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A REVIEW OF **DISASTER RISK MANAGEMENT** FOR FRAGILITY, CONFLICT AND VIOLENCE COUNTRIES IN THE WORLD BANK PORTFOLIO

Fiscal Years 2012-2022 **JULY 2023** 



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# A REVIEW OF

# DISASTER RISK MANAGEMENT FOR FRAGILITY, CONFLICT AND VIOLENCE COUNTRIES

IN THE WORLD BANK PORTFOLIO

Fiscal Years 2012–2022 JULY 2023

# **ACKNOWLEDGMENTS**

This portfolio review, led by GFDRR's Disaster-FCV Nexus thematic area, aims to assess quantitatively and qualitatively the World Bank's engagement on disaster risk management in countries impacted by fragility, conflict, and violence, over the span of FY12-FY22.

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# LIST OF ABBREVIATIONS AND ACRONYMS

AFE	Eastern and Southern Africa
AFD	Agence Française de Développement
AFR	Africa
AFW	Western and Central Africa
BiH	Bosnia and Herzegovina
BMZ	German Federal Ministry for Economic Cooperation and Development
CDD	Community Driven Development
CIARP	Conflict Impact Recovery and Reconstruction Planning
CIARP	Conflict Impact Recovery and Reconstruction Planning
CMDRM	Community-Based Disaster Risk Management
CMU	Country Management Unit
CPF	Country Partnership Framework
CSO	Civil Society Organization
DAC	Development Assistance Committee
DFID	Department for International Development (UK)
DNA	Damage and Needs Assessment
DPF	Development Policy Financing
DRC	Democratic Republic of Congo
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
EAP	East Asia and Pacific
ECA	Europe and Central Asia
EU	European Union
EWS	Early Warning Systems
FCDO	Foreign, Commonwealth & Development Office (UK)
FCS	Fragile and Conflict-affected Situations
FCV	Fragility, Conflict and Violence
FY	Fiscal Year
GFDRR	Global Facility for Disaster Reduction and Recovery
GIS	Geographic Information System
GP	Global Practice
GPURL	Global Practice for Urban, Disaster Risk Management, Resilience and Land
GRADE	Global Rapid post-disaster Damage Estimation
HNP	Health, Nutrition and Population
HR	Human Resources
IA	Implementing Agency
IBRD	International Bank for Reconstruction and Development
ICR	Implementation Completion Report
IDA	International Development Association
IDP	Internally Displaced Person(s)

IEG	Independent Evaluation Group
ILO	International Labor Organization
IPF	Investment Project Financing
ISR	Implementation Status Report
ITS	Information and Technology Solutions
JIT	Just-in-Time
KAP	Kiribati Adaptation Program
LCR	Latin America and Caribbean
MENA	Middle East and North Africa
MTI	Macroeconomics, Trade, and Investment
NBS	Nature-Based Solutions
NDMA	National Disaster Management Agency (Sierra Leone)
NGO	Non-Governmental Organization
ODA	Official Development Assistance
OECD	Organisation for Economic Co-operation and Development
OLC	Open Learning Campus
OPCS	Operations Policy and Country Services
PAD	Project Appraisal Document
PCNA	Post-Conflict Needs Assessment
PDNA	Post-Disaster Needs Assessment
PforR	Programs for Results
PNG	Papua New Guinea
PUB	Public Utilities Board (Kiribati)
RPBA	Recovery and Peacebuilding Assessment
RRA	Risk and Resilience Assessments
SAR	South Asia
SIDS	Small Island Developing State
STC	Short-Term Consultant
TTL	Task Team Leader
UN	United Nations
UNDP	United Nations Development Programme
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
UNOPS	United Nations Office for Project Services
USAID	United States Agency for International Development
WBGG	World Bank Group
WFP	World Food Programme
WHO	World Health Organization
YIUSEP	Yemen Integrated Urban Services Emergency Project

# EXECUTIVE SUMMARY

## About this review

This portfolio review, led by the GFDRR's Disaster-FCV Nexus thematic area, aims to contribute to the GFDRR's overarching objective to help low- and middle-income countries understand and reduce their vulnerability to natural hazards and climate change. More specifically, the report aims to i) assess financing trends in World Bank (WBG) Disaster Risk Management (DRM) activities in Fragility, Conflict and Violence (FCV) countries over the fiscal year (FY) period 2012–2022, ii) understand key challenges for operational teams; identify and disseminate lessons and best practices, and iii) recommend ways to inform the GFDRR's work on the Disaster-FCV Nexus and integrate the nexus into WBG operations. The primary audience for this portfolio review is WBG task teams and managers, but it may also interest current and possible new donors to the GFDRR.

The review is informed by (i) a quantitative analysis of WBG investment projects and GFDRR grants for DRM in FCV countries for 2012–2022, (ii) a qualitative review of project documents from selected DRM operations in FCV countries, (iii) a gap analysis from in-depth interviews with Task Team Leaders (TTLs) with a range of geographical and thematic expertise.

The review builds on the Independent Evaluation Group's (IEG)<sup>1</sup> 2022 report on the WBG's actions and funding to reduce disaster risks, including in FCV countries. This study supports Recommendation 4 of the IEG's report which calls for country engagement and project design to respond to the related effects of disasters and FCV.

<sup>1</sup> For more information: https://ieg.worldbankgroup.org/

## **Key findings**

#### Grant and lending operations that support DRM in FCV countries: what we found out

Over a 10-year period, the WBG supported the design, preparation and/or supervision of 1,873 lending operations in FCV countries with funding of US\$143 billion, accounting for 26 percent of WBG operations. Within these projects, the WBG has supported 310 lending operations with DRM activities,<sup>2</sup> which amounts to US\$29.4 billion and accounts for approximately 17 percent of lending operations in FCV countries. WBG projects with DRM activities in FCV countries are concentrated in the Global Practice for Urban, Disaster Risk Management, Resilience and Land (GPURL) Trust Fund, with 82 projects from FY 12–22.

During FY12–22, GFDRR provided 320 grants in 50 FCV countries, accounting for 25 percent of all grants and 23 percent of all GFDRR funding and costing US\$153 million across the 320 grants. An upward trend was observed from FY18-22 with the highest number of grants at 42 in FY20. The funding for grants in FCV countries increased significantly in FY22, following COVID-19, to US\$14.1 million. Among other achievements, the grants facilitated development finance, Just in Time (JIT) technical and funding support, business development and expertise on the disaster-FCV nexus.

Of the 320 GFDRR grants, 131 grants, worth US\$72 million, were linked to 310 WBG lending operations in FCV countries with DRM activities.<sup>3</sup> The GFDRR grants provided evidence to leverage and inform WBG and other donor-funded loans/grants of US\$6 billion. While specific DRM activities vary by region and country, they broadly include:

- technical assistance to mainstream DRM and build capacity
- · needs assessments and recovery frameworks
- urban resilience
- · early warning and hydrological and meteorological services; and
- infrastructure resilience.

These activities reflect GFDRR's priority areas: (i) Risk-Informed Decision Making; (ii) Reducing Risk and Mainstreaming Disaster Risk Management; (iii) Financial Preparedness to Manage Disaster and Climate Shocks; (iv) Disaster Preparedness and Resilient Recovery; and provide evidence of the cross-cutting nature of the Disaster-FCV Nexus.

#### Leveraging development finance for DRM in FCV: underutilized potential

The review suggests there is still potential to leverage development finance for DRM in FCV settings. While the FCV context for DRM projects is generally recognized, there is little discussion of the links and causal mechanisms between disasters and FCV, and of their economic impacts. This is largely due to the lack of analytics for the disaster-FCV nexus, which makes it difficult for the WBG to integrate this nexus into its operational models.

The gap analysis informed a list of priorities that can help TTLs to seek and mobilize financing for DRM in FCV settings, and to design projects sensitive to the multidimensional crises that WBG operations respond to. Ideally, such projects should endeavor to address disaster risks at the same time as they alleviate the drivers of fragility and conflict.

DRM is ever more critical as climate change impacts take hold. While change adaptation in FCV settings is drawing increasing attention, it is acute shocks which dominate governments' attention and funding in the short-term. Acute shocks have significant, immediate, and long-lasting economic and social impacts on FCV countries; with cascading regional impacts, regardless of whether countries are FCV or relatively stable and peaceful. The short-term focus of governments' attention and funding may not meet the broader requirements of DRM. However, response to acute shocks may offer an opportunity to extend response, recovery and reconstruction phases into longer-term risk reduction and resilience building; in turn, such actions may ultimately support medium to long-term responses to slow-onset disasters, and to climate change impacts.

<sup>2</sup> Proxy databases such as DRM Co-benefits data from FY21–22, IEG DRR database, DRM sector code database, a proxy database developed by ITS and manual sample checks were used to identify projects with DRM activities. It is important to note that DRM activities may be in addition to other DRM-related work depending on projects' nature and sectors.

<sup>3</sup> Some GFDRR grants are linked to lending operations (IPFs, DPFs, PforRs), while others are linked to regional ASAs or are standalone ASAs.

#### Way forward

Balancing short- and longer-term actions is needed for governments to address current and emerging compounding risks and impacts, and a disaster-FCV lens is required across WBG programs so that FCV risks are not exacerbated by DRM interventions or investments. While priority should be given to countries on the WBG FCV list, all countries to differing extents may suffer multidimensional crises and experience FCV.

Context- and FCV-sensitive approaches to investment and program designs may add to project preparation times and reduce WBG institutional agility, while the consequences of not doing so may include reduced development impact, program cessation, and the reputational risk of poorly designed investments.

Beyond mitigating risks for bank investments, there is a need – and opportunity – to advance the disaster-FCV agenda to improve development financing and implementation of WBG lending operations. We recommend that these actions (detailed in Section 4) are adopted in order to:

- · Secure acceptance of the disaster-FCV nexus and integrate the agenda into WBG processes and products.
- Explicitly consider the disaster-FCV nexus in all phases of the operational/project cycle: design, implementation, project closure and sustainability.
- Establish technical support for inclusion, learning and accountability to advance action on the disaster-FCV nexus agenda.

This review will inform the GFDRR Disaster-FCV Nexus FY24 workplan and Theory of Change. In the long-term, building operational and technical capacity will help to scale up DRM investments in FCV countries and increase development finance in support of disaster resilience.

# . Introduction

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Section 1.1 outlines the prevalence of mutually reinforcing disaster4 and FCV risks. The real and perceived barriers to investing in DRM in FCV settings are also considered. Section 1.2 situates GFDRR's engagement with the disaster-FCV nexus. The methodology for the review can be found in Annex 1.

# **1.1. THE INTERSECTION OF DISASTERS AND FCV**

**FCV countries are generally more vulnerable to disasters, and suffer worse impacts of natural and man-made shocks.** Of the 15 countries most vulnerable to disasters, 14 are among the top 50 fragile states.<sup>5</sup> Disasters accounted for at least 58 percent of deaths in the top-30 fragile states between 2004 and 2014,<sup>6</sup> and this figure is likely higher, given that such impacts are significantly under-reported. Between 1996 and 2015, 34 percent of disaster-affected people lived in the top 30 fragile and conflict-affected states.<sup>7</sup> Hazards and their impacts are increasingly made worse by climate change, in particular in FCV contexts in which vulnerability is generally high.<sup>8</sup>

<sup>4</sup> Harris, K., Keen, D. and Mitchell, T. (2013). "When disasters and conflicts collide: Improving the links between disaster resilience and conflict prevention." Research Paper. London: ODI. https://odi.org/en/publications/when-disasters-and-conflicts-collide-improvinglinks-between-disaster-resilience-and-conflict-prevention/.

<sup>5</sup> Peters, K. (2017). "The next frontier for disaster risk reduction: Tackling disasters in fragile and conflict-affected contexts." Research Paper. London: ODI. https://www.odi.org/publications/10952-next-frontier-disaster-risk-reduction-tackling-disasters-fragile-andconflict-affected-contexts.

<sup>6</sup> CRED (Centre for Research on the Epidemiology of Disasters) and UNISDR (2016). Poverty and Death: Disaster Mortality 1996–2015. Brussels: CRED. http://www.unisdr.org/files/50589\_creddisastermortalityallfinalpdf.pdf.

<sup>7 7</sup>UNDRR (2019). Global Assessment Report 2019. Geneva: UNISDR. https://gar.undrr.org/report-2019.

<sup>8</sup>Development Initiatives (2022). Global Humanitarian Assistance Report 2022. Bristol, UK: Development Initiatives. https://devinit.org/ documents/1193/GHA2022\_Digital\_v8\_DknWCsU.pdf.

<sup>8 9</sup>GFDRR (2016). Disasters, conflict, and fragility: A joint agenda. Washington, D.C.: World Bank Group. https://www.gfdrr.org/en/ publication/disasters-conflict-and-fragility-joint-agenda.

**Global experience has shown that the disaster-FCV nexus is one in which FCV and the effects of disasters are mutually reinforcing in complex, context-specific ways.** Research from 187 countries (1950–2000) shows that disasters increase the risk of fragility and conflict in the medium-term, while disasters occurring shortly after conflict intensify the risk of its return.<sup>9</sup> Evidence suggests that conflict and fragility increase vulnerability to hazards and can weaken the capacity of governments and local institutions to protect communities from, and respond to, disasters. Anthropogenic climate change is intensifying climate-related hazards (e.g., floods, droughts) and escalating the risk of conflict through its impact on risk drivers such as food insecurity, economic shocks, and migration.<sup>10</sup>, <sup>11</sup>

Disasters and how they are managed can exacerbate fragility, conflict, and the likelihood of violence. The uneven allocation of DRM resources, whether real or perceived, may inflame inter-communal and state-society

relations, as was the case in Aceh, Indonesia following the 2004 Tsunami.<sup>12</sup> Non-state armed groups may provide services in the aftermath of disasters, as happened in Pakistan following the 2011 floods, which can have longer- term impacts on conflict dynamics. When disasters destroy livelihoods, individuals may join armed groups for security and income, as is the case in parts of the Sahel. Disasters can also displace people, and lead to tensions between refugee and host communities, particularly where government services are already stretched, as is the case for the Rohingya in Bangladesh and Malian communities in Mauritania.

**Conversely, FCV can increase people's exposure and vulnerability to disasters.** Conflict-related displacement can force people to live in riskier locations which are more exposed to floods, drought etc., as is the case for communities fleeing non-state armed groups in Colombia, and the Rohingya crossing the Myanmar-Bangladesh border.<sup>13</sup> Conflict can erode people's livelihoods and social networks, reducing their economic means to invest in risk reduction or protection against hazards, as is the case in protracted conflict settings in East Africa and the Sahel where repeated livestock destocking may occur without replenishment. Conflict can undermine the governance structures and financing mechanisms required for effective DRM in a myriad of ways. For example, unstable political conditions may stall the approval of legal frameworks and Disaster Risk Reduction (DRR) strategies required to guide risk reduction investment, policies and regulatory frameworks, as was the case for a time in Fiji and in Nepal. Conflict can undermine the stability of economic and financial systems, and limit finance from central government to disaster management authorities and sub-national counterparts, as is the case across much of the West African and Sahelian region, particularly in Chad.<sup>14</sup> Finally, armed conflict and insecurity can limit access required for state and non-state actors to deliver goods and services for risk reduction, response, reconstruction and recovery interventions, as is the case in Yemen and Syria.

**FCV can weaken the capacity of governments and local institutions to deliver DRM.**<sup>15</sup> The reasons are varied and context specific. For example, DRM authorities may be underfunded, and lack sufficient technical capacity and political influence to pass and enforce disaster regulations, as in the case of Chad; governments may not have full access to or control over conflict-affected areas, and this impedes risk reduction efforts, as in the case of Colombia; and disasters may prompt calls for wider political change, as happened after the 2020 port explosion in Lebanon, or (for very different reasons), the 2004 tsunami in Ache, Indonesia.

<sup>9</sup> GFDRR (2020). GFDRR Strategy 2021–2025: Scaling up and mainstreaming resilience in a world of compound risks. Washington, D.C.: World Bank Group. http://documents.worldbank.org/curated/en/955811620194170587/GFDRR-Strategy-2021-2025-Scaling-Up-and-Mainstreaming-Resilience-ina-World-of-Compound-Risks.

<sup>10</sup> UNDRR (2019). Global Assessment Report 2019. Geneva: UNISDR. https://gar.undrr.org/report-2019.

<sup>11</sup> Gaillard, J.-C., Clavé, E. and Kelman, I. (2008). "Wave of peace? Tsunami disaster diplomacy in Aceh, Indonesia," Geoforum, 39(1), 511–526. https://doi.org/10.1016/j.geoforum.2007.10.010.

<sup>12</sup> Siddiqi, A., Peters, K. and Zulver, J. (2019). "Doble afectación'. Living with disasters and conflict in Colombia." Report. London, UK: ODI, p. 36. https://odi.org/en/publications/doble-afectacion-living-with-disasters-and-conflict-in-colombia/.

<sup>13</sup> African Union (2022). Disaster Risk Reduction in West Africa and the Sahelian Region: A Review of Progress. Addis Ababa: African Union. https://www.undp.org/africa/publications/disaster-risk-reduction-west-africa-and-sahelian-region-review-progress.

<sup>14</sup> Desportes, I. and Hilhorst, D. (2020). "Disaster Governance in Conflict-Affected Authoritarian Contexts: The Cases of Ethiopia, Myanmar, and Zimbabwe," Politics and Governance, 8(4), 343–354. https://doi.org/10.17645/pag.v8i4.3127; Mena, R. and Hilhorst, D. (2021). "The (im)possibilities of disaster risk reduction in the context of high-intensity conflict: the case of Afghanistan," Environmental Hazards, 20(2), 188–208. https://doi.org/10.1080/17477891.2020.1771250.

<sup>15</sup> Peters, K. Peters, L.E.R., Twigg, J. and Walch, C. (2019). "Disaster risk reduction strategies. Navigating conflict contexts." Working Paper 555. London: ODI, p. 48. https://odi.org/en/publications/disaster-risk-reduction-strategies-navigating-conflict-contexts/.



Despite the ways in which disaster impacts and FCV are related, and the urgency of addressing these dynamics, the Sendai Framework for Disaster Risk Reduction 2015–2030 is silent on issues of FCV. The Sendai Framework does not explicitly consider FCV as a root cause of vulnerability to disaster risk, though regional DRR frameworks vary: the Asia regional DRR strategy mentions FCV in the context of sexual and gender-based violence escalating during disasters,<sup>16</sup> while African regional DRR strategies and statements recognise the links between disaster and conflict risk, and have committed to pursue combined DRM and peacebuilding initiatives.<sup>17</sup>

Known actions to reduce disaster risk and impacts are insufficiently delivered in FCV settings. Past trends in financing DRM in FCV settings by the international community are concerning. OECD DAC<sup>18</sup> figures suggest that, between 2005 and 2010, for every US\$100 of Official Development Assistance (ODA) to fragile states, only US\$1.30 was spent on DRM.<sup>19</sup> More recent estimates show that disaster-related funding is largely channelled to emergency response, as opposed to risk reduction, prevention and preparedness. In 2021, according to OECD DAC, US\$30.6 billion in bilateral aid went to disaster-related activities, of which 85 percent (US\$26.11 billion) was for emergency response; only about 12 percent (US\$3.66 billion) went to multisector DRR or disaster prevention and preparedness while a further 3 percent (US\$0.86 billion) went to reconstruction relief and rehabilitation.<sup>20</sup>

16 Ibid

<sup>17</sup> The OECD's (Organization for Economic Cooperation and Development) Development Assistance Committee (DAC) is the international forum of many of the largest providers of development aid.

<sup>18</sup> Peters, K. and Budimir, M. (2016). "When disasters and conflicts collide: Facts and figures." Briefing/Policy Paper. London: ODI https://odi. org/en/publications/when-disasters-and-conflicts-collide-facts-and-figures/.

<sup>19</sup> UNDRR (2023). Financing Disaster Risk Reduction in humanitarian and crisis settings. Geneva: UNDRR.

<sup>20</sup> UNDRR (2021). Scaling Up Disaster Risk Reduction in Humanitarian Action 2.0. Recommendations for the Humanitarian Programme Cycle. Geneva, Switzerland: UNDRR. https://www.undrr.org/media/49222/download; UNDRR (2023). Evidence of positive progress on Disaster Risk Reduction in the Humanitarian-Development-Peace nexus. Geneva, Switzerland: UNDRR. https://www.undrr.org/publication/evidence-positive-progress-disaster-risk-reduction-humanitarian-development-peace-nexus.

**Barriers to channelling climate finance to FCV countries remain.** Despite climate adaptation finance for FCV countries steadily increasing over time, levels are considerably lower than non-FCV countries. Global climate adaptation funds are risk averse, and thus, funding for FCV countries is low: only 12 percent (US\$1.3 billion) of funds (US\$11 billion) go to conflict-affected contexts,<sup>21</sup> and as climate and DRM finance is delayed, disasters and the changing climate outpace adaptation and risk governance effortsDRM.

**Funding for DRM in FCV settings is constrained by several real and perceived barriers.** FCV countries are typically regarded as the domain of those focusing on conflict, despite the co-occurrence of natural hazards. Large-scale international humanitarian responses in FCV contexts typically focus on saving lives, with the integration of DRM a relatively new – though growing – agenda.<sup>22</sup> Normative conceptions of DRM assume a relatively stable, peaceful state in which risk management is directed through central government. In many FCV countries this assumption does not hold, particularly where the ruling party is subject to international sanctions, as in Syria. Moreover, governments in FCV countries may simply be unwilling to engage in DRR<sup>23</sup> owing to the prioritisation of other development or security concerns.

# **1.2 GFDRR ATTENTION TO THE DISASTER-FCV NEXUS**

To further contribute to its aim to help low- and middle-income countries better understand and reduce their vulnerability to natural hazards and climate change, GFDRR launched the Disaster - FCV Program in 2018. The current GFDRR Strategy 2021–2025<sup>24</sup> includes the Disaster-FCV Nexus as a cross-cutting theme, and to address growing demand, is seeking to leverage greater development finance for DRM in FCV settings. Commitment to the disaster-FCV nexus has continued in light of the IEG<sup>25</sup> evaluation of WBG support to reduce disaster risks from natural hazards, published in August 2022. The report found that the case for risk reduction in FCV settings is best made by emphasizing the compounding nature of hazards and conflict risks and impacts.<sup>26</sup>

#### The GFDRR's Disaster-FCV Nexus thematic area identified the following :

- Disasters in FCV settings undermine development and investment and will continue to do so (especially in light of climate change), unless addressed.
- There is potential to channel development finance to DRM in FCV settings, and to address the links between disasters and FCV.
- Investments which don't acknowledge these links may exacerbate existing FCV conditions and create new ones.

Interviews with TTLs and country teams suggest that a number of operational challenges need to be overcome, and technical issues resolved, in order to scale-up DRM in FCV countries. Operational teams face FCV-related constraints to preparing, implementing and closing projects, which in turn delays progress in DRM. These challenges include institutional capacity to carry out investment projects, security concerns affecting field visits and staff safety, data scarcity, political instability, and staff turnover, all of which impact project sustainability. In turn, when implemented, DRM investments in FCV settings usually neglect the opportunity to address underlying causes of FCV in their technical design and implementation. This has a compounding impact: not

<sup>21</sup> UNDRR (2023) Financing Disaster Risk Reduction in Humanitarian and Crisis Settings. UNDRR: Geneva.

<sup>22</sup> Peters, K. (2017). "The next frontier for disaster risk reduction." Report. London, UK: ODI, p. 50. https://odi.org/en/publications/the-next-frontier-for-disaster-risk-reduction-tackling-disasters-in-fragile-and-conflict-affected-contexts/.

<sup>23</sup> GFDRR (2020). GFDRR Strategy 2021–2025: Scaling up and mainstreaming resilience in a world of compound risks. Washington, D.C.: World Bank Group. http://documents.worldbank.org/curated/en/955811620194170587/GFDRR-Strategy-2021-2025-Scaling-Up-and-Mainstreaming-Resilience-ina-World-of-Compound-Risks.

<sup>24</sup> The IEG evaluates the development effectiveness of the World Bank Group. It aims to provide evaluative evidence to help the World Bank Group deliver better services and results to its clients by generating lessons from past experience and accountability to shareholders and stakeholders at large. IEG is independent of the Management of the World Bank Group and reports directly to the Executive Board. For more information: https://ieg.worldbankgroup.org/

<sup>25</sup> World Bank (2022). Reducing Disaster Risks from Natural Hazards: An Evaluation of the World Bank's Support, Fiscal Years 2010–20. Independent Evaluation Group. Washington, D.C.: World Bank. https://ieg.worldbankgroup.org/evaluations/reducing-disaster-risksnatural-hazards.

<sup>26</sup> For further information: https://www.gfdrr.org/en/drm-fcv

only are opportunities for improved design and investment missed, but lessons applicable to future projects are not learnt or captured.

In light of these pressing challenges, GFDRR's Disaster-FCV Nexus thematic area aims to support DRM engagements in complex settings and scale-up interventions that address the intersection between disasters-FCV.<sup>27</sup> If designed effectively and intentionally, DRM and disaster responses can address underlying drivers of FCV and related causes of disaster-FCV risks. If an FCV-sensitive approach is adopted, DRM projects may build resilience in communities, strengthen social cohesion, reduce the risk of conflict incidence and escalation, and mitigate the causal mechanisms which link disaster-FCV risks.<sup>28</sup> The Program, launched in 2018 and which entered its second phase in 2021–22, is structured around three areas of engagement:

- Mainstreaming DRM in FCV contexts, by creating opportunities along the DRM value chain, capitalizing on key entry points in FCV engagements, and adapting pre-existing tools for a more efficient delivery of DRM in FCV settings;
- Promoting FCV-sensitivity in DRM operations by raising awareness among operational teams and providing guidance on how to carry out FCV-sensitive DRM work;
- Understanding the interplay between disasters and FCV and clarifying what this means in practice for operations.

Each area of engagement will be pursued through 3 pathways:

- Pathway 1 Enhancing operations. Integrate disaster-FCV nexus into investments, and operational support throughout project life cycles in FCV countries.
- Pathway 2 Enhancing knowledge and technical competencies. Upskill staff on disaster-FCV nexus, supported by a strong knowledge and evidence base.
- Pathway 3 Strengthening partnerships. Partnerships within and beyond WBG to systematically integrate the disaster-FCV nexus.

Over the last few years, engagements have evolved from adapting post-disaster assessment methodologies and developing new methodologies for remote data collection, to investing in new analytical research and testing cross-sectoral operational approaches to DRR in differentiated FCV settings. Further details of activities' delivery under the Disaster-FCV Nexus thematic area can be found online.<sup>29</sup>

The disaster-FCV nexus aligns with broader WBG efforts to acknowledge disaster-FCV risks and respond to them. For example, the 2020 World Bank FCV strategy <sup>30</sup> looked at the root causes of conflict and recognized the role of disasters as drivers of conflict risk and incidence. Engagements have evolved from adapting post-disaster assessment methodologies and developing new methodologies for remote data collection, to investing in new analytical research and testing cross-sectoral operational approaches to DRR in conflict areas. Further details of activities' delivery under the Disaster-FCV Nexus thematic area can be found online. This report also aligns with and builds on findings from the IEG report, GFDRR's strategy, the disaster-FCV nexus as a cross-cutting theme, and the WBG commitment to align finance with the Paris Agreement and mainstream climate into all actions.

This portfolio review analyses DRM in WBG projects in FCV countries for FY12–22. The objectives are to: (i) review macro trends in funding DRM in FCV countries over FY12–22; (ii) understand challenges for teams to deliver DRM operations in FCV settings, and; (iii) identify lessons and good practices from DRM activities in FCV settings.

<sup>27</sup> Mena, R. and Hilhorst, D. (2021). "The (im)possibilities of disaster risk reduction in the context of high-intensity conflict: The case of Afghanistan," Environmental Hazards, 20(2), 188–208. https://doi.org/10.1080/17477891.2020.1771250.

<sup>28</sup> World Bank (2020). World Bank Group Strategy for Fragility, Conflict, and Violence 2020-2025. Washington, D.C.: World Bank. http://documents.worldbank.org/curated/en/844591582815510521/World-Bank-Group-Strategy-for-Fragility-Conflict-and-Violence-2020-2025.

<sup>29</sup> See more: https://www.gfdrr.org/en/drm-fcv

<sup>30</sup> See more: https://www.worldbank.org/en/topic/climatechange/overview#2

# **2. Results:** Disaster-FCV Nexus across the World Bank lending portfolio

This section outlines the results of an analysis of the World Bank lending portfolio over FY12–22 and covers trends in World Bank financing in FCV countries as a whole before taking a closer look at DRM activities within that portfolio. Emphasis is placed on the GPURL, with findings presented from the quantitative analysis of trends, and in-depth assessment of 10 projects.

# 2.1 TRENDS IN WORLD BANK FINANCING IN FCV COUNTRIES

This portfolio review identified 1,873 World Bank lending operations from FY12–FY22 throughout its financing instruments (Investment Project Financing (IPF), Development Policy Financing (DPF) and Programs for Results (PforR)) in FCV countries with total funding of US\$143 billion.<sup>31</sup> The analysis shows that both the number of lending operations and the amount of funding increased over the 10 years.<sup>32</sup> More specifically, from FY12 to FY22 the overall financing of FCV countries increased over 3.5 times. Due to COVID-19, there was a spike in the number of projects on COVID-19 preparedness and response under the Health, Nutrition & Population Global Practice, with 45 projects in FY20 compared to 18 projects in FY19.

<sup>31</sup> The data are based on a lending portfolio report obtained from the WBG data systems and includes both additional financing and recipient executed projects.

<sup>32</sup> The WBG FCS list is updated every year and some of the countries graduated from FCS lists; however to have a more systematic approach all countries included in FCS lists between FY12-FY22 are considered for this analysis.

Approximately 80 percent of financing was received from the International Development Association (IDA) (US\$115 billion), the primary funder of FCV countries. Funds from the International Bank for Reconstruction and Development (IBRD) accounted for 14 percent of funding (US\$20 billion) and funds from other sources such as trust funds accounted for 6 percent of funding (US\$8 billion).



In terms of regional representation, the Africa region (Eastern and Southern Africa "AFE" and Western and Central Africa "AFW") had the largest share of projects with 1,125 lending operations amounting to US\$103 billion (see Figure 2). Other regions had significantly less financing; in part this is because the Africa region accounts for 29 FCV countries (of the 37 on the FY23 List of Fragile and Conflict-affected Situations). The Middle East and North Africa (MENA) region had the second largest financing with US\$12 billion, which is significantly lower than the Africa region considering fragile states such as Yemen, Iraq, Libya, Syria, West Bank and Gaza etc. South Asia (SAR) region had the third largest financing with US\$11 billion; however, the analysis shows that there were fewer and larger lending operations, averaging US\$80 million in SAR in comparison with Europe and Central Asia (ECA) (US\$45 million) and the East Asia Pacific (EAP) region (US\$36 million) where there were more projects with less financing. The Latin America and Caribbean region (LCR) had the lowest number of projects as Haiti was the only LCR country on the WBG List of Fragile and Conflict-affected Situations during the review. Despite the smallest regional amount of finance, there were 52 projects in Haiti worth a total of US\$1.9 billion, with the highest number of projects from GPURL.



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**The largest number of projects in FCV countries were in Health, Nutrition and Population Global Praactice** (249), although the figures varied by Global Practice; Macroeconomics, Trade, and Investment (196); Energy & Extractives (168). An equal number of projects were in Urban, Resilience and Land and Social Protection and Jobs Global Praactices with 163 projects each (see Figure 3 & 4).





Figure 4. Number of WBG Projects in FCV FY12-22 by Global Practices

Analysis shows that the higher number of projects in Health, Nutrition and Population Global Practice (HNP) were driven by a significant increase following COVID-19. If this trend continues and HNP investments remain steady, then mainstreaming DRM in the health sector would be a priority. However, the Macroeconomics, Trade, and Investment (MTI) Global Practice had the largest share of financing (15 percent of total funding) due to large numbers of Development Policy Loans (DPFs) with an average amount of US\$100 million including the DPFs related to COVID-19 preparedness, response, and recovery. Considering this, MTI DPFs may offer an entry point for policy dialogue with governments of FCV countries on the fiscal implications of climate and disasters, and building-in resilience through DRM investments. Collaboration between DRM teams and the MTI Global Practice could bolster DRR in structural sectors of the economy by including DRR measures in DPFs.

## 2.1.1 Trends in World Bank portfolios on DRM in FCV

The review identified 310 lending operations in FCV countries that included activities related to DRM,<sup>33</sup> which accounts for approximately 17 percent of lending operations in FCV. The Africa region (AFE and AFW combined) has the largest number of projects with DRM activities, accounting for 58 percent of projects. EAP and LCR followed, with 17 and 7 percent respectively. It is interesting to observe that the MENA region has the third largest share of WBG projects in FCV, but the smallest number of projects (5 percent of total) in FCV which include DRM activities.

We may assume that while the MENA region concentrates a relatively large share of projects in FCV countries, that these do not necessarily entail DRM interventions (see Figure 5), which is surprising given the region's hazard exposure and high vulnerability.





WBG projects in FCV countries with DRM activities by Global Practice (see Figure 6) are concentrated in GPURL and Social Protection & Jobs. GPURL had the largest number of projects with DRM activities in FCV countries (27 percent of projects), followed by the Social Protection and Jobs Global Practice (13 percent), reflecting their work on adaptive social protection and safety nets related to disaster risk. For example, the Ethiopia Productive Safety Nets Project 4 (P146883) focused on integrating social protection and DRM systems.

The Transport Global practice accounted for 11 percent of projects largely due to activities in resilient infrastructure and transport. For example, in the Democratic Republic of Congo (DRC), the Goma Airport Safety Improvement Project (P153085) monitors volcano risks, strengthened airport and surrounding community preparedness, and enhanced airport infrastructure resilience to floods and rain.

Ten percent of projects were from the Water Global Practice, related to flood preparedness and response, and resilient water and sanitation infrastructure. For example, the Flood Emergency Project in Haiti (P143940) included repair of hydraulic infrastructure for flood protection and rice production, and overall DRM and emergency related activities.

Finally, the Agriculture Global Practice accounted for 9 percent of projects, and focused on climate resilient agriculture in response to natural hazards and climate change.

<sup>33</sup> Proxy databases such as DRM Co-benefits data from FY21-22, IEG DRR database, DRM sector code database, a proxy database developed by ITS as well as manual sample checks have been used to identify projects including activities related to DRM. It is important to note that activities related to DRM can be in addition to other activities depending on projects' nature and sectors.





#### 2.1.2 Disaster-FCV Portfolio in the Urban, Land and Resilience Global Practice

The analysis shows that 82 projects from the GPURL supported DRM in FCV countries over FY12–22. Overall, the number of and funding for projects increased over the decade. Despite annual variations, since 2017 there has been a notable rise in lending operations for DRM in FCV countries (see Figure 7).



**Further analysis was conducted on geographical regions and hazard focus.** In terms of geographical regions, the data show a similar trend to that on Global Practices. The Africa region has the largest share of projects (56 percent) followed by EAP (13 percent) and LCR (10 percent). In terms of hazard focus, of the 82 projects, floods were most frequently addressed (56 percent of projects) followed by droughts (35 percent), cyclones (12 percent) and earthquakes (11 percent).

**Lending from GPURL for DRM activities in FCV countries spanned the full DRM value chain.** Approximately 93 percent of projects included some ex-ante preparedness activities. 62 percent of DRM projects only focused on ex-ante, 7 percent focused on recovery and reconstruction and 31 percent included both (see Graph 7).

Among the most common ex-ante interventions are those which strengthen emergency preparedness and early warnings by improving forecasting and warning services. This includes modernizing observation networks and forecasts, institutional strengthening of hydro-meteorological services, data management, and capacity building and implementation support to Departments of Hydrology and Meteorology. Other ex-ante interventions are entry-level resilience investments, such as retrofitting public buildings (e.g., schools, health centers), and building regulations for a more resilient built environment and to meet internationally accepted building standards. Resilient infrastructure activities included preventive structural and non-structural measures to enhance preparedness, particularly flood preparedness. In terms of disaster risk financing, some of the projects helped governments to access immediate liquidity post-disaster for low, medium, and high-risk events.

- The Pacific Resilience Program Project in the Marshall Islands (P155257) included an integrated disaster risk financing strategy which provided risk retention (for high frequency, low severity events) and risk transfer (for low frequency, high severity events) and included national and regional instruments. Finally, some of the projects included nature-based solutions (NBS) activities.
- The Urban Resilience and Solid Waste Management Project in Ivory Coast (P168308) focused on flood mitigation infrastructure and services through a hybrid approach that combines green and grey infrastructures, including urban drainage and associated roadworks, and NBS for erosion control and water retention.

# Some ex-post interventions included rehabilitation of infrastructure after disasters, supply of emergency disaster recovery goods, and housing reconstruction.

- The Bosnia and Herzegovina (BiH) Floods Emergency Recovery Project (P151157) included procuring critical goods urgently required for the continuity of public services and economic opportunities. This was due in part to the flooding of some coal mines which restricted power supply to the main thermal power plants. Areas traditionally used for agriculture and agribusiness were severely flooded, resulting in fodder and forage shortages and an urgent need for seeds and fertilizers for reseeding.
- In Sierra Leone the Freetown Emergency Recovery Project (P166075) financed the restoration and improvement of public infrastructure and stabilized the slope area surrounding the landslide.
- In Mozambique, the Cyclone Idai & Kenneth Emergency Recovery and Resilience Project (P171040) financed the replacement of public infrastructure with new, more resilient buildings. Specific activities included the repair and reconstruction of markets, government buildings, public water and sanitation units, and multifunctional elevated flood evacuation sites and cyclone wind shelters.
- The analysis reveals the value of engaging GPURL teams in FCV countries to scale-up ex-post and ex-ante activities to deliver comprehensive recovery systems.

# 2.3 IN-DEPTH ASSESSMENT OF DRM PROJECTS IN FCV COUNTRIES IN THE URBAN, LAND AND RESILIENCE GLOBAL PRACTICE

A qualitative assessment was conducted on 10 DRM projects in GPURL in Chad, Ethiopia, Haiti, Kiribati, Liberia, Myanmar, Niger, Sierra Leone and Yemen, each of which was on the FY12–22 FCV list. The assessment identified common challenges faced by DRM projects in FCV countries, such as limited institutional capacity, inadequate governance structures, and insufficient financing. Lessons learned were identified alongside a suite of recommendations, such as enhancing community engagement, building local ownership of DRM, strengthening partnerships with local and international DRM stakeholders, and technical capacity building for risk reduction. Further details on the methodology can be found in Annex 1.

# 2.3.1 Project Preparation

Understanding the different risk factors and underlying FCV dynamics early on is critical to ensure contextual nuances can inform project design. An FCV-sensitive approach to DRM project design is essential to achieve more sustainable results, even thought this may add a layer of time and cost to project preparation. A key takeaway from the portfolio review on DRM in FCV contexts is that sub-regional differences must be acknowledged, and that a one-size-fits-all approach cannot be adopted, even within the same country context.

 The Myanmar Flood and Landslide Emergency Recovery Project (P158194) and the Myanmar Southeast Asia Disaster Risk Management Project (P160931) illustrate the differences in sub-regional institutional capacity within the DRM field. While the Implementing Agency (IA) of the former, Yangon City Development Committee (under the Ministry of Planning and Finance), was able to carry out the project's activities and eager to learn from it, the implementing agency of the latter, the Ministry of Agriculture, Livestock and Irrigation, was less successful in implementing similar activities for a variety of reasons, which caused delays.

# Phasing of interventions may enable capacity building and quick-wins in priority areas while setting the stage for more complex DRM investments.

- The **Myanmar Flood and Landslide Emergency Recovery Project (P158194)**, which supported the recovery of priority areas after the 2015 floods and landslides, was designed with a phased approach and was thus only partially ready to be implemented at the time of approval. Stage 1 (the first two years) financed goods and small-scale road and drainage works, allowing staff to build capacity and set the stage for larger, higher-risk road works in Stage 2.
- Another example is the N'Djamena Urban Resilience Project (FY23), in which infrastructure investments will be phased to enable "no-regret" investments to start in the first half of the project. While these quick wins are implemented, the project can invest in comprehensive technical and environmental and social studies of hydrological and urbanization dynamics, before complex investments are made in neighbourhoods where this knowledge is currently low.

# An FCV-sensitive approach to DRM investments in FCV settings is critical so that investments do not exacerbate conflicts or cause harm.

The Yemen Integrated Urban Services Emergency Project (YIUSEP II, P181053) demonstrates how an FCV-sensitive approach can be implemented for sustainable and inclusive development in FCV contexts. The project conducted a conflict analysis to identify potential conflict triggers and risks related to the project. A participatory approach to activity selection was adopted by engaging with local communities and stakeholders, including women and marginalized groups to take their concerns into account in project design and implementation. Thus, YIUSEP II incorporated several FCV-sensitive measures into its design and implementation, such as championing the participation of women in project committees and decision-making, promoting transparency and accountability in project management, and conducting regular monitoring and evaluation to assess the impact of the project on conflict dynamics.

# There is value in employing an inclusion-focused conflict analysis to inform prioritization of geographic areas, types of engagement, and overall project preperation.

 While the Myanmar Flood and Landslide Emergency Recovery Project (P158194) did not directly aim to address inclusion and peace, it fostered inclusion and restored livelihoods through labor-intensive rehabilitation of rural roads and provided essential goods to vulnerable communities after the 2015 floods and landslides. As such, the project addressed spillovers of conflict such as forced displacement, and shocks resulting from climate and environmental changes.

# Nature-Based Solutions (NBS) are a potentially cost-effective approach to tackling climate-related risks in fragile environments, and can be designed in FCV-sensitive ways to mobilise community involvement in environmental protection.

In Kiribati, a Small Island Developing State (SIDS), all infrastructure and human settlements are directly
exposed to coastal erosion and climatic threats. Coastal erosion (particularly on South Tarawa) is
associated with settlement and unsustainable land use. Approaches tend to be reactive, and ad hoc, and

primarily respond to high existing exposure and ongoing deterioration caused by poor understanding of the complex coastal processes at play in different locations. The **Kiribati Adaptation Program - Phase III Project (P112615)** supported shoreline mangrove plantings and awareness-raising in nine Outer Islands. Mangroves trap sediments in their root systems and maintain water quality and clarity, filter pollutants and protect shorelines from coastal flooding.

Sierra Leone's urban population is growing rapidly, and unplanned growth has led to the expansion of settlements into unsuitable areas, including steep, landslide-prone slopes, flood-prone river basins, and estuarine shores. The loss of green space in the city of Freetown has exacerbated geohazards and climate risks, especially for residents already living in unsuitable and precarious conditions. The loss of vegetation—which binds soils, slows runoff, absorbs water, and reduces wave energy—has resulted in increased severity and impact of landslides, floods, and coastal erosion. The Resilient Urban Sierra Leone Project (P168608) supported the Freetown City Council's plan to plant 1 million trees as part of its Transform Freetown Strategy for 2019–2022. To date, over 900 residents - mostly locals - have been trained and paid to plant mangroves, shrubs, and other trees and grasses throughout the city, totalling 567,000 plants. This has included 66,000 mangroves in the city's estuaries. The restoration has taken place in 300 communities across and surrounding the city, and includes schools, government buildings, and private properties.

# The integration of local communities in DRM through participatory approaches can help overcome fragile social contracts by building trust, promoting ownership and overcoming social exclusion.

In Liberia, years of civil war, lack of transparency from authorities, low-capacity institutions and incomplete
decentralization weaken the social fabric and the capacity for DRM. To address this, the Liberia Urban
Resilience Project (P169718) aims to support flood risk management and community upgrading of
infrastructure in prioritized areas of Greater Monrovia through participatory approaches. Citizen engagement
will be encouraged to carry out these activities through consultations, focus groups and community
interviews prior to the start of civil works.

# Initial and ongoing security risk assessments are required to inform project site selection, and weigh up the viability of a project in relation to the security risks and the need for DRM interventions.

In Niger, in order to assess the level of FCV risk for each municipality, a Security Risk Assessment was
conducted during preparation of the Integrated Urban Development and Multi-Sectoral Resilience Project.
Criteria were tailored to each municipality and informed by field missions, and included: absence of a military
base, accessibility of the unescorted area, number of attacks recorded, number of victims of insecurity,
and number of villages under trusteeship. A flexible approach to implementation is being adopted, based
on a continuous assessment of security risks.

# Working with the UN and other development partners is one way to deliver DRM interventions in the midst of armed conflict.

 To respond to the devastating consequences of the conflict in Yemen (P181053), the WBG reengaged through an innovative strategy under OP 2.30 (the operational policy on "Development Cooperation and Conflict") at strategic and operational levels. Through a partnership, the WBG contributed financing as well as technical and operational expertise, and the UN agencies carried out on-the-ground project implementation in coordination with national institutions.

# Studying the successes and challenges of building resilience is critical to help projects evolve, especially where the WBG and its partners have long-standing relationships with FCV countries.

 The N'Djamena Urban Resilience Project (FY23) was prepared in close coordination with Agence Française de Développement (AFD) and the European Union (EU), which have supported the urban development sector in N'Djamena for several years. Flood protection infrastructure was financed under Component 1 of the project. The project is also conceptualized as a platform for future urban investments, which could benefit from the technical and financial contributions of AFD, EU and/or other development partners. The task team integrated insights from the ongoing Chad portfolio during project preparation, including lessons learned from a recent Country Program Evaluation, such as: addressing upfront infrastructure procurement with a focus on design, close management of contracts and supervision of works; and having PIU in-place at project inception.

# Demonstrating the long-term economic benefits of investing in DRM is key to discussions with governments of FCV countries, in which DRM may be perceived as "the lesser priority".

In Sierra Leone (Resilient Urban Sierra Leone Project, P168608), the task team demonstrated the project's effects on economic activity, employment, and income; increased health benefits; and reduction in flood risk and Greenhouse Gas (GHG) emissions through improved institutional performance and investments at municipal and intermunicipal levels. The economic analysis was performed for the three main groups of infrastructure investments likely to be carried out under Component 2: neighbourhood upgrading; solid waste management upgrading; and market upgrading. The parameters for the cost-benefit analyses included a discount rate of 6 percent; a 20-year horizon for benefits from the project; and valuation of costs and benefits based on market and shadow prices.

#### Partnering with development donors and humanitarian agencies to fill-in data gaps.

The N'Djamena Urban Resilience project (FY23) in Chad identified at the preparation stage a data gap in key sectors of the project, including the intersection of flood risks and internal displacements. The project will, throughout implementation, coordinate with humanitarian partners such as the United Nations High Commissioner for Refugees (UNHCR) to share data and expertise related to forced displacement, and with International Organization for Migration (IOM) on flood response and recovery. Likewise, to address the data gaps in Ethiopia, the task team of the Conflict Impact Recovery and Reconstruction Planning (CIARP) (P178696, FY23) collaborated with IOM and used a Displacement Tracking Matrix to track the location and movement of Internally Displaced Persons (IDPs) due to conflict and to understand IDPs immediate needs. Several algorithms to geographically visualize IDP locations and needs were developed. While the project did not evaluate the root causes of the multiple conflicts, it did examine local 'fault lines' for which FCV risk may be mitigated, while contributing to resilience building and a strong social contract in Ethiopia.

#### 2.3.1 Project implementation

Greater flexibility in project implementation is often needed within DRM projects in FCV countries to respond to rapidly changing contexts, and as a result, more implementation support is often needed. Acknowledging possible needs to readjust the project's results framework and activities could help task teams adapt to changing circumstances and pursue realistic goals. Additionally, capacity building can help strengthen governments' institutional capacity and shift from reactive to proactive DRM approaches.

- Historically, the transport sector in Myanmar has struggled to strengthen resilience to climate and disaster shocks. The 2015 floods were a pivotal event for the Government to reflect upon its emergency response. Disaster response machinery, goods, and equipment and capacity building for the Emergency Operations Centre, funded by the Myanmar Flood and Landslide Emergency Recovery Project (P158194) helped to prepare for similar events in 2018.<sup>34</sup> In Liberia, national actors are hampered by insufficient institutional capacities in DRM and urban planning due to low numbers of staff, lack of access to global good practices, and limited educational opportunities. The Liberia Urban Resilience Project (P169718), which includes infrastructure development, is aiming to overcome the lack of DRM engineering expertise within the implementing agencies through a US\$3 million (7.5 percent of the total loan) component for capacity building in integrated resilient urban development. A major setback to DRM capacity building in FCV settings is 'brain drain', as staff may seek employment in more stable and secure organizations and countries, leading to a loss of institutional memory and DRM expertise.
- The Liberia Urban Resilience Project (P169718) is aiming to reinforce citizen participation in urban
  resilience infrastructure investments to improve their sustainability. The project will deliver its interventions
  and technical assistance through a participatory approach, which will include citizen engagement in all
  stages of the lifecycle of key project activities, such as identification, design, implementation and monitoring
  of interventions. This will be done through consultations, focus group discussions and community resident
  interviews, which will be conducted during the design stage, prior to the start of civil works.

<sup>34</sup> The project supported the transport sector's work with the government to create new pathways to reduce climate and disaster risks to transport infrastructure through risk-informed planning, siting, design, and investing in structural approaches, (for example, building roads with wider drainage channels in flood-prone areas, and stabilizing slopes to reduce landslide risk, including NBS) and by partnering with officials to integrate long-term climate-smart and disaster risk mitigation measures, and sustainable asset management practices into road reconstruction to enhance protection from future natural hazards.



# Studying labor markets is essential to assess the feasibility of providing large-scale disaster resilient infrastructure while supporting local labor to boost economic and social stability.

• Many constraints to providing materials and contracts arise in FCV settings. Work in Yemen took place during active conflict which made it difficult to provide materials and labor for the Integrated Urban Services Emergency Project (YIUSEP II). The WBG team worked with design focal points to review the availability of alternative materials and avoid dependence on imported materials. Moreover, early coordination with implementing partners on project plans and required materials was crucial to request import clearances timeously. Furthermore, YIUSEP's focus was infrastructure rehabilitation in urban settings, where infrastructure was provided through local contractors, thus promoting local economic activity and employment through the participation of small private sector contractors, building material suppliers, and service providers. Throughout implementation, the project created around 1.6 million non-permanent person days for Yemeni workers. Almost all contracts were awarded to local contractors, suppliers, and consultants in order to generate local economic activity and support stressed communities and local businesses in Yemen. Furthermore, the project directly invested in capacity building and skills training that likely contributed to more jobs.

# In volatile contexts, flexibility, responsiveness, and a solutions-oriented mindset are required for task teams to manage basic aspects of project preparation and implementation.

 The complex nature of the Haiti Disaster Risk Management and Reconstruction Project (P126346) design in a context of overall institutional fragility, continuous changes within the Ministry of Interior and Local Authorities, and limited technical and project management capacity, led to substantial implementation delays throughout the project. In order to realign project components and the results framework with the evolving context and challenges, the task team proposed four restructurings which extended the lending operation to over ten years. The **Yemen Integrated Urban Services Emergency Project (YIUSEP II)** is another example of how flexibility can support DRM in volatile contexts: there were no predetermined sectoral allocations, which allowed for flexible use of resources according to needs and absorptive capacity, and no predetermined city-level allocations, allowing the project to adapt to conflict and security developments.

# Multi-year, consistent, reliable WBG engagement, including grant financing, is crucial to support DRM in the economies of FCV countries.

 The transport component of the Haiti Disaster Risk Management and Reconstruction Project (P126346) adapted to reflect the complex and volatile situation through: (i) the earmarked funds in stand-by mode which were efficiently disbursed after a catastrophic event (Hurricane Matthew); (ii) innovative, reliable, less expensive engineering, such as new gabion reinforcement techniques for resilient transport infrastructure in flood-prone areas; and (iii) trained and empowered men and women for labor intensive work, with unique skills for ongoing maintenance of transport infrastructure.

# FCV settings with low-capacity to carry out projects will require support, potentially through a third party or non-traditional supervision, to achieve expected DRM results.

 While the Myanmar Flood and Landslide Emergency Recovery Project (P158194) was originally to be implemented by UNOPS, the task team decided to have the project implemented by the government as there was demonstrated willingness to build institutional capacity. However, the implementation was delayed because the implementing agency lacked experience of the WBG's fiduciary and procurement policies, and because of the military takeover in February 2021 which led to significant staff turnover.

#### 2.3.2 Project closure and sustainability

Sustainability of DRM investments in FCV countries is difficult to achieve due to the complex and volatile operating environments in which these projects operate. Overcoming this challenge requires a long-term commitment and tailored approach to each context. DRM capacity building and mainstreaming, community engagement, partnerships with other donor agencies and building DRM knowledge and analytics are some of the approaches presented below. In low government capacity settings, often a characteristic of FCV countries, DRM capacity building needs to go hand-in-hand with strengthening the institutions responsible for DRM in order to retain skilled personnel and build the sustainability of DRM investments.

- This is the case of the Kiribati Adaptation Program Phase III Project (KAP III, P112615), which strengthened the capacity of the Public Utilities Board (PUB) to implement the project water network rehabilitation, conservation, and increasing efficiency of supply in South Tarawa. Prior to KAP III, the government agency faced capacity constraints: PUB did not have the tools, expertise, capacity, or financial resources to quantify losses or undertake repair or leak reduction programs. The project supported PUB to establish a Leak Detection Unit to undertake systematic field detection of actual losses along the 30-kilometer-long transmission main and in-line storage systems and to make repairs. PUB took every opportunity offered by the project to build internal capacity, including basic asset condition assessment, maintenance and works planning, operational troubleshooting, hydraulic modelling for possible network expansion, and market studies, among other improvements. The Unit is now institutionalized, fully funded and monitors the system to ensure the sustainability of South Tarawa's water supply.
- Likewise, the Resilient Urban Sierra Leone project (P168608) is combining local staff training on DRM with foundational institutional building for urban governance and DRM for the newly-created National Disaster Management Agency (NDMA). This includes capacity building, provision of adequate equipment and infrastructure, and the strengthening of own-source revenue mobilization.

#### Citizen and community engagement is key for the use and maintenance of DRM infrastructure investments.

Citizen and community engagement requires carefully planned and managed strategies, tailored to the needs and priorities of different communities (i.e., urban/rural, consumers/beneficiaries) and groups (i.e., women and girls, men and boys, youth, elderly, low-income groups, businesses). In Kiribati (KAP III, P112615), a project that increased supply of fresh water and protected coast lines, sustainability risks were mitigated by proactively recognizing the needs and priorities of different groups and factoring them

into project investments. Community engagement evolved from information seeking to understanding communities' needs (e.g., household surveys were conducted in pilot water improvement zones by IAs), to semi-commercial behavior change campaigns (e.g., paying for water and conservation in the 24/7 pilot water supply zones), to empowering residents and allowing for a public voice in decision-making, such as the project design (e.g., community advice on soft solutions, such as vegetation and beach cleaning at the seawall sites, and to identify where shared tap stands would be located in village reticulation systems).

# DRM policy development is a recurrent challenge in FCV settings and requires continuous and long-term engagement.

In Haiti (P126346), close relationships were developed between the World Bank's task teams and Haiti's public authorities and communities through decades of DRM implementation support, technical assistance and capacity building. The introduction of policy dialogue into investment project implementation was then possible, and the government took responsibility for DRM governance and legislation. This continuous engagement paid-off and led to the formulation and adoption of the National DRM Strategy, the DRM legal and institutional framework, and the enactment of the National DRM System after over ten years in the making. The government has also developed a disaster risk financing strategy, and established a decision-making body to demonstrate to donors the seriousness of its approach to disaster response spending and preparation.

#### DRM analytics underpin the move from emergency response to proactive resilience-building.

 In many cases, addressing disaster risks in FCV countries does not happen through discrete DRM engagements but rather with DRM as part of other sectoral engagements and Global Practices. In Yemen, the technical input provided by GFDRR analytics from 2018 to 2021 to the YIUSEP II (Integrated Urban Services Emergency Project - P178270) strongly contributed to its evolution from an emergency operation to a resilience-building activity. As conflict continued in the country, a follow-on project was prepared based on the evidence from the 2020 Yemen Damage and Needs Assessment (DNA) study and its two iterations, building on a successful area-based approach adopted during YIUSEP's implementation and the key lessons learned. These included the need for greater focus on capacity building of local partners to support long-term sustainability and help the country address emergency needs by restoring urban infrastructure services and increasing resilience to climate fluctuation in the 16 cities selected for the project. Likewise, in Haiti (Haiti Disaster Risk Management and Reconstruction, P126346), the WBG helped build scientific capabilities for DRM decision making through a component for collecting disaster risk data. It financed extensive technical assistance and collection and interpretation of seismic and hydrometeorological data, as well as procurement of servers, computers, software, technical monitoring, data collection equipment, and small works. When these systems are fully operational, they will help formulate more effective strategies, design policies, support early warning systems (EWS), and prioritize programs and projects with real-time monitoring capabilities that allow for proper evaluation and recalibration.

# Cross-thematic expertise and partnerships are needed to address disaster risk in many FCV settings, and enable resilient recovery.

In 2022, as the Government of Ethiopia was responding to unprecedented conflicts compounded by COVID-19 and climate emergencies, the WBG, under the stewardship of the Ministry of Finance, and in collaboration with the UN and other development partners, conducted a Conflict Impact Recovery and Reconstruction Planning (CIARP) (P178696, FY23) initiative that included a DNA (December 2022) and a Resilient Recovery and Reconstruction Planning Framework. The project task team set-up formal and informal mechanisms to jointly plan, trouble-shoot, and report, while promoting coordination and collaboration. This included sector working groups with representatives from the UN, government and partners. This engagement has engendered collaboration and momentum for recovery and reconstruction and subsequent fundraising, and thereby facilitated resilient recovery from disasters in a fragile setting.

# **3. Results:** GFDRR Portfolio in FCV countries

In addition to the World Bank lending operations (covered in Section 2), an analysis of GFDRR grants in FCV countries has been conducted. This analysis seeks to better understand the technical DRM support provided to governments of FCV countries, identify temporal and regional trends, and draw lessons from all GFDRR grants focused specifically on the disaster-FCV nexus, a total of 10 grants.

# 3.1 QUANTITATIVE ANALYSIS OF GFDRR PORTFOLIO IN FCV COUNTRIES (FY12-22)

**Over 10 years (2012–2022), GFDRR funded 320 grants in FCV countries to a value of US\$153 million, accounting for 25 percent of grants from GFDRR over this decade.** Despite annual differences, a broadly upward trend was observed across the decade in terms of number of grants. Funding volume also increased from FY18–22, with the highest funding in FY18 (US\$17.8 million).<sup>35</sup> A dip occurred in FY21 owing to the impact of COVID-19 on operations; however, funding for grants in FCV countries subsequently increased by FY22, with an annual total amount of US\$14.1 million (see figure 8).

<sup>35</sup> Three large grants worth approximately US\$7 million contributed a large amount of funding in FY18. More specifically, two grants under CREWS in Niger (US\$2.2 million) and the Democratic Republic of Congo (US\$2.5 million), and a grant under EU ACP in the Democratic Republic of Congo (US\$2.6 million) to strengthen Hydro-Meteorological and Climate Services.



Figure 8. GFDRR Grants in FCV countries from FY12-22 (US\$ Millions)

In terms of regional representation, the Africa region accounted for the largest number of grants and share of funding, with 167 grants totaling US\$91 million over the decade. In terms of share of funding, the Africa region (combined figures for AFE and AFW) was followed by the EAP and SAR regions (see Figure 9).



#### Figure 9. GFDRR Grants in FCV by region from FY12-22 (US\$ Millions)

Of the 320 GFDRR grants, 131 grants worth US\$72 million were linked to the 310 lending operations of the World Bank (specifically lending in FCV countries which included DRM activities). While specific DRM activities vary by region and country, they broadly include (i) technical assistance for DRM mainstreaming and capacity building, (ii) needs assessments and recovery frameworks, (iii) urban resilience in cities, (iv) early warning systems and hydrological and meteorological services; (v) infrastructure resilience.

**GFDRR grants in FCV countries mobilized US\$6 billion of development financing from the World Bank and other partners such as governments and international development partners;** such as USAID, BMZ (German Federal Ministry for Economic Cooperation and Development), and the European Union and United Kingdom's Foreign, Commonwealth & Development Office (FCDO). Funding contributed to knowledge products, risk assessments, and post-disaster needs assessments (PDNA). Such activities also helped to provide the evidence to leverage larger investments and inform the design, preparation, and/or supervision of WBG lending operations.

# 3.2 IN-DEPTH ASSESSMENT OF 10 GRANTS UNDER THE DISASTER-FCV NEXUS THEMATIC AREA (FY19-20)

A qualitative assessment was conducted for 10 grants under the Disaster-FCV Nexus thematic area (FY19–20), and six common challenges were identified. Selected best practices were also identified and provided, although caution should be exercised as each FCV setting is differentiated; thus, while general best practice can be offered, there is no blueprint for how best to pursue DRM in FCV settings. See Annex 2 for the 10 grant overviews and Annex 3 for details of the intersection between fragility and disaster risks for each grant.

#### Box 1. Background information for the Disaster-FCV Nexus thematic area Grants

In May 2019, GFDRR launched grants to prepare DRR lending operations in FCV settings. With funding from Germany, a grant call for proposals was launched by GFDRR, as part of phase I of the Disaster-FCV Nexus thematic area. The call sought proposals for ways to adapt DRM engagements to the specific challenges of FCV settings, or to integrate disaster risk considerations by using DRM knowledge and tools in FCV engagements. The proposed grant size was US\$50,000–US\$150,000 and projects were finalized in August 2020. Ten projects were funded, covering four regions (AFR, EAP, LAC, ECA) with global scope (see Figure 10). Out of the 10 grants, 4 were analytical, producing inputs for conducting DRM operations in FCV countries and understanding the disaster-FCV nexus. The remainder of the grants looked at integrating DRM activities in FCV settings, particularly disaster preparedness, early warning systems, response and disaster recovery.



#### 3.2.1 Understanding the causes of fragility

Understanding the causes of fragility can help to identify the specific disaster risks that need to be addressed, the most effective strategies to do this, and the local dynamics that shape fragility and disaster risks in the local context. This allows TTLs to be better informed when designing and implementing WBG operations, and to avoid the pitfalls of a one-size-fits-all approach. This understanding can also foster DRM projects that are responsive to the needs of the local population, sustainable, reduce disaster risks, and build resilience.

Selected best practices:

- Integrated risk analysis and vulnerability analysis at the sub-regional / regional level can improve
  understanding of the intersections between poverty, crime, violence, and climate change, including in
  urban settings, which can greatly differ from the national level. The integrated risk analyses conducted
  in Papua New Guinea (PNG) and Zimbabwe show that ex-ante assessments of fragility and its relation
  to disaster risk led to a better understanding of the disaster-FCV nexus. The integrated risk profiles
  developed in Myanmar and PNG also demonstrated how that working at the sub-regional / regional level
  can help develop more nuanced understandings of the nexus, especially in cases where FCV (insecurity,
  IDPs, active conflict, etc.) is localized in a specific region (while the rest of the country remains relatively
  stable). The experience of the PNG grant shows that such analysis would benefit from a wider dissemination
  to stakeholders, including development partners.
- Approaches from non-DRM fields may help to address the disaster-FCV nexus. Findings from the portfolio review revealed that non-conventional DRM approaches, namely adaptive social protection mechanisms, social development instruments such as Community Driven Development (CDD) programs (e.g., Myanmar project), participatory assessments of natural hazards/climate change and conflict risks (e.g., Kenya project) are proven to help countries and communities deal with disaster and climate at the local level.
- The combination of theory and pragmatic expertise provides a better understanding of DRM in FCV contexts. Analysed grants, in particular in PNG, relied on this approach by consulting with former/ current cross-disciplinary TTLs and international partners, and systematizing multi-Global Practice collaboration for DRM project implementation.
- Collaboration between international partners in the DRM and FCV fields may improve our understanding
  of challenges and ways to overcome them. Task teams with GFDRR grants, in particular from Zimbabwe
  and Tajikistan, exchanged information on financing trends, approaches, and challenges faced by the
  European Union and the United Nations, and developed approaches to maximize joint efficiency, identify
  loopholes, and avoid duplication. Since its inception, GFDRR has increased cooperation with several UN
  agencies (UNDP, UNICEF, WHO, WFP, ILO etc.) in particular on the parallel development of the PDNA and
  Post-Conflict Needs Assessment (PCNA) methodologies and their implementation.

#### **3.2.2 Accounting for security concerns and mobility restrictions**

**Security challenges limit field deployment.** The existence of pockets of conflict, and economic and social inequalities related to gender, urbanization, and displacement can create insecure conditions, such as in Haiti, PNG, Zimbabwe and the Lake Chad region. Fast-changing contexts and the sudden eruption of conflict or violent social unrest can delay projects and restrict mobility. Security is important when dealing with IDPs and refugees who are often located in marginal and unsafe areas at the edges of towns.

Aside from security concerns specific to the FCV area of a project, the 10 GFDRR grants were affected by mobility restrictions related to the COVID-19 pandemic. These increased the need for flexibility and capacity to adapt to quickly evolving situations and new challenges; teams had to extend deadlines and timelines, and stakeholder capacity building had to be reorganized.

#### Selected best practices:

- Anticipate that fieldwork, due to poor security, may not take place as planned during project design. Planning ahead for alternative options to gather data and conduct activities in the field (including designing the project implementation, monitoring and support remotely through emails, videoconferences, etc.). This was the case for the Haiti grant, in which security concerns prevented field visits from WBG task teams even prior to the COVID-19 pandemic; therefore, all activities were designed based on remote implementation.
- Local consultants/counterparts helped to navigate security concerns and COVID-19-related restrictions. Analyzed grants identified ways to overcome COVID-19 mobility restrictions, such as working with local consultants (e.g., an international NGO with pre-existing relationships and access to Tajikistan government authorities) to find alternative options.



## 3.2.3 Engaging with non-state actors

Stakeholders in disaster preparedness and response, including civil society and local communities, can help in situations where trust in government may be low, and can promote ownership and sustainability of DRM initiatives. Stakeholders can also help to integrate local perspectives on disaster risks, increase resilience, and foster inclusion and equity in the DRM process. However, engaging with non-state actors may be difficult for TTLs, mainly because of fiduciary and procurement issues. Additionally, sensitivities around conflict and peace processes may create difficulties for task teams when engaging with non-state actors.

#### Selected best practices:

- Working with local NGOs can provide access to national and local institutions, help mobilize civil society groups, and reach out to non-state actors and citizens. In Haiti the task team used a local NGO to convene preparedness meetings with citizens and facilitate dialogue between civil society volunteers and the Civil Protection institution.
- One-on-one consultations with key stakeholders, together with multi-stakeholder meetings, may help manage political sensitivities around conflict and peace processes. The Myanmar team invested time in one-on-one meetings with stakeholders (representatives from Ethnic Armed Groups, Ethnic Service Providers, etc.) rather than multi-stakeholder meetings.

#### 3.2.4 Overcoming data gaps and restrictions on access to data

**Obtaining data to assess disaster-FCV intersections can be difficult in FCV countries, which can lack data collection systems.** Many FCV countries lack institutional data due to political fragility and low government capacity. Often, census and household surveys have not been conducted for decades due to conflicts and lack of funds. Data collection was further challenged in some countries as COVID-19 restrictions affected travel and the viability of group meetings.

#### Selected best practices:

- More time may be needed in the early stages of a project to collect data, including through qualitative research such as interviews and group discussions. Interviews and discussions with focus groups (Learning from Risk Management and Reconstruction in Africa) and non-state actors and citizens (via phone surveys such as in the Haiti and Tajikistan projects) may help bridge the gap.
- Partnering with governments and national institutions, and use of remote sensing data may supplement poor data sets. Several approaches were identified from the GFDRR grants, such as partnering with governments, think tanks, CSOs and researchers, and using GIS and big data to fill data gaps (as in the grant on Flagship on Land, Conflict, and Inclusion).
- International development and humanitarian partners, such as UN agencies, can help to collect data from areas affected by disasters and FCV. The grant on "Learning from Risk Management and Reconstruction in Africa" used this approach to collect data on IDPs and refugees.

#### **3.2.5 Working with low-capacity institutions**

Political instability and low institutional capacities s often hinder governments' ability to address hazard and environmental risks. Haiti is a prime example of how institutional and social crises prevent systemic change on DRM, can overshadow DRM work, and even bring it to a halt. The experience in Haiti also revealed how certain terminology, such as 'fragility', may not be commonly used within a country. sGovernments in FCV countries often have limited human and financial resources, and political instability may cause high turnover of officials; this slows projects as frequent changes in government focal points and decision makers hinders communication between officials and task teams.

#### Selected best practices:

• Clarify and communicate FCV concepts to foster understanding between the WBG and its counterparts. In Haiti, additional time was needed during grant implementation to do this. Assess capacity and incentives for project staff from governments to engage in local conflict-resolution efforts through disaster risk mitigation, and pursue cross-departmental collaboration where there is a risk of overlapping mandates with other government institutions, including local governments. In Tajikistan, political fragility was addressed by strengthening government capacity to jointly address FCV and disaster risks.

# 4. Gap Analysis

To complement the quantitative analysis of WBG lending and grants on DRM in FCV countries and the qualitative review of project documents (see Sections 2 and 3), a gap analysis was conducted in order to better understand the needs of selected TTLs and to help them leverage development finance for DRM in FCV settings.

A series of semi-structured interviews were conducted between November 2022–February 2023. The perspectives of more than 10 interviewees were assessed from a range of technical, programmatic and geographical areas including the FCV team and Global Crisis Risk Platform, GPURL and GFDRR including DRM and Urban Development Specialists, and regional expertise including from Eastern and Southern Africa, the Middle East and North Africa, and East Asia Pacific.

These results are summarized in the themes below and indicate WBG demand for additional support on the disaster-FCV nexus and possible next steps.

Data analytics	<ul> <li>Disaster-FCV analytics are required at the country level to inform specific processes, tools and mechanisms, such as Risk and Resilience Assessments (RRA) and Global Rapid post-disaster Damage Estimation (GRADE) assessments.</li> <li>Inclusion of disaster-FCV intersections within existing or emerging Bank products is required (such as climate-conflict risk analysis).</li> <li>There is a need to address the data gap on the economic impact of disasters in FCV settings, and implications on the recovery time, cost, and longer-term impacts. And relatedly, to unpack the links between disasters and FCV, and their implications for project design and delivery.</li> </ul>
Operations and methodologies	<ul> <li>There is a need to respond to the numerous requests to revise methodologies and operations to include the disaster-FCV nexus at subregional and cross-sectoral levels, such as PCNA and RPBA.</li> <li>Several respondents spoke of the need for FCV-sensitive and Do No Harm tools and approaches to inform DRM decision-making in FCV settings.</li> <li>There is a need to systematically track WBG/GFDRR DRM investments in FCV settings – to inform future analysis, for example, through tagging allocation and spending within internal accounting systems.</li> </ul>
Knowledge generation and gaps	<ul> <li>Technical capacity development is required to support TTLs and World Bank staff more broadly to understand the nexus, and options for pursuing disaster-FCV action at various stages of a project cycle.</li> <li>There is a need to upskill staff, for example, through an OLC course, webinars and knowledge products showcasing different types of action to address disaster-FCV risks and impacts.</li> </ul>
Partnerships	• Strengthened partnerships with a greater diversity of actors may be required, for example, bringing together disaster and conflict expertise. This is likely to be country/ project specific depending on the context and partnership required.
Technical and HR capabilities	<ul> <li>Create and/or improve the feasibility of using the STC database to identify relevant consultants with experience on the disaster-FCV intersection.</li> </ul>



The ways forward draw on the quantitative portfolio review (lending operations and GFDRR grants), qualitative analysis of selected DRM projects in FCV countries (from GPRUL lending operations and GFDRR grants), and insights from the gap analysis (section 4). The primary audience for this portfolio review is WBG task teams and management, but we hope the suggested ways forward may also be of use to external audiences.

In terms of next steps, this review will inform the GFDRR Disaster-FCV Nexus FY24 workplan and Theory of Change. In terms of longer-term ambition, addressing the current gaps in operational and technical capacity for the disaster-FCV nexus will support the scaling-up of DRM investments in FCV countries, and leveraging more development finance for disaster resilience work in FCV settings.

# **PRIORITY ACTIONS**

The operational and technical needs to effectively address the intersection of disaster-FCV are differentiated, specific to each location, investment and operation. However, there was enough commonality within the findings to identify actions for the Disaster-FCV Nexus GFDRR Program in the coming 1-3 years, and which may also provide ideas to partner governments interested in addressing the compounding risks and impacts of disasters and FCV. Here are some ways forward:

Secure strategic buy-in and institutional action on the disaster-FCV nexus by integrating the theme into WBG processes and products:

 Systematically include the disaster-FCV nexus into headline WBG processes, specific thematic projects and core WBG products, and disaster-FCV nexus considerations across all Global Practices. There is a need to integrate disaster-FCV nexus considerations into core WBG products such as RRAs and Country Partnership Frameworks (CPFs), and encourage their use in products that the WBG often contributes towards, like PDNAs and disaster recovery frameworks. Systematic integration of the disaster-FCV interlinkages will help identify entry points for DRM operations in FCV settings and advance operations at the disaster-FCV intersection. Other products that could be developed include methodologies to embed consideration of compounding disaster-FCV risks into Emergency Preparedness and Response diagnostics, Nature-Based Solutions assessment and GRADE assessments.

- Raise awareness of the disaster-FCV nexus among WBG task teams, partners, donors and client countries by disseminating information via a newsletter of the Disaster-FCV Nexus thematic area, sharing latest insights and lessons learned from operations, hosting regular webinars and linking with academia and research.
- Over the long-term, integrate consideration of compounding disaster-FCV risks into revised GFDRR, FCV, and WBG strategies. To assess progress, improve systems to tag and track spending on DRM in FCV contexts.

Explicitly consider the disaster-FCV nexus within the operational/project cycle: design, implementation, project closure and sustainability:

- Reach out to stakeholders, private firms and local DRM consultants and specialists to build a robust network of practitioners on the disaster-FCV nexus. In order to support TTLs to integrate disaster-FCV issues in project preparation and early implementation phases, a robust network of practitioners is required to address gaps as they materialise. This may include, for example, collaborations to overcome mobility restrictions and poor data in FCV countries through (i) developing a database of NGOs, academic institutions, development partners and international financial institutions working on DRM and climate adaptation in fragile settings and highlighting those with local representation in FCV settings; (ii) create a database of trusted private firms using innovative approaches to data collection such as remote sensing technology, and (iii) a roster of STCs and specialists with experience in DRM in FCV countries, and conflict analysis specialists with experience of DRM.
- Encourage innovations in DRM through guidance notes on alternative approaches. Conventional
  approaches to DRM may not be effective or appropriate in FCV contexts, and there is a need for differentiated
  approaches that are FCV context-specific and flexible. Innovation in DRM for FCV settings involves sharing
  alternative strategies that have worked in similar contexts. Guidance notes provide a means to do this, and
  examples may include bespoke approaches to Early Warning Systems in FCV, Community Based DRM,
  and inclusive DRM in FCV settings. Such notes should build on successful outcomes from WBG and NGO
  projects globally, and in a diversity of FCV settings.
- Design and embed monitoring processes to track the relationship between DRM interventions and drivers and imapcts of FCV. Analytics to clarify the links between disasters, DRM, and FCV could be pursued via the WBG's Country Management Unit (CMU). This may require a country-specific theory of change to unpack the relationship between disasters and FCV, and to identify indicators to monitor DRM projects on changing (and hopefully improving) FCV conditions.
- Develop operational tools that encourage proactive approaches to mitigate and address compounding disaster-FCV risks. This will require case specific analysis of the links between disasters and FCV including future scenarios and identification of countries/areas vulnerable to hazard where conflict may amplify the impacts, such as in Haiti, Sudan, and Syria. Greater awareness of the range of possible risks and impacts may support the argument for proactive operational approaches to addressing the disaster-FCV nexus.

Establish technical support for inclusion, learning and accountability:

- Prepare educational and training materials on the intersection of disaster-FCV risks, including key concepts, tools and approaches, for WBG staff and national counterparts. In order to lay the groundwork for collaborative working across technical expertise, learning materials can be developed drawing on the insights from GFDRR's Disaster-FCV Nexus thematic area. Doing so will help build individuals' and teams' knowledge of disaster and FCV terminology, concepts, and operational actions, to address compounding disaster-FCV risks and impacts.
- Train staff to integrate disaster-FCV considerations into project design and implementation. This work
  can draw on the Haiti, Myanmar, and Tajikistan GFDRR grant outputs: the toolkit for Community-based
  DRM (CBDRM) in FCV settings (in Myanmar), the conflict-sensitive DRM manual (in Tajikistan), and use of
  existing tools (such as phone surveys) to gather data on citizen perception of risks, and feedback on DRM
  services at the local level. To expand, build on the conflict-sensitive DRM manual developed in Tajikistan
  which aimed to (i) increase government capacities to help communities manage and resolve conflicts
  around land and property after disasters, and (ii) how to support communities to prepare for disasters.
- Provide bespoke support to task teams working in FCV settings through tailored guidance and standardized templates and documents which demonstrate how to analyze and act on disaster-FCV intersections. This could include, for example, TOR templates to help FCV task teams to understand the challenges and opportunities of DRM in such contexts. Additionally, support might include the application of conflict-sensitivity principles, novel innovations in data collection, or community participation approaches. This support could help ensure that investment and project design is comprehensive, accurate, and relevant to their context.

# **ANNEX 1. METHODOLOGY**

#### Methodology for the quantitative analysis of World Bank lending operations.

- The portfolio review looked at 1,873 WBG projects in FCV countries across Global Practices between FY12-22. The database was obtained from WBG data management systems by collecting the data from all WBG projects in FCV settings across Global Practices and regions. A project was considered as "FCV" if the country appeared on the WBG FCS list at any time over this period.<sup>36</sup> The data includes lending operations, recipient executed projects and additional financing projects.
- 310 lending operations with DRM components were found using a DRR database developed by Independent Evaluation Group (IEG) and a DRM-co-benefits database FY21 and FY22<sup>37</sup> provided by Operations Policy and Country Services (OPCS). Additional proxy databases developed by ITS (based on taxonomy of keywords) have been incorporated.
- Out of 310 lending operations, 82 projects were identified within Urban, Resilience and Land global practice (GPURL) for a more thorough analysis of macro trends over time, regions, and countries.
- Ten projects (active and closed) across GPURL were shortlisted for further qualitative analysis. The selection
  aims to represent a diversity of DRM projects: (i) tackling various hazards (urban floods; earthquakes;
  cyclones; droughts; coastal erosion); (ii) investing in different regions (MENA, AFR, LCR, SAR, EAP); (iii)
  working on the ex-ante (risk reduction and preparedness) as well as the ex-post (response and recovery)
  phases of the DRM life cycle; (iv) representing different forms of FCV, including fragile states, post-conflict
  settings, armed conflict zones, and inter-communal violence. The ten projects also represent different
  phases of implementation, with a few recently effective, others in implementation and some closed. This
  deep-dive aims to identify the challenges of DRM in FCV settings, and share lessons and possible solutions
  from operational experiences.
- A qualitative analysis has been conducted on these 10 DRM operations in GPURL covering the following countries: Chad, Ethiopia, Haiti, Kiribati, Liberia, Myanmar, Niger, Sierra Leone and Yemen.<sup>38</sup> The purpose of this in-depth analysis is to identify challenges, lessons, and best practices of project design and implementation, and make recommendations for the sustainability of DRM investments in FCV settings. The ten projects have been selected as per the following criteria to offer a broad range of examples from a variety of DRM projects: i) region, ii) FCV, iii) IDA vs. IBRD, and iv) hazard type (flood, drought, earthquake, cyclone). The methodology involves an in-depth analysis of each of the 10 projects, including an assessment of their development objectives, components and design, implementation, and results. The analysis also considered the specific context in which each project was implemented, including the fragility and conflict dynamics that influenced its outcomes.
- The analysis of the ten selected projects started with the review of available program documents, such as Project Appraisal Documents (PAD), Implementation Status Reports (ISR) and Implementation Completion Reports (ICR), in order to extract information on project objectives, components and results frameworks. More specifically, the team looked at what characterized conflict or fragility settings and risk profiles, the type of DRM approaches provided for the situation (such as urban flood risk reduction investments, reconstruction and improving DRM governance at the national and local levels), and the intended impact of the operation (reducing risks, protecting goods and livelihoods, rebuilding, etc.). Whenever necessary, interviews TTLs were conducted to complement the analysis. Interviews also countered the limitation that lessons from ICRs are often only relevant to project/operational levels.

<sup>36</sup> The list of fragile and conflict-affected situations (FCS) is released annually by the WBG and aims to inform strategic and operational decision-making within the WB. It is used to prioritize WBG support and resources to countries that are most in need of support to address the underlying causes of fragility, conflict, and violence. The list distinguishes between countries based on the nature of issues they face. The classification uses the following categories: (i) Countries with high levels of institutional and social fragility, identified based on indicators that measure the quality of policy and institutions, and manifestations of fragility; (ii) Countries affected by violent conflict, identified based on a threshold number of conflict-related deaths relative to the population. See: https://www.worldbank.org/en/topic/fragilityconflictviolence/brief/harmonized-list-of-fragile-situations

<sup>37</sup> In addition to IEG and DRM-co-benefits databases, a few projects were added to the databased based on the DRM activities mentioned in the project documents.

<sup>38</sup> As described in the methodology, not all of these countries are on the WBG FCS list for FY23 (Kiribati and Liberia). However, they were classified as "FCV" at some point of the project preparation and/or implementation. Additionally, FCV conditions are dynamic; thus, continuous awareness of underlying risk drivers of violence and conflict that intersect with disaster risks is needed in order to make sure preventative and mitigatory actions are taken to avoid any escalation or upsurge of violence and conflict.

#### Methodology for the quantitative analysis of GFDRR grants

- **320 GFDRR grants** in FCV countries have been identified in GFDRR's FY12–22 portfolio and further analysis has been conducted to understand how GFDRR supported WBG teams working in FCV settings.
- Finally, an in-depth analysis was conducted of all GFDRR grants under the Global Disaster-FCV Nexus thematic area – 10 grants prepared and implemented between 2019–2020 – to identify key challenges and best practices to address the nexus.

#### Limitations

- Limitations with the sample size: despite the variety of selected projects in regions, hazard types, fragility settings and stages of implementation, the sample might not be fully representative of the wide range of DRM experiences in FCV settings.
- Data on DRM projects: a comprehensive list of DRM projects across the WBG is currently not available. Sectoral and thematic codes related to DRM in WBG systems are used but this use is not standardized. The DRM co-benefits database provided by OPCS can provide proxy data but the method to identify projects has not been consistent and raises concerns for data accuracy. To overcome this limitation, the IEG DRR database, DRM co-benefits databases, and a proxy database developed by ITS based on various taxonomies have been combined with sample manual checks. It is often difficult to calculate the exact amount that went to DRM interventions as activities may be embedded at the subcomponent level or activity level.
- Fast-evolving FCV settings make it difficult to crystallize experiences and lessons learned from ongoing DRM projects, in particular those in very early stages of implementation. In many FCV settings, conditions on the ground can change rapidly, making it difficult to implement DRM projects. In such settings, DRM projects may have to contend with issues such as sudden outbreaks of violence or changes in political leadership, which can impact the implementation and results of the project, thus impeding out collective ability to draw lessons learned at early stages of project implementation. Additionally, staff turnover means that new task teams may not be fully aware of past implementation challenges and lessons learned, leading to a lack of institutional memory.



# ANNEX 2. OVERVIEW OF GFDRR GRANTS FOR THE FCV-DRM NEXUS

#### 1. [Africa] Learning from Risk Management and Reconstruction in Africa

The grant looked at how DRM tools (such as risk mapping and crowd-sourced approaches) can provide an opening for policy dialogue on urban forced displacement, in particular when their impacts are not addressed by national and local governments. The project used methods trialed in African cities under the GFDRR's Open Cities Africa Project, such as crowdsourced data from mobile phones/OpenStreetMap, and remote-sensing imagery (drones or satellites), and complemented them with FCV practices such as refugee urban profiling (developed by Global Alliance for Urban Crisis), adapted to the local context of African cities.

#### 2. [Global] Flagship on Land, Conflict, and Inclusion

The objective was to understand access to land as a means of inclusive resilience in the contexts of disastercrisis and FCV. The project explored the role of land as an asset and coping mechanism; and access to land as a livelihood strategy fostering economic/social stability and inclusion.

# 3. [Guinea and Lake Chad region: Cameroon, Chad, Niger, Nigeria] Resilient development and planning in Guinea and the Lake Chad Region

The project promoted climate, disaster and conflict resilience in local development under the communitydriven Local Development Program in Guinea and the Lake Chad Region Recovery and Development Project. It developed a pilot Community Driven Development (CDD)/ Local Development DRM/FCV Risk Identification and Response Tool in Guinea and adapted it for the Lake Chad Region. The grant had two components which aimed to (1) understand, monitor and respond to DRM-FCV risks at the local and community level in Guinea, and (2) raise awareness of DRM-FCV risks in the Lake Chad region.

#### 4. [Haiti] Strengthening DRM at the local level in a fragile context.

The project supported the Government of Haiti to develop an innovative approach to generate technical and operational knowledge to (i) improve DRM at the local level by strengthening community engagement and local governments' capacities; (ii) strengthen DRM dialogue / feedback between local and national levels to improve services to the population, and to replicate this in other FCV settings. In particular, the project supported a hurricane preparedness communications campaign for the Civil Protection Directorate to improve shelter management and construction. Another output was a better understanding of citizen perceptions of DRM at local and national levels through a high-frequency phone survey, and of how to better integrate local, department and national levels in the DRM process.

#### 5. [Kenya] Strengthening Local Resilience to Climate Change and Conflict in Kenya

The grant developed climate-DRM/FCV approaches for early DRM to support peace and stability. It also enhanced country-level capacity to partner with communities to manage natural hazards/climate change and conflict in selected counties of Kenya; and helped communities in arid and semi-arid lands affected by climate hazards and FCV through participatory assessments. The grant has been used to assess methods to investigate climate-DRM/FCV in specific contexts; it has also supported county-level discussions on the framework/approach for integrated CCA/DRM/FCV assessment and resilience planning, including indicators to map and monitor causal pathways and make interventions.

#### 6. [Mozambique] Maputo City Climate and Social Vulnerability Risk Analysis and Action Planning

The grant supported collaborative action research on the intersectionality of poverty, urban crime, gender-based violence, and climate change in Maputo City to design multisector FCV-Disaster-Climate interventions for a forthcoming WBG-financed Maputo Project. The grant has financed the Maputo Risk Mapping and Spatial Analysis Project, including a detailed vulnerability map of Maputo down to 100m2 to direct use of funds from the Maputo Urban Transformation Project.

#### 7. [Myanmar] Strengthening Resilience and Collaboration for Disaster Preparedness and Response in Myanmar

The grant strengthens disaster and climate resilience of vulnerable communities, and collaborations of state and non-state actors in selected townships in conflict-affected areas of Myanmar. The project included two components: (i) hazard and risk profiles for conflict-prone townships in Mon, Kayin and Kayah States (funded through the DRM-FCV Nexus Program); (ii) assessment of interagency collaboration mechanisms for disaster preparedness and early warning system (funded by DFID under Challenge Fund program).

#### 8. [Papua New Guinea] PNG Sub-Regional Intersectional Risk Profiles

The project examined conflict and disaster dynamics in three sub-regions in PNG: Bougainville, East New Britain and the Highlands, and Hela. The autonomous island province of Bougainville is historically the most conflict affected sub-region in the country and is at risk of tsunamis and sea level rise; the provinces of Hela and the Southern highlands suffered from electoral disputes, conflicts over disaster relief, violence against girls and women, and earthquake, landslide, and drought risks. The risk profile analyses explore a range of data, views, and experiences regarding how disaster and climate risks are exacerbated by, or themselves may exacerbate, challenges related to violent conflict and/or fragile social and state institutions. This invites cross-disciplinary and cross-sectoral discussions with a diverse range of stakeholders with the hopes of establishing a richer, more informed base for disaster preparedness, response and climate adaptation actions in the challenging implementation environments in PNG. The approach taken to the FCV-disaster/climate nexus in PNG offers another way to pursue a wider-ranging and yet more nuanced discussion about risks and how we understand (and address) them.

#### 9. [Tajikistan] Strengthening Socio-Economic Resilience in Tajikistan through Conflict Sensitive DRM

The grant supported capacity building of national government counterparts, partners and local government officials to: i) monitor households' experiences of natural hazards and climate variation, coping mechanisms (i.e., migration, selling off assets, etc.) and the impact of shocks on conflict, including interpersonal violence and disputes; ii) help communities manage and resolve conflicts that emerge around land and property after disasters; and iii) prepare for disasters, and empower marginalized groups, such as female-headed households, to play prominent roles in disaster preparation. In particular, the project developed a conflict-sensitive DRM training manual and module for government officials.

#### 10. [Zimbabwe] Zimbabwe FCV sensitive Cyclone Recovery

The grant has provided just-in-time analysis to understand the links between disasters and fragility in Zimbabwe, and produced a draft, multi-sector risk framework to use in early recovery from the cyclone. The process adopted the same cross-disciplinary approach used in PNG.

# ANNEX 3. FRAGILITY AND RISK DIMENSIONS FOR GFDRR GRANTS

This analysis identifies fragility dimensions for each of the 10 GFDRR grants. The fragility categories are drawn from the OECD's Fragility Framework<sup>39</sup> which specifies five dimensions of fragility: security, societal, political, economic, and environmental. Disaster risk falls under environmental fragility, and is therefore not highlighted in the table and analysis, as all GFDRR grants address this dimension.

	Country	Fragility conditions				Risk conditions	
Grant		Security	Political	Societal	Economy	Main risks (high and medium)	Project focus
Learning from Risk Management and Reconstruction in Africa	Africa	x		x	x	Flood Water scarcity Extreme heat Wildfire Volcano Tsunami	Flood Water scarcity Cyclone
Flagship on Land, Conflict, and Inclusion	Global			x	x	Hydro- meteorological: floods, storms, droughts Geophysical: earthquakes, tsunamis, and volcanic eruptions Biological: epidemics and insect infestations	All (global); case study focus: Earthquake Flood
Community and development resilience to DRM and FCV risks in Guinea and the Lake Chad Region	Guinea and Lake Chad region			x	x	Flood Storm Landslide Extreme heat Wildfire Water scarcity	Flood Storm Extreme heat
Strengthening DRM at the local level in a fragile context	Haiti	x		x		Flood Landslide Cyclone / Hurricane Storm Wildfire Earthquake Water scarcity Extreme heat	Cyclone / Hurricane Flood Earthquake Pandemic (Covid 19)
Strengthening Local Resilience to Climate Change and Conflict in Kenya	Kenya			x	x	Flood Landslide Wildfire Volcano Earthquake Tsunami Water scarcity Extreme heat	Flood Drought (Water scarcity and Extreme heat)

<sup>39</sup> OECD (2022) States of Fragility 2022. Paris: OECD. Available: https://www.oecd.org/dac/states-of-fragility-fa5a6770-en.htm

		Fragility conditions				Risk conditions	
Grant	Country	Security	Political	Societal	Economy	Main risks (high and medium)	Project focus
Maputo City Climate and Social Vulnerability Risk Analysis and Action Planning	Mozambique	х		х	х	Flood Cyclone Extreme heat Wildfire Tsunami	Flood
Strengthening Resilience and Collaboration for Disaster Preparedness and Response in Myanmar	Myanmar	х		х		Flood Landslide Extreme heat Wildfire Earthquake Tsunami Cyclone	All, plus water scarcity
PNG Sub-Regional Intersectional Risk Profiles	Papua New Guinea	х		х		Earthquake Tsunami Volcano Landslide Flood Extreme heat Wildfire	All
Strengthening Socio-Economic Resilience in Tajikistan through Conflict Sensitive DRM	Tajikistan		х	х	x	Flood Earthquake Landslide Wildfire Water scarcity Extreme heat	All
Zimbabwe FCV sensitive Cyclone Recovery	Zimbabwe	х		х		Flood Water scarcity Wildfire Earthquake Cyclone Extreme heat	Cyclone



