2017), p.8.
9 UNDRR (2015), p.14.
10 From this, a DRR-related activity can be located along the disaster management cycle: pre-disaster activities (prevention, mitigation or preparedness) or post-disaster activities (response or mitigation).
11 Petri (2016); European Commission (2016).

Figure 2: Scoring decision rule for the OECD DAC DRR policy marker and Rio marking system



Source: OECD (2017).

4.2. Scope of the analysis

The analysis reviewed budget data from all the ministries, departments and agencies (MDAs) of the central government. The data was obtained from national budget documents of the Ministry of Finance, specifically the budget books for 2016/17, 2017/18 and 2018/19. The data covered all expenditures of the budget, current and capital expenditures, across all the MDAs of the central government.

The application of the OECD marker sheds light on five ministries (votes) with 12 subprogrammes under seven programmes with principal DRR allocations at national level and 30 votes, 23 programmes and 23 subprogrammes at district level. It also found eight ministries, 26 programmes and 52 subprogrammes with significant DRR allocations at the national level, and 31 votes, 228 programmes and 312 subprogrammes at district level.

Table 3: Number of marked projects/activities and institutions

Coverage	DRR expenditure at national and 31 district levels				
	Component	Level	Votes (institution)	Programmes	Subprogrammes
	Principal	National	5	7	12
		District	30	23	23
	Significant	National	8	26	52
		District	31	228	312
Data source	http://www.minecofin.gov.rw/index.php?id=231 All sub-votes under a total of 71 votes (27 institutions and 31 districts assessed)				
Budget period	2016/17–2018/19				

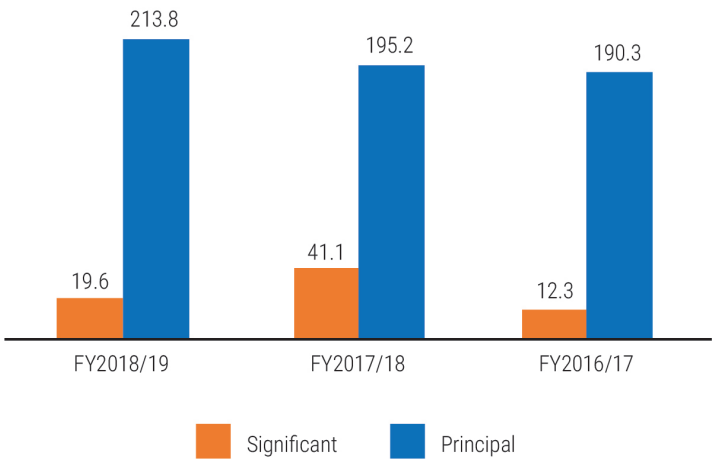
Source: Author's calculations based on 2016/17–2018/19 budgets, Ministry of Finance and Economic Planning, Rwanda.

4.3. Principal and significant DRR marked budget

Aggregate DRR marked budget

Applying the OECD DAC DRR policy marker, the analysis established that the overall estimate of all DRR investments in Rwanda over the period 2016/17–2018/19 was about $0.2 billion per year, on average, of which $24.3 million was allocated to principal DRR investments and $199.8 million to significant investments. This represented 8.5% (0.9% principal and 7.6% significant) of the total average annual budget (of $2.6 billion) over the three-year period.

Figure 3: Estimate of overall DRR investments, 2016/17–2018/19 ($ millions)



Source: Author's calculations based on 2016/17–2018/19 budgets, Ministry of Finance and Economic Planning, Rwanda.

There was a notable decline in the overall volume of DRR investments, which fell by about 13.2% between 2017/2018 and 2018/2019 (Figure 3). Principal DRR allocations rose from $20 million in 2016/17 to $41 million in 2017/18, before falling to $12 million in 2018/19. At the same time, significant DRR allocations declined from $214 million in 2016/17 to $190 million in 2018/19.

The principal component of DRR investments ($24.3 million on average) remained at less than 1% of the national budget and less than 15% of total DRR investment. Over the three-year period, principal DRR represented, on average, 0.9% of the national budget and about 10.6% of the average volume of all DRR investments.

Despite the existence of a government institution (MIDIMAR) mandated to spearhead disaster management and related initiatives, direct investment in DRR remained low and largely implicit, with no direct deliberate intentions to identify and streamline all financing for DRR. Table 4 presents estimates of DRR investments (principal and significant). Only MIDIMAR had a specific vote on disaster management that received allocations over the three financial years.

Table 4: DRR investments (principal and significant)

Description (amounts in $)	2016/17	2017/18	2018/19	Total for 2016/17–2018/19	Average per year
Total national budget	**2,503,700,734**	**2,533,321,806**	**2,846,231,914**	**7,883,254,454**	**2,627,751,485**
Total DRR investment	**233,415,451**	**236,319,802**	**202,600,066**	**672,335,319**	**224,111,773**
% of total national budget	9.3%	9.3%	7.1%	8.5%	8.5%
Principal	19,568,121	41,076,023	12,268,865	72,913,010	24,304,337
% of total DRR investment	8.4	17.4	6.1	31.8	10.6
% of total national budget	0.8	1.6	0.4	2.8	0.9
Significant	213,847,330	195,243,779	190,331,201	599,422,310	199,807,437
% of total DRR investment	91.6	82.6	93.9	268.2	89.4
% of total national budget	8.5	7.7	6.7	22.9	7.6

Source: Author's calculations based on 2016/17–2018/19 budgets, Ministry of Finance and Economic Planning, Rwanda.

Distribution of DRR marked programmes across MDAs

The budget documents used for analysis in this report lacked disaggregation in terms of projects that could be used to identify and document the specific investments and initiatives to which DRR funding was directed. Nonetheless, using the OECD DAC DRR policy marker, the analysis revealed that at least 68 programmes, under nine ministries, could be deemed to be DRR investments. Table 5 lists the specific ministries and the corresponding votes and number of DRR programmes that were considered to be implicitly relevant to DRR.

Most of the DRR investments (principal and significant) were channelled through the Ministry of Health with 17 subprogrammes, followed by the Ministry of Environment with 13 subprogrammes, the Ministry of Agriculture with 12 and the Ministry of Infrastructure with seven. When considering total volumes of DRR investments, it appeared that most of them were channelled through the Ministry of Infrastructure, with 41.8% ($71,211,467), the Ministry of Health with 23.0% ($39,182,264), the Ministry of Agriculture with 18.0% ($30,713,736), the Ministry of Local Government with 6.8%

($11,531,008) and the Ministry of Environment with 6.2%. The bulk of the allocations over the three years were allocated through three ministries, the Ministry of Infrastructure, the Ministry of Health and the Ministry of Agriculture, accounting for about 83% of total principal DRR spending (Figure 4), which is equivalent to $141,107,467.

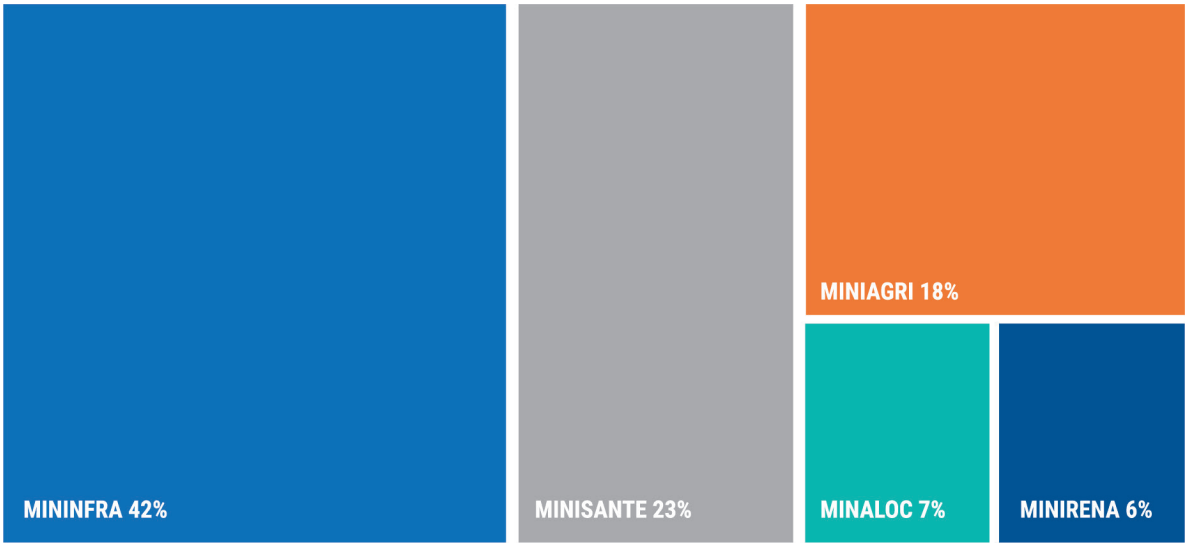
Table 5: Distribution of DRR marked programmes across MDAs

	Ministry/vote	Principal	Significant	Number of programmes
9	Ministry of Agriculture	1	11	12
36	Agricultural and animal resource intensification	1	6	7
37	Research, technological transfer, advisory services and professionalization of farm advisory	–	3	3
38	Value chain development and private sector investment	–	2	2
10	Ministry of Trade, Industry and East Africa Affairs	–	1	1
45	Promotion of cooperatives	–	1	1
16	Ministry of Health	3	14	17
80	Administrative and support services	–	1	1
81	Health human resources	–	1	1
82	Financial and geographical health accessibility	–	2	2
83	Policy development and health service regulation	–	4	4
84	Maternal and child health	–	4	4
86	Health quality improvement	–	3	3
87	Disease prevention and control	3	4	5
18	Ministry of Infrastructure	1	6	7
93	Transport infrastructure development and maintenance	–	1	1
94	Fuel and energy	1		1
95	Water and sanitation	–	2	2
96	Urbanization, housing and government assets management	–	3	3
19	Ministry of Youth and ICT	–	1	1
99	Youth economic empowerment and social welfare	–	1	1
22	Ministry of Environment	2	11	13
A4	Environment and natural resource policy development and coordination	–	2	2
A5	Environmental management and climate change resilience	–	4	4
A6	Land administration and land use management	–	1	1
A7	Integrated water resource management	–	2	2
A8	Terrestrial ecosystems and forest resource management	–	2	2
B0	Meteorological operations	2	–	2
23	Ministry of Local Government	–	6	6
B1	Social protection	–	1	1

	Ministry/vote	Principal	Significant	Number of programmes
B2	Policy development and coordination	–	1	1
B6	Local development support	–	1	1
B7	Demobilization, reintegration and reinsertion coordination	–	3	3
25	Ministry of Disaster Management and Refugee Affairs	5	–	5
1	Administrative and support services	1	–	1
C4	Returnees and refugees management	2	–	2
C5	Disaster management	2	–	3
26	Ministry of Gender and Family Promotion	–	2	2
C7	Women's empowerment	–	1	1
C9	Child rights protection and promotion	–	1	1
	Total	**12**	**52**	**64**

Source: Author's calculations based on 2016/17–2018/19 budgets, Ministry of Finance and Economic Planning, Rwanda.

Figure 4: Top recipients (institutions) of DRR marked allocations (%)



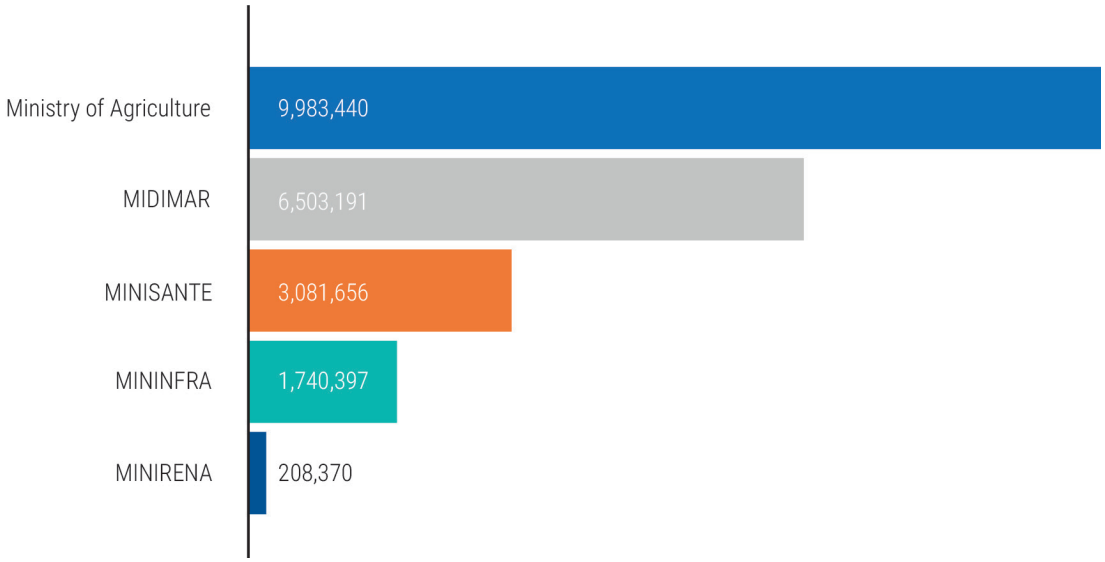
Source: Author's calculations based on 2016/17–2018/19 budgets, Ministry of Finance and Economic Planning, Rwanda.

Notes: MIDIMAR: Ministry of Disaster Management and Refugee Affairs; MIGEPROF: Ministry of Gender and Family Promotion; MININFRA: Ministry of Infrastructure; MINALOC: Ministry of Local Government; MINIAGRI: Ministry of Agriculture; MINIRENA: Ministry of Environment; MINISANTE: Ministry of Health.

Nationally, principal DRR investments were channelled through five ministries (votes) with 12 subprogrammes under seven main programmes. At district level, 30 votes were tracked with 23 subprogrammes under 23 programmes. Allocations were largely in disease prevention and control, management of returnees and refugees and disaster management.

The bulk of the principal DRR allocations over the three years were allocated through three ministries – the Ministry of Agriculture, the Ministry of Disaster Management and Refugee Affairs and the Ministry of Health. These three accounted for about 90.9% of total average principal DRR financing, equivalent to about $19.2 million (Figure 5).

Figure 5: Top recipients (institutions) of average principal marked DRR investments ($)



Source: Author's calculations based on 2016/17–2018/19 budgets, Ministry of Finance and Economic Planning, Rwanda.

Notes: MININFRA: Ministry of Infrastructure; MIDIMAR: Ministry of Disaster Management and Refugee Affairs; MINIRENA: Ministry of Environment; MINISANTE: Ministry of Health.

The ministry dedicated to disaster management, MIDIMAR, received a share of 30.2% of the total average estimated principal DRR investments over the three years considered in the analysis. Over the same period the Ministry of Agriculture received 46.4% on average and the Ministry of Health received 14.3%. Table 6 provides a summary of the key votes, programmes and subprogrammes marked by the analysis as representing principal DRR allocations. Of the total allocations to MIDIMAR, 66.6% on average were earmarked for development projects and the rest as recurrent budget. It is also notable that administrative and support services constituted 14.5% of total average allocations to MIDIMAR.

Table 6: Distribution of principal DRR investments across MDAs ($)

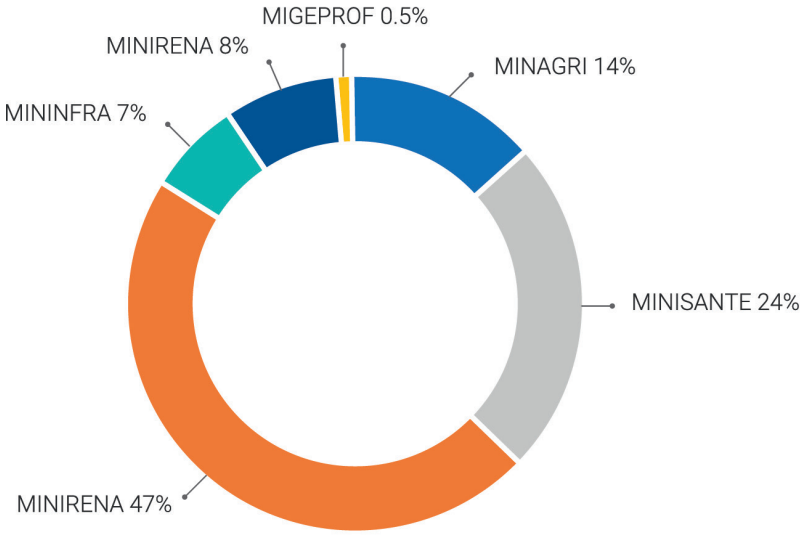
Vote	Ministry	Number of subprogrammes	2016/17	2017/18	2018/19	Average 2016/17–2018/19
9	Ministry of Agriculture	1	871,188	29,079,132	-	9,983,440
36	Agricultural and animal resource intensification	1	871,188	29,079,132	-	9,983,440
% of total principal DRR investment		5.3	77.5	0.0	46.4	
16	Ministry of Health	3	4,097,458	2,672,255	2,475,255	3,081,656
87	Disease prevention and control	3	4,097,458	2,672,255	2,475,255	3,081,656
% of total principal DRR investment		24.7	7.1	23.7	14.3	
18	Ministry of Infrastructure	1	10,232,766	216,994	1,747,201	4,065,653
94	Fuel and energy	1	3,256,996	216,994	1,747,201	1,740,397
% of total principal DRR investment		19.7	0.6	16.7	8.1	
22	Ministry of Environment	2	28,716,564	24,063,207	25,796,854	26,192,208
B0	Meteorological operations	2	544,197	45,970	34,944	208,370
% of total principal DRR investment		3.3	0.1	0.3	1.0	
22	Ministry of Disaster Management and Refugee Affairs	5	7,797,513	5,525,320	6,186,739	6,503,191
1	Administrative and support services	1	927,191	970,428	933,939	943,853
C4	Returnees and refugee management	2	4,345,039	2,709,191	2,821,033	3,291,754
C5	Disaster management	2	2,525,283	1,845,700	2,431,767	2,267,583
% share of total principal DRR Spending		47.1	14.7	59.2	30.2	
Total principal DRR investments	**12**	**16,567,352**	**37,539,670**	**10,444,139**	**21,517,053**	

Source: Author's calculations based on 2016/17–2018/19 budgets, Ministry of Finance and Economic Planning, Rwanda.

Due to the lack of sufficient disaggregated budget data, our effort to explore and identify the specific projects under each of the programmes was limited. However, using the OECD DAC tracker, the analysis established that DRR investments marked as significant were channelled through 52 subprogrammes, housed in eight ministries (votes), distributed across 26 programmes at the national level, and 31 votes, 228 programmes and 312 subprogrammes at the district level.

The analysis noted that most of the allocations of significant DRR were channelled, on average, over the three years through three ministries – the Ministry of Infrastructure, the Ministry of Health and the Ministry of Agriculture. These three ministries accounted for about 84.6% of total average significant DRR financing over the three years, equivalent to about $126.3 million. This funding was invested largely in agriculture and animal resource intensification ($16,353,330 on average per year), financial and geographical health accessibility ($6,097,613 on average per year), health quality improvement ($16,685,852) and transport infrastructure development and maintenance ($53,359,071 on average per year).

Figure 6: Distribution of significant DRR investments across MDAs



Source: Author's calculations based on 2016/17–2018/19 budgets, Ministry of Finance and Economic Planning, Rwanda.

Notes: MIGEPROF: Ministry of Gender and Family Promotion MINALOC: Ministry of Local Government; MINIAGRI: Ministry of Agriculture; MININFRA: Ministry of Infrastructure; MINIRENA: Ministry of Environment; MINISANTE: Ministry of Health.

Table 7 illustrates a summary of the key votes, programmes and subprogrammes marked by the analysis as representing significant DRR allocations.

Table 7: Distribution of significant DRR Investments across MDAs ($)

Vote	Vote/subvote	Number of subprogrammes	2016/17	2017/18	2018/19	Average 2016/17–2018/19
9	Ministry of Agriculture	11	27,825,958	34,364,930	0	2,041,937
36	Agricultural and animal resource intensification	6	21,602,110	27,457,881	0	16,353,330
37	Research, technological transfer, advisory services and professionalization of FA	3	3,051,668	3,953,418	0	2,335,028
38	Value chain development and private sector investment	2	3,172,180	2,953,631	0	2,041,937
% of total significant DRR investment		17.8	23.6	-	1.6	
10	Ministry of Trade, Industry and East Africa Affairs	1	937,838	0	0	312,613
45	Promotion of cooperatives	1	937,838	0	0	312,613
% of total significant DRR investment			0.6	0.0	0.0	
16	Ministry of Health	14	42,321,643	34,967,068	31,013,112	36,100,608
80	Administrative and support services	1	52,271	944,156	633,623	543,350
81	Health human resources	1	4,776,411	1,385,507	1,328,194	2,496,704
82	Financial and geographical health accessibility	2	11,373,054	6,919,784	0	6,097,613
83	Policy development and health service regulation	1	9,912,177	3,657,950	0	4,523,376
84	Maternal and child health	4	1,406,812	860,515	4,663,799	2,310,375
86	Health quality improvement	3	12,641,440	16,540,792	20,875,325	16,685,852
87	Disease prevention and control	2	2,159,479	4,658,364	3,512,172	3,443,338
% of total significant DRR investment		27.1	24.0	21.3	27.6	

Vote	Vote/subvote	Number of subprogrammes	2016/17	2017/18	2018/19	Average 2016/17–2018/19
18	Ministry of Infrastructure	6	70,370,349	59,200,060	78,842,801	69,471,070
93	Transport infrastructure development and maintenance	1	57,247,756	44,387,892	58,441,565	53,359,071
95	Water and sanitation	2	9,475,790	13,095,951	17,211,569	13,261,103
96	Urbanization, housing and government assets management	3	3,646,802	1,716,216	3,189,668	2,850,895
% of total significant DRR investment		45.0	40.6	54.0	53.2	
19	Ministry of Youth and ICT	1	34,500	18,816	0	17,772
99	Youth economic empowerment and social welfare	1	34,500	18,816	0	17,772
% of total significant DRR investment		0.0	0.0	0.0	0.0	
22	Ministry of Environment		11,268,947	9,606,895	10,444,540	10,440,127
A4	Environment and natural resource policy development and coordination	2	7,091,811	2,080,211	5,345,800	4,839,274
A5	Environmental management and climate change resilience	4	1,814,622	3,376,630	1,269,469	2,153,573
A6	Land administration and land use management	1	0	0	139,776	46,592
A7	Integrated water resource management	2	1,252,373	3,756,903	3,256,321	2,755,199
A8	Terrestrial ecosystems and forest resource management	2	1,110,141	393,152	433,175	645,489
% of total significant DRR investment		-	-	0.1	0.0	
23	Ministry of Local Government	6	2,636,567	6,802,878	25,153,577	11,531,008
B1	Social protection	1	1,162,431	1,329,384	12,117,206	4,869,674
B2	Policy development and coordination	1	0	203,588	0	67,863
B6	Local development support	1	479,053	4,763,697	13,036,371	6,093,040

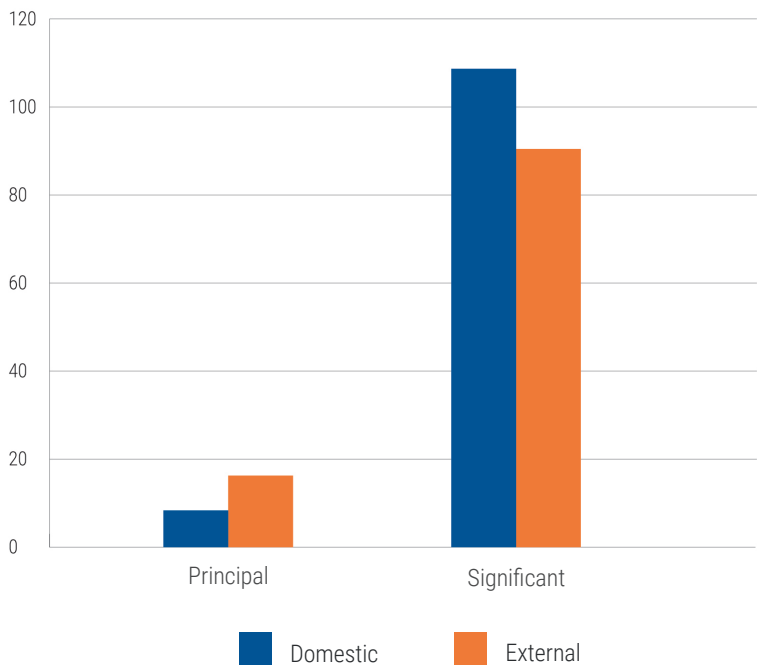
Vote	Vote/subvote	Number of subprogrammes	2016/17	2017/18	2018/19	Average 2016/17–2018/19
B7	Demobilization, reintegration and reinsertion coordination	3	995,083	506,208	0	500,431
% of total significant DRR investment		1.7	4.7	17.2	8.8	
26	Ministry of Gender and Family Promotion	2	990,340	759,196	452,004	733,847
C7	Women's empowerment	1	0	71,367	0	23,789
C9	Child rights protection and promotion	1	990,340	687,830	452,004	710,058
% of total significant DRR investment		0.7	0.6	0.3	0.5	
Total subvotes	**52**	**156,386,142**	**145,719,843**	**145,906,035**	**130,648,981**	

Source: Author's calculations based on 2016/17–2018/19 budgets, Ministry of Finance and Economic Planning, Rwanda.

Analysis of sources of DRR investments

Compared with external sources of finance, domestic resources comprise a larger proportion of the total basket of resources for DRR in Rwanda. They account for 53.5% of DRR investments over the three financial years considered, representing an annual average of about $119.9 million. External resources invested in DRR add up to $104.2 million over the same period, representing 4.2% of the total national budget.

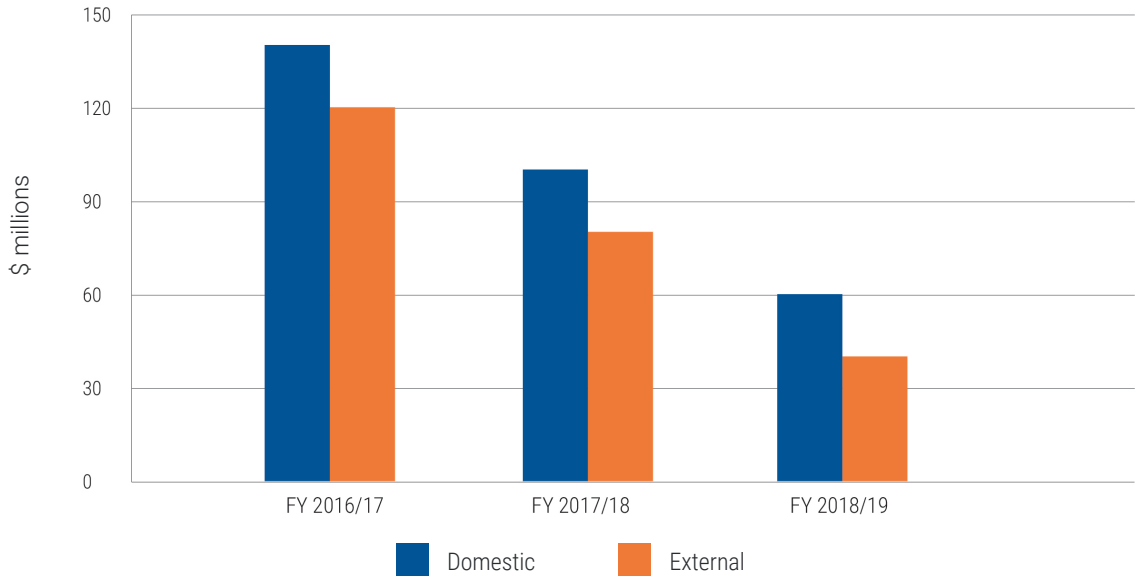
Figure 7: Sources of overall DRR investments, external and domestic ($ millions)



Source: Author's calculations based on 2016/17–2018/19 budgets, Ministry of Finance and Economic Planning, Rwanda.

External resources are more targeted to DRR objectives. External finance represents 65.4% of principal DRR investment, and 44.2% of significant investments. While domestic resources for overall DRR fluctuated over the three years, external resources steadily declined, falling from $108.9 million in 2016/17 to $95.8 million in 2018/19. Domestic resources meanwhile appeared to fluctuate over the three-year period, rising from $124.5 million in 2016/17 to $128.3 million in 2017/18, and then falling back to $106.8 million 2018/19.

Figure 8: Sources of DRR investments, 2016/17–2018/19 ($ millions)



Source: Author's calculations based on 2016/17–2018/19 budgets, Ministry of Finance and Economic Planning, Rwanda.

4.4 DRR marked budget across categories of the DRM cycle

DRR investments can be divided into four different types of expenditure across the DRM cycle: mitigation and prevention, preparedness, response and relief, and reconstruction and recovery. The bulk of DRR investments in Rwanda go to risk preparedness, which accounted for the largest proportion of DRR allocations over the three-year period, amounting to about $193.0 million, or 86.1% of the total (Table 8). Allocations towards preparedness, however, declined over the period. The risk category of mitigation and prevention, however, saw allocations grow steadily over the three years, rising by 159% between 2016/17 and 2018/19 and accounting for about $26.8 million on average per year (11.9% of the total).

Table 8: Distribution of overall DRR allocations across the disaster risk cycle

Amounts in $ millions	2016/17	2017/18	2018/19	Total DRR investment 2016/17–2018/19	Average DRR investment 2016/17–2018/19
Mitigation and prevention	16.0	22.8	41.4	80.3	26.8
% of total DRR investments	6.9	9.6	20.5	11.9	11.9
Preparedness	211.5	210.5	156.9	578.9	193.0
% of total DRR investments	90.6	89.1	77.4	86.1	86.1
Response and relief	1.6	0.3	1.5	3.3	1.1
% of total DRR investments	0.7	0.1	0.7	0.5	0.5
Recovery and reconstruction	4.3	2.7	2.8	9.9	3.3
% of total DRR investments	1.9	1.1	1.4	1.5	1.5
Total DRR investment	**233.4**	**236.3**	**202.6**	**672.3**	**224.1**

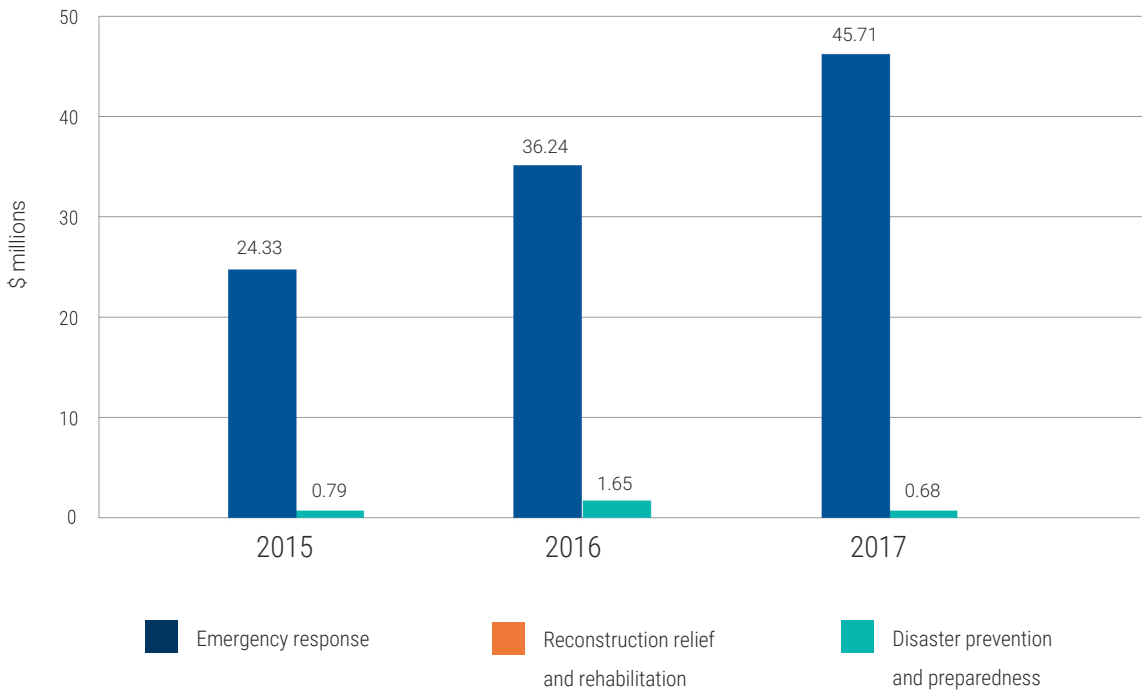
Source: Author's calculations based on 2016/17–2018/19 budgets, Ministry of Finance and Economic Planning, Rwanda.

Response and relief and recovery and reconstruction accounted for a negligible proportion of DRR investments in Rwanda, amounting respectively to only about $1.1 million (0.5%) and $3.3 million (1.5%) on average per year. While there may have not been any significant disasters in the recent past requiring expenditures in these areas, this could also be explained to some extent by the efforts of the international humanitarian community (Box 1).

Box 1: Official development assistance by DRM category

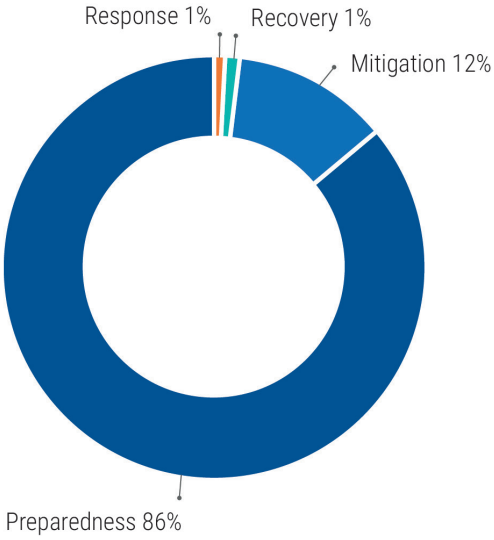
A key finding from the RSBR is that most of the marked DRM budget goes to pre-disaster activities rather than to post-disaster activities. However, most of the post-disaster activities are carried out by humanitarian actors, rather than by the government.

The figure below shows the humanitarian component of ODA assistance to Rwanda between 2015 and 2017 and its allocation to various DRM categories. Of the $74.2 million gross disbursement the country received as humanitarian aid, disaster prevention and preparedness took a share of only 2%. Most of the spending over the three years – 97.6% – was on emergency response. This partly explains why Rwanda's government has focused mostly on preparedness.



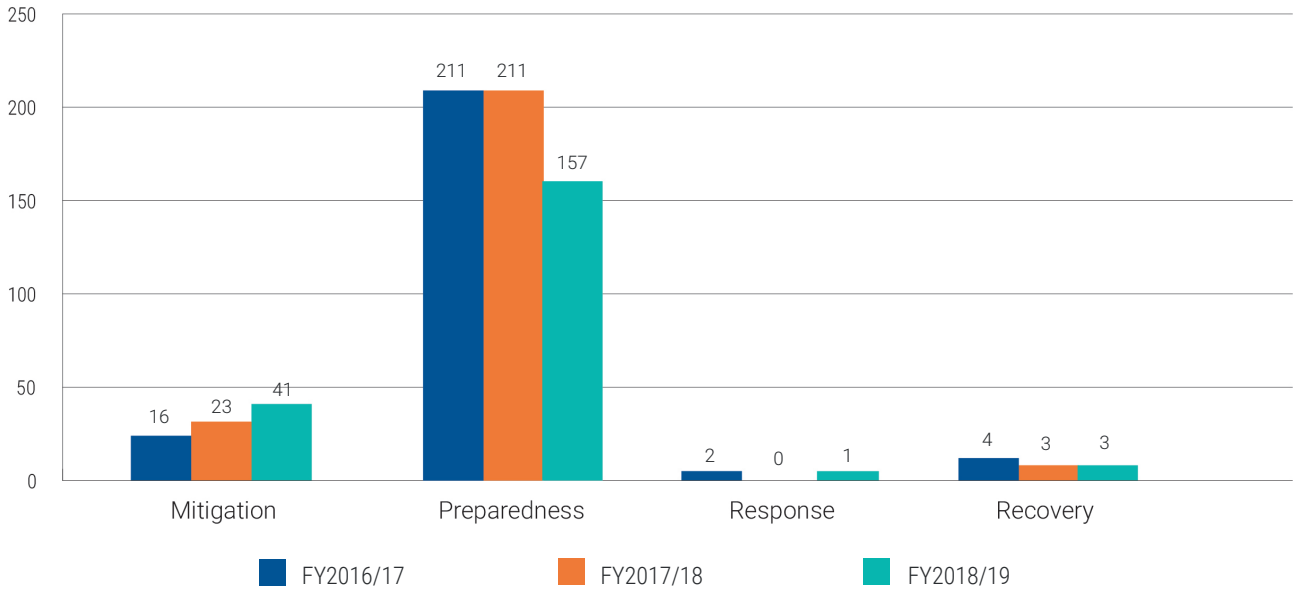
Source: OECD humanitarian aid data: www.oecd.org/dac/stats/humanitarian-assistance.htm.

Figure 9: Aggregate DRR investments by risk cycle



Source: Author's calculations based on 2016/17–2018/19 budgets, Ministry of Finance and Economic Planning, Rwanda.

Figure 10: DRR investments by risk cycle, 2016/17–2018/19 ($ millions)



Source: Author's calculations based on 2016/17–2018/19 budgets, Ministry of Finance and Economic Planning, Rwanda.

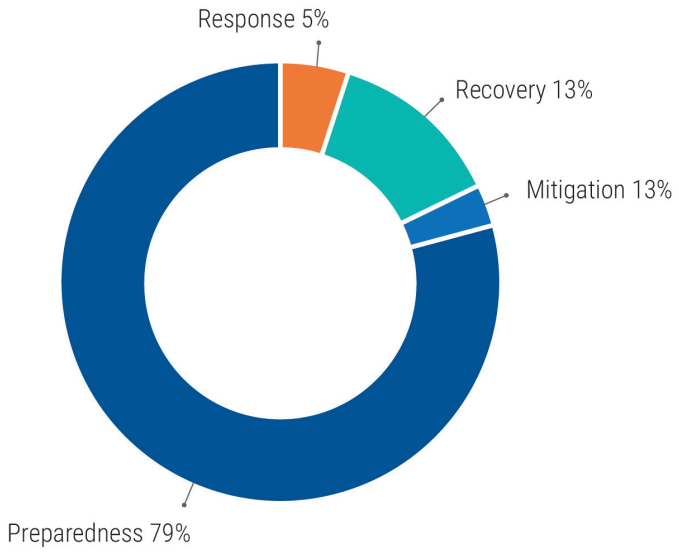
Investments in the principal marked budget were concentrated on preparedness – about 79%, or $19.1 million on average annually over the three years (Table 9). In comparison, allocations to mitigation and prevention came to $0.8 million (3.3%) per year on average, with $1.1 million (4.6%) to response and $3.3 million (13.5%) to recovery and reconstruction.

Table 9: Distribution of principal marked DRR allocations across the disaster risk cycle

Amounts in $ millions	2016/17	2017/18	2018/19	Total DRR investment 2016/17–2018/19	Average DRR investment 2016/17–2018/19
Mitigation	1.5	0.7	0.2	2.4	0.8
% of total principal DRR investments	7.9	1.6	1.5	3.3	3.3
Preparedness	12.1	37.4	7.8	57.3	19.1
% of total principal DRR investments	62.0	91.0	63.7	78.6	78.6
Response	1.6	0.3	1.5	3.3	1.1
% of total principal DRR investments	8.0	0.8	11.9	4.6	4.6
Recovery	4.3	2.7	2.8	9.9	3.3
% of total principal DRR investments	22.2	6.6	23.0	13.5	13.5
Total DRR investment	**19.6**	**41**	**12.3**	**72.9**	**24.3**

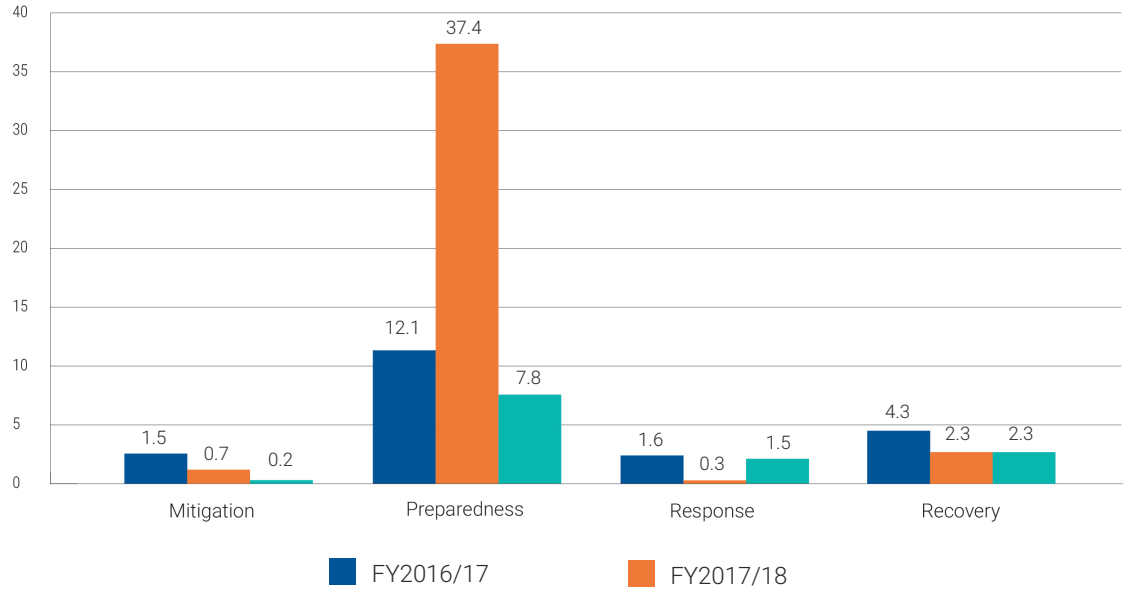
Source: Author's calculations based on 2016/17–2018/19 budgets, Ministry of Finance and Economic Planning, Rwanda.

Figure 11: Average principal DRR investments across the risk cycle



Source: Author's calculations based on 2016/17–2018/19 budgets, Ministry of Finance and Economic Planning, Rwanda.

Figure 12: Average principal DRR investments across the risk cycle, 2016/17–2018/19 ($ millions)



Source: Author's calculations based on 2016/17–2018/19 budgets, Ministry of Finance and Economic Planning, Rwanda.

In significant DRR investments, the bulk of resources is concentrated on two risk categories, preparedness and mitigation, with no identifiable resources allocated to the response and recovery risk categories. Investment in preparedness amounted to about $173.8 million (87%) on average per year, and about $26.0 million was allocated to prevention and mitigation (Table 10). While allocations to preparedness have declined over the three financial years considered, the proportion of allocations to prevention and mitigation has been rising steadily, more than doubling between 2016/17 and 2018/19.

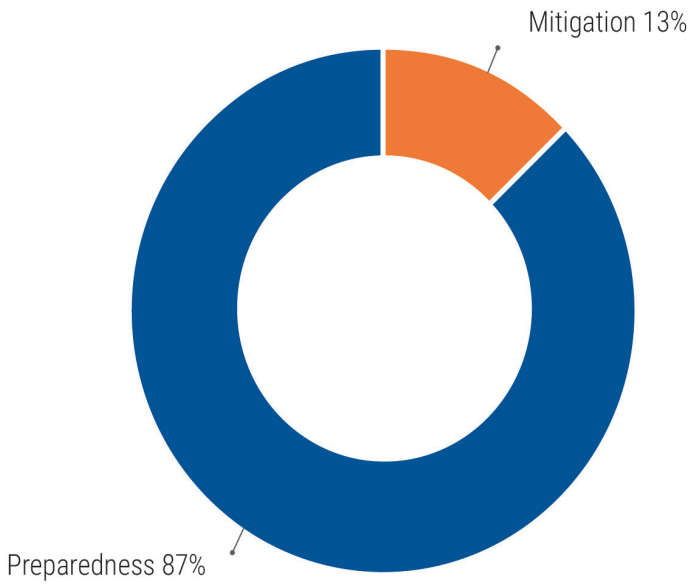
Table 10: Distribution of significant marked DRR allocations across the disaster risk cycle

Amounts in $ millions	2016/17	2017/18	2018/19	Total DRR investment 2016/17–2018/19	Average DRR investment 2016/17–2018/19
Mitigation	14.5	22.1	41.3	77.9	26.0
% of total significant DRR investments	6.8	11.3	21.7	13.0	13.0
Preparedness	199.4	173.1	149.1	521.5	173.8
% of total significant DRR investments	93.2	88.7	78.3	87.0	87.0
Response	–	–	–	–	–
% of total significant DRR investments	–	–	–	–	–
Recovery	–	–	–	–	–
% of total significant DRR investments	–	–	–	–	–
Total DRR investment	**213.8**	**195**	**190.3**	**599.4**	**199.8**

Source: Author's calculations based on 2016/17–2018/19 budgets, Ministry of Finance and Economic Planning, Rwanda.

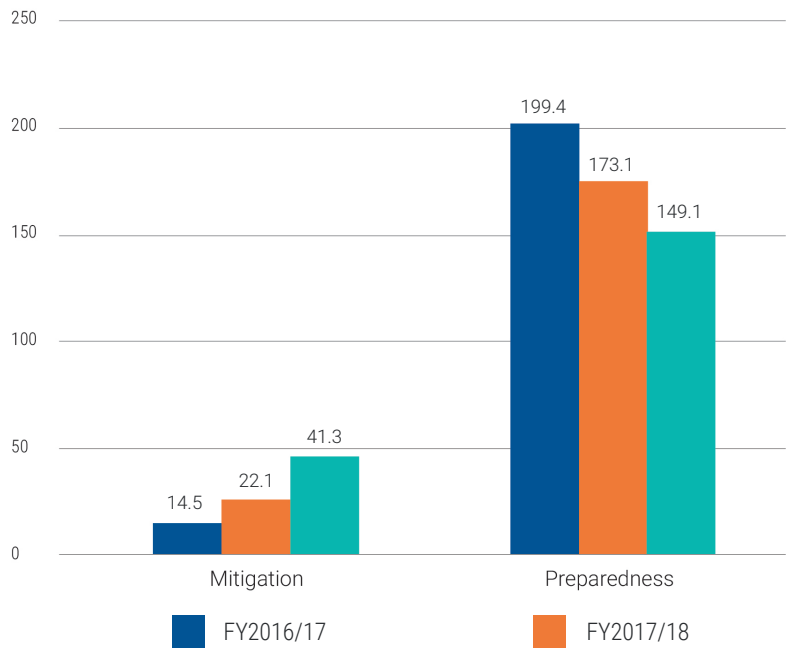
Comparing allocations to the two DRR components by risk category reveals that while principal DRR investments consider all risk categories, albeit skewed to one category, significant DRR investments focus only on the pre-disaster phase of the DRM cycle. Another major difference between the two components by risk category is that allocations for mitigation and prevention were higher for DRR investments marked as significant, at 13.0%, compared with those marked as principal, at 3.3%.

Figure 13: Average significant DRR investments across the risk cycle



Source: Author's calculations based on 2016/17–2018/19 budgets, Ministry of Finance and Economic Planning, Rwanda.

Figure 14: Significant DRR investments across the risk cycle, 2016/17–2018/19 ($ millions)



Source: Author's calculations based on 2016/17–2018/19 budgets, Ministry of Finance and Economic Planning, Rwanda.

Categorizing the marked DRR investments according to the DRM cycle, the balance of allocation tilts overwhelmingly towards pre-disaster activities rather than to post-disaster activities. Over the three years considered, almost all DRR investments (98%) were allocated to pre-disaster activities, amounting to about $219.2 million, compared with only $4.9 million allocated to post-disaster activities. This was attributable partly to the fact that there had not been any major disasters in the country in the past three years to warrant substantive post-disaster expenditures, and to the understanding that it is mostly humanitarian actors who intervene in response when disasters strike.

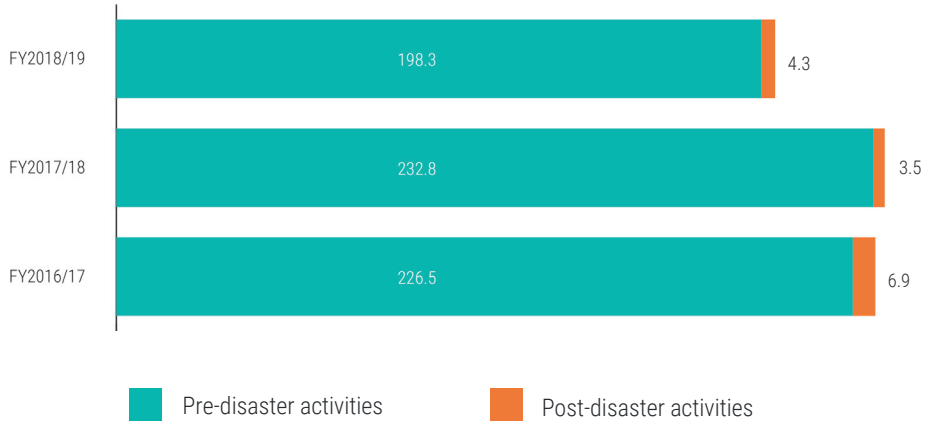
Table 11: Distribution of overall DRR allocations across the disaster management cycle

	2016/17	2017/18	2018/19	Total DRR investment 2016/17–2018/19	Average DRR investment 2016/17–2018/19	% share of total DRR
Pre-disaster activities	226.5	232.8	198.3	658	219.2	97.8%
Post-disaster activities	6.9	3.5	4.3	15	4.9	2.2%
Total DRR investment	**233.4**	**236.3**	**202.6**	**672.3**	**224.1**	

Source: Author's calculations based on 2016/17–2018/19 budgets, Ministry of Finance and Economic Planning, Rwanda.

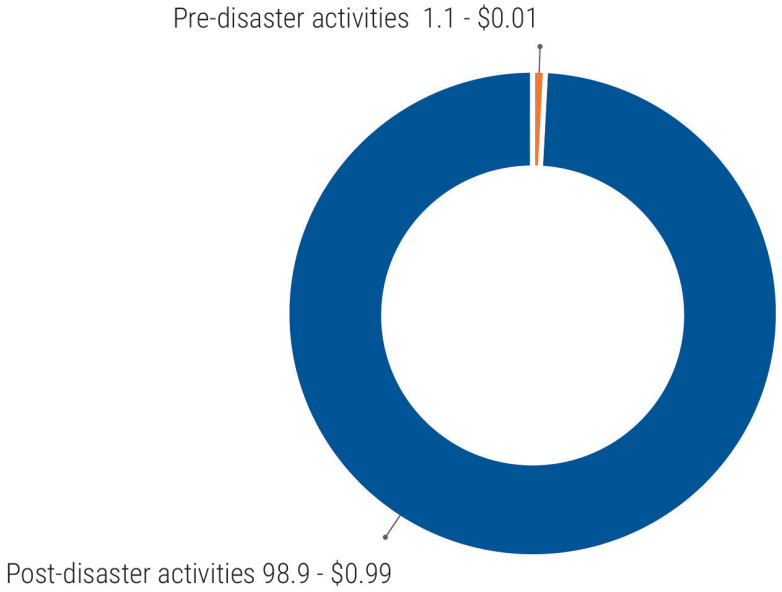
There were, however, some notable disparities when the balance between pre-disaster activities and post-disaster activities was compared across national and district budgets for both the principal and significant DRR investment categories. Considering national budgets alone, for post-disaster activities there was more allocated for DRR marked under principal (20.5%) than under significant (0.3%). Also, when comparing the overall DRR allocations marked significant and principal, there were more allocations for post-disaster activities in the principal category ($4.4 million, or 18.1%) than in the significant category ($0.5 million, or just 0.3%).

Figure 15: Yearly allocation to DRR across the disaster management cycle ($ millions)



Source: Author's calculations based on 2016/17–2018/19 budgets, Ministry of Finance and Economic Planning, Rwanda.

Figure 16: Overall allocation across the disaster management cycle, 2016/17–2018/19 ($ millions)



Source: Author's calculations based on 2016/17–2018/19 budgets, Ministry of Finance and Economic Planning, Rwanda.

5. Conclusion and recommendations

The RSBR has attempted to evaluate and determine the level of public investments targeted to DRR in Rwanda. Though not necessarily a tight and effective methodology for accurately identifying and measuring DRR investments, the OECD marker provides a useful starting point that can be improved upon.

The RSBR analysis shows the following:

- Although DRM is not explicitly documented in the programmes and activities of Rwanda's budget, the use of the OECD marker reveals 284 programmes relevant to DRR in 11 ministries and 31 districts.
- The overall estimate of all DRR investments in Rwanda over the period considered (2016/17–2018/19) was about $0.2 billion ($224,111,773), comprising $24.3 million in principal investments and $199.8 million in significant investments.
- DRR investments appeared to be channelled largely through the Ministry of Health, with 17 subprogrammes, the Ministry of Environment with 13, the Ministry of Agriculture with 12 and the Ministry of Infrastructure with seven. By volume of allocations for DRR, it appeared that most of the investments were channelled through the Ministry of Infrastructure ($71,211,467), the Ministry of Health ($39,182,264), the Ministry of Agriculture ($30,713,736) and the Ministry of Local Government ($11,531,008).
- When all DRR investments (principal and significant) are considered, the dedicated ministry for handling disaster management, the Ministry of Disaster Management and Refugee Affairs (MIDIMAR), received a share of 3.8% on average over the three years (compared with the Ministry of Infrastructure, which received 41.8%), of which 66.6% was for development expenditures and the rest for recurrent budget.
- Domestic resources comprise the larger proportion of the total basket of resources for DRR in Rwanda when compared with external resources. Notably, domestic resources contributed on average $119.9 million a year, compared with external resources, which contributed $104.2 million.
- More than four-fifths of DRR investment is channelled towards the preparedness risk category. On average, the country allocated $193 million annually over the three financial years to this category.
- A much larger proportion of DRR investments in Rwanda was targeted at pre-disaster than at post-disaster activities. Notably, during the three years considered, 97.8% of all DRR investments were allocated to pre-disaster activities, amounting to about $219.2 million on average, compared with $2.2 million allocated to post-disaster activities.

Recommendations

- Further disaggregation of the budget documents is necessary to allow effective analysis that can facilitate identification and marking of specific projects relevant to DRR.
- The government should work further towards the mainstreaming of DRR in ministries and institutions. This requires deliberate consideration of DRR by each ministry, while at the central level there is a need to consider optimization of overall DRR expenditure.
- The government should work further towards spreading DRR investments across all components of the risk cycle. In particular, cost-effective investment is needed in disaster risk prevention and mitigation.

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Annex 1: Risk-sensitive budget review methodology

UNDRR's application of the OECD DAC DRR policy marker: an overview

Performing the RSBR for each country involved several steps, the first one being to access programme-based budgets.[12] For most countries (13 out of 16), the budget information was readily available online (generally through the Ministry of Finance web portal).[13] Budget information from Cameroon and Côte d'Ivoire was shared by some participants during national DRR workshops organized by UNDRR in Yaoundé and Abidjan, respectively, both in 2018. In the case of Guinea-Bissau, consultants managed to gain access through their connection with the Ministry of Finance. For a more detailed methodological note on UNDRR's application of the RSBR, please consult the companion document, "*A methodological guidance note on risk-sensitive budget reviews*".

Once the budget data was secured, the OECD policy marker methodology was applied to identify DRR components from the budgets. This involved reviewing the most recent national budgets available (see Table A1) in several steps:

Step 1: Review of overall performance of each ministry/institution in its respective programmes.

Step 2: Review of targets and policy outcomes expected to be delivered for DRR elements. This then guided the authors in reviewing budget allocations under each programme and subprogramme.

Step 3: Analysing subprogramme activities that had DRM elements and categorizing them according to the four key DRM categories – risk prevention and mitigation, preparedness, response and relief, and reconstruction and recovery.

Step 4: The same subprogramme activities were further categorized according to DRR policy objectives – principal, significant and not targeted – and were weighted using the OECD DAC Rio marker weighting guidelines (principal = 100%, significant = 40% and non-DRR = 0%).

The policy marker relies on – and the quality of results therefore depends on – the availability of documentation in relation to policy objectives and spending activities. In general, the more disaggregated and documented the budget at the activity level, the more accurate the marking. In reality, the level of disaggregation varies from one country to another.[14]

12 When budget data was not available (i.e. for Cameroon and Guinea-Bissau), public investment plans were used instead. Due to data availability, the analysis is based on 'planned' rather than 'executed' expenditures.

13 Budget information for Gabon and São Tomé and Príncipe was retrieved from www.mays-mouissi.com and www.cabri-sbo.org, respectively.

14 An interesting aspect of disaggregation is whether local government authorities have their own budgets, in addition to national budgets. In 13 cases out of 16, countries have only national budgets (the exceptions are Angola, Rwanda and Tanzania (United Republic of)).

Although programme objectives were stated in 14 country budgets out of 16, Table A1 shows that only half of the countries disaggregated activities. In most cases (13 out of 16), financial documents available captured exclusively domestic budget resources; Angola,15 Côte d'Ivoire and Guinea-Bissau were the exceptions (both domestic and foreign resources were presented in the budgets).

The main challenge experienced during the RSBR was that programmes and activities are often neither classified/coded for DRR nor sufficiently described. This makes it difficult to identify the full range of activities that may be related to DRR in the budget. For some countries, such as Angola, budget expenditures are simply not coded; this requires the titles of expenditures to be linked across different years to perform the RSBR.

Considering these challenges and the 13 countries with national budgets only, the RSBR overview shows that, on average, a country has 27 national ministries, departments and agencies, of which 11 have DRR expenditures (either principal or significant).

In addition, 9 out of 16 countries have a specific budget allocated to the administration in charge of DRR. This specific budget always represents a small fraction of total DRR expenditures, given the cross-cutting nature of DRM/DRR activities.

As climate change is an important underlying disaster risk driver, it is important to understand whether governments are taking climate change adaptation (CCA) measures. Table A1 shows the countries with expenditures related to CCA, marked either as principal (eight countries) or significant DRR measures (two countries). It is worth noting that 6 countries out of the 16 have not planned for CCA expenditures.

15 For example, the publicly available budgets for Angola do not separate domestic and external resources, making it impossible to take the origin of resources into account into the analysis.

Table A1: UNDRR's RSBR: an overview

Country	Coverage of RSBR analysis Period	Source of budget # of MDAs (ministries, departments, agencies)	Disaggregation level # of DRR marked MDAs	DRR agency portfolio Budget resources considered in the analysis^	Climate change adaptation (CCA) Are programme objectives stated in the budget?	DRR/DRM marked sectors* Are programme objectives disaggregated to activities?	Was the national DRR agency budget marked?	How was climate change marked in budgets?	Larger share of Agriculture marked DRR budget lies under…	Larger share of Health marked DRR budget lies under…	Larger share of Infrastructure marked DRR budget lies under…
Angola	2017–2019	66	40	Domestic/foreign	No	No	Yes*	Principal	Principal	Significant	Significant
Botswana	2014/15–2018/19	25	9	Domestic	Yes	Yes	No	NA	Significant	Significant	Significant
Cameroon	2019	54	13	Domestic	Yes	Yes	Yes	Principal	Significant	Principal	Significant
Côte d'Ivoire	2016–2018	38	29	Domestic/foreign	Yes	No	No	Principal	Significant	Significant	Significant
Equatorial Guinea	2016–2018	21	5	Domestic	Yes	Yes	Yes	NA	Significant	Significant	Significant
Eswatini (The Kingdom of)	2014/15–2018/19	35	12	Domestic	Yes	Yes	No	Principal	Principal	Significant	Significant
Gabon	2014–2017	21	9	Domestic	Yes	No	Yes	Significant	Significant	Significant	Significant
Gambia (The)	2014–2017	19	5	Domestic	Yes	No	Yes	NA	Significant	Significant	Significant
Ghana	2016–2018	29	8	Domestic	Yes	Yes	Yes	Principal	Significant	Significant	Principal
Guinea-Bissau	2015–2018	23	7	Domestic/foreign	No	No	No	Principal	Significant	Significant	None
Kenya	2013/14–2016/17	23	10	Domestic	Yes	Yes	No	Principal	Principal	Significant	Principal
Namibia	2014/15–2018/19	35	8	Domestic	Yes	Yes	Yes	NA	Significant	Significant	Significant
Rwanda	2016/17–2018/19	56	42	Domestic	Yes	No	Yes	Significant	Significant	Significant	Significant
São Tomé and Príncipe	2014–2017	11	7	Domestic	Yes	No	No	NA	Significant	Significant	Significant
Tanzania (United Republic of)	2016/17–2018/19	93	48	Domestic	Yes	No	No	Principal	Significant	Significant	Significant
Zambia	2015–2017	27	21	Domestic	Yes	Yes	Yes	Principal	Significant	Significant	Significant

Source: UNDRR (2019).

** These sectors were chosen due to their direct linkage to natural hazards; NA – No programmes for CCA were found in the RSBR analysis; ^ – All budgets analysed were planned budgets.*

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Citation: UNDRR (2020). *Rwanda: Risk-sensitive Budget Review.*