IOM and the Sendai Framework:

A Global Review of IOM's Contributions

to Strengthening Disaster Resilience

IOM
UN MIGRATION

The opinions expressed in the report are those of the authors and do not necessarily reflect the views of the International Organization for Migration (IOM). The designations employed and the presentation of material throughout the report do not imply expression of any opinion whatsoever on the part of IOM concerning legal status of any country, territory, city or area, or of its authorities, or concerning its frontiers or boundaries.

IOM is committed to the principle that humane and orderly migration benefits migrants and society. As an intergovernmental organization, IOM acts with its partners in the international community to: assist in the meeting of operational challenges of migration; advance understanding of migration issues; encourage social and economic development through migration; and uphold the human dignity and well-being of migrants.

Cover photo: A young boy trudging through deep mud and river water on his way to school. His village in Ethiopia was flooded by heavy rains. © IOM 2018/Muse MOHAMMED

IOM and the Sendai Framework:

A Global Review of IOM's Contributions to Strengthening Disaster Resilience

IOM UN MIGRATION

ACKNOWLEDGEMENTS

CONTENTS

LIST OF ACRONYMS AND ABBREVIATIONS

CADRI   Capacity for Disaster Reduction Initiative

CADRE   Climate Adaptation, Disaster Risk Reduction, and Education

CADRE+   Climate Adaptation, Disaster Risk Reduction, and Education Plus

CBDRM   Community-Based Disaster Risk Management

CCA   Climate Change Adaptation

CCCM   Camp coordination and camp management

COP   Conference of Parties

DRM   Disaster risk management

DRR   Disaster risk reduction

DTM   Displacement Tracking Matrix

EWS   Early warning systems

HCT   Humanitarian Country Team

HRP   Humanitarian Response Plan

IDP   Internally displaced person

IEC   Information, education, and communication

IOM   International Organization for Migration

MCOF   Migration Crisis Operational Framework

MEND   Mass Evacuation in Natural Disasters

MICIC   Migrants in Countries in Crisis Initiative

NGO   Non-governmental organization

NFI   Non-food item

PDD   Platform on Disaster Displacement

SDG   Sustainable Development Goal

UNCT   United Nations Country Team

UNDAF   United Nations Development Assistance Framework

UNDRR   United Nations Office for Disaster Risk Reduction

UNFCCC   United Nations Framework Convention on Climate Change

UNHCR   United Nations High Commissioner for Refugees

WASH   Water, sanitation, and hygiene

EXECUTIVE SUMMARY

Reducing disaster risk is critical to the success of the 2030 Agenda for Sustainable Development. The International Organization for Migration (IOM) supports Member States in integrating mobility in strategies that reduce risk and build resilience. In line with the Sendai Framework for Disaster Risk Reduction 2015–2030[1] and underpinned by broad multi-stakeholder engagement, these efforts harness dimensions of mobility in prevention and preparedness, respond to disaster displacement when it cannot be avoided, and promote resilience and durable solutions in recovery and reconstruction. This report examines the progress made in 2018 for the implementation of IOM's Strategic Work Plan on Disaster Risk Reduction and Resilience 2017–2020, adopted three years ago. The findings presented are grounded in data collected from 65 IOM country offices worldwide.

The report highlights the following key findings:

- IOM maintains a significant and growing portfolio of programming in disaster risk reduction (DRR). In 2018, the Organization implemented 102 DRR-related projects in 65 countries, with a value of approximately USD 251 million. This work supported 4,576,933 individuals and included direct training for 235,587 community members in 704 communities.

- Recognizing Member States' responsibility for DRR, IOM's projects promoted strong government engagement and participation, with 7,941 government officials benefiting from direct training and technical support. These efforts strengthened countries' existing DRR capacities and systems to foster national ownership and leadership at all levels of government, including through the integration of displacement and migration considerations in national DRR planning and programming.

- In 2018, IOM increased support across several DRR global-level output indicators,[2] including the following: (a) community-based DRR in 27 countries; (b) capacity-building on the links between migration, environment, and climate change in 33 countries; (c) non-food item (NFI) pre-positioning in 19 countries; and (d) public health emergency preparedness in 17 countries. Additionally, IOM led multiple emergency responses, including in Indonesia and the Philippines, which saw major displacement from an earthquake and subsequent tsunami and a typhoon and ensuing landslides.

- To deliver DRR, IOM forged partnerships with 79 local, national, and international non-governmental organizations and civil society partners to incorporate local knowledge, capacities, and resources to promote better ownership and sustainability of DRR beyond IOM's engagement.

The scale, complexity, and duration of disasters are expected to increase as weather and climate events become more frequent, intense, and unpredictable, and people's coping capacity and resilience are eroded. With growing urban centres, rising inequalities, and inadequate governance systems to manage risks, displacement is also expected to increase. Those with enough resources may opt to migrate, but often confront new exposure and vulnerability in urban contexts. Additionally, disasters are occurring in conflict affected or fragile contexts,[3] and are often characterized by pre-existing internal and cross-border migration dynamics. In turn, these dynamics can contribute to complex, protracted crises where

---

1   The Sendai Framework calls for focused investments within and across sectors by States at local, national, regional, and global levels in the following four priority areas: (a) understanding disaster risk; (b) disaster risk governance; (c) investing in resilience; and (d) build back better. This framework asks the UN system to support the implementation of these priorities coherently within the 2030 Agenda and other relevant international agreements.

2   All survey indicators are further defined in Annex 1.

3   Additional information on IOM's role in preparedness in conflict settings can be found in IOM, 2018b.

the most vulnerable are disproportionately impacted. Such contexts require the following: (a) new and tailored approaches; (b) better data and analysis on the nexus of migration, environmental and climate change, and conflict; (c) expanded collaboration with non-traditional DRR actors; and (d) concerted efforts to bring the humanitarian, development, and peace spheres closer together to prevent crisis. As we move into 2020, IOM and its partners in the United Nations system and beyond will need to maintain their collective commitment to support Member States' efforts by working collaboratively in increasingly complex environments.

1. INTRODUCTION

1.1. Context

With the number of international migrants estimated to be nearly 272 million globally,[4] more people are on the move than ever before. Migration has been, and always will be, a strategy that people rely on to build resilience and cope with shocks, including by successfully adapting to environmental change. Additionally, migrants make important contributions to economic, social, and cultural development in their countries of destination and origin. However, millions of people are displaced every year by disasters or compelled to migrate due to environmental stressors. An average of 24 million new displacements per year were recorded between 2008 and 2018, which is three times higher than for people displaced by conflict and violence.[5]

Climate-related events are the number one cause of disaster displacement. They account for more than 87 per cent of all displacement globally. For instance, the risk of being displaced by extreme weather events, such as tropical cyclones and monsoon rains, is seven times higher than that of being displaced by earthquakes and volcanic eruptions.[6] Furthermore, an unknown but significant number of people are pushed into displacement every year as a result of slow-onset events and processes, such as drought, rising sea levels, and desertification, which are increasingly driven by global and local environmental change.

While those living in the poorest countries are the least responsible for the global environmental crisis, they frequently have the highest levels of vulnerability and are disproportionately impacted. In addition, disasters often occur in conflict-affected or fragile contexts. When disasters and conflict intersect, it can lead to further pressures on scarce resources and limit investments in disaster risk reduction (DRR) and recovery. This can further fuel ongoing or latent conflict, and aggravate displacement risk and humanitarian need. Those that are already vulnerable – such as women, children, youth, and those on the move – feel the effects the most.

It is expected that both sudden- and slow-onset disasters – amplified by issues such as unsustainable ecosystem use, climate change, conflict, urbanization, and water scarcity – will increase disaster displacement in the years to come and further compel people to migrate within and across borders. Without urgent climate action, as many as 140 million people may migrate internally across sub-Saharan Africa, South Asia, and Latin America by 2050 due to environmental factors.[7]

1.2. IOM's efforts in disaster risk reduction and key global frameworks

Given the extent and complexity of challenges, the International Organization for Migration (IOM) has increased efforts in recent years to support Member States in preventing disasters and addressing related population movements. In the lead-up to the World Conference on Disaster Risk Reduction, the 2015 Paris Conference of Parties (COP) and the 2030 Agenda for Sustainable Development (2030 Agenda), the Organization worked with Member States and partners to ensure that appropriate attention was given to displacement and mobility dimensions within the final agreements. IOM also supported the inclusion of these topics in the Global Compact for Safe, Orderly, and Regular Migration.[8] This compact explicitly highlights the need to address the drivers of large-scale movements, prevent and prepare for disaster-induced population movements, and include migrants in disaster risk management (DRM) efforts.

---

4   United Nations Department of Economic and Social Affairs, n.d.; International Labour Organization, 2018.

5   Internal Displacement Monitoring Centre (IDMC), 2019.

6   Oxfam, 2019.

7   Rigaud et al., 2018.

8   United Nations, 2018a.

IOM is committed to maintaining and strengthening its support for Member States to implement actions to reduce disaster risk and build resilience, and to help them meet their 2020 and 2030 targets under the Sendai Framework for Disaster Risk Reduction 2015–2030 (Sendai Framework), Paris Agreement, and Sustainable Development Goals (SDGs). The Organization works closely with the United Nations Office for Disaster Risk Reduction (UNDRR) to ensure its activities and operations are aligned with system-wide efforts and initiatives, in accordance with the United Nations Plan of Action on Disaster Risk Reduction for Resilience (UN Plan of Action).[9] Updated in 2016, the UN Plan of Action provides the blueprint for maximizing the joint impact of UN action and support for countries to strengthen coherence, risk-inform development planning, and ensure that no one is left behind.

To operationalize its commitments and guide the DRR and partnership activities of IOM's country offices, IOM elaborated a four-year plan of action in 2017. Launched on the occasion of the Global Platform in Cancun, *Taking Sendai Forward: IOM Strategic Work Plan on Disaster Risk Reduction and Resilience 2017–2020* is helping to improve the Organization's ability to measure progress on DRR across 47 distinct activity areas – including through contributions to the United Nations system – while seeking to foster a more coherent, institution-wide approach based on IOM's mandate and comparative advantage.

1.3. The purpose of this report

The purpose of this report is to provide a detailed overview of IOM activities in DRR in 2018 and evaluate the progress of implementation measured against initial targets established in IOM's Strategic Work Plan on Disaster Risk Reduction and Resilience 2017–2020 (Strategic Work Plan). The report presents key findings and lessons learned based on the Organization's global survey of 102 projects in 65 countries. It also highlights how IOM is increasingly working in an integrated manner with UN and non-UN partners to advance the priorities of the Sendai Framework by integrating mobility aspects into risk reduction and resilience building.

---

9   United Nations, 2016a.

2. IOM'S APPROACH AND COMPARATIVE ADVANTAGE

IOM's approach to risk reduction is based on the premise that exposure, vulnerability, and capacity are profoundly influenced by people's mobility options and choices. While mobility is often a causal factor for risk, under the right circumstances, it is also an essential response and strategy that can contribute to resilience and support successful coping and adaptation.[10] With the definition of disaster risk categorizing that such risk could occur within a system, society, or a community in a specific period of time,[11] DRR seeks to prevent new and reduce existing disaster risk and manage residual risk to achieve sustainable development.[12] As the global migration agency, IOM contributes to these efforts by strengthening State capacity to prevent displacement and manage mobility, in line with relevant provisions in the Sendai Framework. Through four specific objectives, the Organization advances mobility-based strategies in DRR and resilience,[13] with a focus on migrants, displaced people, at-risk communities, and other vulnerable population categories.

Figure 1. IOM's objectives on disaster risk reduction and resilience

Reduce disaster-induced displacement by harnessing the dimensions of mobility in prevention and preparedness
(linked to Outcome 1 and 2)

Strengthen resilience by building back better in recovery and reconstruction
(linked to Outcome 4)

Mitigate the impacts of displacement through risk-informed response
(linked to Outcome 3)

Expand and strengthen partnerships to support integration of mobility in global risk reduction efforts
(linked to Outcome 5)

Source: IOM, 2017.

To achieve these objectives, the Organization relies on its highly decentralized and agile operational business model, which allows for responsiveness to local contexts and needs. Operating at national, subnational, and local levels, IOM is able to incorporate the specific needs of beneficiary groups into national frameworks and programming that aim to prevent displacement as much as possible, or enable well-organized movement of and assistance to individuals in situations where displacement proves unavoidable. Through "build back better" measures, IOM's efforts contribute to durable solutions to displacement by strengthening resilience in post-disaster recovery and reconstruction efforts.

Guided by the Organization's global migration governance policies and with a presence in 173 countries through a network of 436 offices, IOM's DRR programming draws on more than two decades of experience and expertise in addressing drivers of risk and managing mobility in complex crisis environments. As mobility can result in both new risks and strengthened resilience, IOM maintains a

---

10 Guadagno, 2017.

11 United Nations, 2016b.

12 Ibid.

13 IOM, 2017.

participatory community-engagement approach throughout its DRR, disaster response, and recovery interventions in creating conditions to maximize positive outcomes and reduce negative impacts for households, communities, and systems.[14] As a result, IOM can contribute to hazard resilience and make communities better able to cope when displacement occurs. The Organization's actions are shaped by its responsibilities within the cluster approach, notably as co-lead of the Global Camp Coordination and Camp Management (CCCM) Cluster, in which IOM specifically takes the lead in disasters. Furthermore, IOM's programming is supported with data through the Displacement Tracking Matrix (DTM), which uses a range of methods and technologies to inform interventions that are locally relevant and responsive to evolving needs.

Figure 2. IOM's comparative advantage
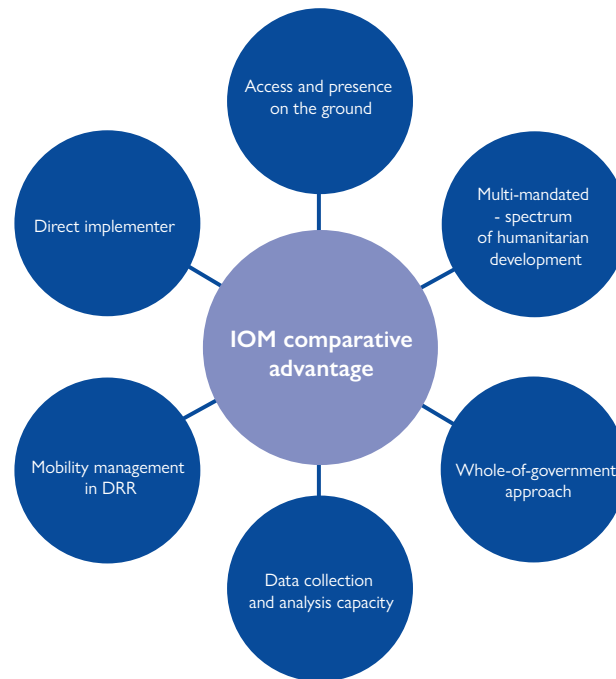
Source: IOM, 2018a.

At the country level, DRR constitutes a core service sector in several contexts and is integrated in IOM's institution-wide Migration Crisis Operational Framework (MCOF).[15] MCOF permits IOM to incorporate risk reduction goals into country-level planning processes to build resilience in relation to the 2030 Agenda. At the country level, DRR is promoted in stand-alone initiatives, but also as a cross-cutting issue in other programme areas. In its capacity as a member of the United Nations Country Teams (UNCTs) and Humanitarian Country Teams (HCTs), the Organization contributes to addressing mobility challenges through DRR as part of a UN system-wide prevention effort in line with what is set out by the 2016 UN Plan of Action.

Furthermore, IOM recognizes the importance of a whole-of-government approach to DRR and utilizes its strong government ties to address migration challenges and build partnerships across ministries. Other established DRR partnerships include academia, civil society, diaspora networks, local and national governments, local and international non-governmental organizations (NGOs), the private sector, and UN agencies. Additionally, to promote sustainability, IOM builds the capacity of local actors that will remain engaged beyond the duration of IOM's programmes.[16]

---

14 IOM, 2018a.

15 MCOF is a practical, operational, and institution-wide strategic planning tool to improve and systematize the way in which the Organization supports States and partners to better prepare for and respond to migration crises. IOM Member States unanimously adopted Resolution 1243, endorsing the Migration Crisis Operational Framework (MCOF) in 2012.

16 IOM, 2018a.

3. IOM'S DISASTER RISK REDUCTION ACTIVITIES IN 2018: A SNAPSHOT

| 102 DRR projects | 65 countries | USD 251 million |
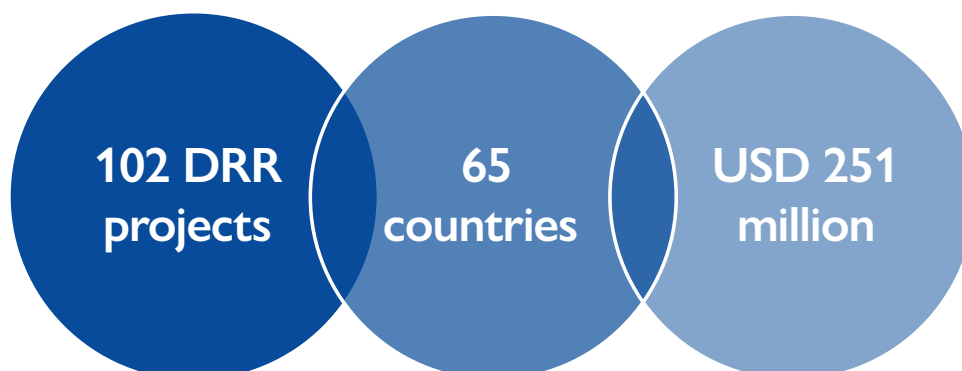
In 2018, IOM implemented 102 DRR-related projects in 65 countries with a value of approximately USD 251 million. Through these projects, the Organization reached 4.6 million individuals in 704 at-risk communities. IOM also trained 235,587 community members and 7,941 government officials on DRR.

4,576,933 individuals directly supported	704 communities
DRR project beneficiaries, 2018	
235,587 community members trained	7,941 government officials trained
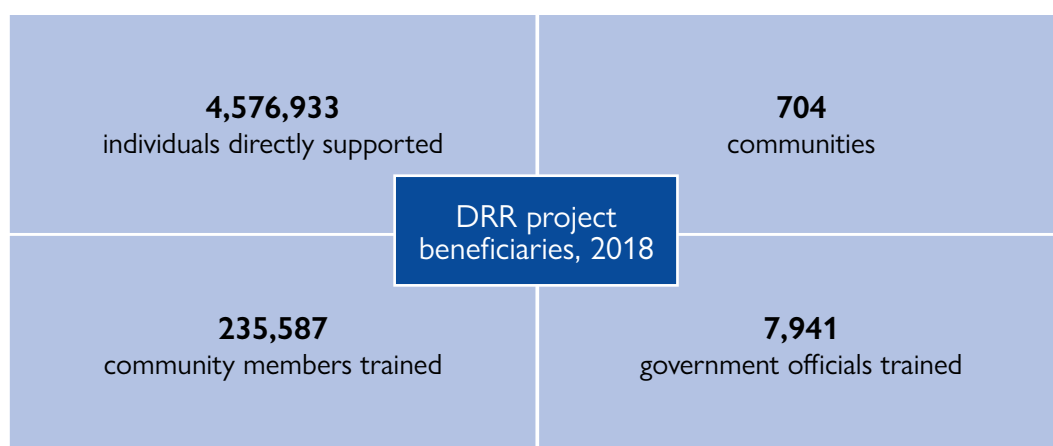
Most programming took place in Asia and the Pacific and Africa regions (Figure 3). For example, 44 per cent of DRR projects were implemented in Asia and the Pacific, while Eastern Africa accounted for 24 per cent. This was followed by Central and West Africa at 12 per cent, Central and North America and the Caribbean at 8 per cent, Southern Africa at 3 per cent, and the remaining countries at a combined 10 per cent (Figure 4). According to the Internal Displacement Monitoring Centre (IDMC), 46 per cent of disaster-induced internal displacements occurred in the East Asia and Pacific region in 2018,[17] suggesting that IOM focused on the regions that were most impacted.

In 2018, most of IOM's projects focused on flash floods, with landslides, river flooding, cyclones, droughts, and earthquakes respectively following behind (Figure 5). The Organization also supported Member States with projects associated with coastal flooding, epidemics, extreme temperatures, tsunamis, volcanic eruptions, and wildfires (Figure 6). While some hazard types were not as prominent as others, the broad spectrum of hazards with implications for displacement highlights the importance of multi-hazard approaches that address risks across varying scales and time frames.

---

17 IDMC, 2018.

Figure 3. Number of countries and projects by region, 2018
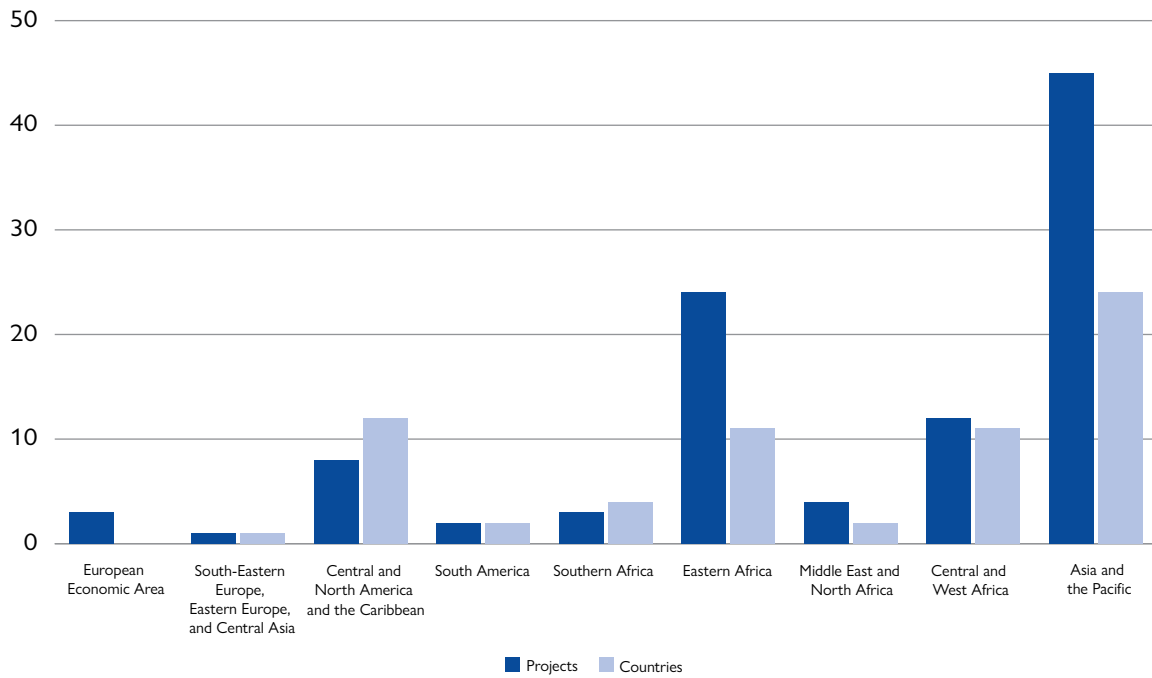
Note: Figures are based on data from the survey results.

Figure 4. IOM disaster risk reduction projects by region, 2018
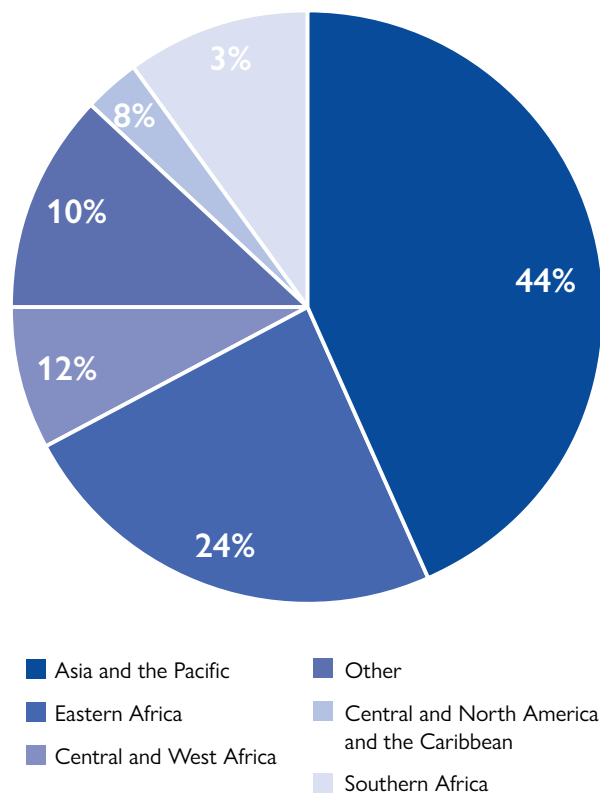
Note: Figures are based on data from the survey results.

Figure 5. IOM disaster risk reduction projects by hazard type, 2018

Hazard type	Number of projects
Coastal flooding	21
Cyclone	25
Drought	25
Earthquake	24
Epidemic	20
Extreme temperatures	11
Flash flooding	46
Landslide	30
River flooding	29
Tsunami	15
Volcanic	5
Wildfire	5
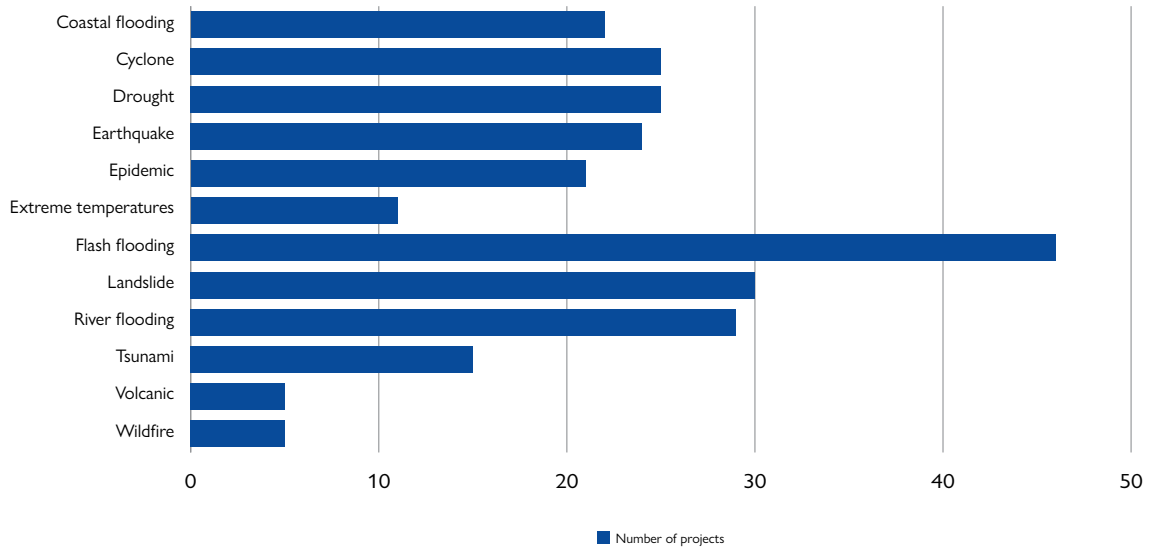
■ Number of projects

Note: Figures are based on data from the survey results.

Figure 6. Number of Member States supported by hazard type, 2018

Hazard type	Number of projects
Coastal flooding	25
Cyclone	26
Drought	25
Earthquake	12
Epidemic	16
Extreme temperatures	16
Flash flooding	35
Landslide	25
River flooding	23
Tsunami	19
Volcanic	4
Wildfire	4

■ Number of projects
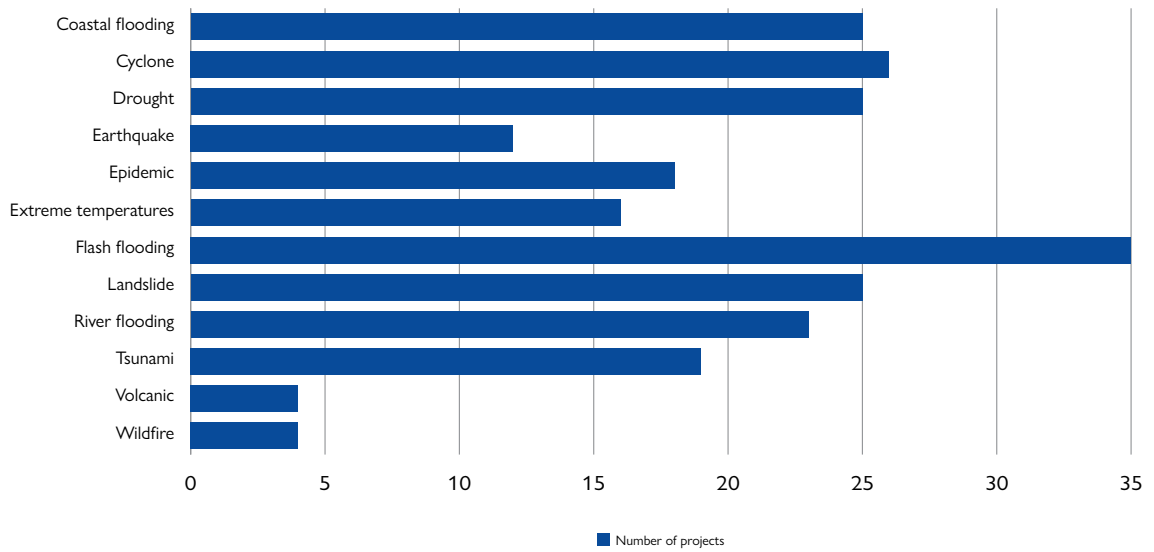
Note: Figures are based on data from the survey results.

Figure 7. Disaster risk reduction projects by disaster phase, 2018

Legend: ■ Preparedness ■ Prevention ■ Response ■ Recovery

Pie chart segments: 37%, 34%, 18%, 11%
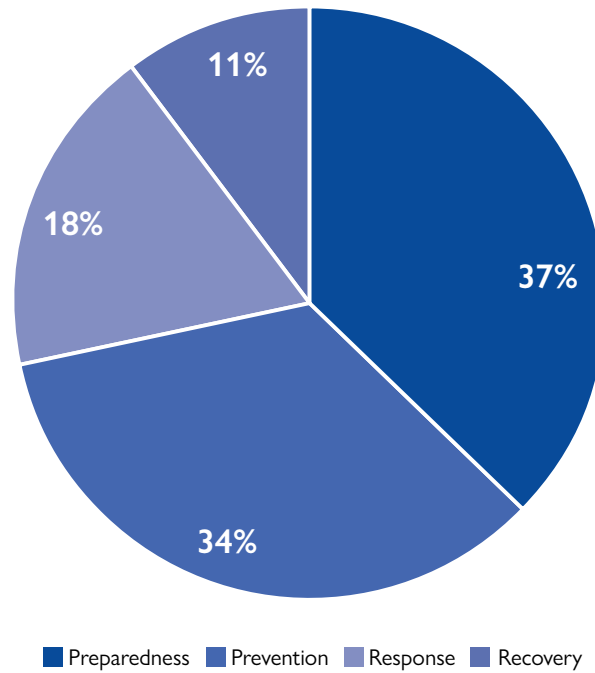
Note: Figures are based on data from the survey results.

In 2018, IOM supported Member States with DRR through both pre- and post-disaster measures, as well as through emergency response. For instance, 64 projects focused on prevention, 70 on preparedness, 35 on response, and 21 on recovery measures (Figure 7). In turn, 57 countries were assisted through prevention, 42 through preparedness, 17 through response, and 14 through recovery efforts.

Countries and territories benefiting from IOM disaster risk reduction programming during 2018

Asia and the Pacific:

Afghanistan	Malaysia	Papua New Guinea
Bangladesh	Marshall Islands	Philippines
Cambodia	Federated States of Micronesia	Republic of Korea
Cook Islands	Mongolia	Thailand
Fiji	Myanmar	Timor-Leste
Indonesia	Nepal	Tuvalu
Kiribati	Pakistan	Vanuatu
Lao People's Democratic Republic	Palau	Viet Nam

Central and North America, and the Caribbean:

Anguilla	Martinique
Antigua and Barbuda	Montserrat
British Virgin Islands	Saint Kitts and Nevis
Dominica	Saint Lucia
Guatemala	Saint Vincent and the Grenadines
Haiti	United States of America

Central and West Africa:

Burkina Faso	Guinea
Cameroon	Guinea-Bissau
Chad	Niger
Democratic Republic of the Congo	Nigeria
Gambia	Senegal
Ghana	Sierra Leone

Eastern Africa:

Burundi	Rwanda
Djibouti	Somalia
Ethiopia	South Sudan
Kenya	Uganda

Middle East, and North Africa:

Iraq	Yemen

Southern Africa:

Madagascar	Mozambique
Mauritius	Namibia

South America:

Plurinational State of Bolivia	Colombia

South-Eastern Europe, Eastern Europe, and Central Asia:

Bosnia and Herzegovina

IOM DISASTER RISK REDUCTION ACTIVITIES IN 2018

THE UNITED STATES OF AMERICA - 1
THE BRITISH VIRGIN ISLANDS - 1
ANGUILLA - 1
SAINT KITTS AND NEVIS - 1
ANTIGUA AND BARBUDA - 1
MONTSERRAT - 1
DOMINICA - 1
MARTINIQUE - 1
HAITI - 5
SAINT LUCIA - 1
SAINT VINCENT AND THE GRENADINES - 1
GUATEMALA - 1
COLOMBIA - 1
PLURINATIONAL STATE OF BOLIVIA - 1

BOSNIA AND HERZEGOVINA - 1
MONGOLIA - 1
REPUBLIC OF KOREA - 1
IRAQ - 2
AFGHANISTAN - 2
NEPAL - 2
BANGLADESH - 7
PAKISTAN - 1
MYANMAR - 7
CHAD - 1
SENEGAL - 3
THE NIGER - 1
SOUTH SUDAN - 2
YEMEN - 3
GUINEA BISSAU - 1
THE GAMBIA - 1
NIGERIA - 4
DJIBOUTI - 2
ETHIOPIA - 3
GUINEA - 4
CAMEROON - 1
SOMALIA - 11
SIERRA LEONE - 3
UGANDA - 1
KENYA - 3
BURKINA FASO - 1
GHANA - 2
RWANDA - 1
THE CONGO - 1
BURUNDI - 4
MADAGASCAR - 3
MAURITIUS - 1
MOZAMBIQUE - 1
NAMIBIA - 1

LAO'S PEOPLE'S DEMOCRATIC REPUBLIC - 2
THAILAND - 2
VIET NAM - 2
THE PHILIPPINES - 3
MALAYSIA - 2
CAMBODIA - 2
INDONESIA - 2
TIMOR-LESTE - 2
PALAU - 3
FEDERATED STATES OF MICRONESIA - 6
THE MARSHALL ISLANDS - 3
PAPUA NEW GUINEA - 7
TUVALU - 1
VANUATU - 3
KIRIBATI - 1
FIJI - 1
THE COOK ISLANDS - 1

NUMBER OF DRR PROJECTS | 1 | 2-5 | 6-10 | 11-15

THE BOUNDARIES AND NAMES SHOWN AND THE DESIGNATIONS USED ON THIS MAP DO NOT IMPLY OFFICIAL ENDORSEMENT OR ACCEPTANCE BY THE UNITED NATIONS OR THE INTERNATIONAL ORGANIZATION FOR MIGRATION.

Notes: This map was produced by IOM's Media and Communications Department. Figures are based on data from the survey results.

This map is for illustration purposes only. The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by IOM.

3.1. Strategic outcome 1: Prevention – Making migration a choice rather than a necessity

In 2018, IOM implemented disaster prevention activities through 64 specific projects in 57 countries. By reducing existing risk and preventing future risk, these projects contributed to creating safer local environments for people to stay in, without having to resort to displacement or migration.

64 projects included prevention	**57 countries** supported on prevention
Prevention	
33 countries supported with capacity-building on migration, environment, and climate change	**24 countries** supported with institutional capacity-building on DRR

Specifically, IOM supported hazard mapping and risk assessments in 26 countries. These efforts assessed the nature and extent of hazards, exposure, vulnerability, and capacities. They also helped inform planning and programming at local, subnational, and national levels. Many assessments adopted community-based approaches, which enabled the identification of risk reduction actions that were locally owned and suitable for the local context.

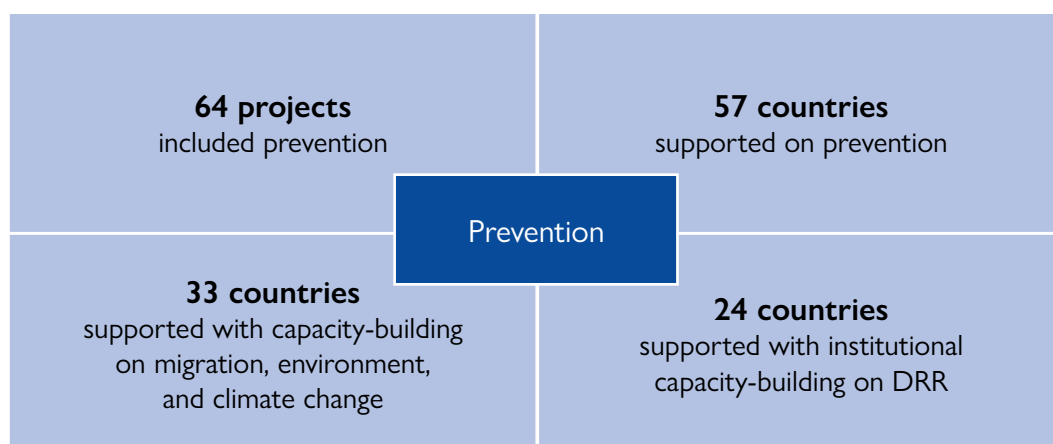For example, in Papua New Guinea, IOM supported highland, coastal, and outer atolls communities to assess risks of earthquakes, landslides, cyclones, river and coastal flooding, tsunamis, and sea-level rise. In Ghana, Guinea, Guinea-Bissau, Senegal, and Sierra Leone, the Organization supported assessments regarding the risk of disease importation and transmission and identified vulnerable hotspots for the prioritization of early warning and early action measures.

Capacity-building for resilience: Reducing disaster risks in Palau

Palau lies along the typhoon belt in the Western Pacific Ocean, rendering the more than 300 islands exposed to weather-related hazards and rising sea levels. Although only nine of these islands are inhabited, the population of Palau needs to take urgent preventive measures to reduce such risks. In cooperation with the Ministry of Education, the National Emergency Management Office, and civic action teams, IOM implemented the Alii CADRE programme (Climate Adaptation, Disaster Risk Reduction, and Education Programme). Alii CADRE contributed to improved awareness of climate and disaster risks among students and teachers by integrating climate change adaptation (CCA) and DRR learning modules in the national science curriculum. The programme also included infrastructure assistance, such as upgrading and maintaining water systems at schools and providing typhoon shutters.

Closely associated with this work, IOM implemented community-based disaster risk management (CBDRM) projects in 17 countries. CBDRM efforts empowered communities to identify and implement small-scale projects by adopting participatory, community-driven planning processes inclusive of vulnerable groups. For instance, in Afghanistan, Bangladesh, Iraq, Myanmar, Palau, and Somalia, IOM supported upgrades in infrastructure that were vital for livelihoods and service delivery in vulnerable areas. In Timor-Leste, IOM supported an initiative to reinforce riverbanks and reduce seasonal flooding.

A teacher in Pohnpei, the Federated States of Micronesia, asked children to name known hazards, ensuring that students are aware of the various hazards that might affect the small Pacific islands. © IOM 2017/Muse MOHAMMED

In addition, IOM sponsored school-based information campaigns and community outreach activities in Afghanistan, Bangladesh, Burundi, Colombia, the Federated States of Micronesia, the Marshall Islands, Myanmar, the Philippines, and Sierra Leone. These campaigns delivered targeted trainings to help raise awareness and stimulate discussion regarding the risks communities face and how to address them.

Under the CBDRM framework, IOM implemented projects in 22 countries that promoted traditional, indigenous, and local knowledge and practices in DRR. In Sierra Leone, IOM supported the establishment of people-centred warning techniques based on traditional methods, such as weather forecasts based on the behaviour of certain animals. For instance, when it rains in southern Sierra Leone and many frogs appear in the middle of town, it is an indication of an upcoming flood, which will require the evacuation of people living close to the riverbanks. In other Sierra Leone communities, the appearance of a rare bird is thought to be a warning that there will be a poor harvest due to limited rainfall, allowing people that rely on subsistence farming to plan for a potential food shortage. In Afghanistan, traditional warning methods include volunteers that travel to hilly areas to assess the situation during a rainy day and inform people in their community to evacuate before a flood might hit their village. Some communities also use drums and fire on the hilly areas to signal that downstream villages are in danger.

IOM distributed 1,000 copies of DRR booklets to 20 schools in the municipalities of Baucau, Bobonaro, Ermera, Manatuto and Viqueque in Timor-Leste. © IOM 2018

IOM also worked to prevent the risk of disease outbreak and strengthen health systems. This assistance was provided in 15 countries. Examples include Djibouti, Ghana, Guinea, Guinea-Bissau, Senegal, Sierra Leone, Somalia, South Sudan, and Yemen, where IOM health trainings and hygiene awareness-raising sessions focused on especially vulnerable communities. As part of a cholera prevention initiative, IOM reached more than 60,000 beneficiaries by providing information through house-to-house outreach activities in Yemen. In Somalia, IOM coordinated mass vaccinations and trained health workers to prevent, detect, and respond to disease outbreaks.

> **Assessing disaster impacts on women and girls in the Federated States of Micronesia**
>
> Given the country's geographic location, and due to climate change, the inhabitants of the Federated States of Micronesia are increasingly exposed to tropical storms and other weather-related hazards. In 2018, IOM sponsored a study investigating the effects of disasters on women and girls' health and security. The study included exploratory knowledge mapping, surveys with 422 female participants, and 20 focus group discussions with both female and male participants. The study found that in times of disaster, women and girls face disproportionate levels of exposure to violence and health risks due to prevailing gender inequalities in decision-making before, during, and after a disaster. In contrast, findings showed that male participants were more familiar with disaster planning and had better access to early warning information. The resulting report[18] sets out recommendations for local and international actors to more effectively incorporate previously neglected gender concerns in development and humanitarian interventions within the Federated States of Micronesia.

To support the production and dissemination of information, education, and communication (IEC) materials in 27 countries, IOM produced training manuals on community-based DRR, which provided a resource for teachers and government officials to train schoolchildren in Sierra Leone and Timor-Leste.

The Organization also supported planned relocations in 13 countries. For instance, in Rwanda, IOM relocated vulnerable households living in areas exposed to recurrent flash floods and landslides. In Viet Nam, IOM contributed to the development of the manual for *Planned Relocation for Communities in the Context of Environmental Change and Climate Change,*[19] which aims at empowering communities for local-level planning and implementing relocation projects. The Organization also partnered with Georgetown University, the Global Knowledge Partnership on Migration and Development, and the United Nations High Commissioner for Refugees (UNHCR) to support a regional workshop in Costa Rica on planned relocation for States in Central America.

Additionally, IOM harnessed labour mobility, diaspora resources, and remittances for investment in risk reduction and CCA. This was done by conducting a study and a survey that identified the involvement of the Filipino, Bangladeshi, and Haitian diasporas in disasters and alternative approaches to safer shelters. IOM also provided trainings on hazard-resistant construction to diaspora members and conducted assessments on the contributions of diaspora communities for disaster mitigation, through activities such as remittance transfers. Overall, the project identified important resources that diaspora members can provide through financial, social, political, and other forms of support, and identified gaps and opportunities for future engagement.

To strengthen disaster resilience, the Organization supported 10 countries with targeted livelihood interventions. In Bangladesh, IOM provided Rohingya refugees and host communities with cash-for-work opportunities linked to soil stabilization and dredging to maintain drainage canals. Additionally, to reduce vulnerability, at-risk individuals in host communities received tailored livelihood plans based on livelihood

18 Gombas, Gruss, and Nyawara, 2018.
19 IOM and Institute of Sociology, Ha Noi, 2017.

Rohingya refugees employed by IOM through a cash-for-work scheme reinforced a slope in Balukhali Rohingya refugee settlement, Bangladesh. © IOM 2018/Olivia HEADON

assessments and a grant or asset to implement these plans. In Rwanda, up to 220 members of the most vulnerable households gained improved access to non-farm labour markets through vocational and financial literacy training, and business development.

In addition, IOM championed several initiatives to enhance knowledge surrounding DRR for strategic planning, policy reform, and advocacy by coordinating with multiple actors. For instance, IOM backed 16 countries to develop or update their DRR and CCA strategies and plans and 17 countries to risk-inform their national or local development strategies. In Bangladesh, IOM collaborated with local government authorities, disaster management committees, community-based organizations, cyclone shelter management committees, and other stakeholders to update risk reduction action plans for areas hosting Rohingya refugees in the Cox's Bazar district. These plans later served as an input to strengthen annual development plans at the municipal level.

Furthermore, IOM provided institutional capacity-building on DRR to 24 governments. Distinctively, the Organization worked with the National Disaster Risk Reduction and Management Authority in Nepal to support the roll-out of the new national DRR Act at the municipal level through capacity assessments and tailored trainings on DRM and post-disaster recovery. IOM also seconded a senior DRR expert within the National Disaster Risk Reduction and Management Authority, supported high-level dialogue and workshops, and organized stakeholder consultations and media advocacy campaigns.

By facilitating multi-stakeholder platforms for DRR coordination in 18 countries, IOM also brought together civil society, diaspora, and other stakeholders to promote disaster resilience. For example, in Indonesia, IOM supported a provincial-level meeting of the Aceh DRR Forum, which developed DRR recommendations surrounding enhanced public information, contingency planning, and risk mapping.

IOM continued its policy and research work to examine the links between migration, environment, and climate change in 11 countries. For instance, in collaboration with communities and authorities in six municipalities, IOM sponsored a research project to assess the effects of climate change on migration patterns in the Bolivian Altiplano. By reviewing current literature that examines the connections between environmental degradation, climate change, and migration globally,[20] IOM produced a paper on the impact of disasters on human mobility[21] and another paper on the CCA policy as a response.[22]

---

20 Flavell, Milan, and Melde, 2020.

21 Flavell, Melde, and Milan, 2020.

22 Wright, Tänzler, and Rüttinger (forthcoming).

Renewable energy for displaced people and local communities in Ethiopia, Iraq, Kenya, Nigeria, Somalia, and Uganda

IOM is a member of the steering committee of the Safe Access to Fuel and Energy global working group. As many refugee camps use generators that consume large amounts of fuel and create high recurrent costs for already cash-poor refugee households, the Organization recognized the importance of green energy solutions in humanitarian interventions. Through a project that spans Ethiopia, Iraq, Kenya, Nigeria, Somalia, and Uganda, IOM introduced renewable energy solutions to increase the water supply for local communities and refugee and internally displaced persons (IDP) camps in drought-prone areas. The project contributed to reducing recurrent household expenditures and promoted clean energy. IOM also supported the development of technical briefs to promote solar energy, a *Build Back Better* manual for water supply infrastructure, and national guidelines on solar pumping. As a result, the Energy Research Centre at Strathmore University in Nairobi included the Solar Water Pumping Training in its curriculum, which ensured continuous training for engineers of water, sanitation, and hygiene (WASH) stakeholders in the region.

Complementing these research efforts, IOM delivered capacity-building on migration, environment, and climate change, benefiting 33 countries. For example, a regional initiative for the Cook Islands, Fiji, Kiribati, the Marshall Islands, Palau, Papua New Guinea, Tuvalu, and Vanuatu created a shared understanding of key issues and policy priorities around migration, displacement, and planned relocation in the context of disasters and climate change. The project generated recommendations for the development of a regional framework that addresses identified challenges.

To improve planning processes, IOM strengthened initiatives in 14 countries to review gaps in DRR and CCA policies, plans, programmes, and investments. For example, a project that focused on the Asia regional migration programme facilitated Vietnamese officials to travel to Bangkok to learn how to include migrants in DRM and use MCOF to support disaster planning and response. This strengthened the development of an upcoming national plan for flood prevention and control. In support of the priorities of the United Nations Framework Convention on Climate Change (UNFCCC), IOM also assisted the mapping of national climate and DRR policies to develop recommendations for the Executive Committee of the Warsaw International Mechanism for Loss and Damage.

The Organization also helped six governments develop multisectoral loss databases. These efforts helped improve national capacities to monitor and report against the global targets of the Sendai Framework. For instance, IOM collaborated with the Afghanistan Disaster Management Authority to develop a national disaster management information system, which is now active in all 34 provinces of the country. The system contributed to collecting, organizing, and reporting disaster information based on disaggregated damage and lost data across sectors.

Throughout the year, IOM helped 16 countries develop DRR thematic guidelines and tools. One example is a project in the Plurinational State of Bolivia, which produced guidelines for developing tailored local action plans and policies to improve DRR and CCA measures. In Vanuatu, another example is shown through IOM's assistance in developing trainer guidelines to help the Government integrate environmental protection measures in displacement contexts, as proposed during the gap review.

IOM's prevention work also included public and advocacy events dedicated to DRR, with support for such initiatives in six countries. For example, the Federated States of Micronesia, the Marshall Islands, Myanmar, and Sierra Leone planned various activities to mark the International Day for Disaster Risk Reduction. IOM statements, publications, and communication products were also part of IOM's DRR outreach strategy.

3.2. Strategic outcome 2: Preparedness – Building capacity for response

In 2018, IOM implemented projects in 42 countries to strengthen preparedness for response. These efforts helped communities and governments better prepare for, respond to, cope with, and recover from disasters and displacement in line with Priority 4 of the Sendai Framework.

70 projects included preparedness	**42 countries** supported on preparedness
17 countries supported with community-based preparedness	**19 countries** supported with non-food item pre-positioning hubs
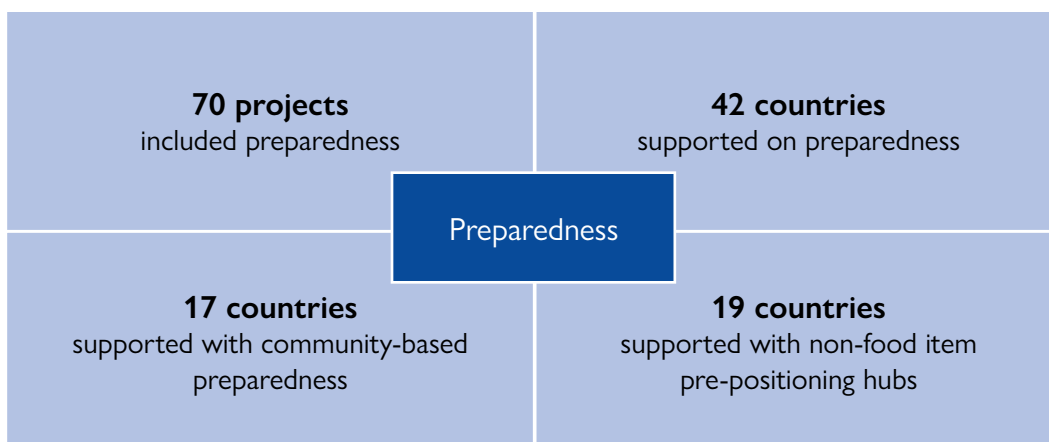
Preparedness

For example, IOM strengthened community-based disaster preparedness in 17 countries. Initiatives included emergency evacuation drills in schools and local communities in Mongolia and Palau to enable more effective and efficient responses to hazards. Other activities included community-based disaster management committees that empowered communities to better respond to hazards when they occur, which IOM supported in Bangladesh, Myanmar, the Marshall Islands, and Timor-Leste. The Organization also worked in partnership with the Burundi Red Cross on the use of an emergency phone line, with the goal of sensitizing local communities that are exposed to recurring floods.

IOM also supported 14 countries with capacity-building to better include international migrants in disaster preparedness, response, and recovery planning. In Cambodia, the Organization brought together government representatives from Cambodia, Lao People's Democratic Republic, Myanmar, Thailand, and Viet Nam in a regional workshop to design strategies for evacuating international migrants in the context of disasters. This workshop yielded four community-based disaster preparedness workshops that reached 113 migrants. In collaboration with the Department of Disaster Prevention and Mitigation, IOM also reached 400 Thai and 200 Myanmar migrants through outreach activities in the private sector.

Red Cross practitioners and local authorities attend a DRR training in Sukhbaatar Aimag, Mongolia. © IOM 2018/ Zuzana JANKECHOVA

CADRE+ in the Marshall Islands

The Climate Adaptation, Disaster Risk Reduction, and Education Plus (CADRE+) programme adopts a holistic approach of working with community members and aims to leverage the inherent resilience and capacity of island communities. Most residents in the Marshall Islands live in coastal areas that are highly exposed to storms and cyclones, storm surges, coastal erosion and sea-level rise, droughts, and flooding. To implement the CADRE+ programme in the Marshall Islands, IOM sponsored the Youth Leadership Camp that was hosted by KIO Club in July 2018. Twenty students participated in the event, which aimed at enhancing their leadership skills and applying them in their communities to strengthen DRR and community preparedness. The young leaders engaged in various activities such as discussions, group work, field visits, and practical hands-on training. The topics covered included DRR, climate change, LGBTQI rights, public speaking, and leadership, with the students demonstrating passion and engagement for each. In addition, the Organization was invited by the University of the South Pacific and the Waan Aelõñ in Majel Training Centre to organize educational lessons on DRR and CCA for students using the CADRE+ curriculum.

Moreover, in Mexico, IOM co-organized a forum with the National Centre for Disaster Prevention and the Immigration Policy Unit of the Ministry of the Interior to discuss migrants and disaster management.[23] The forum took stock of the country's actions towards the implementation of the Guidelines to Protect Migrants in Countries Experiencing Conflict or Natural Disaster (MICIC Guidelines), and resulted in the identification of follow-up actions for increased preparedness. This result was possible due to civil institutions, consulates, shelters, and international organizations sharing their experiences from disasters that affected the country in the previous year.[24]

Working at national and local levels, IOM assisted 16 countries with developing or upgrading early warning systems (EWS), including Afghanistan, Bangladesh, Myanmar, Sierra Leone, and Timor-Leste. In Palau, the Federated States of Micronesia, and the Marshall Islands, the Organization facilitated an upgrade to the radio station infrastructure to improve broadcasting capabilities and expand the range of public information and warning announcements. In turn, this support enabled disaster information to reach outer islands that were otherwise cut off from access to critical warning information and helped increase the lead time before a hazard can strike.

Representatives from South-East Asian countries participate in a regional workshop in Cambodia on crisis preparedness. © IOM 2018/Chhaya CHHIN

---

23 IOM, 2018b.

24 Ibid.

IOM also supported the development and functioning of early warning methods for health threats. For example, in Burundi, the Democratic Republic of the Congo, and South Sudan, IOM provided screening equipment for local authorities, which improved the surveillance and detection of Ebola virus disease outbreaks. In Ghana, Guinea, Guinea-Bissau, and Sierra Leone, IOM initiatives strengthened community events-based surveillance systems, which improved cross-border disease surveillance and coordination.

Throughout the year, IOM maintained support to bolster preparedness capacities for CCCM, Mass Evacuation in Natural Disasters (MEND), and WASH services, benefiting a total of 26 countries. For instance, in Somalia, the Organization trained hundreds of community leaders on site management. This training resulted in an increase in information-sharing, appropriate gender representation, and the accountability of community leaders to the affected population. In Vanuatu, IOM trained the National Disaster Management Office, provincial authorities, and national and international NGOs to understand the needs of the displaced communities and respond with adequate CCCM services given the high displacement risk due to cyclones and volcanic eruptions.

At a point of control in the Ebola-affected Komanda zone of the Democratic Republic of the Congo, IOM screens thousands of travellers each day. © IOM 2019/Muse MOHAMMED

> **Emergency management in Myanmar**
>
> A DTM analysis showed that when Cyclone Komen made landfall in Myanmar in 2015, most interviewees sought refuge in monasteries, where the monks and nuns made an effort to respond to the immediate needs of affected community members. Therefore, to improve the capacity and knowledge of monks on emergency management, IOM targeted highly exposed monastic schools that are eligible for evacuation use. As a result, the Organization developed collective centre management guidelines to facilitate evacuation procedures and conduct evacuation centre management training for selected monasteries, reinforcing the capacity of monks to manage the influx of people during an emergency. After the training, one monk summarized his experience by saying, "During this course, we gained a wider knowledge on collective centre management, such as registration and information management, collective centre set-up, food distribution, and health and WASH knowledge. We also learned about the closure of collective centres and the prevention of gender-based violence."

In Sierra Leone, IOM provided WASH training for female community members and supplied water purification facilities for five different communities. Additionally, an IOM WASH programme launched in Ethiopia supported IDPs affected by years of drought. In 2018, the programme reached approximately 200,000 people with services, such as communal sanitation facilities and the distribution of hygiene kits.[25]

To address health risks, the Organization's Migration Health Division promoted comprehensive public health emergency preparedness in 17 countries. As part of this, IOM provided targeted trainings on emergency response, surveillance, and health and border management. The trainings included volunteers, health workers, and officials in Bangladesh, Burundi, the Democratic Republic of the Congo, Djibouti, Ghana, Guinea, Guinea-Bissau, Senegal, Sierra Leone, and South Sudan. In Somalia, these efforts included the maintenance of health facilities in the El Afweyn, Dhahar, and Bardhere districts to expand the coverage of critical life-saving interventions. Furthermore, IOM supported governments to develop or update their health risk-related contingency plans. For example, in Burundi and the Democratic Republic of the Congo, the Organization assisted the Ministry of Health to revise the national Ebola virus disease contingency plan.

IOM also assisted 16 countries with training and technical support for DTM, which strengthened national capacities to monitor displacement situations and identify needs. For instance, 511 officials were trained in Mongolia, 31 people attended a workshop in Timor-Leste, and 28 enumerators are now available to local government units in the Philippines. In addition, IOM preparedness monitoring reports improved institutional analysis of risks and response capacities, resulting in a list of priority countries that may require higher preparedness levels or humanitarian intervention in the next few months.[26]

Furthermore, the Organization supported 19 governments with pre-positioning hubs for non-food item (NFI) distribution. This support improved the readiness of countries to deliver relief items in the event of a disaster. Relief preparation included arranging kits for up to 10,000 households in advance of the hurricane season in Haiti, 500 emergency kits for households in Papua New Guinea, shelter and WASH items for Pakistan, and medicines that can immediately respond to disease outbreak in Somalia.

IOM also prepared service provider agreements for cash transfers in Bangladesh, the Federated States of Micronesia, the Marshall Islands, Pakistan, the Philippines, and Somalia to enable a more rapid deployment of cash assistance to the most vulnerable groups.

3.3. Strategic outcome 3: Response – Managing mobility in disaster

In 2018, IOM delivered disaster emergency response through a total of 35 projects in 17 countries. Some of the major events that the Organization responded to during the year included the 7.5 earthquake and subsequent tsunami in Indonesia, rainy season flooding in Nigeria, the 7.5 magnitude earthquake in Papua New Guinea, and Typhoon Mangkhut and associated landslides in the Philippines.

35 projects on disaster emergency response	**17 countries** assisted with disaster emergency response
14 countries supported with the provision of emergency shelter and non-food items	**10 countries** provided with emergency water, sanitation, and hygiene services
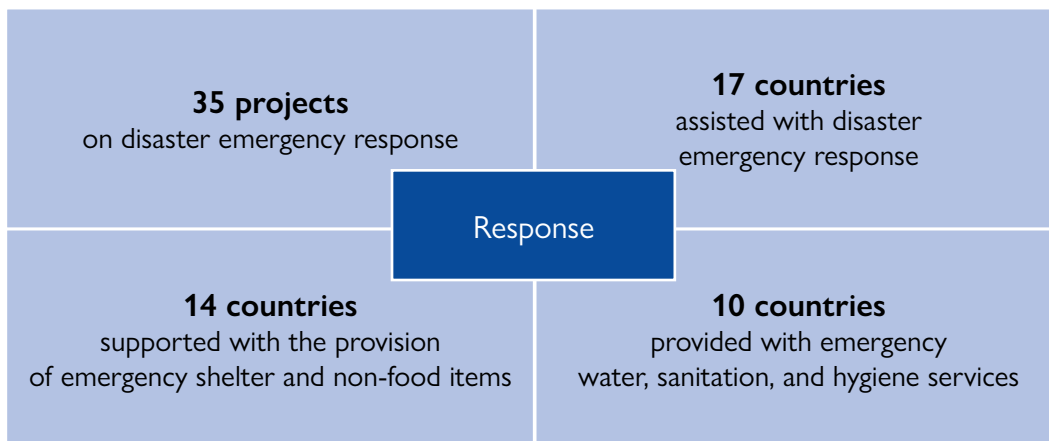
Response

One form of response that IOM provided includes efforts to move people out of harm's way through emergency evacuation and transportation assistance. For example, in response to typhoons, associated landslides, and flooding in the Philippines, IOM assisted the local government to pre-emptively evacuate hundreds of families and provide shelter for those affected by Typhoon Mangkhut.[27] In Indonesia, the Organization provided aid to the victims of an earthquake and tsunami to support an emergency response operation that included transporting evacuees out of affected areas in returning NFI delivery vehicles.[28] In Vanuatu, IOM assisted with the evacuation of nearly 11,000 people due to eruptions from the Manaro Volcano.[29]

IOM and KSRelief staff distribute shelter kits to Rohingya refugees in the Balukhali settlement in Bangladesh. © IOM 2018/Olivia HEADON

27 IOM, IOM 2018c, 2018d.
28 IOM, 2018e.
29 IOM, 2019.

Emergency response to floods and landslides in Burundi

During 2018, the rainy season in Burundi caused floods and landslides, affecting more than 75,000 people. The floods destroyed more than 2,000 houses and severely impacted the livelihoods of many vulnerable households. In the commune of Nyanza Lac, flash floods destroyed 189 homes during the month of May alone. To meet the immediate needs of the affected population, IOM provided more than 1,000 households with emergency shelter assistance, rental support, and essential relief items. Unfortunately, the floods destroyed the belongings and damaged agricultural yields for Makamba province inhabitant, Tereza. Reflecting on her own experience, she said, "My house was destroyed when the floods occurred, and I became desperate. We welcomed the humanitarian assistance in this situation, and I am grateful for the help."

As another form of response, IOM provided emergency shelter and NFI support to a total of 14 countries. In Burundi, where floods displaced 9,134 people in April,[30] the Organization provided household NFI kits for 200 people, emergency shelter kits for 50 households, and rental subsidies for 14,000 households. In partnership with UNICEF, the Kenya Red Cross, World Vision, and Samaritan's Purse, IOM also delivered 18,639 NFI kits to flood-affected people in Kenya. In response to the massive earthquake and tsunami in Indonesia, which killed more than 2,227 people and displaced 164,626 people,[31] the Organization delivered household kits for 1,700 households and emergency shelters for 724 households. Moreover, IOM delivered 20,309 NFIs to drought-affected communities in Afghanistan, installed a total of 56 solar energy kits after the Fuego Volcano eruption in Guatemala, and distributed 4,000 hygiene and fixing kits to 2,000 disaster-affected households in Haiti.

IOM also assisted eight disaster-affected countries with CCCM services that were adapted and localized for participants, ranging from local and national authorities, to community leaders, to local and international humanitarian actors.[32] In all responses, capacity-building remained a key component. For instance, the Organization completed four CCCM trainings with 105 community representatives who had been

IOM emergency response specialists work with the Government and UN partners to assess the devastation caused by the earthquake and tsunami in Central Sulawesi, Indonesia. © IOM 2018

---

30 IOM, 2018f.

31 United Nations Office for the Coordination of Humanitarian Affairs (OCHA), 2018.

32 Eight countries were reportedly supported through DRR-related projects; however, IOM's global presence allowed the Organization to support a total of 26 countries with CCCM services when conflict-affected populations were also included.

impacted by the earthquake and tsunami in Indonesia. In Somalia, IOM's CCCM programme assisted with site-level coordination to identify and address the needs of drought-affected people living in displacement sites, including improving the knowledge and practice of CCCM principles for 240 individuals through a training.

Delivering humanitarian assistance in Vanuatu

Due to a location along tropical cyclone tracks and in the Pacific Ring of Fire, Vanuatu is highly prone to hazards and disaster-induced displacement. With volcanic eruptions that caused mass evacuations at the end of 2017 and additional eruptions in March and April of 2018, it was a particularly challenging year for the people of Ambae Island. Consequently, the Government of Vanuatu declared a state of emergency in April 2018, and by July, the volcano showed an increase in volcanic activity again. Over the year, IOM provided emergency response support and assisted the Government in evacuating more than 11,000 people to safety on neighbouring islands. Additionally, the Organization utilized its DTM to inform response interventions by tracking the movements and needs of IDPs. In partnership with the National Disaster Management Office, IOM also strengthened CCCM services for those residing in evacuation centres. Given the range of risks the people of Vanuatu face, the Organization will continue to support the Government in addressing the needs of those displaced by disasters and invest in resilience measures to reduce future displacement risk.

To help inform planning for disaster response interventions, IOM deployed its DTM in 11 countries. For example, the DTM tool allowed IOM to efficiently manage information in emergency shelters during the first phase of the Fuego Volcano emergency in Guatemala. In turn, this enabled government institutions to make informed decisions and provide assistance by activating the appropriate clusters. In Somalia, DTM was an essential component in IOM's appeal to respond to 1,050,700 drought-affected individuals, as DTM activities improved response through the provision of accurate data for humanitarian coordination. Following the earthquake and tsunami in Indonesia, DTM data also played an important role in the planning and coordination of humanitarian assistance. This assistance included technical support from the Organization to conduct a second assessment to determine which displacement sites had not been assessed and how many IDPs had returned home.[33]

IDP camp in the outskirts of Herat City, Afghanistan, where people from drought-affected provinces have sought refuge. © IOM 2018/Amanda MARTINEZ NERO

---

33 IOM, 2018g.

In addition to these efforts, IOM supported 10 countries with emergency WASH services. For instance, in Somalia, the Organization assisted 36,694 people with temporary water supplies, distributed 5,000 hygiene kits to IDP households, and procured 42 primary health-care kits. In response to drought and extreme temperatures in the province of La Guajira, Colombia, IOM also restored and upgraded impacted water supply systems.

Under its migration health portfolio, the Organization provided emergency medical referral services targeting maternal and newborn care, including a fleet of 12 ambulances to transport patients. In Djibouti, IOM responded to an emergency acute watery diarrhoea outbreak and strengthened disease surveillance for epidemic-prone diseases in areas affected by Cyclone Sagar, treating 58 acute cases. In Iraq, response measures included providing transportation for 10 individuals in need of medical assistance when 2,392 tents in the Qayarrah Airstrip camp experienced flooding.

Life-saving and sustainable water, sanitation, and hygiene services in Northern Somalia

As a result of four poor rainy seasons in 2018, severe drought conditions in Northern Somalia undercut the livelihoods of many people. In response, IOM provided safe drinking water and hygiene kits to drought-affected populations at the Dhahar IDP settlement. The Organization also undertook the rehabilitation of boreholes and installation of solar systems for the Dhahar community, which facilitated access to clean water for cooking purposes. Amina, a recipient of IOM's services, was especially thankful as she and her seven children were forced to leave their home due to a lack of available food and water, recurrent hygiene-related diseases, and having to walk 9.5 km to retrieve water. After walking for nine days, Amina and her family reached the Dhahar IDP settlement and thanked IOM, "...for the timely support they provided to us at a needful hour as we were in dire need for water, hygiene kits, and other basic humanitarian relief and support. IOM's sustainable water supply in Dhahar significantly changes the lives of many drought victims, not only for those residing in my village, but also for many who are living in the host communities."

3.4. Strategic outcome 4: Recovery – Fostering resilience in recovery

In 2018, IOM implemented 21 projects in 14 countries to support disaster recovery. These projects addressed risk factors that prevent the reoccurrence of disasters and incorporated "build back better" measures to promote durable solutions to displacement.

21 projects
included recovery interventions

14 countries
supported with "build back better"

Recovery

7 countries
supported with hazard-resistant transitional housing and shelter

11 countries
supported with hazard-resistant reconstruction of community infrastructure
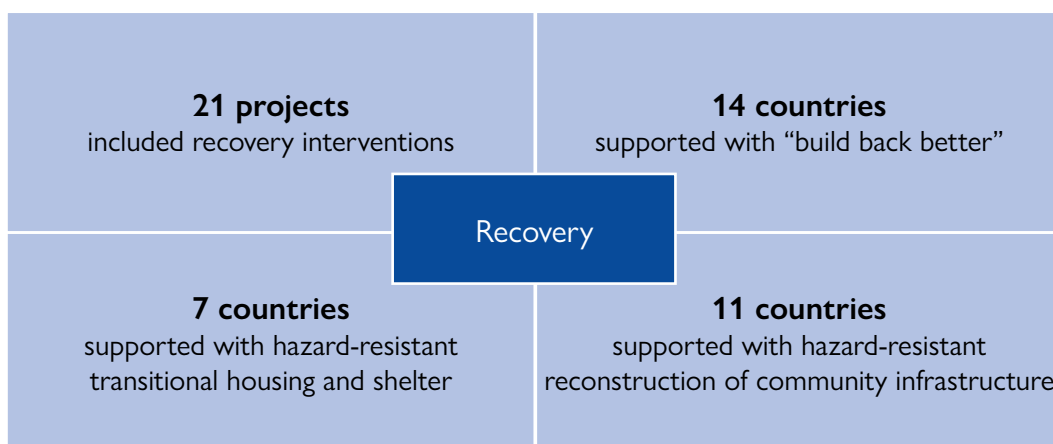
IOM assisted three countries in carrying out multi-hazard risk assessments to inform recovery assistance. For example, when Rohingya refugees from Myanmar and host communities were affected by flooding and landslides during the monsoon season in Bangladesh, the Organization undertook a multi-hazard risk assessment to identify options for mitigation, preparedness, and recovery in anticipation of future events.

A landslide in Itogon, Philippines, triggered by super Typhoon Mangkhut, left 35 people dead and 68 missing. © IOM 2018/JC BORLONGAN

The Organization also contributed to inter-agency efforts through the creation of post-disaster recovery strategies in Ethiopia, Pakistan, and Vanuatu. In Ethiopia, the Organization supported an inter-agency needs assessment to define the recovery needs of displaced populations, which served to guide shelter recovery interventions in flood-affected areas. With 20,000 households estimated to be at high or very high risk of eviction in Somalia, an assessment of the proposed site for relocation ensured that there were no land tenure disputes, security could be provided, the area was not flood prone, and there was underground water availability.

IOM supported seven countries with hazard-resistant shelter and housing through reconstruction or training to "build back better" and strengthen resilience ahead of potential future events. After Typhoon Mangkhut struck in the Philippines, the Organization provided rental subsidy schemes, shelter repair kits, and training on hazard-resistant construction methods for 468 people whose houses had been damaged by landslides. In Ethiopia, IOM assisted 6,000 households with shelter rehabilitation and offered "build back better" training to 500 households.

Rebuilding safer homes in Papua New Guinea

In February 2018, Papua New Guinea was struck by a 7.5 magnitude earthquake that damaged many homes and displaced local communities. In the aftermath of the earthquake, IOM partnered with the Government and the UNCT to provide "build back better" training to community members. After the training, beneficiary communities selected safer land, materials, and structural designs to rebuild their houses. Diane Joel took part in the training and received a shelter toolkit to rebuild her house in the Humbra community. She noted that the training raised community awareness for building safer and more resilient shelters that are better constructed to withstand extreme weather conditions. Diane summarized her experience by saying, "IOM taught us how to build safer homes, and this is the house which I have built. It is safer for me to live in, and when a natural hazard strikes, we will be safe." The training also challenges cultural perceptions regarding the role of women and construction, as it was previously undertaken almost exclusively by men.

A community member presenting her new house in Humbra, Papua New Guinea. © IOM 2018/Christine CONWAY

Other recovery measures included IOM's backing for hazard-resistant community infrastructure and access to basic services, which benefited 11 countries. For instance, in Somalia, IOM rehabilitated 12 non-functional water sources, providing improved access for 73,300 drought-affected people. The Organization also adopted a "build back better" approach to reconstruct four schools in Myanmar that had been destroyed by Cyclone Komen and will serve as shelter sites for possible future disasters. In Iraq, IOM also strengthened health delivery systems by conducting a damage assessment to identify the main priorities for restoring the Halabja Taza hospital, which had been heavily damaged by an earthquake in 2017. By October 2018, the most damaged parts of the hospital underwent rehabilitation and were open to the public again.

Through debris removal and infrastructure repair projects linked with cash-for-work opportunities, IOM restored infrastructure and community services in Bangladesh, the Federated States of Micronesia, Pakistan, and Somalia. These projects also allowed for the meaningful participation of affected individuals in recovery efforts. For example, in Cox's Bazar, IOM involved individuals from host and refugee communities to improve drainage and stabilize slopes for landslide risk reduction. These activities provided cash-for-work opportunities for 2,688 labourers from refugee and host communities on a monthly basis.[34] Opportunities such as this can create an economic revitalization that complements livelihood support.

IOM's measures also included planned relocation assistance in disaster-prone regions. For instance, in Somalia, IOM assisted in developing a relocation plan for IDPs that were affected by droughts. Specifically, the plan targeted those who face high eviction risk or live in congested sites to improve their living conditions and access to services. The Organization further provided technical guidance to the National Recovery Committee of Vanuatu for planned relocation opportunities as a "second home" transitional option for people that have been displaced by the eruptions of Manaro Volcano. IOM made preparations to support the Government of Vanuatu in implementing the Ambae recovery plan, including developing standard operating procedures related to planned relocation.

---

34 IOM Bangladesh, 2018.

Disaster recovery assistance in Ethiopia

Widespread flooding in Ethiopia affected over 347,000 people, of which more than 200,000 were displaced in 2018. To support the country's recovery efforts, IOM provided shelter repair and rehabilitation assistance to 6,000 households. These efforts were combined with "build back better" training, information, and education materials for 500 households. Traditionally, in the Afar region, women are responsible for constructing shelters for their families. In turn, they must travel long distances to collect construction materials and face risks regarding their safety and security. Following the Organization's assistance, women reported that they were spending less time collecting shelter materials, were less exposed to different kinds of security threats, and were exerting less effort for weaving. Beneficiaries accepted and welcomed the shelter repair kits as IOM had tailored them to meet the local requirements.

The Organization also promoted sustainable livelihood recovery to diversify people's livelihood strategies and help them become more resilient in responding and adapting to future shocks. In 2018, these projects addressed five countries. For example, IOM promoted income-generating agricultural projects by providing technical assistance, seeds, irrigation systems, and marketing support in Colombia. In Madagascar, recovery efforts in the drought-affected Androy region included 11 community stabilization initiatives that focused on capacity-building for community-managed poultry farming and fishing.

Additionally, in Pakistan, a livelihood recovery project sponsored various food security and livelihood interventions, reaching a total of 57,456 individuals through cash-for-work opportunities, distribution of agricultural inputs, kitchen gardening, and poultry farming support. Furthermore, the Organization released multipurpose cash transfers for a pilot group of 29 households in the Benguet Province of the Philippines to diversify their livelihood reliance on small-scale mining. Moreover, IOM worked with Baidoa district officials and community leaders in Somalia to support long-term planning and implement tangible community priorities through durable solutions.

By diminishing the risk of future displacement, the recovery phase represents an important opportunity for planning disaster prevention activities at the local level. Aligned with this effort, IOM initiated CBDRM measures in Bangladesh, Bosnia and Herzegovina, Madagascar, Somalia, the Federated States of Micronesia, and the Philippines. For instance, in Bangladesh, the Organization supported the formation of a community-based DRR women's group to raise awareness on preparedness, mitigation, and DRR.[35]

Emergency and transitional shelter support in the Philippines

Last September, Typhoon Mangkhut, locally known as Typhoon Ompong, made landfall in the northern part of the Philippines. The Category 5 typhoon caused landslides and flooding, damaging more than 210,000 homes, destroying agricultural land, and displacing many people. Overall, 192,840 people had to seek shelter in 1,899 evacuation centres. IOM met Helen Nilo, who lost her two sons when they were trying to rescue people buried in mud and rocks due to the landslides. She said, "My two sons just wanted to help; instead, they died rescuing others." Her sons were experienced backhoe operators, and this is only one of the many tragic stories that followed Typhoon Mangkhut. To support recovery efforts, the Organization provided rental subsidies and shelter repair kits to affected people, as well as training on better construction techniques. Helen is one of the beneficiaries of the IOM rental subsidy support, which will enable her to rebuild her new home in a location that is not as prone to landslides.

---

35 IOM, 2018h.

3.5. Strategic outcome 5: Partnerships – Strengthening coordinated support for mobility-based resilience

79 NGO/ International NGO/ Civil society   partnerships in   **44 countries**
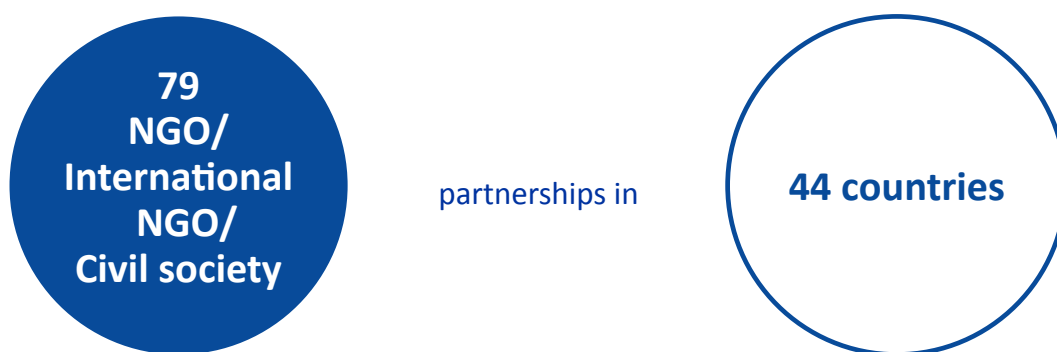
The development of partnerships remained a central priority during the year. At the global level, IOM supported initiatives by maintaining its close collaboration with UNDRR, which serves as the focal point in the UN system for the coordination of DRR activities. IOM also worked closely with other UN member agencies through the UNDRR Focal Points Group, which supports the mandate of the UN Senior Leadership Group on Disaster Risk Reduction to strengthen commitment and coherent UN support for DRR, including through reporting against the results framework indicators of the UN Plan of Action.

Additionally, the Organization continued to support the work of the Capacity for Disaster Reduction Initiative (CADRI), which is the largest existing inter-agency mechanism supporting countries to integrate risk reduction in development and humanitarian response planning. During the year, IOM contributed to the development of a 2019–2023 joint programme for CADRI's new implementation phase. With the Food and Agriculture Organization of the United Nations, the Organization continued to co-lead the CADRI Secretariat in the Southern Africa region and participated in CADRI joint country support missions to Comoros and Botswana. CADRI, which involves a critical mass of UN system organizations and engages a range of other partners and stakeholders, has been highlighted as an example of good practice that should be further strengthened and encouraged, in line with SDG Goal 17 on strengthening the means of implementation for sustainable development.[36]

Furthermore, IOM supported the work of the Platform on Disaster Displacement (PDD), which is a State-led initiative working towards better protection for people displaced across borders in the context of disasters and climate change. As a Standing Invitee to the PDD, the Organization contributed to the development of the new PDD Strategic Framework for the period 2019–2022, where support for implementation of the Sendai Framework was identified as a key area of engagement. In collaboration with the PDD and hosted by the Government of Fiji, IOM organized a capacity-building workshop in February that convened policymakers from nine Pacific Island States to take stock of national and regional policy development and discuss opportunities for a regional framework on human mobility in the context of disasters and climate change.[37]

The Organization also engaged with civil society organizations during IOM–NGO humanitarian consultations. These consultations occur on an annual basis and allow for all parties to discuss shared values, current challenges, and future partnerships in the humanitarian sector, with a specific focus on internal displacement during the 2018 meeting.

Moreover, the Organization provided inputs for the Words into Action Guidelines on Disaster Displacement, which was part of a wider UNDRR-initiative aimed at ensuring worldwide access to expertise, communities of practice, and networks of DRR practitioners. The development of the

---

36 Cazeau, 2019.
37 Platform on Disaster Displacement (PDD), 2018.

The 2018 IOM NGO Consultations held in Geneva, Switzerland. © IOM 2018/Muse MOHAMMED

guideline was a collaborative effort, led by the Norwegian Refugee Council, in support of the PDD's efforts to ensure that future DRR strategies include disaster displacement risk in accordance with the Sendai Framework.[38]

As a member of the Task Force on Displacement under the Paris Agreement and through a comprehensive assessment, IOM also supported the development of recommendations on how to avert, minimize, and address displacement related to climate change. These recommendations were adopted in December 2018 by COP24 through decision 10/CP.24. COP24 also mandated the task force to continue its work, through which IOM remained closely involved, particularly regarding potential collaborations to implement the Global Compact for Migration.

At the regional level, IOM also engaged in partnerships on migrant-inclusive DRR to promote the adoption by governments of the recommendations included in the MICIC Guidelines. For instance, IOM organized a regional workshop on nationals abroad in crisis contexts that brought together government representatives from Cambodia, Lao People's Democratic Republic, Myanmar, Thailand, and Viet Nam.

At the country level, IOM exercised its role in the respective UNCTs and the HCTs by providing expertise on migration and displacement issues as part of risk-informing United Nations Development Assistance Frameworks (UNDAFs). For example, IOM contributed to the United Nations Sustainable Development Framework for Pakistan and offered DRR training for the UNCT in Sierra Leone. In Bosnia and Herzegovina, Ethiopia, and Guinea, IOM supported the integration of DRR elements in UNDAFs. In Nepal, an IOM project to support the Government in the implementation of the Disaster Risk Reduction Management Act formed small working groups to coordinate joint activities in support of UNDAF Outcome 3.

In addition, IOM supported Humanitarian Response Plan (HRP) processes in Colombia, Ethiopia, Guinea, Iraq, and Sierra Leone by providing guidance on how to integrate DRR in humanitarian response. As a result, Ethiopia's 2019 HRP now includes measures to address displacement risks of populations exposed to disasters, such as severe drought or cyclone-induced flooding. By focusing on the humanitarian–development nexus, the Government committed to include DRR in humanitarian responses, namely through activities aimed at prevention, recovery, and system strengthening.[39] In 2018, these activities were implemented in the agriculture, education, nutrition, and WASH sectors, enabling durable solutions for IDPs and allowing for the delivery of basic services and livelihood support.[40]

---

38   United Nations Office for Disaster Risk Reduction, 2018.

39   OCHA, 2019:14.

40   OCHA, 2019.

The Mass Evacuations in Natural Disasters (MEND) Summit. © IOM 2018/Julie BATULA

Furthermore, the Organization built preparedness partnerships, focusing on MEND, CCCM and the DTM in 10 countries. For example, IOM collaborated with the National Disaster Risk Management Directorate of Timor-Leste to offer trainings on CCCM and emergency response for the Government and NGOs. To enhance preparedness efforts on DTM, the Organization also partnered with the National Disaster Management Office in Vanuatu and the National Authority for Management and Coordination of Humanitarian Affairs and Disaster Response in Yemen. In Mongolia, IOM continued its role as CCCM Cluster Lead, partnering with the National Emergency Management Agency and humanitarian actors on contingency planning for future disaster scenarios.

The Organization also promoted DRR research, guidelines, and programmatic partnerships in 16 countries. For instance, IOM organized a workshop on sustainable drainage systems in Iraq with international NGOs, the WASH cluster, and researchers from Coventry University. In Ethiopia, Kenya, and Uganda, the Organization initiated or participated in the development of national guidelines on solar pumping.

At the local level, IOM worked to make DRR sustainable by engaging and building the capacity of local organizations. Throughout 2018, IOM forged partnerships with a total of 79 different organizations across 44 countries. For example, in the Federated States of Micronesia, technical working groups were established in Chuuk and Yap to design and implement a project that assessed the effect of natural disasters on the health and security of women and girls. These working groups consisted of NGOs, government, and civil society counterparts, such as the Chuuk Women's Council, Red Cross, and Yap Women's Association. In Yemen, the Women Water Users Group, Yemen Women Union, and Khadiga Foundation all participated in re-establishing local water user associations that were inactive due to conflict and a lack of resources. In Burundi, IOM worked with Red Cross volunteers on emergency shelter construction and the Organisation pour la Prévention et l'intervention contre les Risques et Contingences on prevention and preparedness measures through distributions and sensitizations.

4. LESSONS LEARNED

Through the global survey of IOM DRR activities, country offices reflected on critical "lessons learned" in 2018 that will be important to consider in future efforts. Three broad themes emerged, as follows:

(a) Relationships are key. While government officials and partner organizations' time might be at a premium due to competing priorities, sustained engagement with these actors proved key to the success of many initiatives. By investing time to build relationships and undertake joint planning with governments, international, national, and local NGOs, and community-based actors, projects were more likely to foster locally owned initiatives, comprehensive solutions, and increased technical skills. For instance, establishing and strengthening effective institutional arrangements and partnerships in Timor-Leste enabled sustainable outcomes and community resilience by implementing initiatives that were locally managed and owned. In Somalia, a comprehensive approach that allowed for a multisector humanitarian response to drought led to empowered communities through inclusive participation and community-based relationships. In Myanmar, engaging with the Government during the project's inception phase facilitated the State's commitment to the project and a joint working group to increase the technical capacity.

(b) Context matters. Given the unique sets of challenges, needs, capacities, and underlying risk drivers prevalent in the various locations that IOM works in, it is essential that projects and interventions are based on strong situational awareness through continuous analysis. For example, while a project was being implemented in two Yemen towns, it was found that there were variations on the societal positions of women. Although the participation of women in both locations were represented differently, the Organization successfully included them in this project by taking the social norms of each locale into consideration. Another project in Yemen was threatened by the variability and unpredictability of local weather patterns. Therefore, project timelines were adjusted to better account for anticipated variations according to the specific location.

(c) Tailored approaches for fragile settings. There are growing calls for increasing DRR investment in fragile contexts, as it is predicted that 80 per cent of the world's poorest will be living in such settings by 2030.[41] Although it is recognized that people are more vulnerable to the impacts of hazards in conflict-affected contexts, there are currently limited or inadequate DRR policies and interventions focusing on the many locations across the world where disasters, fragility, and conflict intersect.[42] For IOM, insecurity in Somalia prevented the Organization from operating effectively during flash floods. Strengthening capacity to address risks in such contexts will be an important priority in the coming years to more effectively reach the most vulnerable.

---

41 Organization for Economic Co-operation and Development (OECD), 2018.

42 Peters et al., 2019.

5. CONCLUSION AND WAY FORWARD

This report has highlighted the breadth and scope of IOM's operational activities in DRR throughout 2018. Overall, the Organization supported 65 countries in 4 continents to prevent and address the impact of disasters and climate change on displacement and migration, reaching a total of 4,576,933 individuals in 704 communities.

The majority of IOM's programmatic efforts in DRR focused on addressing the risks of flash flooding, with landslides, river flooding, cyclones, droughts, and earthquakes respectively following. The broad spectrum of hazards, with implications for displacement risk, highlights the importance of managing multi-hazard risks across varying scales and time frames in sudden- and slow-onset contexts. This report has also stressed the centrality of all-of-society and all-of-State engagement to effectively tackle the root causes of risk, instead of only managing their consequences. Such approaches combine the efforts of Member States, UN agencies and networks, NGOs, and national and local actors and communities by assessing and drawing on their added value and comparative advantages across specific sectors and contexts.

In conclusion, the scale, complexity, and duration of disasters are expected to increase as hazards become more frequent and intense, and vulnerability more acute due to processes, such as environmental change, unregulated urbanization, demographic change, inequality, and weak governance systems. As a consequence, displacement will almost certainly continue to increase, and more people will be compelled to migrate in their efforts to cope with environmental shocks and stresses. Additionally, many disasters are occurring in fragile contexts that are characterized by significant internal and cross-border migration, which can fuel existing humanitarian crises and result in disproportionate impacts on the most vulnerable, particularly women, youth, children, and those already displaced. Such contexts present unique sets of challenges that require new and tailored approaches, better data and analysis, and expanded collaboration with non-traditional DRR actors. As we move into 2020, IOM and all its partners in the UN system and beyond will need to maintain their collective commitment to preventative and anticipatory action by working collaboratively in increasingly complex environments to support Member States' efforts.

ANNEX 1. GLOBAL-LEVEL OUTPUT INDICATORS, BASELINES, AND TARGETS

This table provides descriptions on how to interpret the indicator data on the following pages:

Data	Description
Projects 2012–2018	The Projects 2012–2018 column lists the number of IOM projects between these years.
Projects 2018	The Projects 2018 column lists the number of IOM projects during 2018 only.
Baseline 2015	The 2015 baseline reflects the year the Sendai Framework was adopted and refers to the number of countries supported through projects that started between 1 January 2012 and 31 December 2015.
Actual 2017	The Actual 2017 column lists the number of countries that IOM supported in relation to that indicator during 2017.
Actual 2018	The Actual 2018 column lists the number of countries that IOM supported in relation to that indicator during 2018.
Cumulative 2018	The Cumulative 2018 column refers to the cumulative number of countries that IOM supported with projects from 2012 through 2018.
Target 2019	The Target 2019 column refers to the cumulative number of countries that IOM plans to target in relation to that indicator by the end of 2019.
Target 2020	The Target 2020 column refers to the cumulative number of countries that IOM plans to target in relation to that indicator by the end of 2020.
Sendai Priority	The Sendai Priority column links the indicator to the priority that it addresses, as outlined in the Sendai Framework for Disaster Risk Reduction 2015–2030. The priorities are as follows: • Sendai Priority 1 – Understanding disaster risk • Sendai Priority 2 – Strengthening disaster risk governance to manage disaster risk • Sendai Priority 3 – Investing in disaster risk reduction for resilience • Sendai Priority 4 – Enhancing disaster preparedness for effective response and to "build back better" in recovery, rehabilitation, and reconstruction

Table A1.1. Prevention

#	Indicator	Projects 2012–2018	Projects 2018	Baseline 2015	Actual 2017	Actual 2018	Cumulative 2018	Target 2019	Target 2020	Sendai Priority
1	# of countries supported with multi-hazard risk assessments	49	28	3	21	26	35	37	39	1
2	# of countries supported with community-based disaster risk management	106	40	14	10	27	31	33	35	2
3	# of countries supported with information, education, and communication on mobility, risk, and resilience	54	27	7	21	27	41	43	45	1
4	# of countries supported with planned relocation assistance	15	7	2	10	13	21	23	25	3
5	# of countries supported with sustainable and diversified livelihoods support	30	8	9	6	10	19	21	23	3
6	# of countries supported to risk-inform their national, sectoral, and local development strategies, and/or develop disaster risk reduction (DRR) and climate change adaptation strategies and plans, and/or conduct institutional capacity-building	75	25	20	17	34	52	54	56	2
7	# of countries supported with strengthened multi-stakeholder disaster coordination that includes civil society, diaspora, and the private sector, and/or other stakeholder groups	50	20	12	22	18	36	38	40	2

#	Indicator	Projects 2012–2018	Projects 2018	Baseline 2015	Actual 2017	Actual 2018	Cumulative 2018	Target 2019	Target 2020	Sendai Priority
8	# of countries/regions with IOM strategic planning documents that incorporate DRR and resilience	1	No data	1	No data	No data	No data	No data	No data	2
9	# of countries supported to include mobility dimensions of DRR in development planning (United Nations Development Assistance Framework (UNDAF))	N/A	8	N/A	3	6	12	14	16	2
10	# of countries supported with research and assessments on migration, environment, and climate change policy	23	10	11	11	11	21	23	25	1
11	# of countries supported with capacity-building training on migration, environment, and climate change	26	11	33	15	33	54	56	58	1
12	# of countries supported to harness labour mobility, diaspora resources, and remittances for investment in risk reduction and/or climate/environmental change adaptation	3	1	9	1	1	10	10	10	3
13	# of countries supported in reporting on displacement through the Sendai Framework monitor	No data	2	No data	No data	6	6	8	10	2

#	Indicator	Projects 2012–2018	Projects 2018	Baseline 2015	Actual 2017	Actual 2018	Cumulative 2018	Target 2019	Target 2020	Sendai Priority
14	# of countries supported to review current risks and losses, strengths, weaknesses, and gaps in existing DRR policies, plans, programmes, and investments (e.g. Capacity for Disaster Reduction Initiative (CADRI))	57	13	20	10	14	32	34	36	1
15	# of countries supported to develop multisectoral loss databases that incorporate displacement	10	7	0	4	6	8	10	12	1
16	# of thematic guidelines and tools developed in support to countries on DRR	14	10	0	10	16	27	29	31	2
17	# of events resulting in outcome documents/ DRR strategies to support countries in addressing gaps and challenges	46	8	30	8	6	42	44	46	1
18	# of IOM statements, publications, and communications products dedicated to DRR	16	3	4	17	2	22	24	26	1

Table A1.2. Preparedness

#	Indicator	Projects 2012–2018	Projects 2018	Baseline 2015	Actual 2017	Actual 2018	Cumulative 2018	Target 2019	Target 2020	Sendai Priority
1	# of countries supported with community-based preparedness	96	40	18	27	17	40	42	44	4
2	# of IOM preparedness monitoring reports[43]	N/A	2	0	2	2	4	6	8	4
3	# of countries supported to include migrants in disaster preparedness, response, and recovery	18	12	1	37	14	45	47	49	4
4	# of countries supported with improved early warning systems	45	21	5	18	16	26	28	30	3
5	# of countries supported with preparedness planning revision or drafting on camp coordination and camp management (CCCM), including mass evacuation (MEND) preparedness	57	27	6	13	16	26	28	30	4
6	# of regional offices supported to build capacity of country missions with preparedness planning for displacement tracking	23	10	2	9	8	13	15	17	4
7	# of IOM non-food item (NFI) pre-positioning regional hubs for NFI distribution reinforced	33	26	3	3	19	16	18	20	4
8	# of countries with service provider agreements for cash transfers	19	5	11	4	6	19	21	23	4
9	# of countries supported with public health emergency preparedness	28	20	6	4	17	24	26	28	4

43   This indicator refers to the biannual *IOM Emergency Preparedness Monitoring Report*, published by IOM's Preparedness and Response Division.

Table A1.3. Response

#	Indicator	Projects 2012–2018	Projects 2018	Baseline 2015	Actual 2017	Actual 2018	Cumulative 2018	Target 2019	Target 2020	Sendai Priority
1	# of countries supported with emergency evacuation and transportation assistance to reduce risk exposure	9	5	0	4	4	8	10	12	4
2	# of countries supported with risk-informed emergency shelter	57	25	11	18	14	28	30	32	4
3	# of countries supported with ongoing risk-informed CCCM sectoral responses	25	12	4	10	8	30	32	34	4
4	# of countries supported with displacement tracking and data collection (Displacement Tracking Matrix (DTM)) on movements, needs, and vulnerability	33	20	5	13	11	23	25	27	4

Table A1.4. Recovery

#	Indicator	Projects 2012–2018	Projects 2018	Baseline 2015	Actual 2017	Actual 2018	Cumulative 2018	Target 2019	Target 2020	Sendai Priority
1	# of countries supported with multi-hazard risk assessments	5	3	0	2	3	5	7	9	1
2	# of countries supported with hazard-resistant transitional shelter and/or housing	37	12	10	8	7	17	19	21	4
3	# of countries supported with hazard-resistant community infrastructure and services restoration	31	16	6	9	11	15	17	19	4
4	# of countries supported with debris removal and/ or infrastructure repairs linked with cash-for-work opportunities	15	4	5	3	4	8	10	12	4
5	# of countries supported with planned relocation assistance	4	2	0	2	2	4	6	8	3
6	# of countries supported with sustainable livelihoods recovery and diversification strategies	10	5	3	3	5	8	10	12	4
7	# of countries supported with community-based disaster risk management	24	6	5	7	6	14	16	18	2

Table A1.5. Partnership

#	Indicator	Baseline 2016	Actual 2017	Actual 2018	Cumulative 2018	Target 2019	Target 2020	Sendai Priority
1	# of International Strategy for Disaster Reduction (ISDR) initiatives supported at global level (e.g. Global Platform)	1	1	1	3	5	7	1
2	# of Inter-Agency Standing Committee (IASC) task teams/ reference groups supported at global level	2	2	1	3	2	2	2
3	# of UNDAFs that reflect mobility, risk, and resilience supported by IOM	5	3	6	12	14	16	2
4	# of Humanitarian Response Plans that reflect disaster risk reduction and resilience	23	7	5	31	33	35	2
5	# of CADRI initiatives supported at country level	0	2	0	2	4	6	1
6	# of partnerships on migrant-inclusive DRR supported at country level	2	5	9	16	18	20	4
7	# of Platform on Disaster Displacement initiatives on cross-border disaster displacement supported at the global or country level	10	8	8	26	28	30	4
8	# of preparedness partnerships supported at the country level (e.g. MEND, CCCM, DTM)	5	7	9	17	19	21	4
9	# of research, guidelines, and programmatic partnerships (e.g. with Georgetown University, United Nations High Commissioner for Refugees, or the Food and Agriculture Organization of the United Nations)	13	6	16	26	28	30	1

ANNEX 2. DISASTER RISK REDUCTION PROJECTS BREAKDOWN AND PROJECTS OVERVIEW

Table A2.1. Asia and the Pacific – Regional Office, Bangkok, Thailand

Project title	Date	Country
ASEAN Migrant Assistance and Protection Programme (MAPP)	2017–2018	South-East Asia (Cambodia, Lao People's Democratic Republic, Malaysia, Myanmar, Thailand, Viet Nam)
Asia Regional Migration Programme	2018–2019	South-East Asia (Cambodia, Lao People's Democratic Republic, Malaysia, Myanmar, Thailand, Viet Nam)
Assessing the Effect of Natural Disasters on the Health and Security of Women and Girls, Federated States of Micronesia	2017–2018	Federated States of Micronesia
Building the Capacity of Policymakers on Human Mobility in the Context of Disasters and Climate Change in the Pacific	2018	Cook Islands, Fiji, Kiribati, Marshall Islands, Palau, Papua New Guinea, Tuvalu, Vanuatu
Capacity Building Support to the Department of Social Welfare and Development (DSWD) Towards Protection of Mobile and Fragile Populations in the Philippines	2018–2020	Philippines
Capacity Building Towards Resilience (CBRP) Reducing Disaster Risks, Palau (Phase I)	2014–2019	Palau
Climate Adaptation, Disaster Risk Reduction and Education (CADRE+), Federated States of Micronesia	2015–2018	Federated States of Micronesia
Community Vulnerability and Capacity Mapping Exercise and Assessment, Marshall Islands and the Federated States of Micronesia	2017–2019	Federated States of Micronesia, Marshall Islands
Consortium Partner for Building Resilience: Action for Strengthened Institutions, Communities, and Systems, Myanmar	2018–2019	Myanmar
Disaster Preparedness for Effective Response (PREPARE) Programme, Federated States of Micronesia	2013–2018	Federated States of Micronesia
Disaster Preparedness Training, Training of Trainers	2018	Republic of Korea
Disaster Risk Reduction – Building Community Resilience in Timor-Leste (DRRBCR) Phase III, Timor-Leste	2016–2018	Timor-Leste

Project title	Date	Country
Emergency and Transitional Shelter Support for Populations Displaced by Typhoon Ompong	2018–2019	Philippines
Emergency Assistance to Earthquake Affected Communities in the Highland Province of Papua New Guinea (EARTH)	2018	Papua New Guinea
Emergency Cash Grant for Papua New Guinea Earthquake	2018	Papua New Guinea
Emergency Shelter Assistance to Earthquake Affected Communities in the Highland Province of Papua New Guinea	2018	Papua New Guinea
Emergency Shelter Assistance to Earthquake Affected Communities in the Highlands Province of Papua New Guinea (EARTH HAUS)	2018	Papua New Guinea
Expanding Public Information and Early Warning Delivery Systems in Pohnpei	2018–2019	Federated States of Micronesia
Extended Support for the Affected Populations in Cox's Bazar	2018–2019	Bangladesh
GH16-1719 – Advancing the Global Health Security Agenda through Strengthening Capacities for Rapid Response to Humanitarian and Public Health Emergencies	2017–2022	Bangladesh
Humanitarian Assistance Programme (HAP), Afghanistan	2017–2018	Afghanistan
Humanitarian Assistance to the Most Vulnerable and Severely Affected Host Communities for Resilience Building and Livelihoods Restoration	2018–2019	Bangladesh
Improved Reconstruction of Flood and Cyclone Affected Schools in Rakhine State, Myanmar	2015–2018	Myanmar
Life-Saving Emergency Shelter and CCCM Response for Earthquake- and Tsunami-Affected Populations in Central Sulawesi	2018–2019	Indonesia
Multi-Year Humanitarian Programme for Natural Disaster Preparedness, Response, and Recovery in Pakistan	2015–2019	Pakistan
Natural Disasters and Climate Change Migration in Mongolia	2017–2019	Mongolia
People to People Support for Building Community Resilience Through Recovery and Reconstruction in Nepal	2018–2020	Nepal
PREPARE Stage 3 – Typhoon Maysak Reconstruction Project, Federated States of Micronesia	2015–2018	Federated States of Micronesia
Programme for Improved Disaster Management and Resilience Against Natural Disaster in Rakhine State, Burma/Myanmar	2014–2019	Myanmar
Promoting Community Stabilization in Northern Rakhine State, Myanmar, to Address Irregular Migration	2017–2019	Myanmar

Project title	Date	Country
Promoting Resilient Community Development, Agricultural, and Livelihoods Development for Food Security in Rakhine State, Myanmar	2016–2018	Myanmar
Providing Life-Saving Emergency Health Services – Including Reproductive, Maternal, New-Born, Child, and Adolescent Health – to Rohingya Refugees	2018–2019	Bangladesh
Republic of the Marshall Islands: Ailuk Community Disaster Risk Management Plan	2018–2019	Marshall Islands
Restoring Emergency VHF Communications in the Republic of Palau	2018–2019	Palau
Risk-informed Shelter Upgradation in Cox's Bazar	2018	Bangladesh
Site Maintenance Engineering Project Rohingya Refugee Response	2018	Bangladesh
Strengthening Capacity for Disaster Management-Logistic Support for ICS Training in Timor-Leste	2016–2018	Timor-Leste
Strengthening Disaster Risk Reduction (DRR) Capacity and Promoting Community Resilience in Aceh, Indonesia – Phase I and II	2012–2018	Indonesia
Strengthening Disaster Risk Reduction and Fostering Social Cohesion among Communities Affected by the Refugee Influx	2018–2019	Bangladesh
Strengthening Early Warning System and Preparedness Actions for Disaster Risk Reduction in Papua New Guinea (PNG-SEWSPADRR)	2017–2019	Papua New Guinea
Strengthening Extreme Weather and Disaster Preparedness to Enhance the Resilience of Host and Rohingya Communities in Cox's Bazar, Bangladesh	2018–2019	Bangladesh
Strengthening National Capacity to Address the Environmental Impacts of Displacement in Humanitarian Responses in Vanuatu	2018	Vanuatu
Strengthening Operational Capacity for Management of Displacement Induced by Climate Change and Natural Disasters in Vanuatu	2018–2019	Vanuatu
Technical Support to the Government of Nepal to Implement the Disaster Risk Reduction and Management Act	2018–2019	Nepal
The Project for Enhancement of Disaster Risk Management Capacity: Strengthening Preparedness and Resilience at the National, Provincial, and Community Levels	2015–2019	Afghanistan
WASH Emergency Response in Earthquake-Affected Populations in Southern Highlands and Hela Provinces	2018	Papua New Guinea

Table A2.2. Central and North America and the Caribbean – Regional Office, San Jose, Costa Rica

Project title	Date	Country
Building the Capacity of Policymakers on Human Mobility in the Context of Disasters and Climate Change in the Eastern Caribbean and Philippines	2018–2019	Eastern Caribbean (Anguilla, Antigua and Barbuda, British Virgin Islands, Dominica, Martinique, Montserrat, Saint Kitts and Nevis, Saint Lucia, and Saint Vincent and the Grenadines), Philippines
Comprehensive Response for the Volcán de Fuego Emergency	2018	Guatemala
Emergency Preparedness and Capacity Building for 2017	2017–2018	Haiti
Engaging Diaspora for an Alternative Approach to Disaster Response and Preparedness	2018–2019	United States of America
Immediate Humanitarian Response to Earthquake Emergency in the North-West Department, Haiti	2018–2019	Haiti
NFI Prepositioning to Reinforce the Caribbean Emergency Preparedness and Response Capacities	2018–2019	Haiti
NFI Stockpile Maintenance and Management for Emergency Preparedness for the 2018 Hurricane Season	2018–2019	Haiti
Support the Resilience and Preparedness of Haitian Communities through the Promotion of the "Build Back Safer" Approach	2018–2019	Haiti

Project title	Date	Country
Assessing Climate Related Migration Along Lake Chad's Shores in Chad and Nigeria	2017–2018	Chad, Nigeria
Engaging Diaspora to Strengthen the Health, Flood Prevention, and Agriculture Sectors in Sierra Leone	2018–2019	Sierra Leone
Enhancing the Post-Ebola National Preparedness Capacity to Efficiently Respond to Future Health Outbreaks	2018	Guinea
Global Health Security Partner Engagement: Expanding Efforts and Strategies to Protect and Improve Public Health Globally	2017–2020	Ghana, Guinea, Guinea-Bissau, Senegal, Sierra Leone
Preparing Law Enforcement Institutions for Next Epidemics in Guinea (PrepLine)	2018–2021	Guinea
Protecting Vulnerable Migrants in West and Central Africa	2017–2019	Burkina Faso, Ghana, Gambia, Senegal
Provision of Life-Saving Shelter and Non-Food Items (NFI) in Support of Flood Affected Communities in Nigeria	2018–2019	Nigeria
Strengthening Disaster Preparedness, Response, and Community Resilience in Sierra Leone	2017–2018	Sierra Leone
Strengthening National Capacity to Address the Environmental Impacts of Humanitarian Responses to Population Displacement in Nigeria	2018–2019	Nigeria
Strengthening Preparedness and Capacity to Respond to Public Health Emergencies in High-Risk Areas in Guinea	2018–2019	Guinea
Towards an Environmental Dimension of Reintegration Assistance to Reduce Pressure Climate Change on Migration in West Africa	2018–2019	West Africa
Understanding Climate Change Policy and Tracking Climate Related Migration Along Lake Chad's Shores in Cameroon and the Niger	2017–2018	Cameroon, Niger

Tale A2.4. Eastern Africa – Regional Office, Nairobi, Kenya

Project title	Date	Country
Comprehensive Response to the Humanitarian Needs of the Displaced Population in Burundi	2017–2020	Burundi
Displacement and Emergency Tracking in Burundi	2018–2019	Burundi
Ebola Virus Disease (EVD) Screening and Infection Prevention and Control (IPC) Activities	2018–2019	South Sudan
Emergency Acute Watery Diarrhea (AWD) Response for Migrant Populations and Affected Host Communities in Djibouti	2018	Djibouti
Emergency and Recovery Support to Internally Displaced Persons in Oromia and Somali Ethiopia	2018	Ethiopia
Emergency Assistance of Temporary Shelter and Non-Food Items to Flood Affected Internally Displaced Persons in Kenya	2018	Kenya
Emergency NFI/Shelter Response in Nyanza Lac, Burundi	2018	Burundi
Emergency Shelter and Non-Food Items for Flood-Affected Internally Displaced Persons	2018	Ethiopia
Health and Humanitarian Border Management: Capacity Building for Public Health Emergency Preparedness and Response in Burundi and the Democratic Republic of the Congo	2018–2019	Burundi, Democratic Republic of the Congo
Improving Access to Water and Sanitation in Somalia	2017–2020	Somalia
Improving Human Security of Migrants and Communities of Return in Somalia	2018–2019	Somalia
Information, Tracking, and Monitoring for South Sudan Displacement Dynamics (Phase II)	2019	South Sudan
Integrated Humanitarian and Recovery Support for Displacement-Affected Populations in Somalia	2018–2019	Somalia
Life-Saving Emergency Response to Floods and Disease Outbreak in Kenya	2018	Kenya
Malakal Protection of Civilian Site Reconfiguration	2018–2019	South Sudan
Provision of Camp Coordination and Camp Management Services to Displaced Populations in Somalia (ECHO)	2017–2018	Somalia
Provision of Emergency Humanitarian Assistance to Drought-Affected Displaced Populations in Somalia	2017–2018	Somalia
Provision of Emergency Life-Saving Health-Care Services to the Drought-Affected Populations in Somalia	2018	Somalia
Provision of Humanitarian Assistance to Drought-Affected, Displaced, and Vulnerable Somalis	2018–2019	Somalia
Provision of Life-Saving and Sustainable WASH Services to Drought-Affected Populations in Northern Somalia	2018	Somalia

Project title	Date	Country
Provision of Life-Saving Assistance to Drought-Affected Populations in Somalia	2017–2018	Somalia
Reducing Medium- and Long-Term Recurrent Costs: Adoption of Renewable Energy to Ensure Water Supply in Refugee and IDP Camps and Local Communities	2016–2018	Ethiopia, Iraq, Kenya, Nigeria, Somalia, Uganda
Strengthening Disease Surveillance and Response of Epidemic-Prone Diseases in the Areas Affected by Cyclone Sagar	2018	Djibouti
Strengthening Human Security by Enhancing Resilience to Natural Disasters and Climate-Related Threats in Ngororero District, Rwanda	2016–2018	Rwanda
Tracking and Monitoring Population Displacement Trends Using the Displacement Tracking Matrix (DTM) System in Somalia	2017–2018	Somalia

Table A2.5. Southern Africa – Regional Office, Pretoria, South Africa

Project title	Date	Country
Early Action in Response to the 2018 Plague Outbreak in Madagascar	2018–2019	Madagascar
Migration, Environment, and Climate Change: Evidence for Policy in Southern Africa and the Indian Ocean	2016–2018	Madagascar, Mauritius, Mozambique, Namibia
Support to the Humanitarian Response and Early Recovery Activities for the Most Vulnerable People in a Situation of Severe Food Insecurity (Classified at Emergency and Crisis Phase of Index Food Security Phase Classification – IPC), Affected by the Drought in the Androy Region ("Grand Sud" of Madagascar)	2017–2018	Madagascar

Table A2.6. Middle East and North Africa – Regional Office, Cairo, Egypt

Project title	Date	Country
Assistance to Health Facilities Affected by the Earthquake in Iraq in November 2017	2018	Iraq
Displacement Tracking to Vulnerable Migrants, IDPs, and Returnees in Yemen	2018–2019	Yemen
Integrated Cholera Control and Prevention for Vulnerable and Affected Communities in Yemen	2017–2018	Yemen
Strengthening the Role of Women in Conflict Resolution through Natural Resources Management at the Community Level in the Rural Areas of the Governorates of Sana'a and Lahj in Yemen	2018–2019	Yemen

Table A2.7. South America – Regional Office, Buenos Aires, Argentina

Project title	Date	Country
Migration, Medium Environment, and Climate Change in the Bolivian Highlands, Plurinational State of Bolivia	2018	Plurinational State of Bolivia
Strengthening of Humanitarian Response for Affected Indigenous Communities in the Province of La Guajira	2017–2018	Colombia

Table A2.8. South-Eastern Europe, Eastern Europe, and Central Asia – Regional Office, Vienna, Austria

Project title	Date	Country
Flood Recovery – Housing Interventions in Republika Srpska (RS)	2017–2020	Bosnia and Herzegovina

Table A2.9. European Economic Area – Regional Office, Brussels, Belgium

Project title	Date	Country
Environmental Degradation, Climate Change, and Migration: Global Review of Research and Forecasts	2018–2019	Global
Supporting the Implementation of the Protection Agenda – Platform on Disaster Displacement (PDD)	2016–2018	Global
Supporting the Work of the UNFCCC Task Force on Displacement and the PDD Data and Knowledge Working Group	2018	Global

ANNEX 3. NON-GOVERNMENTAL ORGANIZATIONS, INTERNATIONAL NON-GOVERNMENTAL ORGANIZATIONS, AND CIVIL SOCIETY PARTNERSHIPS

Names	Countries
ActionAid International	Global; Myanmar
adelphi research gemeinnüetzige GmbH	Global
African Foundation for Development	Sierra Leone
Agency for Technical Cooperation and Development	Myanmar, Pakistan
Agil	Ghana, Guinea, Guinea-Bissau, Senegal, Sierra Leone
Alaska Institute for Justice	Global
Alpina Foundation	Colombia
AMEVHA	Haiti
Arab Network for Environment and Development	Global
Asia Pacific Refugee Rights Network	Global
Asian Disaster Preparedness Center	Myanmar
Association Action Encadrement Social	Madagascar
Association TAGA	Madagascar
Association TANATARAE	Madagascar
AWALE	Somalia
CARE International	Global; Indonesia, Papua New Guinea, Timor-Leste
Caritas	Indonesia
Catholic Relief Services	Ethiopia
Centre National de Recherches sur l'Environnement	Madagascar, Mauritius, Mozambique, Namibia
ChildFund	Sierra Leone
Chin Green Network	Myanmar
Christian Aid	Bangladesh
Chuuk Women's Council	Federated States of Micronesia
Climate Analytics	Global
Concern Worldwide	Bangladesh, Sierra Leone
Cooperazione Internazionale	Guatemala
Danish Refugee Council	South Sudan
Forum Zakat	Indonesia

Names	Countries
German Society for International Cooperation (GIZ)	Global; Cook Islands, Fiji, Kiribati, Marshall Islands, Palau, Papua New Guinea, Tuvalu, Vanuatu
Health and Nutrition Development Society	Pakistan
Human Development Concern	Somalia
Humanitarian Forum Indonesia	Indonesia
Humanity and Inclusion	Myanmar
International Centre for Integrated Mountain Development	Global
International Displacement Monitoring Centre	Global
International Federation of Red Cross and Red Crescent Societies	Bangladesh, Burundi, Djibouti, Federated States of Micronesia, Kenya, Marshall Islands, Mongolia, Palau, Papua New Guinea, Philippines, Sierra Leone, Timor-Leste, Yemen
International Medical Corps	Ghana, Guinea, Guinea-Bissau, Senegal, Sierra Leone
Kale Lwin Pyin	Myanmar
Khadija Foundation	Yemen
Labour Protection Network	Cambodia, Lao People's Democratic Republic, Myanmar, Thailand, Viet Nam
Marshall Islands Conservation Society	Marshall Islands
Mary Robinson Foundation	Global
MEDELAD	Haiti
Mercy Corps	Mongolia
Motherland	Somalia
Myat Myittar	Myanmar
Norwegian Refugee Council	Global; Ethiopia, Iraq, Kenya, Nigeria, Somalia, Uganda
One Health Platform	Guinea
Organisation of Sierra Leone Health Professionals Abroad	Sierra Leone
Organisation pour la Prévention et l'intervention contre les Risques et Contingences	Burundi
Orphans International Helpline	Haiti
Overseas Development Institute	Global
Oxfam International	Global; Ethiopia, Iraq, Kenya, Myanmar, Nigeria, Somalia, Uganda
Pacific Conference of Churches	Global
Pacific WIN	Global
Palau Parents Empowered	Palau
Perkumpulan Keluarga Berencana Indonesia	Indonesia
Plan International	Myanmar, Timor-Leste

Names	Countries
Refugees International	Global
Research Institute for Development	Madagascar, Mauritius, Mozambique, Namibia
RTI International	Ghana, Guinea, Guinea-Bissau, Sierra Leone, Senegal
Rural Education and Agriculture Development Organization	Somalia
Samaritan's Purse	Kenya
Save the Children International	Ethiopia, Indonesia
Somali Development and Rehabilitation Organization	Somalia
Somali Relief and Development Action	Somalia
Swaynee Development Foundation	Myanmar
Tedim Youth Fellowship	Myanmar
Trees for the Future	Global; Senegal
United for the Protection of Human Rights advocacy Network-Sierra Leone	Sierra Leone
Wahana Visi Indonesia	Indonesia
WARDI Relief	Somalia
Women and Child Care Organization	Somalia
Women Water Users' Group	Yemen
World Vision International	Bangladesh, Kenya, Mongolia, Timor-Leste
Yakkum Emergency Unit	Indonesia
Yap Women's Association	Federated States of Micronesia
Yemen Family Care Association	Yemen
Yemen Women Union	Yemen

BIBLIOGRAPHY

Cazeau, J.W.

2019   Review of the integration of disaster risk reduction in the work of the United Nations system in the context of the 2030 Agenda for Sustainable Development. United Nations, 2019.

Flavell, A., S. Melde and A. Milan

2020   *Migration, Environment and Climate Change: Impacts.* Second report in the "Migration, environment and climate change" series. German Environment Agency, Umweltbundesamt, Germany.

Flavell, A., A. Milan and S. Melde

2020   *Migration, Environment and Climate Change: Literature review.* First report in the "Migration, environment and climate change" series. German Environment Agency, Umweltbundesamt, Germany.

Gombas, A., G. Gruss and V. Nyawara

2018   *Assessing the Effect of Natural Disasters on the Health and Safety of Women and Girls in the FSM.* IOM Pohnpei State.

Guadagno, L.

2017   Human mobility in a socio-environmental context: Complex effects on environmental risk. In: *Identifying Emerging Issues in Disaster Risk Reduction, Migration, Climate Change and Sustainable Development: Shaping Debate and Policies* (K. Sudmeir-Rieux, M. Fernández, I. Penna, M. Jaboyedoff, and J. Gaillard, eds.). Springer, Heidelberg, pp. 13–31.

Internal Displacement Monitoring Centre (IDMC)

2018   *Global Report on Internal Displacement.* Geneva. Available at www.internal-displacement.org/global-report/grid2018/.

2019   *Disaster Displacement: A Global Review, 2008–2018.* Thematic Report. Geneva.

International Labour Organization (ILO)

2018   *ILO Global Estimates on International Migrant Workers: Results and Methodology.* Second edition. Geneva. Available at www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_652001.pdf.

International Organization for Migration (IOM)

2017   *Taking Sendai Forward: IOM Strategic Work Plan on Disaster Risk Reduction and Resilience 2017–2020.* Available at www.iom.int/sites/default/files/our_work/DOE/humanitarian_emergencies/Disaster-Risk-Reduction-Strategic-Action-Plan.pdf.

2018a   *Taking Sendai Forward: IOM Progress Report on Disaster Risk Reduction and Resilience 2018.* Available at www.iom.int/sites/default/files/our_work/DOE/humanitarian_emergencies/transition-recovery/drr/drr-report-2017-2018-1221.pdf.

2018b   *Global Report 2018: Operations and Emergencies*. Geneva. Available at https://publications. iom.int/fr/system/files/pdf/iom_global_report_2018.pdf.

2018c   Six weeks after Typhoon Mangkhut, Northern Philippines braces for Yutu. Press release, 3 October. Available at www.iom.int/news/six-weeks-after-typhoon-mangkhut-northern-philippines-braces-yutu.

2018d   IOM assesses displacement impact of Super Typhoon Mangkhut, commends Philippine Government preparation, response. Press release, 21 September. Available at www.iom.int/news/iom-assesses-displacement-impact-super-typhoon-mangkhut-commends-philippine-government.

2018e   IOM allocates USD 200,000 to aid victims of Indonesian earthquake, tsunami. Press release, 2 October. Available at www.iom.int/news/iom-allocates-usd-200000-aid-victims-indonesian-earthquake-tsunami.

2018f   Shelter/NFI Site Report: Flood emergency in Burundi, May 2018. Available at www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/flood_emergency_in_burundi_2018_shelter_response_and_gaps.pdf.

2018g   Displacement Tracking Matrix (DTM): Earthquake in Lombok, 2018. Narrative DTM round II, 7 November. Available at https://displacement.iom.int/system/tdf/reports/20181030_Narative%20Report%20DTM%20Round%20II_ENG.PDF?file=1&type=node&id=4757.

2018h   IOM Bangladesh: Rohingya Humanitarian Crisis Response External Update, 19–25 October. Available at https://bangladesh.iom.int/sites/default/files/documents/28-10-18/2018-10-25%20-%20IOM%20Rohingya%20Crisis%20Response%20-%20External%20Sitrep.pdf.

2019   Vanuatu 2019 Humanitarian Compendium. Appeals 2019. Available at https://humanitariancompendium.iom.int/appeals/vanuatu-2019.

n.d.   Disaster Risk Reduction and Environmental Degradation. Available at www.iom.int/disaster-risk-reduction (accessed 17 February 2020).

IOM Bangladesh

2018   *Saving Lives Protecting Migrants: Annual Report 2018, Bangladesh*. Dhaka. Available at https://bangladesh.iom.int/sites/default/files/publication/Annual%20Report%202018_0.pdf.

IOM and Institute of Sociology, Ha Noi

2017   *Planned Relocation for Communities in the Context of Environmental Change and Climate Change: A training manual for provincial and local authorities*. IOM Mission in Viet Nam, Ha Noi. Available at https://publications.iom.int/books/planned-relocation-communities-context-environmental-change-and-climate-change.

Organisation for Economic Co-operation and Development (OECD)

2018   *States of Fragility 2018*. Paris.

Oxfam

2019   Forced from home: Climate-fuelled displacement. Oxfam Media Briefing, 2 December. Available at www.oxfam.org/en/research/forced-home-climate-fuelled-displacement.

Peters, K., K. Holloway and L.E.R. Peters

2019   Disaster risk reduction in conflict context: The state of the evidence. Working paper 556. Overseas Development Institute, London. Available at www.odi.org/publications/11340-disaster-risk-reduction-conflict-contexts-state-evidence.

Platform on Disaster Displacement

2018   Workshop on human mobility in the context of disasters and climate change concludes in Fiji. Press release, 14 February. Available at https://disasterdisplacement.org/workshop-on-human-mobility-in-the-context-of-disasters-and-climate-change-concludes-in-fiji.

Rigaud, K.K, A. de Sherbinin, B. Jones, J. Bergmann, V. Clement, K. Ober, J. Schewe, S. Adamo, B. McCusker, S. Heuser, A. Midgley

2018   *Groundswell: Preparing for Internal Climate Migration*. The World Bank, Washington, D.C.

United Nations

2016a   UN Plan of Action on Disaster Risk Reduction for Resilience: Towards a Risk-informed and Integrated Approach to Sustainable Development. Cover note, 27 April. Available at www.unsceb.org/CEBPublicFiles/UN%20PoA%20on%20Disaster%20Risk%20Reduction%20for%20Resilience-ODS.pdf.

2016b   Report of the open-ended intergovernmental expert working group on indicators and terminology relating to disaster risk reduction . Note by the Secretary-General (A/71/644).

2018a   Global Compact for Safe, Orderly and Regular Migration. Final draft, 11 July. Available at https://refugeesmigrants.un.org/sites/default/files/180711_final_draft_0.pdf.

2018b   Draft outcome document of the Intergovernmental Conference to Adopt the Global Compact for Safe, Orderly and Regular Migration. Note by the President of the General Assembly (A/Conf.231/3). Available at https://undocs.org/A/CONF.231/3.

United Nations Department of Economic and Social Affairs (UN DESA)

n.d.   International migrant stock 2019. Available at www.un.org/en/development/desa/population/migration/data/estimates2/estimates19.asp (accessed 5 March 2020).

United Nations Office for the Coordination of Humanitarian Affairs (OCHA)

2018   Indonesia: Humanitarian Snapshot Central Sulawesi (as of 20 Dec 2018). Available at https://reliefweb.int/sites/reliefweb.int/files/resources/revised_file_v2_final_palu_infographics_english_0.pdf.

2019   *2019 Humanitarian Response Plan, January–December 2019*. Available at Ethiopia, https://reliefweb.int/sites/reliefweb.int/files/resources/2019_HRP_030719.pdf.

United Nations Office for Disaster Risk Reduction

2018   *Words into Action Guidelines: Disaster Displacement: How to Reduce Risk, Address Impacts and Strengthen Resilience*. A companion for implementing the Sendai Framework target E. Geneva. Available at https://environmentalmigration.iom.int/sites/default/files/58821_disasterdisplacement05a.pdf.

Wright, E., D. Tänzler and L. Rüttinger

        Migration, Environment and Climate Change: Responding via climate change adaptation policy. German Environment Agency, Umweltbundesamt, Germany (forthcoming).