Building Resilience in Ethiopia (BRE)

Review of Good International Disaster Risk Management Practice

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Acknowledgements

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Executive Summary

The purpose of this review of good practice is to inform the disaster risk management (DRM) initiatives of the Government of Ethiopia. It is based on a review of relevant literature, complemented by conversations with relevant experts, over a 12-day period.

The report has two main sections that mirror the conceptual framework in Ethiopia's Strategic Programme and Investment Framework for DRM. The first focuses on the enabling environment for DRM, and specifically issues of capacity development, policy and legislation, coordination, decentralisation, inclusion, and financing. The second looks at the main phases of the DRM cycle: prevention and mitigation, preparedness and response, and recovery and rehabilitation.

The main messages of the review include the following:

1. Capacity development for DRM should look beyond the provision of training and resources to strengthen functional capacity as well. Functional capacity is concerned with the quality of the enabling environment which allows effective decisions and action on DRM to be taken, such as coordination mechanisms, policies and legislation, or political and stakeholder support for DRM. Capacity development is likely to be most effective when it is sustained, systematic, and coordinated, and addresses both technical and functional capacity, at all levels of operation, in an integrated manner.

2. Legislation is an important tool for governments wishing to strengthen DRM capacity. It can ensure that institutions have the powers they need, that resources are allocated appropriately and sufficiently, that roles and responsibilities are clear, and that there are recognised processes for public participation and inclusion. Dedicated attention to DRR within overarching DRM legislation may be helpful in countries where risk is not yet being effectively reduced by the sectors or local governments. The review and refinement of policy and legislation should be an ongoing and iterative process.

3. The institutional architecture for DRM is critical. The multi-sectoral nature of DRM, and the benefits of policy coherence across complementary agendas (particularly with climate change adaptation), mean that DRM is likely to be most effective when led from a politically strategic location which has the convening power and authority to align policy agendas, priorities, and resources, as well as the legal and administrative mechanisms at its disposal to ensure accountability. The same principle applies at other levels, including inter-governmental and devolved. However, the effectiveness of coordination frameworks depends on the degree to which individuals exercise leadership and responsibility. Policy coherence is essential at the local level where it will be facilitated by a people-centred approach.

4. Decentralised DRM systems are generally considered more effective than centralised. However, they also present risks, particularly if responsibilities are delegated without the powers and resources to carry them out. The 'middle governance' or sub-national space is critical for DRM because it is where national and local priorities must be reconciled, but it is also comparatively neglected in terms of capacity support and financing. The experience of DRM in urban areas suggests that the governance context has the greatest impact on the enabling environment for DRR, specifically strong political support complemented by legislative frameworks and/or ringfenced funding. Civil society

organisations supporting community-based DRM should do so within the overall framework of the mainstream government-led system.

5. An inclusive approach to DRM will be one that is aware of and addresses the differential impacts of disasters on different individuals and groups in society, and that draws on their strengths and resources. Pre-existing inequalities shape people's experience of crisis, while the dislocation caused by a disaster can create opportunities to change them.

6. A strategic approach to risk financing will ensure that all sources of potential finance are considered, both public and private. All public investment should be risk-informed since sustainable development depends on effective risk management. Dedicated DRR budget lines may give more emphasis to risk reduction in the short term, while capacity is being built within the sectors and sub-national authorities to integrate DRR in their plans and budgets, but they may be counter-productive in the long term. Financing can also be structured in ways that incentivise 'building back better' after disasters.

7. Risk reduction and response in the Horn and East Africa should give greater attention to conflict, such as by applying conflict-sensitive approaches and by integrating conflict analysis in information systems and contingency planning. Systematic but creative approaches to the sharing of information about risk, as well as shared analysis and planning, and response options that are structurally linked to the finance necessary to support them, will all facilitate anticipatory or early action that mitigates the impact of disasters.

8. The full operationalisation of DRM systems will take time: for example, effective sectoral mainstreaming will require significant and sustained efforts to develop technical guidance, operating procedures, and oversight mechanisms. The results of capacity development initiatives are unlikely to be evident in the short term. Shifting the focus of monitoring and evaluation from outputs to outcomes and impacts may deepen understanding of the extent to which the institutional and enabling environment for DRM is being strengthened, and ensure that attention is focused on this goal.

Abbreviations

BRE	Building Resilience in Ethiopia
CBDRM	Community-Based Disaster Risk Management
CCA	Climate Change Adaptation
CCCF	County Climate Change Fund
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
DRRM	Disaster Risk Reduction and Management
EDE	Ending Drought Emergencies
EWS	Early Warning System
FRM	Flood Risk Management
HSP	Humanitarian Standards Partnership
IASC	Inter-Agency Standing Committee
IDDRSI	IGAD Drought Disaster Resilience and Sustainability Initiative
IFRC	International Federation of Red Cross and Red Crescent Societies
INGC	Instituto Nacional de Gestão de Calamidades / National Institute for Disaster Management (Mozambique)
MCR	Making Cities Resilient
NDMA	National Drought Management Authority (Kenya)
PoA	Programme of Action
PRO-GRC	Institutionalising Disaster Prevention in Mozambique Programme
SDGs	Sustainable Development Goals
SGBV	Sexual and Gender-Based Violence
SPIF	Strategic Programme and Investment Framework (Ethiopia)
UNDP	United Nations Development Programme
UNDRR	United Nations Office for Disaster Risk Reduction (formerly UNISDR)
WMO	World Meteorological Organization

Introduction

This review of good practice in disaster risk management (DRM) was commissioned by the Building Resilience in Ethiopia (BRE) programme. BRE is supporting the Government of Ethiopia to lead and deliver an effective, accountable, and increasingly self-financed response to climate and humanitarian shocks. It provides technical assistance across four work streams, of which DRM is one.

Risks occupy a spectrum, from the everyday to the catastrophic. Most disasters are small-scale, localised, and largely unreported since they do not meet the threshold for inclusion in official databases. Nevertheless, their aggregate impact can be substantial, in turn deepening underlying vulnerabilities.[1] They are the 'daily, dangerous reality' for many people around the world.[2]

Risk management is integral to sustainable development.[3] This is one reason why governments are seeking ways to achieve coherence across the three principal global frameworks agreed in 2015: the Sendai Framework for Disaster Risk Reduction, the Sustainable Development Goals (SDGs), and the Paris Agreement on Climate Change. While the compartmentalisation of these frameworks creates operational difficulties for governments and agencies, the people they aim to benefit naturally live their lives in a more holistic manner.[4]

> *'Sustainable development cannot be achieved simply by adding a layer of risk management onto existing or future projects. Instead, it requires strengthening the ability of people, institutions, and economies to manage, mitigate, and absorb residual risks and unavoidable shocks.'*
>
> GFDRR, 2018, p. 80

The evolution of some hazards is to some extent predictable, but by no means all. Not everything can be calculated and planned for, and disasters rarely unfold in a linear fashion. A key challenge is therefore how to accommodate and respond to uncertainty.[5] Moreover, since people will understand and interpret risk within the context of their particular world view, these subjective perspectives are also important.[6]

Ethiopia's disaster risk profile is complex and multi-layered. Droughts and floods are the most obvious and substantial climate-related hazards, while landslides, earthquakes and volcanoes can have significant localised impacts.[7] The number of internally displaced people, associated with both disasters and conflict, has risen sharply since 2017; just over 1.4 million were displaced in 2019.[8] The country is also a long-standing host of refugees, now estimated at 750,000,[9] and like its neighbours is currently affected by both locusts and COVID 19.

All these challenges are overlaid on a situation of chronic poverty, high population growth, and profound economic and social change. Analysis of data from the 2016 round of household surveys found approximately one in four Ethiopian households living under the food poverty line.[10] And while still a predominantly rural

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[1] Victoria et al, 2019; Osuteye et al, 2018
[2] Van Voorst et al, 2015
[3] GFDRR, 2018
[4] Victoria et al, 2019
[5] Scoones, 2019
[6] Van Voorst et al, 2015
[7] GFDRR, 2019
[8] https://www.internal-displacement.org/countries/ethiopia
[9] UNHCR, 2020
[10] WFP and CSA, 2019

country, the urban population is expected to triple within the next 20 years,[11] bringing with it new risks associated with unplanned land use, or with the additional pressures placed on the rural natural resource base by rising urban demand.[12]

Ethiopia's response to disaster risk has been continuously evolving. The changes in its policy focus are reflected in the titles of successive institutions – from the Relief and Rehabilitation Commission established after the 1973/74 famine, through the Disaster Prevention and Preparedness Commission (subsequently Agency) in the 1990s, to the Disaster Risk Management and Food Security Sector created under the Ministry of Agriculture and Rural Development in 2009. In recent years the government has significantly strengthened the policy and institutional framework for DRM by approving new policy in 2013 and a complementary Strategic Programme and Investment Framework (SPIF) a year later.[13] It established the National Disaster Risk Management Commission (NDRMC) in 2015 and published guidelines on mainstreaming DRM in 2017.[14] The government's aim is to 'reduce disaster risks and the impacts of disasters through the establishment of a comprehensive and integrated disaster risk management system'.[15]

The purpose of this review is to identify good DRM practices that are relevant to Ethiopia's hazard profile and institutional context and will inform the mainstreaming of DRM policy commitments at federal and regional levels. It is based on a review of relevant literature, complemented by conversations with DRM experts, over a 12-day period. The main challenge was managing the breadth and diversity of material. Priority was therefore given to the following:

- Multi-country studies that draw together the lessons from a range of programmes and projects.
- Documents published since the adoption of the Sendai Framework in 2015.
- Experiences and practices relevant to Ethiopia's policy goal of a government-led, comprehensive and integrated DRM system.

The working definition of 'good practice' was that which the authors or experts judged had been shown to deliver positive results, was potentially replicable, and represented an incremental improvement on what had gone before, enhancing the knowledge and practice of DRM. In that sense it may be thought of as both relative and context-specific, shaped by the particular environment in which it takes place.

The report has two main sections that mirror the conceptual framework in the SPIF. The first discusses the enabling environment for DRM, specifically capacity, policy and legislation, coordination, decentralisation, inclusion, and financing. The second discusses the main phases of the DRM cycle: prevention and mitigation, preparedness and response, and recovery and rehabilitation. Supplementary information is contained in Annexes 1 and 2, and the terms of reference for the review are in Annex 3.

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[11] https://blogs.worldbank.org/africacan/why-should-ethiopians-care-about-urbanization-jobs-infrastructure-and-formal-land-and-housing
[12] Bahal'okwibale, 2017, p. 41
[13] FDRE, 2013 and FDRE, 2014
[14] FDRE, 2017
[15] FDRE, 2014, p. 31

Section 1: Enabling environment for DRM

1.1   Developing capacity for DRM

Disaster risk management is a complex and multi-faceted process. For this reason, some point to a tension between the ambition of the Sendai Framework and the prospects for its realisation. Countries facing higher levels of disaster risk are also likely to be those whose governance capability is less robust. Moreover, DRM is becoming ever more technology-dependent across a range of scientific fields, heightening the advantage of a high level of human capital.[16]

However, capacity development for DRM is about more than the technical competence of individuals or organisations. It also concerns functional capacity, meaning the quality of the enabling environment and therefore the ability of institutions at all levels to act; examples include coordination mechanisms, policies and legislation, and political and stakeholder support for DRM. This was emphasised by a two-year research project, commissioned by the International Federation of Red Cross and Red Crescent Societies (IFRC),[17] that involved six in-depth country case studies,[18] a comprehensive literature review,[19] and an online survey. The literature review found a lack of empirical independent research in low and middle-income countries analysing capacity development for DRM in terms of what works and why. Table 1 contains a selection of the research findings.

Table 1: Selection of research findings on capacity building for DRM:[20]

What is not working / working less well	What has worked / could work
▪ Piecemeal approach: small budgets and short-term programmes.	▪ Coordinated programmes of system-wide, multi-scale capacity strengthening over longer periods that draw on multiple sources of finance and expertise.
▪ 'Missing middle': most support is targeted at the national or community level, overlooking the sub-national level (Box 1).	▪ Consideration given to how new capacities built at one level will integrate with those at other levels, as well as activities designed to enhance coordination between levels.
▪ Gender is considered, if at all, primarily in terms of female participation in capacity building activities.	▪ Incorporating gender analysis from the early stages of programme design so that it informs the content of capacity development.
▪ Bias towards stable areas, overlooking those affected by conflict.	▪ Continuous dialogue, assessment and monitoring of changing contexts so that capacity provision can adapt accordingly, supported by maximum flexibility from donors.
▪ Bias towards disaster preparedness, with less attention given to capacity for prevention, mitigation, and recovery.	▪ The need to broaden the focus from emergency management is largely a matter of prioritisation, the research found, rather than caused by a fundamental obstacle.
▪ Over-reliance on training as the dominant capacity building activity, but based on an inadequate assessment of needs, within which there is also inadequate attention to gender.	▪ Training-of-trainer models complemented by rigorous mentoring and feedback. ▪ On-the-job training and secondments. ▪ 'South-South' interaction. ▪ Conscious effort to apply gender analysis to capacity development approaches.

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[16] Holloway and Fortune, 2019
[17] https://www.ifrc.org/en/get-involved/learning-education-training/research/capacity-building-for-disaster-risk-management/
[18] Ethiopia, Pakistan, Myanmar, Philippines, Haiti, and Mozambique
[19] Scott et al, 2015
[20] Based on Few et al, 2015a

Table 1 refers to the 'missing middle'. This gap is problematic because the sub-national level is critical for DRM (discussed in section 1.4), and because the capacities and processes at one level should ideally dovetail with those at other levels.[21] Box 1 illustrates how the government in Mozambique is addressing this challenge.

Box 1: Mozambique: integrating DRM capacity development at multiple levels

The Institutionalising Disaster Prevention in Mozambique Programme (PRO-GRC) was implemented by the National Institute for Disaster Management (INGC) and GIZ in two phases between 2007 and 2012. Its aim was to promote holistic disaster risk management, within which it supported the decentralisation of risk reduction and emergency response responsibilities from the national to the provincial and district levels. The programme used a number of mechanisms to strengthen integration between these levels, which also enhanced ownership and motivation:

- **Sub-commissions with parallel designations at local, district, and provincial levels.** Individuals at each level were nominated to perform distinct DRM-related roles, such as 'early warning systems representative', or 'disaster needs assessment representative'. These sub-commissions met and discussed issues related specifically to their counterparts at different levels. The system improved communication between levels and streamlined action and reporting as hazards approached.

- **Inter-scalar exposure visits,** through which individuals could attend meetings at other levels and learn from their counterparts.

- **Opportunities for those at different levels to facilitate each other's work** – for example, a member of a local DRR committee might facilitate a district-level SWOT analysis.

However, the authors note that governance in Mozambique is deconcentrated, not devolved, which allows for greater symmetry between local, district and provincial levels. Nevertheless, they suggest that this example represents a model that other countries could work towards.

Sources: Few et al, 2015b; Few et al, 2016.

The project's proposed definition of capacity development for DRM (in the sidebar), informed by its findings, characterises it is as a process that requires sustained effort and leads to action. However, in all the case study countries, high turnover was undermining the effectiveness of capacity development programmes, which were paying insufficient attention to sustainability. Turnover in government may be due to the frequent and often abrupt rotation of officials, or competition from organisations that offer more attractive employment conditions.[22]

'The process by which individuals, organisations and societies strengthen and sustain their abilities to take effective decisions and actions to reduce disaster risk.'

Few et al, 2016

Capacity is built through practice and simulation, and repeated experience of dealing with disasters.[23] There is also evidence that long-term partnerships with African universities are bearing fruit (Box 2). However, there are no common global standards for training in disaster management or DRR,[24] although some countries have developed their own systems of accreditation. If training is being considered, it would be good practice first to answer the following questions:[25]

- Whether the demand for training reflects a genuine need, and whether formal training is the best way of meeting that need.
- How the skills and knowledge that individual trainees acquire will be applied and shared with others.

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[21] In Ethiopia these sub-national levels are the regions, zones, *woredas*, and *kebeles*.
[22] Few et al, 2015a, p. 50
[23] Harkey, 2014
[24] Twigg, 2015, p. 37
[25] A selection from a longer list in Twigg, 2015, p. 37

- How the training fits within a long-term capacity development plan, and how future demand will be met, and follow-up provided.

Box 2: African academic and research institutions contribute to sustainability

The National Emergency Management Agency (NEMA) in Nigeria has been partnering with six universities selected from each of the country's geopolitical zones. These provide postgraduate programmes in DRM and development studies and have trained and re-trained 500 practitioners since the inception of the partnership. A curriculum for DRR and climate change adaptation has been developed and integrated into four carrier subjects: Geography, English, Civil Education, and Health Education. Those involved in the programme believe that it has helped build capacity on a continuous basis, coordinate research, and supported NEMA to deliver its mandate for awareness creation and capacity building.

Source: UNECA, 2015

PeriPeri U is a partnership of 10 African universities, including Bahir Dar in Ethiopia, that aims to strengthen disaster risk-related teaching and learning capacity in institutions across Africa. It provides courses and training modules and facilitates the cross-disciplinary exchange of knowledge. After its first decade, a multi-country survey in 2018 analysed the career paths of graduates from five universities in the consortium (including Bahir Dar). Of those who could be traced, almost all those graduating in Ethiopia had found employment, half of them at sub-national level and most in sectors relevant to DRM.

Sources: Holloway and Fortune, 2019; Twigg, 2015; http://www.riskreductionafrica.org/

The IFRC-commissioned research project developed and tested a framework to guide capacity development for DRM, made up of six generic principles or building blocks (Figure 1). These are explained in more detail in Annex 1, along with a complementary theory of change.

Figure 1: Principles for effective capacity development for DRM:[26]
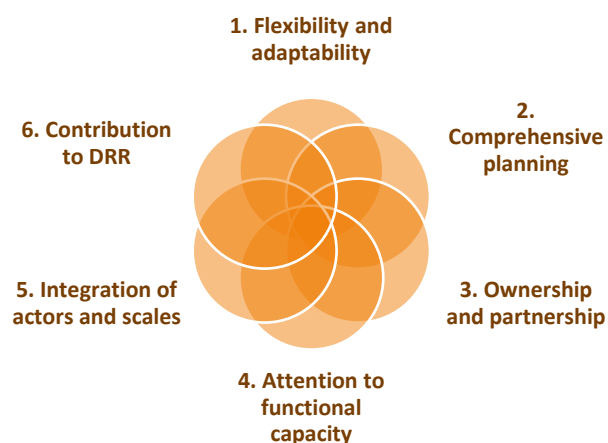
UNDRR has also published guidance on capacity development for implementing the Sendai Framework, including two checklists of ideas to address common obstacles in capacity development for DRR.[27]

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[26] Few et al, 2015a, p. 104
[27] UNDRR 2019b, pp. 107-122

Monitoring and evaluation of capacity development

The literature review mentioned earlier found few resources specific to the monitoring and evaluation of DRM, and no common methodology.[28] Most of the programmes studied in the six countries lacked strong monitoring and evaluation systems. An exception was again in Mozambique (Box 3).

Box 3: Mozambique: monitoring and evaluation of DRM capacity development

Three features of the design of Mozambique's PRO-GRC contributed to the strength of its monitoring and evaluation system:

- **Adequate training:** a week-long course at the start of the programme on how to use the monitoring and evaluation system, which strengthened planning and collaboration.

- **Focus on outcome indicators:** once these were agreed, managers had maximum freedom to adapt activities and outputs in ways that were appropriate to their project and local situation.

- **Participatory approach:** discussions with partners were open and focused on solutions, which helped to institutionalise the system and sustain the capacities developed. One indicator of this is that the monitoring and evaluation systems put in place by the programme were still being used at the time of the research visit, three years after the programme had ended.

Sources: Few et al, 2015b; Scott et al, 2016

The IFRC project developed an overarching monitoring and evaluation framework for DRM capacity development (Table 2); the intention is that any capacity intervention should contribute to at least one of the outcomes or sub-outcomes. It reflects a finding of the research that practitioners needed guidance to make the shift from monitoring outputs to measuring outcomes and impacts; monitoring outcomes is more challenging because change may not be apparent in the short term, and because different tools (such as surveys) may be required.

Table 2: Monitoring and evaluation framework for DRM capacity development[29]

Outcome	Sub-outcome
1. The ability of actors to use knowledge, innovation, education, communication and/or technology for DRM has been enhanced	1.1 Individuals and communities at risk of disaster are able to use enhanced DRM skills and knowledge as a result of the capacity development programme. 1.2 Actors engaged in policy making, planning and/or implementation of DRM at national, regional, district and/or community level are using enhanced skills built by the capacity development programme.
2. The institutional framework for DRM has been strengthened	2.1 The capacity development programme has led to the improvement of DRM policies, strategies and procedures. 2.2 The capacity development programme has led to the inclusion of a wider range of stakeholders in developing new DRM planning and operational processes.
3. Motivation to achieve effective DRM has been improved	3.1 Political support for DRM has been strengthened at national, regional, district, and/or community level by the capacity development programme. 3.2 The capacity development programme has strengthened the motivation of communities and individuals to reduce their vulnerability to disasters.

The framework captures progressive levels of capacity: the first outcome concerns the application of knowledge, equipment or skills; the second concerns functional capacity and the organisational context for

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[28] Scott et al, 2015
[29] Scott et al, 2016, p. 418

DRM (at all levels),[30] and the third concerns the enabling environment for DRM. Additional published guidance on how to apply the framework, with sample indicators for each outcome, is available.[31]

Other examples from the region that may be of interest include the framing of the vision statement for Egypt's National Strategy for DRR in terms of enhancing the capacities of 'Egyptian society', and the approach described in Somalia's National Disaster Management Policy for an annual, participative review of performance structured around the policy's eight guiding principles.[32]

1.2   Using legislation to support DRM

Legislation can be one of the most important tools for governments wishing to strengthen their disaster management capacity.[33] This may be a dedicated DRM law, or one governing a specific hazard, sector, or activity (such as building regulations); the cross-cutting nature of DRM means that its legislation is in effect 'an ensemble of laws and rules' rather than a single document.[34]

Clear legal mandates can help to ensure that institutions have the powers they need, that resources are allocated appropriately and sufficiently, that roles and responsibilities are clear, and that there are recognised processes for public participation and inclusion. However, it is also important that people understand the content of the legislation and its implications,[35] and that accountability for DRM in a complex institutional and legislative environment is unambiguous.

In 2014 the IFRC and UNDP published the findings of the largest comparative study to date of legislation for DRR,[36] involving a desk survey of 31 countries, 14 of them explored in greater depth (one being Ethiopia). The findings of the study informed a checklist (Box 4) and complementary handbook to guide officials when strengthening laws and regulations in line with their commitments under the Sendai Framework.[37]

The relationship between policy and law is important and context specific. Policies and plans may elaborate on the general directives set out in law; alternatively, legislation may be used to reinforce the direction already set by policy and to strengthen its implementation. Either way, the complementary use of law and policy can be particularly effective.[38] For this reason, the answers to the checklist in Box 4 should be informed by a review of both legislation and policy in order to determine the extent to which the latter addresses the issues raised, and whether a stronger legal backing could reinforce policy implementation.

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[30] The authors note that 'institutional frameworks' exist at all levels of governance and can include both formal and informal arrangements, such as those that exist within communities.

[31] Few et al, 2015a, Annex B

[32] Cabinet of Egypt, 2017; FRS, 2017

[33] Harkey, 2014, p. 14, based on the findings of a four-country review (Mozambique, El Salvador, Indonesia, Philippines)

[34] IFRC and UNDP, 2014, p. 5

[35] Rohwerder, 2015

[36] IFRC and UNDP, 2014

[37] IFRC and UNDP, 2015a and 2015b. A pilot version of the checklist was discussed at numerous events, including a consultative regional meeting on law and disasters in Addis Ababa in June/July 2015.

[38] IFRC and UNDP, 2015a

> **Box 4: Checklist on law and DRR**
> 1. Does your country have a dedicated law for disaster risk management that prioritises disaster risk reduction and is tailored to your country context?
> 2. Do your country's relevant sectoral laws include provisions to reduce existing risks and prevent the creation of new risks?
> 3. Do your country's laws:
>   a. Establish clear roles and responsibilities related to risk reduction for all relevant institutions from national to local level?
>   b. Ensure that adequate resources are budgeted for disaster risk reduction?
>   c. Establish clear procedures and responsibilities for conducting risk assessments and ensure risk information is considered in development processes?
>   d. Establish clear procedures and responsibilities for early warning?
>   e. Require education, training and awareness-raising to promote a whole-of-society approach to disaster risk reduction?
>   f. Ensure the engagement of all relevant stakeholders, including civil society, the private sector, scientific institutions and communities, in risk reduction decisions and activities?
>   g. Adequately address gender considerations and the special needs of particularly vulnerable categories of persons?
>   h. Include adequate mechanisms to ensure that responsibilities are fulfilled and rights are protected?
>
> *Source: IFRC and UNDP, 2015a.*

The literature contains a number of relevant lessons which include:

- **Addressing the full DRM cycle.** Recent analysis of legislation governing flood risk management (FRM) in 33 countries found a lack of attention to flood risk reduction and prevention (proactive FRM) and a greater focus on response and recovery (reactive FRM). The authors suggest that legislation could be particularly helpful in encouraging a shift towards anticipatory action, for example by requiring that flood risk assessments consider both current and future risks under climate change, or that climate change trends be taken into account when making decisions about infrastructure or land use.[39]

- **Cross-governmental coherence.** The Philippines provides an example of how separate governmental processes may undermine effectiveness and accountability. The DRM legislation passed in 2010 establishes Local Disaster Risk Reduction and Management Offices. However, the system of decentralisation requires that these are supervised by the Department of the Interior and Local Government – which is insufficiently equipped to do so – rather than by the National Disaster Risk Reduction and Management Council. This creates a lack of vertical accountability within the DRM system.[40]

- **Legislative reform as an ongoing learning process.** A 'continuous improvement' approach to both policy and legislation will ensure that it remains relevant to emerging needs and opportunities.[41] This can be done by including within the policy or legislation the requirement for its review within a specified timeframe, or by using ancillary regulations to facilitate its implementation and address any emerging ambiguities (Box 5). The process of policy and legislative development can itself be a capacity-developing activity if it is done in a way that strengthens the institutions involved in the crafting.[42]

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[39] Mehryar and Surminski, 2020
[40] Harkey, 2014
[41] IFRC and UNDP, 2014
[42] Harkey, 2014

Box 5: Legislative reform in Kenya and Indonesia

Kenya

The National Drought Management Authority (NDMA) was established by Executive Order in 2012 and subsequently by an Act of Parliament in 2016. Drought had previously been managed through a succession of ever-changing projects and ministerial departments. The principal argument behind the creation of the Authority was that drought was a permanent risk which required a permanent mechanism to manage it. The legislation has strengthened the powers of the NDMA as a coordinating body and, as a semi-autonomous agency, protected it from the impact of ministerial reorganisation. Other government departments are now aware of its powers and more willing to give support, for example by sharing information and participating in coordination processes. However, further work is needed to elaborate the provisions in the Act, such as setting out the mechanics of the drought information and contingency planning system. This will be done through a set of regulations that will also be presented to Parliament for approval.

Source: personal communication; Republic of Kenya, 2015

Indonesia

Since passing Law 24 on Disaster Management in 2007, in the wake of the 2004 tsunami, the government has continued to reinforce and refine it. It has added regulations on issues such as the architecture and functioning of national and sub-national management structures, the funding and management of relief aid, and the participation of international and non-governmental actors. The National Action Plan on DRR and the national contingency plan have also helped ensure a common interpretation of the law.

Source: Harkey, 2014

One of the objectives of the IFRC/UNDP study was to explore the priority attached to DRR within DRM legislation. This varies between countries, depending on factors such as the level of exposure to hazards, or the level of capacity across government to manage risk. Broadly speaking, DRR will benefit from being given more attention in overarching DRM legislation in countries where risk is not being reduced through other means, such as by the sectors or local governments.[43]

In conclusion, Table 3 illustrates how a number of countries are using legislation to reinforce different aspects of their DRM system.

Table 3: Examples of legislation supporting DRM[44]

DRM priority	Legislative example
Allocating responsibilities clearly	▪ **Vietnam:** the Law on Natural Disaster Prevention and Control, 2013, lists the responsibilities of each relevant line ministry, as well as of the People's Committees responsible for implementation at the local level.
Allocating sufficient finance, particularly to devolved levels	▪ **Philippines:** the National Disaster Risk Reduction and Management (DRRM) Act, 2010, requires local government units to allocate at least five percent of their estimated revenue from regular sources to the Local DRRM Fund. These local funds have strong DRR spending criteria. Further, if the 30 percent of funds set aside for quick response in the National DDRM Fund are not required in a given year, they must be invested in a trust fund, which is to be used solely for DRR and DRM activities by local DRRM councils over the next five years. [The remaining 70 percent of the national fund is already set aside for activities other than disaster response, such as risk reduction and recovery.] ▪ **Kenya:** county governments are establishing County Climate Change Funds through legislation passed by the devolved governments which requires the allocation of a fixed percentage of the county budget (usually one or two percent).[45]

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[43] IFRC and UNDP, 2014
[44] IFRC and UNDP, 2014 and 2015b
[45] https://adaconsortium.org/index.php

DRM priority	Legislative example
Applying risk information	▪ **Algeria:** the Law on Prevention of Major Risks and Disaster Management in the Context of Sustainable Development, 2004, includes requirements for risk assessment and risk mapping, land use planning and building safety, and integrates the work of the National Committee on Major Risks and a Directorate-General on Civil Protection in the Ministry of the Interior with decentralised local governance structures.
Ensuring accountability	▪ **Seychelles:** the National Disaster Risk Management Act, 2014, requires its high-level inter-ministerial committee to meet a minimum number of times each year – partly to avoid the tendency for such committees to lose interest during periods when no disaster is present. ▪ **Namibia:** the Disaster Risk Management Act, 2012, requires reports to be submitted to the cabinet. ▪ **Philippines:** the 2010 Act requires parliamentary oversight by a high-level committee and a review of the law within five years or as need arises.
Facilitating inclusion	▪ **Philippines:** the 2010 Act sets out expectations with regard to the participation of civil society organizations, private groups, volunteers, and communities. The *barangay* (neighbourhood) committees are required to ensure the participation of at least two representatives from existing and active community-based people's organisations representing the most vulnerable and marginalised groups in the *barangay*.

1.3   Coordinating DRM

As a multi-sectoral and multi-stakeholder long-term process, DRM requires a central coordinating body. There are broadly three options in use for its institutional location: in a dedicated ministry, in another line ministry, or in a high-level body with authority across government (such as a presidential or prime ministerial office). Each has its advantages, although a weakness of the second, the line ministry, is that it has less capacity to mobilise the necessary cross-sectoral support, [46] and eliminate cross-sectoral contradictions.

Recent analysis of budgetary allocations in Africa has found a correlation between the location of the political office in which a DRM authority sits and the size of both its own budget and the investment made in DRR; investments were higher – up to seven times higher for the budget of the authority – when it was located in the Office of the President, Vice-President, Prime Minister, or Deputy Prime Minister.[47] The suggestion is that this politically strategic location helps align policy agendas and priorities across government.

A parallel exists at the regional level in the Horn and East Africa. The Platform Coordination Unit for IGAD's Drought Disaster Resilience and Sustainability Initiative (IDDRSI) is administratively linked to the Division of Agriculture and Environment in the IGAD Secretariat. A mid-term review in 2016 found that this weakens its relationship with other IGAD Divisions and Specialised Institutions responsible for delivering other components of the multi-sectoral IDDRSI framework. A similar finding was made at the level of member states, where in all countries except Kenya and Uganda, IDDRSI coordination is located in a line ministry responsible for agriculture, livestock, or the environment. The mid-term review recommended that ministers attending the General Assembly be those responsible for cross-cutting ministries with the powers to coordinate the contributions of all relevant sectors.[48]

As the financial cost of unmanaged risk becomes ever more apparent, one recent trend is the growing power of national treasuries over DRM practice. For example, Panama has a dedicated risk management unit within

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[46] Bahal'okwibale, 2017
[47] UNDRR, 2020a, based on reports for 13 countries over periods of between three and five years.
[48] Majwa et al, 2017

the Ministry of Economy and Finance,[49] while Kenya's National Treasury has produced a disaster risk financing strategy.[50] This can significantly strengthen DRM by leveraging the authority that is attached to most national treasuries, but it also adds a further layer of complexity, requiring close collaboration not just between the DRM coordinating body and the line ministries and local governments responsible for delivery, but with the institutions leading on finance and planning as well. The Association of Southeast Asian Nations (ASEAN) models this by establishing a standing committee within its disaster risk financing programme with representatives from ministries of finance, insurance regulators, and disaster management authorities.[51]

However, institutional location is only part of the story; much also depends on leadership and the extent to which individuals make use of the powers they have been given. Kenya's 'Ending Drought Emergencies' (EDE) programming framework (its contribution to IDDRSI) is coordinated through six pillar groups whose performance is variable. The weaker ones combine sectors which lack a strong history of collaboration, or whose chairs have too many other responsibilities; the stronger ones have chairs who take a high level of personal responsibility and look for synergies with other national and regional commitments.[52]

Box 6 contains an example of a coordination mechanism used in Rwanda that may be particularly relevant to DRM, given the high level of external finance often associated with it.

Box 6: Single project implementation unit

In 2011 the Government of Rwanda introduced a single project implementation unit in all ministries and agencies. This was seen as a way of improving coordination and synergy across multiple externally-funded projects, and of lowering transaction costs. The mid-term evaluation of a capacity development programme implemented by the Ministry of Disaster Management and Refugee Affairs, with UNDP, found that focusing technical assistance to the unit in this ministry had allowed it to have a broad impact across projects and donors.

Source: Langdon, 2017

1.4   Decentralising DRM

A study of four national governments that have increased their capacity to lead disaster risk management found that one of the most important contributory factors was the strengthening of sub-national institutions.[53] UNDRR notes that decentralised DRM systems are generally considered more effective than top-down,[54] although it recognises that the situation is nuanced.

Decentralised DRM systems involve both potential and risk (Table 4). The literature contains many examples of responsibilities being devolved without the resources to match. A systematic assessment of DRR mainstreaming in local development plans for rural areas of 21 African countries found that local governments never financed more than 10 percent of DRR actions; the rest might be met by other agencies, or simply not funded.[55] The critical issue is to ensure that local structures have both the authority to act and the means to

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[49] GFDRR, 2018
[50] ROK, 2018; https://blogs.worldbank.org/nasikiliza/across-africa-disaster-risk-finance-is-putting-a-resilient-future-within-reach
[51] Hillier, 2018
[52] Personal communication
[53] Harkey, 2014, p. 7
[54] UNDRR, 2019a, p. 330
[55] Tiepolo and Braccio, 2020

do so, and that their capacity and resources match the mandate they have been given.[56] Box 7 illustrates this with examples of how devolution is changing drought risk management in Kenya.

Table 4: Potential opportunities and risks of decentralised DRM[57]

Potential opportunities	Potential risks
▪ Increase local ownership of DRM / DRR ▪ Strengthen citizen-state interaction ▪ More responsive to local needs and priorities, and more accountable ▪ Closer to the 'everyday' risks	▪ Responsibilities are not matched by resources, or by the capacity to implement them ▪ Places responsibility on those who can only address the local-level causes of vulnerability ▪ DRM / DRR becomes separated from mainstream government decision-making and loses political traction

The sub-national level is the key 'middle governance' space where bottom-up and top-down analysis and action can meet. However, care needs to be taken with the institutional arrangements to ensure that this happens. Tanzania's Disaster Management Act of 2015 establishes disaster management committees down to the village level, but these have not been operationalised in urban areas where they stop at the ward; the informal settlements, which are exposed to significant risks, are therefore not covered. It is the sub-ward governments which act as the critical interface between informal and formal DRM systems, which are often the first responders, and which are best placed to help manage those 'everyday risks' mentioned in the Introduction.[58]

Community-based disaster risk management (CBDRM) is a widely used approach, particularly since the principle resource in managing disasters is arguably the people at risk and their knowledge and expertise.[59] However, CBDRM can disempower as well as empower: as with local governments, responsibilities may be assigned without also strengthening the corresponding capacities to act, including the political power needed to address the drivers of vulnerability.[60] Moreover, the concept of 'community' needs to be grounded in an understanding of the conflicts and contradictions that exist in any society.[61]

CBDRM is often facilitated by external NGOs whose approaches and practices vary. One important lesson is that their efforts must be closely coordinated with government; otherwise, they risk isolating communities from long-term support and closing off the possibility of their work feeding back into the mainstream DRM system.[62] This is a concern addressed in Somalia's National Disaster Management Policy, which allocates significant responsibilities to State Governments within its federal system. Each State is encouraged to develop a CBDRM framework that will maximise synergies and benefits within its area of jurisdiction.[63]

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[56] IFRC and UNDP, 2014
[57] Drawn from UNDRR, 2019a, and Twigg, 2015
[58] Osuteye et al, 2018
[59] Twigg, 2015
[60] Wilkinson et al, 2014
[61] Siddiqi and Peters, 2019
[62] Harkey, 2014
[63] FRS, 2017

Box 7: Devolution and drought risk management in Kenya

Kenya's 2010 Constitution established a cooperative system of devolved governance in which the national and county governments are distinct and interdependent; the county governments are thus neither agents of, nor subordinate to, the centre. Political and fiscal authority are devolved, giving the elected county governments both the power and the resources to act within the mandates assigned to them. Inter-governmental relations are provided for in legislation, and include an Inter-Governmental Committee on Drought and Food Security which operates at both the political and technical level.

Risk reduction

A study of devolved water governance in Isiolo county identified a shift from short-term, piecemeal responses to drought and floods and towards a more strategically planned approach. The authors observed ways in which devolution has enabled greater official recognition and strengthening of the customary institutions which are critical in dryland water resource management, as well as more use of local technical expertise to improve the design, management, and cost-effectiveness of systems. However, they also note that a mix of centralised and decentralised approaches is needed in order to facilitate transboundary resource management, avoid conflict, and ensure that water resource users can rely on effective action by catchment-level and national institutions when needed.

Response

Devolution, in combination with other policy and institutional reforms, is one of the factors behind improved responsiveness during the 2016-17 drought. As drought warnings emerged, some counties re-allocated their budgets to repair and maintain water infrastructure, provide water to institutions and remote rangelands, purchase livestock drugs, and distribute cash and food transfers. Pastoralists interviewed in six counties for an evaluation of livestock-related mitigation activities reported that government officials were more accessible and decision-making faster than when previously centralised in Nairobi.

Lessons

1. **Leadership and transparency matter.** Progress has been patchy and partial. Some Governors are taking ownership, for example by moving a percentage of their budgets into dedicated funds for disaster management and climate change adaptation (CCA), or by contributing to the operating costs of the decentralised early warning system. Others have been slower to adjust to the new dispensation, waiting for the national government to act as a crisis looms rather than using the funds and powers at their disposal. Financial transparency is helping drive change: county financing mechanisms, such as disaster funds, appear in the published printed estimates which means that all parties, including the National Treasury and the public, are aware of what the counties could do if they chose.

2. **Structures can facilitate good practice, if used well.** The better-performing counties are those that are making good use of the institutional frameworks in place. Drought-affected counties have a coordinating structure that is:
   a. Responsible for the whole DRM spectrum. For example, it reviews and approves the county's monthly early warning data, coordinates the biannual food security assessments, and oversees both response and risk reduction, being the entry point for EDE in the county.
   b. Inter-governmental, with representation from both the county departments and the national government agencies working in the county.
   c. Multi-sectoral and multi-stakeholder.

3. **Further progress will depend on broadening understanding and ownership to consolidate and expand the gains being made.** These examples illustrate what is possible under a devolved system, but they are not evidence of comprehensive or sustained change. Numerous challenges remain, such as insufficient attention to the actual outcomes of investments. Nevertheless, they echo the conclusion of an earlier study of disaster risk governance that the redistribution of power and resources, even if incomplete, can create space for individuals to champion more progressive approaches to risk management.

Sources: Kanyinga, 2016; Wilkinson et al, 2014; King-Okumu et al, 2017; Groupe URD and ALNAP, 2018; Nyamweya et al, 2017; personal communication

Urban DRM

Decentralisation of DRM is often discussed in the context of urbanisation. UNDRR's Making Cities Resilient (MCR) campaign has involved over 4,300 cities, including Addis Ababa, Dire Dawa and Mekelle in Ethiopia, and is about to move into its next phase.[64] Dire Dawa has also been participating in a complementary initiative focused on 20 pilot cities, representatives from which shared their experiences of using the MCR scorecard and developing DRR action plans at a workshop in 2019. One of their conclusions was that the governance context has the greatest impact on the enabling environment for DRR planning and action – specifically, strong political support for DRR at local and national levels, supported by legislative frameworks and/or ringfenced funding.[65]

The experience of the five MCR role model cities suggests 11 factors that help sustain urban DRM/DRR:[66]

i. An integrated, broad-based, and multi-disciplinary approach.

ii. Partnership and coordination across institutional boundaries.

iii. A long-term perspective combined with adaptive management, monitoring, and course correction as necessary.

iv. Leadership and commitment from the city authorities.

v. Public engagement and communication that is extensive and systematic and mobilises action. One example in Makati is the annual DRM awards which recognise and encourage the work of *barangays*.

vi. National legal and policy frameworks.

vii. Inclusion, particularly supporting the most vulnerable people and groups.

viii. Membership of international campaigns, which provides cities with inspiration and learning.

ix. Review, analysis, evidence and learning, which improve delivery, connect stakeholders, and provide evidence and encouragement to decision-makers.

x. Funding, whether maximising the resources cities already have, or securing additional support from national governments, regional bodies, external agencies, or the private sector.

xi. Risk data and assessment, which can help mobilise local stakeholders, increase public accountability, and provide an entry point for action. Box 8 provides an example from Dar es Salaam in Tanzania.

Box 8: Tanzania: Community risk mapping

Ramani Huria ('open map' in Swahili) is a community-based digital mapping project that is helping manage flood risk in Dar es Salaam. Rapid population growth, extensive informal settlements and a variable climatic environment combine to leave the city at high risk of flooding. Approximately 80 percent of Dar es Salaam had not been surveyed before the project began in 2015. Within three years, the neighbourhoods of approximately 3.5 million residents had been mapped in a collaboration between the city authorities and technology specialists. University students and community members were trained to gather the data; the input of residents was especially valuable in providing fine-grained information, such as identifying which drains worked and which were blocked. The maps are now available on the OpenStreetMap platform and are being used to plan investment in drainage, waste management, and flood protection. They can also guide response should flooding recur, since they provide data such as the number of houses in at-risk areas.

Sources: UNDRR, 2019a, pp. 288-290; https://ramanihuria.org/en/

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[64] https://www.unisdr.org/campaign/resilientcities/home/article/making-cities-resilient-2030-mcr2030-initial-proposal
[65] Schofield and Twigg, 2019
[66] Schofield and Twigg, 2019. Only one of these five (Makati, in the Philippines) is in the Global South.

1.5   Inclusive DRM

Disasters affect excluded and marginalised people in specific ways. An inclusive approach to DRM will be one that is aware of and addresses these differential impacts. Exclusion may be associated with a person's gender, age, disability, ethnicity, or combination of these, or indeed with other forms of socio-economic inequality. Inequalities exist before a crisis: they will shape each person's experience during that crisis, and may in turn be changed by it, for good or ill, over the longer term.

Box 9 summarises some of the messages about inclusion drawn from a recent good practice review of DRR.

Box 9: Inclusive DRR

- **Recognise that vulnerabilities intersect.** People do not fit neatly into categories. For example, a woman's experience of disaster will be determined not just by her gender but by other aspects of her identity and by a range of other socio-economic factors.

- **Take an inclusive approach from the start.** Work with marginalised groups as part of the whole community, involving them in assessment, decision-making and action.

- **The right policy and institutions can help.** Effective inclusion requires an enabling policy and institutional environment that promotes inclusiveness and ensures compliance with laws and regulations.

- **Draw on people's capacities.** Women's resources and skills in coping with crisis are generally underused. Older people may have previously held positions of responsibility and may still be economically active. Children tend to be close to their environment and observe it acutely.

- **Look for ways to challenge more fundamental inequalities.** In some crises the temporary weakening of social constraints can be an opportunity to increase women's control over basic assets, or strengthen their public roles as leaders.

Source: Twigg, 2015

Part of the IFRC's work on legislation, discussed in section 1.2, is a study of how national laws, policies, and institutional frameworks can support gender equality in DRM, as well as prevent and respond to sexual and gender-based violence (SGBV), using case studies from Ecuador, Nepal and Zimbabwe.[67] Few DRM laws address gender adequately. Where provisions exist, there are seldom the mechanisms to ensure that these are implemented. For example, the law may establish inclusive decision-making processes, but this requires further action to make them work, such as articulating eligibility criteria, or removing cultural barriers to participation, or ensuring that safe and accessible transport is available for people to reach meetings.[68]

The IFRC study concluded that DRM laws could be used to advance gender equality and SGBV protection in a number of ways, including:[69]

i.   In their overarching principles or objectives, which can specifically refer to these issues as priorities.

ii.   Through subsidiary DRM laws or regulations.

iii. In the mandates of DRM institutions, by requiring them to take specific actions (for example concerning training, or monitoring).

iv.   By prescribing the membership or representation of women and women's organisations in DRM institutional frameworks.

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[67] IFRC, 2017

[68] IFRC, 2018

[69] IFRC, 2017. These examples were identified in the course of gender-specific research but could presumably be adapted to address other inclusion priorities.

v.   By requiring that the content of DRM policies and plans include specific actions (such as gender targets, or disaggregated data).

With regard to gender-based violence in disasters in particular, earlier IFRC research had identified three outstanding challenges: a lack of institutional frameworks to address SGBV, a lack of awareness about SGBV and consequently insufficient attention to women's needs for protection and security, and a lack of data on SGBV in general, and in disasters in particular. The three case studies confirmed that challenges and gaps persist but also identified some effective models and practices, including:

i.   Community awareness-raising on gender equality, before a disaster or during a slow-onset disaster, and on SBGV as an issue of community safety.

ii.   Using pre-existing police structures and women's ministry structures intended to support women and children on SBGV, particularly where these are integrated in local DRM committees.

iii.   On-location assistance to SGBV survivors in disaster-affected areas through government and civil society collaboration, such as integrated psychological, legal, and social counselling to displaced people in shelters in Ecuador, and legal and advocacy services provided to women in Nepal.

iv.   Extension of court services to displaced populations in shelters to improve access to justice.

Box 10 describes relevant actions being taken by the government of Mozambique, while the standards and guidelines listed in Annex 2 contain several recently published on various aspects of inclusion.

Box 10: Action on gender equality in Mozambique

The INGC developed a strategic gender plan for 2016-20 and established a gender unit to lead on its implementation, evaluation, and accountability. The plan addresses gender equality in CCA and DRM, and in the broader reduction of vulnerability. The gender unit promotes the integration of gender equality in sector policies, plans and interventions, conducts research, and provides training. The objectives of the plan address the following:

- Equal participation of women and men in DRR and CCA
- Improved responses to the economic needs of women, particularly in emergencies
- Participation of women in DRR committees
- Access to economic and natural resources during recovery
- Improved attention to the specific needs of women in preparedness and response
- Interventions to prevent and respond to gender-based violence
- Application of a code of conduct by all actors in emergency situations.

A review of gender-based violence associated with Cyclone Idai in 2019 demonstrates why such actions are necessary. A total of 1.5 million people were affected by the crisis, and over 140,000 were displaced into overcrowded accommodation centres and public buildings. The numbers of female-headed households and widowed women increased, and women and girls facing economic hardship resorted to negative strategies such as sex work or early marriage. One of the lessons from this experience was that adolescent girls were at particular risk of gender-based violence yet they had less access to health care due to their age and social position, and were not always being specifically targeted by reproductive healthcare services. Another lesson concerned the loss of documentation in the cyclone and subsequent flooding which made it difficult for children to attend school, when a known risk factor for gender-based violence and child marriage is children being out of school.

Sources: UNDRR, 2020b; UNDRR, 2019c; Gender-Based Violence AoR, 2019

1.6   Financing DRM

Effective financing of DRM will involve a number of complementary strategies and interventions, some of which are touched on in other sections of this document and drawn together here.

Strategic approach

The complexity of DRM, and the range of activities carried out by different actors at different levels, means that an overarching financing strategy can be helpful. Kenya's disaster risk financing strategy is framed in terms of its contribution to two national goals: protecting the economy from shocks and protecting the poorest and most vulnerable people from the economic impact of disasters.[70] Its four objectives concern:

   i.   Coordinated approach to disaster risk financing across the national and devolved governments.
   ii.   Improved sovereign financing capacity by strengthening and expanding the portfolio of disaster risk financing instruments.
   iii. Supporting programmes to protect the vulnerable and contribute to resilience.
   iv.   Enhancing the capacity of the national and devolved governments to respond to disasters.

A strategy of this kind can be a useful way of looking across the various financing instruments and sources, whether public or private, and ensuring that all forms of investment are considered and well-coordinated; for example, the private sector is a key partner in Kenya's livestock insurance and social protection programmes and within its climate finance portfolio. The cost-effectiveness of different forms of public subsidy, such as in social protection or insurance premiums, should also be compared.[71]

More widely, the contributions that are routinely made by those affected by risk are rarely assessed but thought to exceed the contributions from external sources.[72] This echoes evidence on remittances, which are now the largest source of foreign exchange earnings in low and middle-income countries, and more than three times the size of official development assistance.[73] However, the distribution of remittances is important, not just their size: a minority of households in Somalia received them in 2016 (40 percent), while urban households were more likely to receive them on a regular basis than rural.[74]

Comprehensive approach

All public investment should be risk-informed, given that sustainable development depends on effective risk management. Further, the process of budget allocation should ensure that sufficient resources reach the sub-national level in order to avoid the common problem of unfunded mandates, noted in section 1.4. The mainstreaming of risk reduction in the plans and budgets of sectors and sub-national bodies is discussed in section 2.1.

The distribution of funds across the DRM cycle is important. In general, more money is spent on responding to crisis than on averting it, and very little at all to recovering from it. Recent analysis of budgets in 16 African countries showed that the vast majority is directed towards pre-disaster activities (preparedness, prevention and mitigation) with very little for recovery and reconstruction (Figure 2).
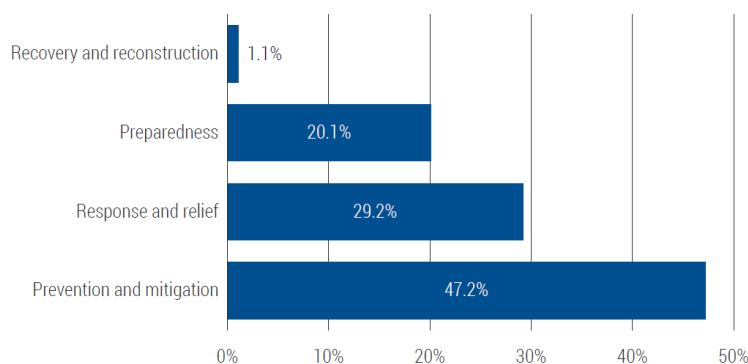
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[70] RoK, 2018
[71] Hillier, 2018
[72] King-Okumu, 2019
[73] KNOMAD, 2019
[74] Majid, with Abdirahman and Hassan, 2018

Figure 2: Direct DRR Investments across the four phases of the DRM cycle[75]

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

One way to increase the proportion of investment in risk reduction is to have a dedicated DRR budget line. This may be particularly effective in countries which are making the transition from focusing on response to focusing on risk. In these situations, DRR may be new and less well-defined, such that agencies default to what is familiar. A dedicated DRR budget allocation can thus be a form of affirmative action. However, over time, and once DRR is better integrated in government processes, a separate budget line at the national level may no longer be needed and may even be counter-productive if it detracts from the efforts that the sectors and sub-national authorities should be making. At the sub-national level, fixed percentages for DRR can help improve accountability for meeting the risk reduction priorities of communities.[76]

Other options are to use federal revenue to incentivise DRR by devolved governments, or to establish a dedicated DRR fund outside the regular budgeting system to receive both government revenue and external finance. India's National Disaster Response Fund is intended to ensure support to state governments during major emergencies, thereby allowing them to invest more of their budgets in risk reduction.[77]

Budget tracking, transparency, and accountability

If the allocations to risk reduction are to be increased, there first need to be systems to identify this expenditure. DRR investments need disaggregating and coding in budgets at all levels so that they can be tracked and analysed; even better would be to track data on actual expenditure rather than planned. In the Philippines, a climate change expenditure tagging system was introduced in 2015 by the Department of Budget and Management, and the budget allocated to this category has been rising rapidly since.[78]

These tracking systems may also enhance transparency by allowing scrutiny of the distribution of public funds. In Zambia, the Disaster Management and Mitigation Unit, a permanent statutory agency in the Office of the Vice-President, has been using DRR-sensitive budget analysis as a tool to scrutinise public investment, including in a special parliamentary session.[79] Other positive actions are the publishing of information about donor funds for DRM on government websites, as in the Philippines.[80]

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[75] UNDRR, 2020a, p. 9

[76] IFRC and UNDP, 2014

[77] IFRC and UNDP, 2015b

[78] IMF, 2019

[79] UNISDR, 2019

[80] http://www.ndrrmc.gov.ph/index.php/2014-09-05-05-34-29/ndrrmc-donated-funds

Section 2: DRM cycle

2.1   Prevention and mitigation

The prevention and mitigation of risk are central to Ethiopia's policy goals; three of the SPIF's four objectives address them in one form or other. The first objective notes that disaster risk and vulnerability will be reduced 'primarily by focusing on proactive measures, establishing a culture of risk reduction in regular development programmes, and addressing the underlying causes of recurrent disasters'.[81] The mechanisms for doing so include mainstreaming DRM in sectors (objective 4) and promoting resilience (objective 3).

A recent paper on risk-informed development describes it as a process requiring three things: (i) explicit acknowledgement that threats interact and present both risks and opportunities for development; (ii) explicit acknowledgement that unsustainable development creates risk; and (iii) action to promote more sustainable and resilient development, thereby preventing new risks and reducing existing ones.[82] The process illustrates that all development choices involve trade-offs. The authors identify four good practice principles and explain their importance (Table 5).

Table 5: Good practice principles in risk-informed development[83]

Good practice principle	Importance
Inclusive and transparent	What is considered risky in a proposed development plan or programme is a value judgement. Not everyone has the same risk tolerances or perceptions. Multiple stakeholders need to be involved in the decision process to ensure that the most marginalised people or critical ecosystems on which livelihoods depend are adequately represented. Lack of transparent information, data and decision-making, as well as poor participation, can contribute to unsustainable development and create risks.
Phased and iterative	Generating knowledge about risks and acting upon it involves several phases, from risk assessment and understanding risk tolerances to implementation and monitoring and evaluation. This allows for reflection and review of information emerging from each phase, and adjusting the development objective(s) accordingly.
Flexible and adaptable	Each development context is different, and different countries, donors and international investors have different priorities. Capacities and resources for taking action, and deciding which development plans and programmes to implement, also vary. Risk-informed development allows for flexibility in identifying and addressing threats and risks according to priorities, resources and capacities.
Continuous learning and reflection	Development pathways, threats and risks, and knowledge about them, are constantly changing. Risk-informed development is not an endpoint. Risk analyses, evaluations of risk tolerances and so on have to be repeated as conditions change. We have to learn from past disasters and understand the lessons of development failures. This can assist in avoiding repeating the same mistakes and reduce vulnerability and exposure to emerging threats.

This section discusses three aspects of the intersection between DRM and other policy goals: first, the mainstreaming of DRM in sector plans and budgets; second, the links between DRM and climate risk management; and third, the need for conflict-sensitive DRM.

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[81] FDRE 2014, p. 31
[82] Opitz-Stapleton et al, 2019
[83] Opitz-Stapleton et al, 2019, p. 34

Mainstreaming DRM in sector plans and budgets

A study into the mainstreaming of climate-related DRR in the agriculture sector in East Africa illustrates how it involves the consideration of both threats and opportunities. The author identifies different types of good practice response that might characterise a risk-informed agriculture sector plan (Table 6).

Table 6: Typology of risk-informed responses in the agriculture sector[84]

Response to the threat	Response to the opportunities
Avoid: implement measures so that the threat does not happen, or its effects are not felt, such as avoiding crops with high water requirements and long growing periods	**Exploit:** take steps to maximise benefits, such as planting crops with high water requirements when above-normal rainfall is likely
Reduce: minimise the probability of occurrence or its impact, such as supplementing agricultural activities with drip irrigation	**Share:** spread the benefits of impacts to other stakeholders
Fallback: operationalise contingency plans in order to provide for the basic needs of those affected or support their switch to alternative livelihoods	**Enhance:** implement actions that favour the event's occurrence, such as preparing land and channels for flooding and infiltration under high rainfall
Transfer: use insurance to cover losses	**Reject:** ignore the opportunity as the outcome will not generate additional value
Accept: do nothing, since the actions required would not have value	
Share: spread the cost of impacts to other stakeholders	

Governments are using various strategies to facilitate sectoral mainstreaming and ensure accountability for the same. A common one is the use of ministerial focal points. For example, DRM law in Namibia requires the appointment of a national focal person from every governmental body to liaise with the national DRM agency and participate in a national forum. But to be effective, these focal points need the knowledge, resources and authority to ensure that their sector is accountable for its commitments.[85] Another strategy is to use the power of high office, such as implementation protocols signed by the Prime Minister.[86] Some countries also use legal or administrative sanctions to promote compliance.[87] Other strategies include:

- **Pakistan:** a DRR checklist is part of the proposal form for public sector development projects to prompt the mainstreaming of DRR in each new project before it is approved. A National Working Group on Mainstreaming DRR also provides oversight of relevant ministries and professional bodies.[88]

- **Mozambique:** the Ministry of Planning and Development is tasked with ensuring that line ministries incorporate DRM in their annual operating plans and budgets, with training on how to do so.[89]

- **Philippines:** the National Economic Development Authority has developed guidelines on how to incorporate DRR into provincial planning. It also uses hazard maps created in collaboration with

[84] Bahal'okwibale 2017, pp. 45-46
[85] IFRC and UNDP, 2015b
[86] Sudan, personal communication
[87] IFRC and UNDP, 2015b, p. 67
[88] Lopez-Lucia, 2015
[89] Harkey, 2014

technical line ministries to support land use and development planning by provinces that is sensitive to current hazards and to those likely to result from future climate change.[90]

- **Peru:** the government has developed a number of tools to help the sectors address climate change and DRR in public investments. They include a conceptual framework for integrating DRM and CCA; a series of interactive maps with data on climate change, hazards, land use and ecosystems; identification of adaptive measures for investment projects; development and testing of cost-benefit analysis tools; revision of official guidelines for project design; and training.[91]

These examples suggest that effective sectoral mainstreaming will take time to achieve since it requires significant technical preparation, awareness-raising, and oversight mechanisms.[92]

Similar processes operate at sub-national levels. For example, Costa Rica does not develop separate risk management strategies at this level; rather, risk management is incorporated in local development planning instruments, some of which are mandated by law. Its National Risk Management Plan includes 25 targets that are commitments made by local governments.[93]

There is some evidence that cross-sector collaboration may be facilitated by devolution. A study of nutrition-sensitive, multi-sector programming in two counties of Kenya (Homa Bay and Makueni) found that devolution was regarded as more of an enabler than a barrier to multi-sector partnership because it was no longer mediated through coordination structures at the national level. The reduction in upwards accountability had reduced the bureaucracy associated with cross-sector partnership, increasing counties' freedom to decide whether and how they pursued it, and letting county departments engage with each other opportunistically and directly based on shared needs.[94]

Integrating disaster and climate risk management

The three global frameworks agreed in 2015 – the SDGs, the Paris Agreement, and the Sendai Framework – share common ground:[95]

- They are mutually reinforcing; implementation of one contributes to the achievement of the others. The converse is also true, in that failures in one may undermine others.
- They are concerned with the same underlying factors, such as poverty and declining ecosystems, and are driven by similar goals, such as reducing vulnerability or building resilience.
- They all require coordinated action across government and with other stakeholders.
- They all have specific goals and targets which governments are required to monitor and report on.

This commonality is reflected in the first of the five objectives of the African Union's Programme of Action (PoA) to implement the Sendai Framework, which is to strengthen coherence and integration between DRR and adaptation / mitigation, and with

Target 2: 'Increase integration of DRR in regional and national sustainable development, and climate change adaptation frameworks, mechanisms and processes.'

AU Commission, 2016, p. 9

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[90] Harkey, 2014
[91] Twigg 2015, p. 232.
[92] Harkey, 2014
[93] UNDRR 2019c
[94] Karanja-Odhiambo et al, 2018, p. 13
[95] Pearn, 2019; UNESCAP, 2018

other developmental goals.[96] This is also one of the additional five targets to those set in Sendai that were agreed by African governments (see sidebar).

The differences between DRR and CCA – for example in terms of their scope and dimensions (over time and space), professional cultures (distinct terminologies and methodologies), and separate institutional frameworks – illustrate the challenges in achieving this integration.[97] Moreover, there is an argument that 'good enough coherence' may be sufficient, given political realities and institutional constraints.[98] Nevertheless, integration may improve efficiency and effectiveness. It is also essential at the local level where all three frameworks intersect, and will be facilitated by a people-centred, participatory, and inclusive approach.[99]

Recent guidance on how to pursue coherence in the Asia-Pacific region emphasises the importance of first deciding the results to be achieved, since coherence is not an end in itself but rather a means to achieve those results. The guidance proposes a model to stimulate discussion on the extent to which three elements of governance are advancing integration at different levels (Figure 3). It also suggests a number of possible entry points to do so, with country examples. The potential entry points include:

- National development plans and investment processes.
- Decentralisation, since local governments can have a comparative advantage in finding 'win-win' solutions given their smaller size, greater flexibility, and proximity to local people.
- Collaborative data collection and analysis.
- Integrated tracking and monitoring systems.
- Joint analysis of financing requirements and funding mechanisms.

Figure 3: Coherence model[100]

Outcome	'How' of coherence		
Levels of coherence	1. Strategies, policies, plans and their resources	2. Mechanisms, relationships, and information-sharing processes	3. Technical capacities and tools/guidelines
Horizontal coherence — Local			
Horizontal coherence — Sub-national			
Horizontal coherence — National			
Horizontal coherence — Regional			
Country examples:	Indonesia integrates a risk index into government financial resource allocations at all levels	India uses standardised templates for data collection that allow integration with other datasets and contribute to SDG reporting	Local governments in the Philippines use a climate and disaster risk tool to integrate DRR and CCA into local development

Boxes 11 and 12 provide two further examples of coherence: the first in district planning in Uttar Pradesh, and the second in policy and institutional reform in Pacific island states.

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[96] African Union Commission, 2016, p. 7
[97] Natoli, 2019
[98] Vanheukelom et al, 2018; Wilkinson et al, 2014
[99] Pearn, 2019
[100] Drawn from Pearn, 2019

Box 11: District planning in Uttar Pradesh, India

The Gorakhpur Environmental Action Group provided technical assistance to the Gorakhpur District Disaster Management Authority on how climate change could be integrated into disaster management. Until this point, disaster management planning had focused on relief and reconstruction: district disaster management authorities had little access to data on climate projections and operated separately from those working on climate change. The research project explored the factors contributing to both resilience and vulnerability in this flood-prone district and the policy options that might bridge both the vertical gap between the national DRM framework and the local context, and the horizontal gap between sector programmes seeking to integrate DRM and climate change.

In 2013 the Gorakhpur District Disaster Management Authority used this information to prepare a new climate-smart district disaster management plan. The multi-sectoral process meant that the plan reflected the needs, priorities, and capacities of different departments. The district repeated the process and upgraded the plan in 2014, this time without external support. India's National Institute of Disaster Management considers it a model for such plans, and the State Government has now directed that all its 75 districts do the same, supported by a newly developed training module.

The high level of buy-in from the district authorities is attributed to a number of factors:
i. Sharing scientific information on climate change with decision-makers in a way that conveys the threats to the performance of various sectors in the district.
ii. Building understanding among decision-makers of the urgency to act, as well as the potential benefits of integrating climate resilience in district development plans.
iii. Building collective understanding of vulnerability and resilience within and across departments through a structured and iterative process of shared learning and dialogue with departmental staff and stakeholders.

Sources: Bahadur et al, 2014; Bahadur et al, 2016

Box 12: DRM and CCA in Pacific island states

Vanuatu

Vanuatu's national development document aspires to an integrated approach to climate change and disasters. This high-level policy commitment is supported by an institutional framework. A National Advisory Board (NAB) on Climate Change and Disaster Risk Reduction was created in 2012, bringing together two previously separate bodies tasked with coordinating DRR and CAA. The NAB has both governmental and non-governmental membership and is Vanuatu's 'supreme policy-making and advisory body for all disaster risk reduction and climate programmes, projects, initiatives and activities'. Second, a new Ministry for Climate Change Adaptation, Meteorology, Geohazards, Environment, Energy and Disaster Management brings together related but previously separate policy areas. There are also examples of an integrated approach in programming, although these are not necessarily described as such but rather as 'good development'. They include embedding climate-proofing measures in a major road-building programme and the design of schools that can withstand natural hazards.

Source: Peters and Bahadur, 2014

Tonga

Tonga was the first country in the region to develop a joint national strategy on climate change and DRM – the Joint National Action Plan (JNAP) on Climate Change Adaptation and Disaster Risk Management, 2010-2015. Given Tonga's size, and the obvious synergies between the two areas of work, a joint plan seemed a logical step to those involved. Some of the factors that assisted the process were high-level political support from the concerned ministers, technical input from multi-stakeholder committees and regional organisations, and the establishment of a JNAP Secretariat to drive the process. The presence of a representative from the Ministry of Finance and National Planning in the advisory and parliamentary working committees was also important. A second JNAP was approved for 2018-2028 which clarified the roles of the various stakeholders, led by the Department of Climate Change in the Ministry of Meteorology, Energy, Information, Disaster Management, Environment, Climate Change and Communications, now supported by a JNAP task force. One indication of the JNAP influencing practice is the way implementing ministries and NGOs refer to it in their project proposals.

Source: UNISDR, 2013; UNDRR, 2019a
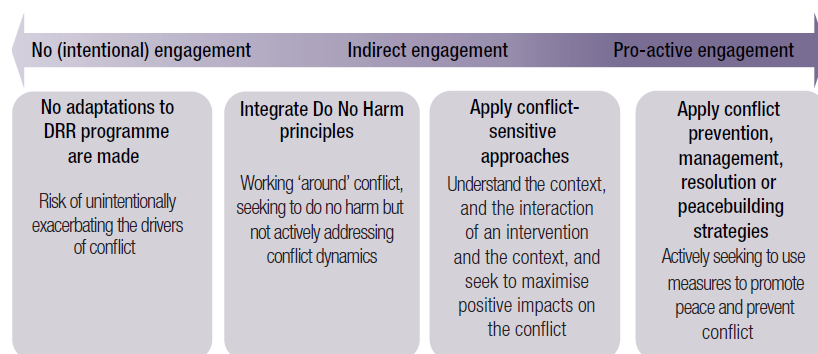
Conflict-sensitive DRM

The policy coherence objective in the Africa PoA explicitly includes conflict (see sidebar). Conflict and violence have an impact on vulnerability and on the incidence of disasters which are more likely in places where the systems for managing shocks have been weakened, such as those affected by conflict.[101] However, there is an argument that DRM should be conflict-sensitive in any context because conflict is a normal part of interaction in any society.[102]

In terms of risk reduction, the level of engagement with conflict may be thought of on a spectrum, from no engagement at one end to pro-active engagement at the other (Figure 4). Given the risks of neglecting the political realities in which programmes take place (the left end of the spectrum), the minimum would be to work in the middle, applying 'Do No Harm' principles and conflict-sensitive approaches. In these situations, conflict analysis is an essential prerequisite.[103] Unfortunately, a recent systematic review of DRR strategies and tools from the perspective of violence, conflict, and fragility found very little guidance or advice on how to apply them in such situations.[104]

Figure 4: Continuum of intent: disaster risk reduction and conflict prevention[105]

No (intentional) engagement	Indirect engagement		Pro-active engagement
No adaptations to DRR programme are made Risk of unintentionally exacerbating the drivers of conflict	Integrate Do No Harm principles Working 'around' conflict, seeking to do no harm but not actively addressing conflict dynamics	Apply conflict-sensitive approaches Understand the context, and the interaction of an intervention and the context, and seek to maximise positive impacts on the conflict	Apply conflict prevention, management, resolution or peacebuilding strategies Actively seeking to use measures to promote peace and prevent conflict

In terms of response, a recent review of early warning systems focused on the Horn / East Africa noted the limited attention they give to conflict despite its prominence as a driver of crisis in the region. The concern is not so much to predict conflict but rather to ensure that conflict analysis is integrated in information systems and its consequences factored into scenarios and contingency planning. An additional observation is that there could be more effective use of qualitative data, partly to help triangulate and complement quantitative data, but also because it may better capture the nature of crisis in dynamic and insecure situations.[106]

The discussion of DRR in fragile and conflict-affected contexts in the 2019 Global Assessment Report emphasises the interaction of multiple risks, and that this complexity will be unique to each context. However, it draws out four common themes: (i) the importance of addressing a wide range of vulnerabilities where risks combine; (ii) considering particularly vulnerable persons and groups and engaging them in the risk reduction

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[101] Siddiqi et al, 2019
[102] Peters et al, 2019
[103] Peters, 2017
[104] Peters et al, 2019
[105] Peters, 2017, p. 26
[106] Maxwell and Hailey, 2020

process; (iii) engaging long term across sectors and at multiple levels; and (iv) adapting to a rapidly changing and dynamic context.[107] Box 13 illustrates some of these themes with examples from Somalia.

Box 13: Examples of integrated and adaptive programming in Somalia

Various design features and administrative measures can maximise flexibility and fungibility so that programmes can adapt to a dynamic security context. For example:

- Programmatic rather than overly projectised approaches can help accelerate disbursements.
- Setting strategic criteria for the use of funds and minimising the sub-division of budgets can facilitate the re-prioritisation of activities in response to changing circumstances.
- Using target ranges rather than absolute targets for some indicators in a results framework, as well as broader descriptions of activities, allows for greater flexibility during implementation.

Interventions to strengthen women's economic empowerment have been combined with an integrated package of community-based clinical, psychological, and legal services for survivors of gender-based violence.

Source: UNDRR, 2019a; World Bank, 2020

2.2   Preparedness and response

The capabilities for preparedness and response constitute one of the four essential components of an early warning system (EWS), emphasising the critical link between information and action.[108] Preparedness helps ensure that action is taken at the point when it will make a difference. The phrase 'anticipatory action' is now increasingly common, meaning actions 'aimed at reducing or mitigating the impact of disasters and enhancing post-disaster response, using forecasts or early warnings of imminent shock or stress'.[109]

While some use the term 'anticipatory action' in a more narrow sense to refer to a discrete humanitarian aid modality that responds to forecasts or predictions, others use it in a wider sense to mean any action taken by any actor (including communities) that mitigates potential crisis on the basis of anticipatory thinking. Given that early warning systems are multi-hazard and multi-sectoral, these actions are likely to be many and varied and involve a number of sectors: for example, surge models in the nutrition sector, or drain clearance and water point rehabilitation in the water sector, or human and livestock disease prevention and control measures in the health and livestock sectors.[110] These are things that should be done as a matter of course but often aren't, and the consequences of failing to do them will be magnified in a crisis. Moreover, without sufficient attention to ex-ante risk reduction on a sustained basis, the level of residual risk as a crisis approaches may be substantial. For this reason, anticipatory action is likely to be most effective where a strong DRM / DRR system is already in place.[111]

The growth of interest in anticipatory or early action is because, while EWS have become ever more sophisticated, the reaction to their warnings is still often late.[112] In 2018, the World Meteorological Organisation published a checklist on multi-hazard early warning systems to serve as a practical, non-technical reference tool to ensure that the main elements of an effective EWS are in place.[113] The checklist is structured

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[107] UNDRR, 2019a
[108] https://www.preventionweb.net/terminology/view/478
[109] Weingärtner and Wilkinson, 2019
[110] Levine, forthcoming, and personal communication
[111] Wilkinson et al, 2020
[112] Wilkinson et al, 2020
[113] WMO, 2018; the product of work by the International Network for Multi-Hazard Early Warning Systems (IN-MHEWS).

around the four elements of an EWS: (i) disaster risk knowledge; (ii) detection, monitoring, analysis and forecasting of the hazards and possible consequences; (iii) warning dissemination and communication: and (iv) preparedness and response capabilities. Table 7 lists the actions associated with the fourth of these.[114]

Table 7: Checklist on preparedness and response capabilities[115]

Component	Checklist of actions
Are disaster preparedness measures, including response plans, developed and operational?	▪ Disaster preparedness, including plans or standard operating procedures, developed in a participatory manner, disseminated to the community, practised and underpinned by legislation where appropriate. ▪ Disaster preparedness measures, including plans and standard operating procedures, account for the needs of people with different degrees of vulnerability. ▪ Multi-hazard risk assessments utilised to develop and design evacuation strategies (evacuation routes, demarcation of safe areas and location of temporary shelters, use of vertical evacuation if needed). ▪ Community's ability to communicate in response to early warnings assessed. ▪ Contingency planning developed in a scenario-based manner following forecasts or likely scenarios across different timescales and informed by climate projections and scientific research. ▪ Early action and response options across time and geographical scales are linked to the provision of funding to support them. ▪ Strategies implemented to maintain preparedness for longer return-periods and cascading hazard events. ▪ Protocols incorporated in the plans or standard operating procedures to reach emergency and health services that need to be ready to respond to events promptly. ▪ Protocols established to activate and mobilize last-mile operators (e.g. local police, firefighters, volunteers, health services) who disseminate warnings to the public and decide public measures, including issuing orders for evacuation or sheltering in place. ▪ Regular exercises undertaken to test and optimize the effectiveness of early warning dissemination processes, preparedness and response to warnings.
Are public awareness and education campaigns conducted?	▪ Ongoing public awareness and education programmes on hazards that could impact the population, vulnerabilities, exposure and how to reduce disaster impacts built into school curricula from primary through university ▪ Public education provided to recognize hydrometeorological and geophysical hazard signals and disease signs and symptoms in order to contribute to community surveillance and to allow and promote robust no-regret response measures ▪ People educated on how warnings will be disseminated, which sources are reliable and how to respond ▪ Utilization of the most effective media (e.g. established broadcasting media, social networks, alternative media) to improve public awareness ▪ Public awareness and education campaigns tailored to the specific needs of vulnerable groups (e.g. women, children, older people and people with disabilities)
Are public awareness and response tested and evaluated?	▪ Previous emergency and disaster events and responses analysed, and lessons learned incorporated into preparedness and response plans and into capacity-building strategies ▪ Public awareness strategies and programmes evaluated regularly and updated as required

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[114] For the purposes of this paper the focus is on the link between information and action. Another study is looking at the mechanisms to collect, analyse, and disseminate information.
[115] WMO, 2018, pp. 14-15

The following practices elaborate on a number of those listed in Table 7. A general observation is that they require a change in mindset and a different way of thinking about and preparing for potential crisis, along with the discipline to ensure that activities happen when they should.

- **Provide people at risk with information and forums to share ideas and thereby plan their own anticipatory action.** A people-centred early warning system should empower individuals and communities to act.[116] Relevant information and advice should be disseminated as soon as it becomes available and in ways that take account of social and cultural diversity, clarifying the level of certainty. The use of multiple communication channels will maximise reach and uptake. Media outlets can facilitate dialogue and debate, such as radio phone-ins where listeners can exchange ideas and make their priorities and needs known, with decision-makers and responders listening in.[117] These kind of events will have different dynamics in rapid-onset and slow-onset crises: in the former, demand for them may be higher but the operating environment challenging, while in the latter, when there is not yet any visible sign of crisis, the reverse is likely to be true.

- **Use the information available to build shared analysis and plans.** At both national and sub-national levels, planning meetings that bring together relevant sectors and stakeholders working at different parts of the DRM system (information systems, risk reduction, and emergency response and recovery) will help build a shared analysis of what might happen and when, and what actions might be needed by whom. Each public body should then review its workplan and budget and decide which activities should be re-prioritised or re-designed in light of the emerging threat, such as switching from new investments to the rehabilitation of existing investments, or re-allocating funds to different geographical areas. These processes are clearly more feasible in a slow-onset situation, but are still possible to some degree in all but the most unexpected emergencies.

- **Clear roles and responsibilities for all actors in the system.** This should include the detail of standard operating procedures, as well as the resources needed to carry out them out. Box 14, which describes a flood risk warning system in Togo, illustrates that the 'actors' in this context may be of many kinds, in this case the company managing a hydroelectric dam.

- **Financing mechanisms integrated with information systems.** Table 7 includes the responsibility to ensure that response options are linked to the finance that can support them. This was the primary concern that underpinned the creation of Kenya's drought contingency fund and is discussed in Box 15.

- **Mechanisms that promote transparency and accountability**. Analysis and plans should be publicly available, which will also guide external partners on how best to support.[118] Monitoring and feedback can help ensure continuous improvement of the DRM system. Projections of need should subsequently be checked against actual outcomes, in order to determine whether forecasts were correct, what actions followed, and what impact they had.[119]

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[116] WMO, 2018
[117] Personal communication
[118] Personal communication
[119] Maxwell and Hailey, 2020

Box 14: Flood risk warnings in Togo

An innovative collaboration between the Red Cross and Red Crescent Climate Centre and the managers of the Nangbéto Dam on Togo's Mono River is improving the communication of flood risk to people living downstream. The dam authorities had been collecting daily rainfall data but lacked a predictive model to connect this with effective river flow. The FUNES ('functional estimation') flood-risk prediction model uses a self-learning algorithm that can estimate the risk of overspill and guide the operators as they plan releases of water from the dam. It can extend flood risk predictions from 2-3 hours to 2-3 days, giving more time to protect those at risk. The system also integrates data from trained volunteers who transmit their daily observations of rainfall and river levels through SMS. The system has five levels of risk which are refined each year as FUNES 'learns' from the actual data recorded during each flood event. The Togolese Red Cross has identified the actions triggered by each level and established a separate preparedness fund to finance these. The system was first tested in 2016 and repeatedly since. An example of positive impact is a change in the timing of evacuations; a longer lead time means that far fewer households have to evacuate at night when it is risky to do so.

Sources: RCRC Climate Centre, 2017; https://www.climatecentre.org/news/849/hydropower-and-humanitarian-sectors-joining-forces-to-combat-flood-risk; https://www.hydropower.org/blog/how-can-the-hydropower-sector-and-the-red-cross-work-together-to-protect-flood-prone

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Box 15: Drought contingency finance in Kenya

A major reason for repeated instances of late response to drought early warning in Kenya was a lack of set-aside finance. Without this, the government could only fund early response by redistributing monies already allocated to sector budgets. This re-allocation can be a lengthy process and potentially unaccountable because it alters budgets that have previously been made public in the printed estimates. Further, it shifts resources away from the necessary long-term investments in risk reduction. These re-allocations are particularly challenging when the need for urgent finance coincides with the fiscal year-end, when systems are temporarily unavailable. These bureaucratic impediments to action are rarely given adequate attention in discussions of late response.

In response to this challenge, the NDMA has been piloting the use of drought contingency finance provided by the European Union. The 2016-17 drought was a major test of the systems put in place to manage this finance. The first signs of drought were flagged in coastal areas in June 2016 and contingency finance was released the following month against those counties' pre-agreed contingency plans. The NDMA also strengthened response protocols – for example, linking enhanced social protection transfers with a pre-defined trigger based on remote sensing data. Numerous challenges remain, including the quality of gender analysis, understanding the outcomes of investments, and ensuring that pockets of good practice can be expanded and sustained. Even so, the key point about this experience is that it demonstrates the benefits to an organisation such as the NDMA of having pre-agreed measures in place based on a range of scenarios as well as control over an existing source of finance.

The government is now in the final stages of establishing its own domestic fund, the National Drought Emergency Fund, to be managed on similar lines. This will be able to receive revenue from both the government and its partners. The fund will prioritise action in the early stages of an evolving drought. An additional advantage of a contingency fund, compared with ministerial budgets, is that unspent funds can be carried over from one financial year to the next.

Sources: Oduor et al, 2014; Republic of Kenya, 2015; Grünewald et al, 2019; King-Okumu et al, 2019; personal communication

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This section concludes with a reminder that humanitarian action is governed by a well-developed set of global principles and standards and that a wide range of technical guidance is available to support their application (Annex 2).

2.3   Recovery and rehabilitation

As Figure 2 showed, recovery is the least-funded phase of the DRM cycle. This review has also found that it is less well documented. This section therefore contains some general reflections and lessons from the literature.

The recovery phase of a disaster is complex, untidy, and can be lengthy.[120] However, it can also be an opportunity to 'build back better' – to rebuild in ways that enhance resilience, or create a safer environment, or reduce the pre-existing vulnerabilities and inequalities that may have contributed to the crisis. It is also a critical phase to get right: for example, quickly reviving women's income-generating opportunities can help protect them from the gender-based violence that is often associated with social disruption and economic hardship.[121]

In 2015 the GFDRR published a Disaster Recovery Framework to guide governments interested in producing their own national frameworks.[122] It is based on good practices compiled from the experience of nine countries and from expert input and contains a series of modules for each step of the process. It concludes by identifying a number of lessons and good practices common to all the studies (Box 16).

Box 16: Lessons for disaster recovery
1. Structures for recovery institutionalised in advance of disaster.
2. Dedicated recovery institutions with a legal mandate and wide credibility.
3. Effective management of national budgeting and donor funds.
4. Operational transparency and accountability.
5. Multi-agency and multi-tier inclusion, without duplication.
6. Implementation responsibilities delegated to sub-national levels as needed.
7. Post-disaster needs assessment institutionalised for future funding, coordination, tracking, and evaluation.
8. Clear guidelines for transitioning from recovery and reconstruction to a post-disaster development response.
9. Post-disaster recovery linked to poverty alleviation and long-term development objectives.

Source: GFDRR, 2015

The need to prepare for recovery is a central lesson, for example by identifying pre-existing risks and vulnerabilities and putting the mechanisms and resources in place to address these. This kind of advance attention can also promote continuity between disaster recovery and development and clarify the milestones that will guide this transition.[123]

Financing can be used to incentivise forward-looking recovery (although some forms of insurance can impede it). Mexico's Fund for Natural Disasters (FONDEN) was established to support the rapid rehabilitation of federal and state infrastructure affected by adverse natural events. Its assistance to reconstruction is structured in ways that encourage the reduction of risk. It will provide 100 percent of the reconstruction costs of an uninsured federal asset on the first occasion it is affected, but only 50 percent on a second occasion and nothing after that. Further, a state government is asked to provide FONDEN with estimates of both the costs of pure replacement and the increased costs of improvements to reduce damage in future disasters.[124]

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[120] Lloyd-Jones et al, 2016
[121] Gender-Based Violence AOR, 2019
[122] GFDRR subsequently produced a number of sector-specific recovery guides, including on health, education, and gender.
[123] GFDRR, 2015
[124] Hillier, 2018

Conclusion

The purpose of this review was to identify practices and lessons from countries in the Greater Horn of Africa and other parts of the global south that the Government of Ethiopia may find useful in its ongoing efforts to reduce the risk and impact of disasters. While each country's risk profile and governance arrangements are unique, there are nevertheless some broad patterns revealed by multi-country studies that may also be relevant in the Ethiopian context.

The institutional architecture for DRM is critical. This is likely to be most effective when the leadership of DRM is located in a place in government which has both the convening power to bring stakeholders together and the authority to ensure that the resources they bring are aligned against a coherent and long-term policy agenda. Accountability can be further enhanced through a range of legislative, administrative, fiscal, or capacity-developing measures, all of which serve to strengthen the enabling environment for DRM.

A number of studies exploring different aspects of DRM (financing, legislation, capacity) highlight the importance of the sub-national level of government as the space where national and local DRM priorities intersect. However, they find that this level is also comparatively neglected: the mandate and responsibilities of institutions working in this space are rarely matched by the resources needed to carry them out, while capacity development initiatives tend to focus at either the national or community levels. The nature of the governance arrangements at the sub-national level, such as the quality of political support, the clarity of policy, legislative, and procedural frameworks, and the effectiveness with which the strengths and resources of civil society organisations and communities, in all their diversity, are engaged, can have a major impact on the outcomes of DRM efforts.

The complexity of a process that brings together multiple sectors and partners at multiple administrative levels, and that is concerned with an ever-growing list of inter-related risks associated with climate, economy, society, and health, means that the full operationalisation of a DRM system will take time, and will benefit from a patient, systematic, and well-coordinated approach. Further, this process will never be complete, since the system will require continuous review and modification if it is to accommodate emerging threats and opportunities.

References

African Union Commission (2016). *Programme of Action for the Implementation of the Sendai Framework for Disaster Risk Reduction 2015-2030 in Africa: In line with the Africa Regional Strategy for Disaster Risk Reduction.* Addis Ababa: African Union.
https://www.unisdr.org/files/49455_poaforsendaiimplementationinafrica.pdf

Bahadur, A., Lovell, E. and Pichon, F. (2016). *Strengthening disaster risk management in India: A review of five state disaster management plans.* Cape Town: Climate Development Knowledge Network.
https://cdkn.org/resource/strengthening-disaster-risk-management-india-review-state-disaster-management-plans/?loclang=en_gb

Bahadur, A., Kirbyshire, A., Khan, D. and Bhatt, M. (2014). *What does it take to mainstream disaster risk management in key sectors?* CDKN Guide, April 2014. https://cdkn.org/resource/what-does-it-take-to-mainstream-disaster-risk-management-in-key-sectors/?loclang=en_gb

Bahal'okwibale, P. M. (2017). *Mainstreaming climate-related disaster risk reduction in agriculture and food sectors in eastern Africa: Analytical report.* Addis Ababa, FAO. http://www.fao.org/3/a-i7719e.pdf

Cabinet of Egypt (2017). *National Strategy for Disaster Risk Reduction 2030: Summary for Dissemination.* Information and Decision Support Center, Crisis Management and DRR Sector.

FAO and IGAD (2019). *Promoting effective resilience investments – Delivering peace, agriculture-led growth and socio-economic transformation in the Horn of Africa.* Rome. 72 pp. Licence: CC BY-NC-SA 3.0 IGO.
http://www.fao.org/in-action/kore/good-practices/good-practices-details/en/c/1190121/

Federal Democratic Republic of Ethiopia (2017). *Guideline for mainstreaming disaster risks into the development planning process and future investment decisions in Ethiopia.* Addis Ababa: National Disaster Risk Management Commission.

Federal Democratic Republic of Ethiopia (2014). *Disaster risk management: Strategic programme and investment framework.* Addis Ababa: Disaster Risk Management and Food Security Sector, Ministry of Agriculture

Federal Democratic Republic of Ethiopia (2013). *National policy and strategy on disaster risk management.*

Federal Republic of Somalia (2017). *National Disaster Management Policy.*

Few, R., Scott, Z., Wooster, K., Avila, M.F., Tarazona, M. and Thomson, A. (2015a). *Strategic research into national and local capacity building for DRM: Synthesis Report.* Geneva: International Federation of Red Cross and Red Crescent Societies. https://www.ifrc.org/Global/Documents/Secretariat/Research/version-2/StrategicResearch-SynthesisReport-EN-LR.pdf

Few, R., Scott, Z., Wooster, K., Avila, M.F., Tarazona, M, Queface, A. and Mavume, A. (2015b). *Strategic research into national and local capacity building for DRM: Mozambique Fieldwork Report.*
https://www.opml.co.uk/projects/strategic-research-national-local-capacity-building-disaster-risk-management

Gender-Based Violence AoR (2019). *Gender-based violence secondary data review. Mozambique: Cyclone Idai and Floods.* Geneva: UNFPA. https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/2019/04/190415_GBV _Secondary-Data-Analysis_Cyclone-Idai_MOZ_Final.pdf

GFDRR (2019). *Disaster risk profile: Ethiopia.* Washington, DC: Global Facility for Disaster Reduction and Recovery. https://www.gfdrr.org/en/publication/disaster-risk-profile-ethiopia-2019

GFDRR (2018). *A decade of progress in disaster risk management*. Washington, DC: Global Facility for Disaster Reduction and Recovery. https://www.gfdrr.org/sites/default/files/publication/GFDRR_TENTH_WEB_04262018.pdf

GFDRR (2015). *Guide to developing disaster recovery frameworks.* Washington, DC: Global Facility for Disaster Reduction and Recovery. https://www.gfdrr.org/en/publication/guide-developing-disaster-recovery-frameworks

Groupe URD and ALNAP (2018). *The State of the Humanitarian System case study: Kenya.* ALNAP Paper. London: ALNAP/ODI. https://sohs.alnap.org/help-library/kenya-case-study-%E2%80%93-sohs-2018

Grünewald, F., Léon, V. and Levine, S. (2019). *Comprehensive Review (CR) of 2016-17 ECHO Horn of Africa (HoA) Drought Response.* Plaisians: Groupe URD and London: Overseas Development Institute. https://ec.europa.eu/echo/sites/echo-site/files/echo_hoa_070619.pdf

Harkey, J. (2014). *Experiences of national governments in expanding their role in humanitarian preparedness and response.* Somerville, MA: Feinstein International Center. https://fic.tufts.edu/publication-item/experiences-of-national-governments-in-expanding-their-role-in-humanitarian-preparedness-and-response/

Hillier, D. (2018). *Facing risk: Options and challenges in ensuring that climate/disaster risk finance and insurance deliver for poor people.* Oxford, UK: Oxfam International. https://policy-practice.oxfam.org.uk/publications/facing-risk-options-and-challenges-in-ensuring-that-climatedisaster-risk-financ-620457

Holloway, A. and Fortune, G. (2019). *Beyond fragility: Advancing skilled human capital for disaster risk reduction and resilience in Africa.* Contributing Paper to GAR 2019. https://www.undrr.org/publication/beyond-fragility-advancing-skilled-human-capital-disaster-risk-reduction-and-resilience

IFRC (2018). *A seat at the table: inclusive decision-making to strengthen local resilience.* DRR in Action Case Study. https://media.ifrc.org/ifrc/wp-content/uploads/sites/5/2018/06/CaseStudy7_Asia-Pacific-Disaster-Law-Final.pdf

IFRC (2017). *Effective law and policy on gender equality and protection from sexual and gender-based violence in disasters.* https://media.ifrc.org/ifrc/wp-content/uploads/sites/5/2017/10/Gender-SGBV-Report_-Global-report.pdf

IFRC and UNDP (2015a). *The Checklist on Law and Disaster Risk Reduction: An annotated outline.* https://www.ifrc.org/Global/Publications/IDRL/Publications/The%20Checklist%20on%20law%20and%20DRR%20Oct2015%20EN%20v4.pdf

IFRC and UNDP (2015b). *The Handbook on Law and Disaster Risk Reduction*.
https://www.ifrc.org/Global/Photos/Secretariat/201511/Handbook%20on%20law%20and%20DRR%20LR.pdf

IFRC and UNDP (2014). *Effective law and regulation for disaster risk reduction: a multi-country report.*
https://www.ifrc.org/Global/Publications/IDRL/reports/DRR%20Report%20(full%20version)%20final_page_LR.pdf

IMF (2019). *Building resilience in developing countries vulnerable to large natural disasters.* IMF Policy Paper No. 19/020. https://www.imf.org/en/Publications/Policy-Papers/Issues/2019/06/24/Building-Resilience-in-Developing-Countries-Vulnerable-to-Large-Natural-Disasters-47020

Kanyinga, K. (2016). 'Devolution and the new politics of development in Kenya'. *African Studies Review,* 59.3, 155-167. DOI: https://doi.org/10.1017/asr.2016.85

Karanja-Odhiambo, L., Swinnen, T., Shoham, J. and Dolan, C. (2018). *Multi-sector programming at the sub-national level: A case study in Homa Bay and Makueni counties in Kenya.* Kidlington: Emergency Nutrition Network. https://scalingupnutrition.org/news/multi-sectoral-programming-at-the-sub-national-level-a-case-study-in-homa-bay-and-makueni-counties-in-kenya/

King-Okumu, C., Orindi, V. and Lelalkuli, L. (2019). 'Drought management in the drylands of Kenya: what have we learned?' In: Mapedza, E., Tsegai, D., Bruntrup, M. and Mcleman, R. (eds.) *Drought challenges: policy options for developing countries.* https://doi.org/10.1016/B978-0-12-814820-4.00019-5

King-Okumu, C., Jillo, B., Kinyanjui, J. and Jarso, I. (2017). 'Devolving water governance in the Kenyan Arid Lands: from top-down drought and flood emergency response to locally driven water resource development planning.' *International Journal of Water Resources Development*.
http://dx.doi.org/10.1080/07900627.2017.1357539

KNOMAD (2019). *Migration and remittances: recent developments and outlook.* Migration and Development Brief 31, April 2019. Global Knowledge Partnership on Migration and Development (KNOMAD), World Bank. https://www.knomad.org/sites/default/files/2019-04/Migrationanddevelopmentbrief31.pdf

Langdon, B. C. (2017). *Independent mid-term evaluation of 'Building National and Local Capacities for Disaster Management in Rwanda' project.* https://erc.undp.org/evaluation/evaluations/detail/9289

Lloyd-Jones, T., Davis, I. and Steele, A. (2016). *Topic guide: effective post-disaster reconstruction programmes.* Evidence on Demand. DOI: http://dx.doi.org/10.12774/eod_tg.august2016.lloyd-jonestetal

Lopez-Lucia, E. (2015). *Mainstreaming disaster risk management.* GSDRC Helpdesk Research Report 1310. Birmingham, UK: GSDRC, University of Birmingham. https://gsdrc.org/wp-content/uploads/2016/02/HDQ1310.pdf

Majid, N., with Abdirahman, K. and Hassan, S. (2018). *Remittances and vulnerability in Somalia.* Briefing Paper, September 2018. Nairobi: Rift Valley Institute.
https://reliefweb.int/sites/reliefweb.int/files/resources/Remittances%20and%20Vulnerability%20in%20Somalia%20by%20Nisar%20Majid%20-%20RVI%20Briefing%20%282018%29.pdf

Majwa, P., Allego, J., Wekesa, M. and Omeno, S. (2017). *Mid-term review (MTR) of the 1st Phase, 2013-2017, of the implementation of the IGAD Drought Disaster Resilience and Sustainability Initiative (IDDRSI) strategy.* http://www.fao.org/in-action/kore/news-and-events/news-details/en/c/885828/

Maxwell, D. and Hailey, P. *Towards anticipatory information systems and action: Notes on early warning and early action in East Africa.* Boston: Feinstein International Center, Tufts University; Nairobi: Centre for Humanitarian Change. 2020. https://fic.tufts.edu/wp-content/uploads/Towards-Anticipatory-Information-Systems-and-Action.pdf

Mehryar, S. and Surminski, S. (2020). *The role of national laws in managing flood risk and increasing future flood resilience.* Centre for Climate Change Economics and Policy Working Paper 365/Grantham Research Institute on Climate Change and the Environment Working Paper 334. London: London School of Economics and Political Science. http://www.lse.ac.uk/GranthamInstitute/wp-content/uploads/2020/03/working-paper-334-Mehryar-Surminski-1.pdf

Natoli, T. (2019). *Literature review on aligning climate change adaptation (CCA) and disaster risk reduction (DRR).* Geneva; IFRC. https://reliefweb.int/report/world/literature-review-aligning-climate-change-adaptation-cca-and-disaster-risk-reduction

Nyamweya, M., Masake, R. and Mwololo, H. (2017). *Impact evaluation of livestock-related drought mitigation activities carried out by the NDMA in 2016-17.*

Oduor, J., Swift, J. and Birch, I. (2014). 'The evolution of Kenya's drought management system'. In: Singh, A. and Zommers, Z. (eds.) *Reducing disaster: Early warning systems for climate change.* Springer, https://www.springer.com/gp/book/9789401785976

Opitz-Stapleton, S., Nadin, R., Kellett, J., Calderone, M., Quevedo, A., Peters, K. and Mayhew, L. (2019). *Risk-informed development: From crisis to resilience.* London: Overseas Development Institute. https://www.odi.org/publications/11314-risk-informed-development-crisis-resilience

Osuteye, E., Leck, H., Johnson, C. Ndezi, T., Makoba, F. D. and Pelling, M. (2018). *Communicating risk from the frontline: projecting community voices into disaster risk management policies across scales.* Urban ARK Briefing. https://pubs.iied.org/G04330/

Pearn, G. (2019). *Guidance note: Coherence concepts and practices.* Bonn: Global Initiative on Disaster Risk Management. https://www.gidrm.net/user/pages/03.get-started/03.resources/files/20190607101731-Guidance%20Note%20on%20Coherence.pdf

Peters, K., Peters, L. E. R., Twigg, J. and Walch, C. (2019). *Disaster risk reduction strategies: Navigating conflict contexts.* Working Paper 555. London: Overseas Development Institute. https://www.odi.org/publications/11341-disaster-risk-reduction-strategies-navigating-conflict-contexts

Peters, K. (2017). *The next frontier for disaster risk reduction: Tackling disasters in fragile and conflict-affected contexts.* London: Overseas Development Institute. https://www.odi.org/publications/10952-next-frontier-disaster-risk-reduction-tackling-disasters-fragile-and-conflict-affected-contexts

Peters, K. and Bahadur, A. (2014). *The case of Vanuatu: Advancing integration of disaster, environment and climate change.* London: Overseas Development Institute. https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/8934.pdf

RCRC Climate Centre (2017). *Forecast-based financing: case studies from Togo and Uganda.* The Hague: Red Cross Red Crescent Climate Centre.
https://www.climatecentre.org/downloads/files/RCCC_FbF%20CS%20Togo%20and%20Uganda%20V2.pdf

Republic of Kenya (2018). *Disaster risk financing strategy*, 2018-2022. The National Treasury and Planning.

Republic of Kenya (2015). *Ending Drought Emergencies: Common Programme Framework.* The Presidency: Ministry of Devolution and Planning. http://www.ndma.go.ke/index.php/ede/ede-overview#

Rohwerder, B. (2015). *National humanitarian response.* GSDRC Helpdesk Research Report 1309. Birmingham, UK: GSDRC, University of Birmingham. https://gsdrc.org/publications/national-humanitarian-response/

Schofield, H. and Twigg, J. (2019). *Making cities sustainable and resilient: Lessons learned from the disaster resilience scorecard assessment and disaster risk reduction (DRR) action planning.* Geneva, Switzerland, United Nations Office for Disaster Risk Reduction (UNDRR). https://www.undrr.org/publication/making-cities-sustainable-and-resilient-lessons-learned-disaster-resilience-scorecard

Scoones, I. (2019). *What is uncertainty and why does it matter?* STEPS Working Paper 105, Brighton: STEPS Centre. https://www.ids.ac.uk/publications/what-is-uncertainty-and-why-does-it-matter-2/

Scott, Z., Wooster, K., Few, R., Thomson, A. and Tarazona, M. (2016) 'Monitoring and evaluating disaster risk management capacity'. *Disaster Prevention and Management*, 25.3. 412-422.
http://dx.doi.org/10.1108/DPM-01-2016-0002

Scott, Z., Few, R., Leavy, J., Tarazona, M., Wooster, K. and Avila, M. F. (2015). *Strategic research into national and local capacity building for disaster risk management: Literature review: Version 2.* Oxford: Oxford Policy Management. https://www.ifrc.org/Global/Documents/Secretariat/Research/version-2/Literature_Review_v2_2015.pdf

Siddiqi, A. and Peters, K. (2019). *Disaster risk reduction in contexts of fragility and armed conflict: a review of emerging evidence challenges assumptions.* Contributing Paper to GAR 2019.
https://www.preventionweb.net/publications/view/66211

Tiepolo, M. and Braccio, S. (2020). 'Mainstreaming Disaster Risk Reduction into Local Development Plans for Rural Tropical Africa: A Systematic Assessment'. *Sustainability*, 12. https://doi.org/10.3390/su12062196

Twigg, J. (2015). *Disaster risk reduction: Good Practice Review 9*. London: Overseas Development Institute. https://goodpracticereview.org/9/

UNDRR (2020a). *Disaster risk reduction investment in Africa – Evidence from 16 risk-sensitive budget reviews.* https://www.undrr.org/publication/disaster-risk-reduction-investment-africa-evidence-16-risk-sensitive-budget-reviews

UNDRR (2020b). *Highlights: Africa regional assessment report 2020* (forthcoming). Nairobi, Kenya: United Nations Office for Disaster Risk Reduction (UNDRR). https://www.undrr.org/publication/highlights-africa-regional-assessment-report-2020

UNDRR (2019a). *Global assessment report on disaster risk reduction.* Geneva, Switzerland: United Nations Office for Disaster Risk Reduction (UNDRR). https://www.undrr.org/publication/global-assessment-report-disaster-risk-reduction-2019

UNDRR (2019b). *Strategic approach to capacity development for implementation of the Sendai Framework for Disaster Risk Reduction: A vision of risk-informed sustainable development by 2030.* Geneva, Switzerland: United Nations Office for Disaster Risk Reduction (UNDRR). https://www.unisdr.org/files/58211_fullconciseguide.pdf

UNDRR (2019c). *Words into Action: Developing national disaster risk reduction strategies.* Geneva, Switzerland: United Nations Office for Disaster Risk Reduction (UNDRR). https://www.undrr.org/publication/words-action-guidelines-developing-national-disaster-risk-reduction-strategies

UNESCAP (2018). *Policy coherence for disaster risk reduction and resilience: From evidence to implementation: A toolkit for practitioners.* Bangkok: UN Economic and Social Commission for Asia and the Pacific. https://www.unescap.org/resources/policy-coherence-disaster-risk-reduction-and-resilience-evidence-implementation

UNHCR (2020). *Ethiopia country refugee response plan, 2020-21.* https://reliefweb.int/report/ethiopia/ethiopia-country-refugee-response-plan-2020-2021

UNISDR (2019). *United Nations Office for Disaster Risk Reduction: 2018 Annual Report.* Geneva, Switzerland: United Nations Office for Disaster Risk Reduction (UNDRR). https://reliefweb.int/report/world/unisdr-annual-report-2018

UNISDR (2013). *The Pacific experience in developing policy and legislation on disaster risk reduction and climate change adaptation.* Bangkok: UNDRR. https://www.preventionweb.net/files/34003_34003pacificexperienceonlegislation.pdf

Van Voorst, R., Wisner, B., Hellman, J. and Nooteboom, G. (2015). 'Introduction to the 'Risky Everyday''. *Disaster Prevention and Management*, 24.4. https://www.emerald.com/insight/content/doi/10.1108/DPM-04-2015-0077/full/html

Vanheukelom, J., Mackie, J. and Ronceray, M. (2018). *Good enough coherence? Six lessons from good governance for policy coherence and the 2030 Agenda.* Maastricht: European Centre for Development Policy Management. https://ecdpm.org/publications/good-enough-coherence-six-lessons-from-good-governance-for-policy-coherence-2030-agenda/

Victoria, L. P., Chavda, S. and Drigo, V. (2019). *Views from the frontline 2019: Local level monitoring of progress of the Sendai Framework for Disaster Reduction and related frameworks.* Snapshot of VFL 2019 pilot results in Tonga and the Philippines. Contributing Paper to GAR 2019. https://www.preventionweb.net/publications/view/65738

Weingartner, L. and Wilkinson, E. (2019). *Anticipatory crisis financing and action: concepts, initiatives, and evidence.* London: Centre for Disaster Protection. https://www.disasterprotection.org/publications

Wilkinson, E., Pforr, T. and Weingartner, L. (2020). *Integrating 'anticipatory action' in disaster risk management.* London: Overseas Development Institute. https://www.odi.org/publications/16819-integrating-anticipatory-action-disaster-risk-management

Wilkinson, E., Comba, E. and Peters, K. (2014). *Disaster risk governance: unlocking progress and reducing risk.* Overseas Development Institute and UNDP.

https://www.undp.org/content/undp/en/home/librarypage/crisis-prevention-and-recovery/disaster-risk-governance-unlocking-progress-and-reducing-risk.html

WMO (2018). *Multi-hazard early warning systems: A checklist.* Geneva, Switzerland: World Meteorological Organization. https://public.wmo.int/en/resources/world-meteorological-day/wmd-2018/multi-hazard

World Bank (2020). *Somalia Crisis Recovery Project: Project Appraisal Document.* Report No: PAD3762. Washington, D.C.: World Bank. https://projects.worldbank.org/en/projects-operations/document-detail/P173315

World Food Programme and Central Statistical Agency of Ethiopia (2019). *Comprehensive food security and vulnerability analysis: Ethiopia, 2019.* https://reliefweb.int/report/ethiopia/ethiopia-comprehensive-food-security-and-vulnerability-analysis-cfsva-2019

Annex 1: DRM capacity development framework

Principles for effective capacity development for DRM[125]

Key principle	Definition
1. Flexibility and adaptability	▪ Approach capacity-building interventions flexibly, so that the design of the programme is appropriate to context and responsive to needs (rather than applied as an externally-imposed 'blueprint') ▪ Undertake careful assessment of capacity needs, and work with and reinforce existing skills, strategies, systems and capacities ▪ Understand and account for the political and power dimensions that can undermine or strengthen capacity building
2. Comprehensive planning	▪ Carefully design interventions so that they can meet their objectives and are likely to be sustainable. For example: o Appropriate scheduling of interventions so that pressure to show visible results does not undermine capacity building o Plan for the long-term sustainability of capacity gains after the withdrawal of interventions o Develop a robust system for monitoring and evaluation
3. Ownership and partnership	▪ Ensure that those targeted for capacity building have a clear and significant role in the design and implementation of initiatives (which will again help to ensure they are appropriate, effective and sustainable) ▪ Ownership is likely to rest on active participation, clear statements of responsibilities, engagement of leaders, and alignment with existing DRM and DRR strategies
4. Attention to functional capacity	▪ Focus on 'functional' capacity building. This means doing more than improving technical skills and resources. It means developing the ability of stakeholders and organizations to take effective decisions and actions on DRM. It includes: o Improving coordination o Developing policies and plans o Creating an enabling environment for effective decisions and actions, such as developing incentives for good staff performance o Building support among stakeholders to see DRM as a priority issue
5. Integration of actors and scales	▪ Build capacity to coordinate across scales and work with other stakeholders, and bridge capacity and communication gaps that commonly exist between national and local levels. Initiatives could include: o Building capacity of networks of stakeholders o Building local people's capacity to interact with other stakeholders
6. Contribution to DRR	▪ Apply a more holistic DRR-influenced approach to DRM capacity. This includes: o Understand and plan for long-term changes in risk o Move beyond a focus on short-term emergency management to capacity in disaster prevention, mitigation and long-term recovery o Prioritise the reduction of vulnerability o Target the needs of vulnerable groups o Address gender inequalities in both vulnerability and capacity

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[125] Source: based on Few et al, 2015a, p. 104

Theory of change for DRM capacity development[126]
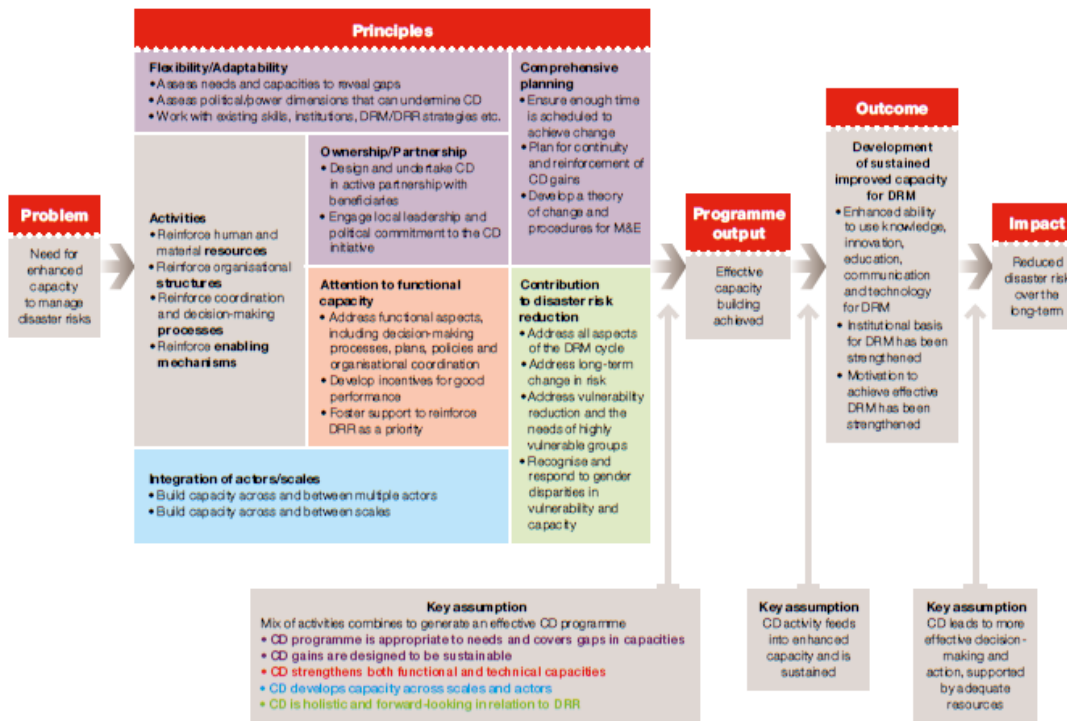
[126] Source: Few et al, 2015a, p. 106. The links between principles and assumptions are colour-coded.

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Annex 2: Additional reading

1. Standards and good practice guidelines

Humanitarian Standards Partnership: http://www.humanitarianstandardspartnership.org/
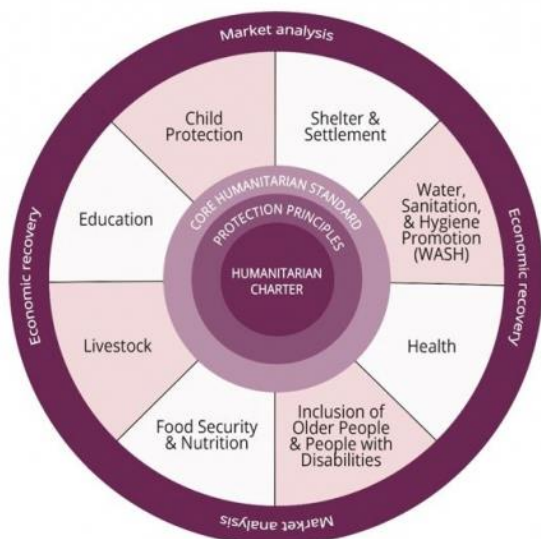
GFDRR (2018). *Gender equality and women's empowerment in disaster recovery.* Disaster Recovery Guidance Series. Washington, DC: Global Facility for Disaster Reduction and Recovery.
https://www.gfdrr.org/sites/default/files/publication/gender-equality-disaster-recovery.PDF

IASC (2018). *The gender handbook for humanitarian action*. Inter-Agency Standing Committee (IASC) Reference Group on Gender and Humanitarian Action.
https://interagencystandingcommittee.org/system/files/2018-iasc_gender_handbook_for_humanitarian_action_eng_0.pdf

IASC (2019). *Inclusion of persons with disabilities in humanitarian action.* IASC Task Team on Inclusion of Persons with Disabilities in Humanitarian Action.
https://interagencystandingcommittee.org/system/files/2019-11/IASC%20Guidelines%20on%20the%20Inclusion%20of%20Persons%20with%20Disabilities%20in%20Humanitarian%20Action%2C%202019.pdf

Akerkar, S. and Bhardwaj, R. (2018). *Good practice guide: embedding inclusion of older people and people with disabilities in humanitarian policy and practice.* Age and Disability Consortium.
https://reliefweb.int/report/world/good-practice-guide-embedding-inclusion-older-people-and-people-disabilities

2. Recent collections of good practice

Executive Committee of the Warsaw International Mechanism for Loss and Damage (2019).
Compendium on comprehensive risk management approaches.
https://unfccc.int/sites/default/files/resource/FINAL_AA3_Compendium_September_2019%28revised%29.pdf

List of case studies:

Harari, N., Gavilano, A. and Liniger, HP. (2017) *Where people and their land are safer: A Compendium of Good Practices in Disaster Risk Reduction.* Bern and Lucerne, Switzerland: Centre for Development and Environment (CDE), University of Bern, and Swiss NGO Disaster Risk Reduction (DRR) Platform, with Bern Open Publishing. http://www.fao.org/in-action/kore/good-practices/good-practices-details/en/c/1112276/

List of case studies:

PREVENT AND REDUCE

REDUCE

DEAL WITH

Annex 3: Terms of reference

Introduction

The Building Resilience in Ethiopia (BRE) programme is co-funded by UKAID and USAID and is intended to assist Ethiopia 'become more resilient to climate and humanitarian shocks.' Under the BRE programme, OPM is the Managing Agent for the delivery of technical assistance (TA) across three workstreams: health, disaster risk management (DRM) and finance.

The primary purpose of this ToR is to identify good DRM practices in particular that are relevant to Ethiopia's hazard profile.[i] Specifically, the Consultant will prioritize good practice developed within the Greater Horn of Africa, while also documenting lessons learned more widely across the global south. Amongst others, good practices will include lessons learned on the following: achieving coherence of understanding and communication between central and local government; coordination; governance and accountability; resource mobilization and allocation; and building synergies between development plans and DRM. The lessons learned, will help inform future DRM mainstreaming of the 2013 National Disaster Risk Management (NDRM) Policy and 2014 DRM - Strategic Policy Investment Framework (DRM-SPIF) at federal or regional levels.

The DRM-SPIF provides a useful framework for the drafting of the report in as much as it is structured around seven pillars: prevention, mitigation and preparedness – the core of disaster risk reduction; response; recovery and rehabilitation; institutional strengthening; monitoring and evaluation; and resource mobilization. These pillars guide the DRM system through three major phases: pre-disaster, during disaster and post disaster. The Consultant is therefore requested to use the three major phases and 7 pillars as a structure for the report, specifically in analysing and presenting good practice.

Key responsibilities, deliverables and timeframe

The Consultant will be contracted for 12 days to:
- Briefly profile Ethiopia's major and most costly hazards since 2000 ,and how they were tackled
- Identify good DRM practice and key lessons learned for major hazards from a) the Greater Horn of Africa and b) the wider global south
- Present the findings in draft report of no more than 25 pages, to be structured around the three phases and the seven pillars referenced above
- Receive comments and present a final report that addresses and incorporates relevant comments

Deliverables
- A summary inception report to include methodology and draft Table of Contents of the planned final report by the 20th April 2020
- A final approved methodology and Table of Contents that includes review comments – by the 1st May 2020
- A formatted and high-quality draft for review and comment - by the 31st May 2020
- A final report – within 7 working days of receiving collated final review comments (the comments to be collated and delivered to the Consultant by the BRE team).

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[i] Drought, floods, human and livestock disease, pests and diseases, ethnic conflict.