

Disaster Risk Reduction Investments in Africa

Evidence from 16 Risk-sensitive Budget Reviews



SENDAI FRAMEWORK
FOR DISASTER RISK REDUCTION 2015-2030





Front cover [photo credit](#): Rwanda Green Fund. The Akanyaru Watershed Protection Project in Gisagara District, Rwanda, aims to increase environmental resilience by preventing soil erosion and landslides.

Contents

| | |
|---|-----------|
| Abbreviations | ii |
| Introduction | 1 |
| Trends in DRR investment across the 16 African countries | 3 |
| Total DRR investments account, on average, for 4% of national budgets across the 16 countries | 3 |
| The higher the political office in which a disaster risk management authority sits, the higher its own budget and the higher the total DRR investment | 4 |
| Indirect DRR investments are three times the size of direct DRR investments | 5 |
| Direct DRR investments range from 0.1% to 3.7% of national budgets | 6 |
| Direct DRR investments at subnational level play a key role | 6 |
| Proportions of direct DRR investments vary widely across the 16 countries | 7 |
| External funding for DRR activities complements the efforts of national governments | 8 |
| Planned expenditures on direct DRR focus on pre-disaster rather than post-disaster activities | 9 |
| Post-disaster activities are often covered by humanitarian aid | 9 |
| Overlaps between DRR and climate change adaption investments call for the building of coherence among international frameworks | 10 |
| The bulk of direct DRR investments are concentrated in the economic sector | 11 |
| The highest portions of indirect DRR expenditures are concentrated in the social sector | 11 |
| Policy recommendations | 13 |
| The way forward for RSBs | 14 |
| Current usability of RSBs and suggested methodological improvements | 14 |
| References | 15 |

Abbreviations

| | |
|-----------------|--|
| CCA | Climate change adaptation |
| DRM | Disaster risk management |
| DRR | Disaster risk reduction |
| MDAs | Ministries, departments and agencies |
| ODA | Official development assistance |
| OECD DAC | Organisation for Economic Co-operation and Development Development Assistance Committee |
| RSBR | Risk-sensitive budget review |

Introduction

In 2018–2019, the United Nations Office for Disaster Risk Reduction (UNDRR) carried out risk-sensitive budget reviews (RSBRs) for 16 African countries. This report synthesises trends in DRR investments across the 16 countries and identifies general policy recommendations. Its aim is to improve understanding of public budgeting for DRR as well as the need to refocus internal and external financial resources based on risk categories and the disaster risk management (DRM) cycle.

The countries included in the review were 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 RSBRs provide an analysis of national budgets using data covering between three and five financial years for each country,¹ except for Cameroon where only 2019 budget data is considered. The budget analyses scrutinized capital budgets in all sectors. For institutions responsible for DRM – DRM authorities – the reviews considered recurrent budgets, based on availability and accessibility of data in each of the countries.² Furthermore, the reports assessed external sources of funding for DRR based on data available in budget documents, as well as official development assistance (ODA) data available from the Organisation for Economic Co-operation and Development (OECD) database for three years.

The analyses used approved estimates for earlier years and planned budgets for the most recent financial year considered in the RSBR. Ideally, actual expenditures would be used as these give a true picture of DRR investments, given that there is likely to be variance between actual spending, approved budgets and budget estimates.

Where information was readily available, the analyses distinguished between sources of funding: financing of DRR activities through domestic resource mobilization or external sources. Moreover, the reports considered ODA, to show how certain disaster risk categories are financed through humanitarian aid.

In light of the priorities of the Sendai Framework for Disaster Risk Reduction, and guided methodologically by the budget marker developed by the OECD Development Assistance Committee (OECD DAC), budget lines were reviewed and marked where relevant as representing DRR investments. Across the 16 national budgets, a total of 576 public budgets of government ministries, departments and agencies (MDAs) were reviewed. Of these, some 273 MDAs were identified as having budgeted for DRR investments.

In 2018, initial results of the country analyses were presented to and discussed by national stakeholders during 16 country workshops. Subsequently, written feedback was requested from selected national experts in each of the countries and was incorporated to improve the analyses.

1 Angola, 2017–2019; Botswana, 2014/15–2018/19; Cameroon, 2019; Côte d'Ivoire, 2016–2018; Equatorial Guinea, 2016–2018; Eswatini, 2014/15–2018/19; Gabon, 2014–2017; Gambia, 2014–2017; Ghana, 2016–2018; Guinea-Bissau, 2015–2018; Kenya, 2013/14–2016/17; Namibia, 2014/15–2018/19; Rwanda, 2016/17–2018/19; São Tomé and Príncipe, 2014–2017; Tanzania, 2016/17–2018/19; and Zambia, 2015–2017.

2 Capital budgets consist of capital receipts and payments. They also incorporate transactions in the public account. Recurrent budgets track ongoing revenues and expenses, which occur on a regular basis, be it monthly, quarterly, semi-annually or annually.

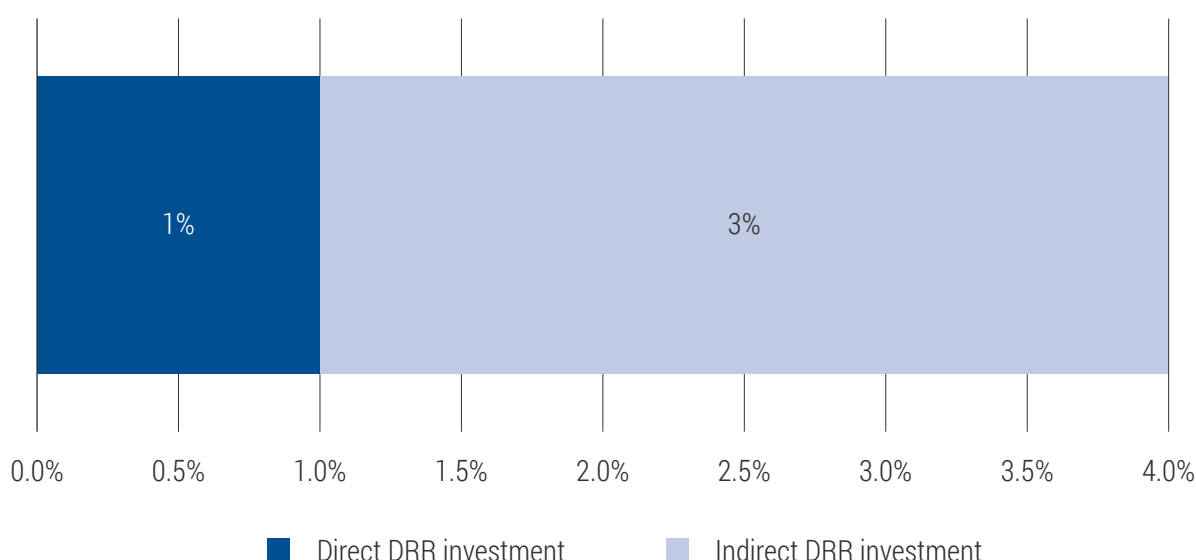
This synthesis report provides evidences on the share of DRR investments in national and subnational budgets; the share of direct and indirect budgets in total marked DRR investments; and the focus of internal and external sources of funding with regard to the DRM cycle and risk categories. It also identifies sectors into which direct and indirect DRR investments in Africa are channelled. The report concludes with general recommendations that are applicable for African countries.

Trends in DRR investment across the 16 African countries

Total DRR investments account, on average, for 4% of national budgets across the 16 countries

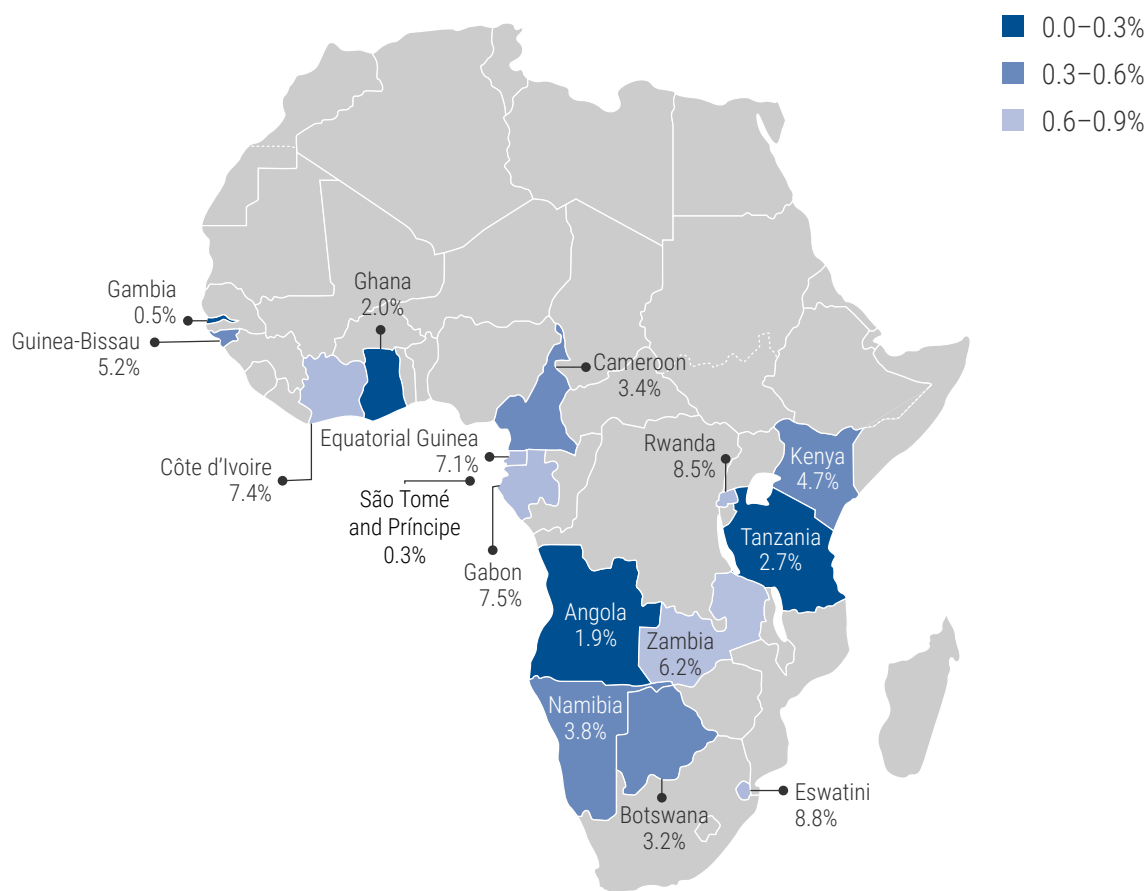
Total DRR investments across the 16 countries represent, on average, 4% of national budgets (Figure 1). Direct DRR spending has a share of 1% in national budgets on average, while indirect spending, accounted through budget activities that are significantly related to DRR but are not necessarily carried out with DRR as their primary objective, represent on average 3% of national budget estimates. However, the shares of DRR investments vary across the 16 countries (Figure 2), with average yearly **direct and indirect DRR expenditures ranging from 0.3% to 8.8%**.

Figure 1: Total DRR investments as % of national budgets



Source: Development Initiatives, based on 16 country RSB reports developed by UNDRR.

Note: The budget reviews cover three to five financial years depending on the country (except for that of Cameroon, which covers only one financial year).

Figure 2: Total DRR investments in respective national budgets (average percentage)

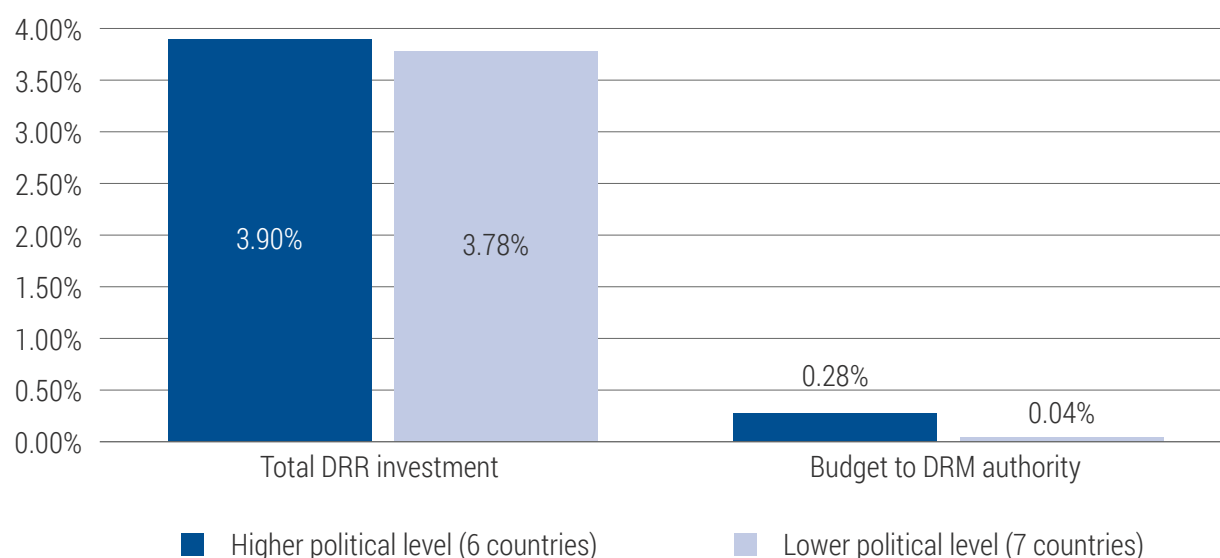
Source: Development Initiatives, based on 16 country RSBR reports developed by UNDRR.

Note: The budget reviews cover three to five financial years depending on the country (except for that of Cameroon, which covers only one financial year).

The higher the political office in which a disaster risk management authority sits, the higher its own budget and the higher the total DRR investment

Each of the 16 countries reviewed has a dedicated national disaster risk management authority and/or a multi-stakeholder national DRR platform. In six of the 16 countries, DRM authorities sit within one of the highest political offices, being domiciled in the Office of the President, Office of the Vice President, the Prime Minister's Office or that of the Deputy Prime Minister.³ Total DRR investments in these countries are higher compared to the rest of the 10 African countries and the DRR budgets of these authorities, on average, are three times higher than the average budgets of authorities located within a lower-level political office (Figure 3). Placing DRM authorities within a higher-level political office facilitates DRR mainstreaming, including connecting policy agendas, and helps align competing priorities across ministries and between central and local governments.

³ President's Office (Botswana); Vice President's Office (The Gambia, Zambia); Prime Minister's Office (Namibia, Tanzania); and Deputy Prime Minister's Office (Eswatini).

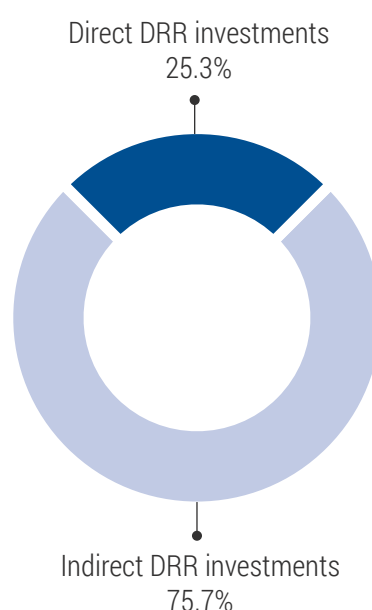
Figure 3: Total DRR investments and budgets for DRM authorities

Source: Development Initiatives, based on 13 country RSBP reports developed by UNDRR.

Notes: The budget reviews cover three to five financial years depending on the country (except for that of Cameroon, which covers only one financial year). Cote d'Ivoire, Gambia and Guinea-Bissau did not have allocations to DRM authority stated in their budget documents.

Indirect DRR investments are three times the size of direct DRR investments

Breaking down total DRR investments into direct and indirect investments reveals that, on average, a quarter of the total DRR budget is allocated for direct DRR investments while the remaining three-quarters has DRR as a secondary objective (Figure 4).

Figure 4: Direct and indirect DRR investments

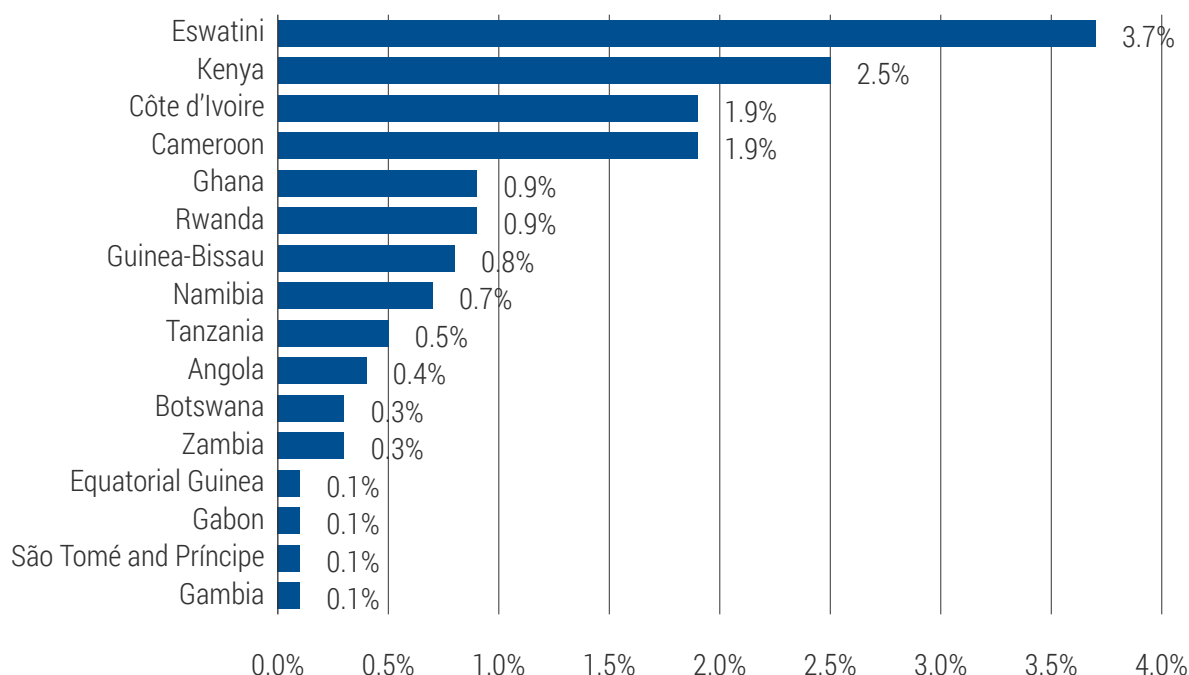
Source: Development Initiatives, based on 16 country RSBP reports developed by UNDRR.

Note: The budget reviews cover three to five financial years depending on the country (except for that of Cameroon, which covers only one financial year).

Direct DRR investments range from 0.1% to 3.7% of national budgets

Across the 16 countries involved in the project, governments planned to allocate on average 1% of their national budgets annually to undertake actions with direct DRR objectives. Only four countries – Eswatini (3.7%), Kenya (2.5%), Cameroon (1.9%) and Côte d'Ivoire (1.9%) were found to allocate more than 1% of their national budgets for direct DRR investments. The national budgets of the remaining 12 countries showed allocations of between 0.1% and 0.9% for direct DRR (Figure 5).

Figure 5: Annual direct DRR investments by country



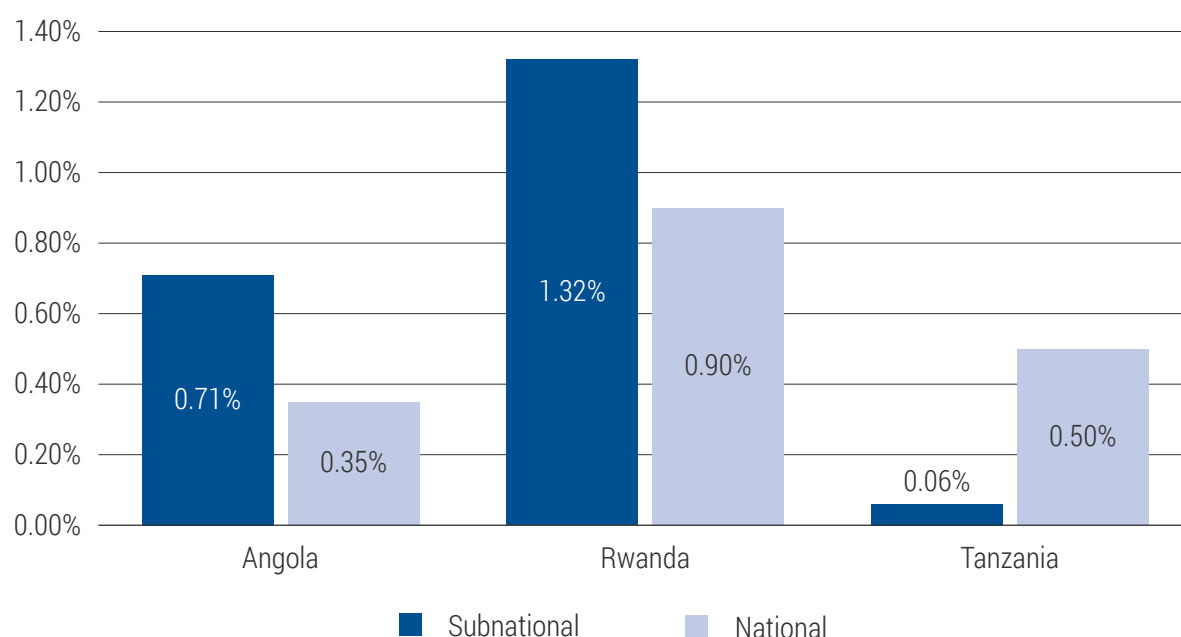
Source: Development Initiatives, based on 16 country RSBR reports developed by UNDRR.

Note: The budget reviews cover three to five financial years depending on the country (except for that of Cameroon, which covers only one financial year).

Direct DRR investments at subnational level play a key role

Where budget data is available at the subnational level – which is the case for Angola, Rwanda and Tanzania – it is possible to compare spending on DRR at the local and the national levels. In two of these three countries, the share of planned direct DRR allocation at subnational level as a percentage of local-level budgets is greater than the share of direct planned DRR spending at national level as a percentage of the national budget (Figure 6). Although it may be difficult to draw conclusions on the basis of just three cases, this analysis leads to a general understanding that DRR investments take place mostly at the local level.

Greater allocation of subnational budgets for direct DRR investments also indicates that local authorities have a legal mandate to design and fund DRR interventions; hence, investments will depend on the degree of autonomy of local governments. The role of local authorities in DRR consists, however, both of complementing efforts at the national level and of better understanding the needs of the population affected. In addition, local-level authorities can hold national authorities to account on their planned DRR investments and advise them how to better tackle regional issues that go beyond local capacities and/or mandates.

Figure 6: Direct DRR budgets at national and subnational levels in respective budgets

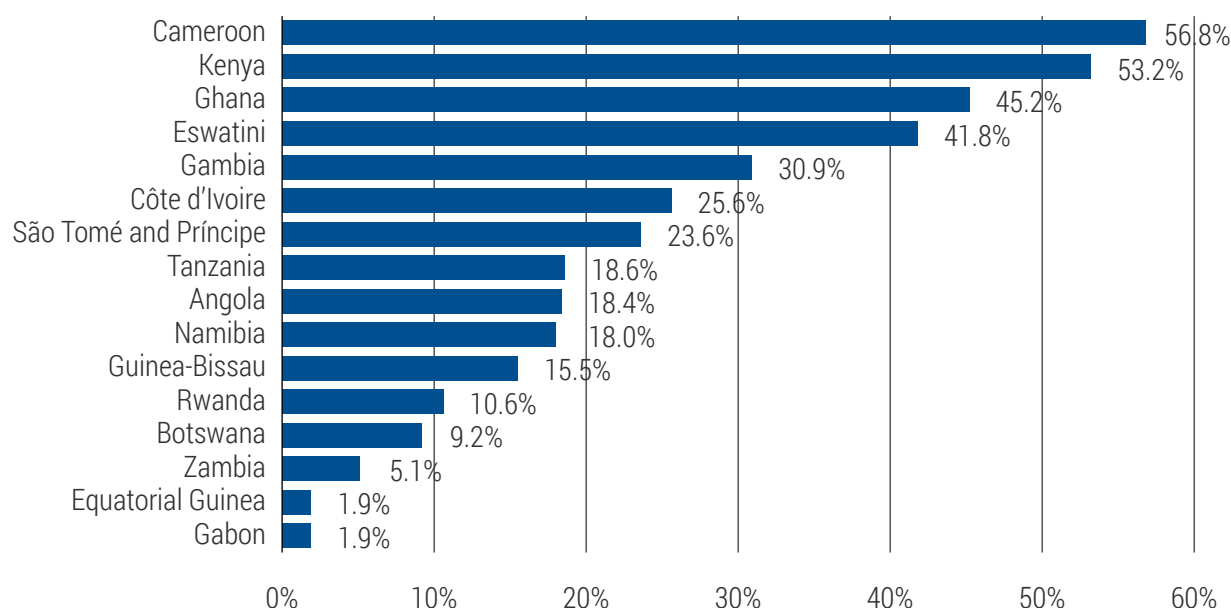
Source: Development Initiatives, based on 16 country RSBR reports developed by UNDRR.

Note: Financial years covered: 2017–2019 (Angola) and 2016/17–2018/19 (Rwanda and Tanzania).

Proportions of direct DRR investments vary widely across the 16 countries

There are big differences between countries when direct planned DRR expenditures are compared across the 16 countries. Planned budget expenditures with a direct DRR objective range between 2% and 45% of total DRR investments, depending on the country. The exceptions are Kenya and Cameroon, whose average direct DRR budgets account for over 50% of total marked DRR investments⁴ (Figure 7). Overall, this is in line with expectations, as indirect DRR expenditures are often related to health and social programmes, which generally involve high-cost projects.

⁴ While Kenya has a National Disaster Management Fund that could potentially explain the high level of targeted DRR investment, the high figure for Cameroon could be a result of considering just one financial year and not an average over a number of years, as in the other countries.

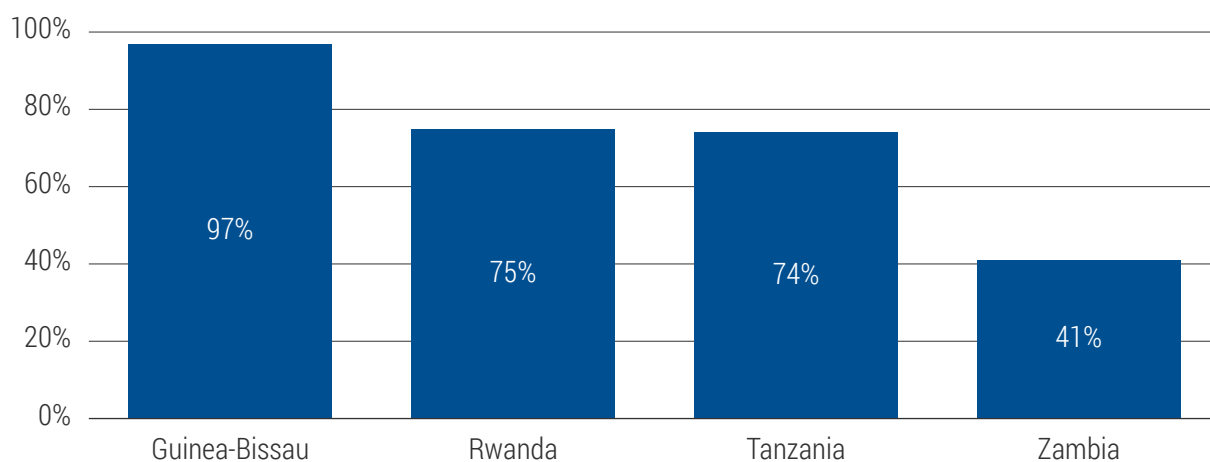
Figure 7: Direct DRR investments as a percentage of total DRR spending

Source: Development Initiatives, based on 16 country RSBR reports developed by UNDRR.

Note: The budget reviews cover three to five financial years depending on the country (except for that of Cameroon, which covers only one financial year). Countries' values are reported as averages over the years analysed.

External funding for DRR activities complements the efforts of national governments

In 4 of the 16 countries – Guinea-Bissau, Rwanda, Tanzania and Zambia – budget documents distinguish between internal and external sources of funding. Evidence from these four countries indicates that ODA is used to finance, on average, more than two-thirds of direct DRR investments (Figure 8).

Figure 8: Contribution of external funding (ODA) to direct DRR investments, by country

Source: Development Initiatives, based on four country RSBR reports developed by UNDRR.

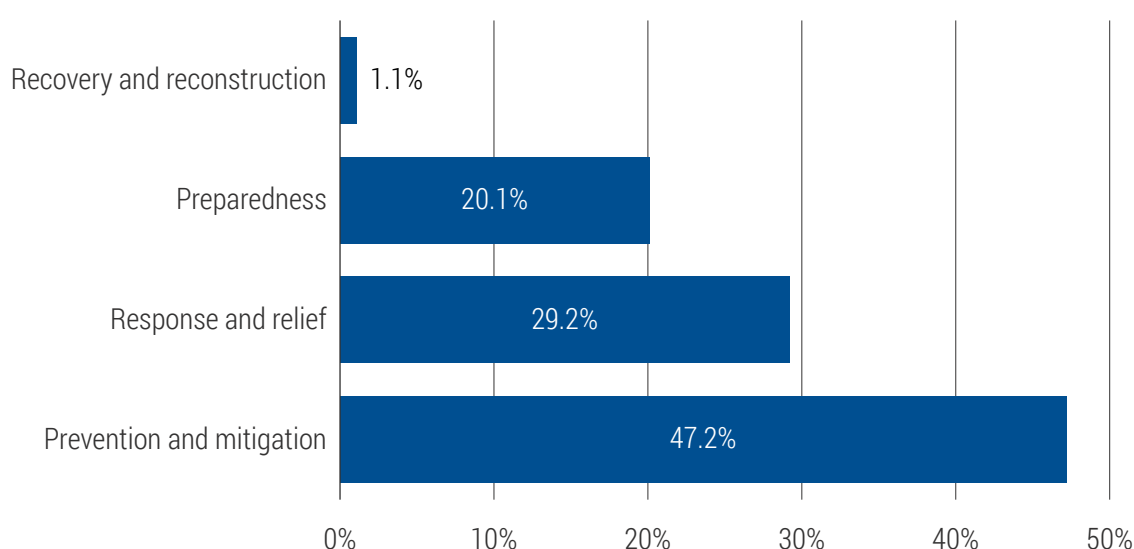
Note: for 2015–2018 (Guinea-Bissau); 2016/17–2018/19 (Rwanda and Tanzania); and 2015–2017 (Zambia).

Planned expenditures on direct DRR focus on pre-disaster rather than post-disaster activities

The analyses of the 16 RSBRs distinguish between investment funding planned for pre-disaster activities and that planned for post-disaster activities. Post-disaster investments include budget lines planned for response, relief, recovery and reconstruction, while pre-disaster investments target activities for disaster preparedness, prevention and mitigation.

Analysis of direct DRR investments across the four phases of the DRM cycle reveals that planned DRR investments are skewed towards prevention and mitigation (Figure 9). It shows further that high amounts of funding are allocated to response and relief, followed by preparedness, and lastly comes recovery and reconstruction with just 1%.

Figure 9: Direct DRR Investments across the four phases of the DRM cycle



Source: Development Initiatives, based on 16 country RSBR reports developed by UNDRR.

Note: The budget reviews cover three to five financial years depending on the country (except for that of Cameroon, which covers only one financial year).

Where subnational allocations can be analysed – in Rwanda, Angola and Tanzania – the bulk of allocations for DRR investments are planned for pre-disaster programmes, with a focus on preparedness in Rwanda and Tanzania and on prevention and mitigation in Angola.

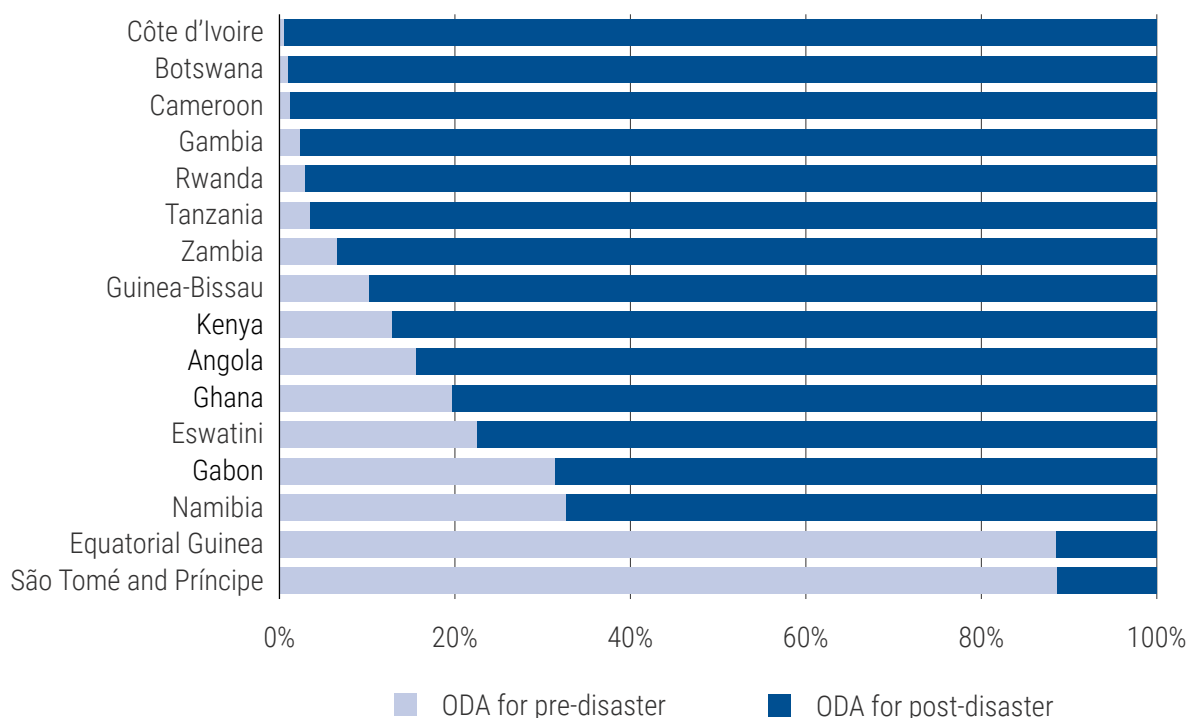
Post-disaster activities are often covered by humanitarian aid

The low levels of planned resource allocation for recovery and reconstruction in national public budgets imply that governments could be managing post-disaster activities with implicit contingent liabilities, or that they rely on external resources such as humanitarian aid.⁵ When governments do not plan for contingent liabilities explicitly, disasters can put a strain on other planned activities. This is particularly the case when external resources do not cover the reconstruction and response and relief costs of frequent small-scale disasters. In addition, relying on external resources compromises sovereignty and ownership of reconstruction processes.

⁵ “Implicit contingent liabilities” in this context refers to financial obligations that are neither budgeted for nor accounted for in fiscal planning, but are contingent upon the occurrence of disaster.

OECD ODA data on donor funding to the 16 countries for the period between 2015 and 2017 indicates that such funding is skewed towards post-disaster activities. External sources financed pre-disaster activities more (specifically preparedness) in only two countries, Equatorial Guinea and São Tomé and Príncipe. This could be due to a low level of disaster occurrence in both these countries during the period under review. Across the remaining 14 countries, on average, 88% of humanitarian aid targeted post-emergency/disaster activities over this three-year period (Figure 10).

Figure 10: Contribution of ODA to DRR investments by phase of DRM cycle, 2015–2017



Source: ODA data from OECD (2020). Creditor Reporting System. OECD International Development Statistics (database). Available at <http://stats.oecd.org/qwids/>.

Overlaps between DRR and climate change adaption investments call for the building of coherence among international frameworks

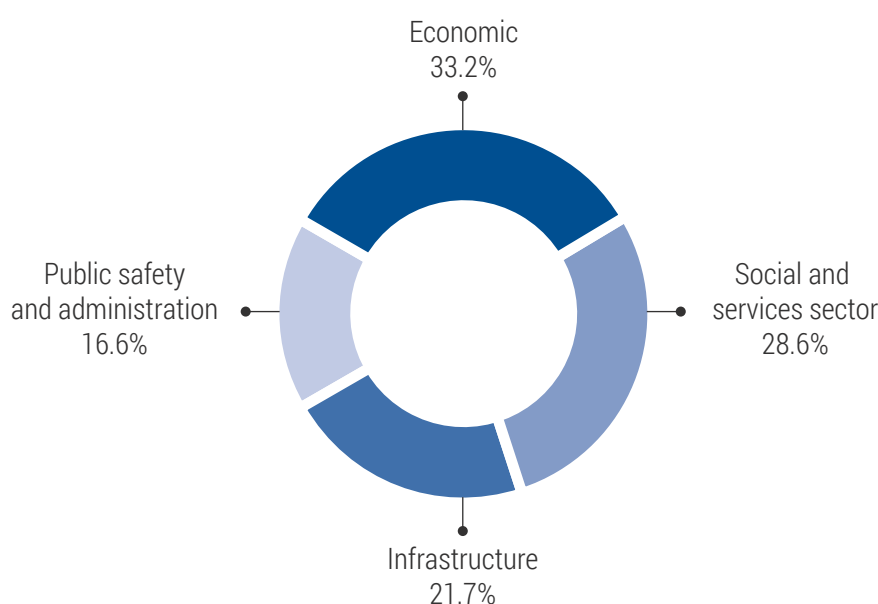
DRR investments often have to compete with other priority areas for scarce resources. DRR investments are, however, intrinsically interlinked with sustainable development. **Such overlaps imply the need to build coherence, particularly between the global Agenda 2030 for Sustainable Development, the Paris Agreement on climate change and the Sendai Framework for Disaster Risk Reduction.**

Almost half of the countries analysed in this study had budget allocations for DRR activities with explicitly stated climate change objectives, mainly under ministries responsible for the environment. The analysis found that 49 of 213 direct DRR investments qualified as climate change adaptation (CCA) programmes. Looking at these 49 DRR/CCA-coherent programmes, only 9 of the 16 countries (Angola, Cameroon, Côte d'Ivoire, Eswatini, Ghana, Kenya, Rwanda, Tanzania and Zambia) had stated them explicitly as being both DRR and CCA.

The bulk of direct DRR investments are concentrated in the economic sector

The largest portion of direct DRR investments – over 33% of the total – were channelled through the economic sector, with agriculture and economic planning leading the way. The **social sector**, which includes health and education, received on average 29% of direct DRR budget allocations. The remaining 38.3% of planned direct DRR investments was shared between infrastructure, public safety and administration (Figure 11).

Figure 11: Direct DRR investments by sector



Source: Development Initiatives, based on 16 country RSBR reports developed by UNDRR.

Note: The budget reviews cover three to five financial years depending on the country (except for that of Cameroon, which covers only one financial year).

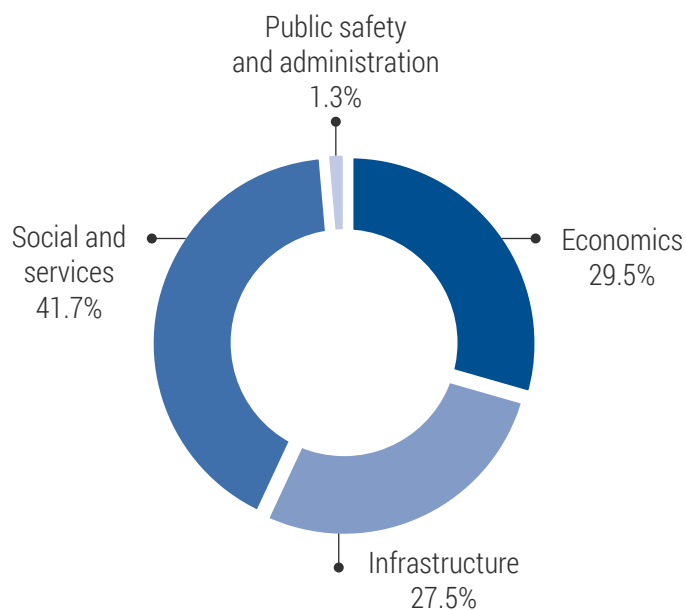
Analysis of the sectors by institutions shows that, across all 16 countries, the social sector is dominated largely by the ministry of health. The economic sector is dominated by the ministries of economics and planning and of agriculture, and infrastructure sector is dominated by ministries such as the ministry of public works. DRR investments targeting public safety and the administrative sector are attached mainly to the interior ministry and to the office of the president or the prime minister.

The highest portions of indirect DRR expenditures are concentrated in the social sector

DRR is a cross-cutting issue for many sectors. Analysis of indirect DRR investments provides an additional indication of which projects could address underlying vulnerabilities. Projects such as poverty reduction or social safety nets, undeniably have benefits in terms of DRR objectives. Understanding whether links with social projects have been designed with a DRR lens also gives an indication of the level of DRR mainstreaming.

The leading sector for indirect DRR investments is the social sector (Figure 12), with a share of 42%; this sector is usually dominated by the ministry of health. The next largest proportion of significant DRR investments is found in the economic sector (30%), with the ministry of finance taking the lead. Indirect DRR investments within the infrastructure sector (28%) tend to be distributed among various ministries, including public works, transport and communications.

Figure 12: Indirect DRR investments by sector



Source: Development Initiatives, based on 16 country RSBR reports developed by UNDRR.

Note: The budget reviews cover three to five financial years depending on the country (except for that of Cameroon, which covers only one financial year).

Policy recommendations

- With high levels of current and emerging disaster risks in sub-Saharan African countries, increasing budgetary allocations to direct DRR investments is key to reducing natural hazard-related disaster risk and to helping countries become more resilient to disasters.
- Direct and indirect DRR investments are both necessary and should be planned in a complementary way in order to address vulnerabilities that exacerbate risk.
- Making sure that investments are risk informed in all thematic areas and sectors is a first step for DRR mainstreaming, which is vital for sustainable development.
- DRR and CCA investments must be coherent and must join efforts as opposed to compete for limited financial resources.
- For the holistic and financially sustainable management of disaster risk, there is a need to focus on developing a portfolio of risk financing tools that takes into account all the phases of the risk management cycle.

The way forward for RSBRs

Current usability of RSBRs and suggested methodological improvements

- Budget data should be disaggregated by subprogrammes, projects and activities, by source of financing and by national- and regional-level spending; this would allow for an efficient and accurate budget marking of direct and indirect DRR investments.
- DRR investments should be explicitly stated as such and coded in budget lines. This would mean that subjective categorization of components of DRR investments could be avoided.
- Data on actual spending, as opposed to planned budget estimates, would allow for a better understanding of actual investments, as opposed to planned ones.
- Analysis of investments by type of hazard, complemented by risk assessment analysis that considers damages and losses, would allow cost-benefit analyses to be carried out to determine value for money.
- Continuous tracking of DRR budgets, both direct and indirect, would allow for progress in DRR investments to be monitored and would allow RSBR reports to be used as a baseline for evaluation.

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