

[Country Sheet I: Canada]

1. Comprehensive Support from Disaster Prevention to Disaster Relief and Recovery Assistance

1.1. Disaster Prevention

Enhancing Climate Resilience in more Vulnerable States

1.1.1 The Canadian Community Resilience Building Project aims to enhance community resilience and mainstream a comprehensive disaster management approach in three Caribbean countries, namely Belize, Saint Vincent and the Grenadines as well as Suriname. It will achieve this through supporting targeted vulnerable communities in organizing themselves, and preparing for natural disasters and crises, and by strengthening comprehensive disaster management at the national and local levels. Canada also contributes to the Climate Resilience and Execution Agency of Dominica to contribute to Dominica's vision to be the world's "First Climate Resilient Nation" by making Dominica's people, infrastructure and systems more resilient to climate-related and natural disasters so they can recover more quickly following disasters.

Support to Avert, Minimize and Address Loss and Damage

1.1.2 Canada recognizes that some communities around the world, are more vulnerable to loss and damage associated with the adverse effects of climate change. As such, at COP27, Canada rallied together with developed and developing countries to establish new funding arrangements, including a fund, for assisting particularly vulnerable developing countries in responding to loss and damage. At COP27, Canada also announced a contribution to the Global Shield Financing Facility, which will help make climate-vulnerable countries more resilient to disaster risk and protect the lives and livelihoods of the most vulnerable, and an additional contribution to establish the Santiago Network, to help developing countries access technical assistance to avert, minimize and address loss and damage.

Nature-Based Solutions for Disaster Prevention

1.1.3 The Natural Infrastructure for Water Security in Peru Project aims to promote the conservation, restoration, and rehabilitation of natural ecosystems, or "natural infrastructure", to improve Peru's water security and climate risk resilience. The project works to build alliances with public and private actors to facilitate investments in natural infrastructure projects that improve nature's ability to

capture, filter, store and deliver water. The project also aims to promote the participation and leadership of women in decision-making spaces and ensure the integration of gender considerations into national climate and water policies.

1.1.4 More recently, Canada announced new funding to Enhancing Eco-systems and Coastal Protection for Climate Change Resilience in the Caribbean, in partnership with the Caribbean Community Climate Change Centre (CCCCC) to increase the climate resilience of communities and vulnerable population in the region by transforming the way coral reefs and coastal ecosystems are managed to ensure that their biodiversity is protected and that the vital services they provide are sustained. As well, Canada announced new funding to the Caribbean Organizations for a Resilient Environment (CORE) project to provide small- to medium-sized grants to local environmental and women-rights organization to reach key ecosystems such as mangroves, coral reef and forests, and increase ecosystems services that support Caribbean communities' resilience to climate change.

1.1.5 Canada also contributes to several initiatives, including the Ocean Risk and Resilience Action Alliance (ORRAA) and the Global Fund for Coral Reefs (GFCR), which aim to foster collaboration amongst the finance and insurance sectors, governments and environmental organizations to scale up investment in nature-based solutions for ocean health and coastal resilience in vulnerable communities, including coastal developing countries and SIDS. For example, through ORRAA, Canada has supported the development of a Coastal Risk Index that integrates the protective benefits of coastal ecosystems into insurance risk models, and providing a more detailed way to assess current and future coastal flooding risk in the context of climate change.

Disaster Prevention with a Focus on more Vulnerable Groups

1.1.6 Canada supports several initiatives that aim at enhancing the resilience of communities, with a particular focus on women, girls, vulnerable groups and indigenous groups. Among others, Canada funds the KIWA Initiative, which aims to make Pacific Island ecosystems, economies and communities more resilient to the impacts of climate change, the Lands4Life project, which increases economic- and climate-resilience livelihoods and food security for poor and vulnerable groups, particularly women and girls, in Indonesia as well as the Building Community Resilience to Climate Change in Senegal aims to improve rural communities' resilience to climate change, especially for women, in the Kedougou region of Senegal.

1.2. Disaster Relief and Recovery Assistance

Direct Support following a Disaster

1.2.1 The Canadian Humanitarian Assistance Fund (CHAF) is one of Canada's humanitarian drawdown mechanisms, and allows Canada to respond quickly to unmet humanitarian needs during small- and medium-scale rapid-onset crises. These are primarily understood to be natural disasters (e.g. floods, earthquakes, tropical storms, etc.).

1.2.2 The Emergency Disaster Assistance Fund (EDAF) is a draw-down fund, administered by the Canadian Red Cross, which allows Canada to rapidly respond to International Federation of Red Cross and Red Crescent Societies (IFRC) emergency operations following small- and medium-scale humanitarian crises. The draw-down fund is a flexible funding mechanism that supports a timely and effective humanitarian response to those affected by natural disasters or complex emergencies, including conflict, population movement, food insecurity, and health crises.

1.2.3 The Caribbean Disaster Emergency Management Agency (CDEMA) project improves comprehensive disaster management in the Caribbean Region with a focus on vulnerable populations, particularly women and girls. The project improves regional emergency communications capacity, trains regional response teams, and funds local early recovery projects in impacted countries.

1.2.4 The Strengthening Climate Risk Management in Africa Project contributes to the African Risk Capacity (ARC) Agency which supports African governments to immediately assist populations affected by extreme weather events and natural disasters, such as drought and flooding, by improving their capacities to plan, prepare and respond to extreme weather events and natural disasters affecting Africa's populations. Using climate risk insurance, early warning tools and national disaster response plans, ARC improves cost-effectiveness of disaster management, reduces the loss of productive assets by farmers, and decreases the risk of household food insecurity.

1.2.5 Improving the Association of Southeast Asian Nations' Humanitarian Assistance Capacity in Multi Hazards supports the Association of Southeast Asian Nations (ASEAN) Coordinating Centre for Humanitarian Assistance (AHA Centre) in increasing member states' capacity to provide humanitarian assistance and respond to disasters. The program will integrate gender, protection and inclusiveness as well as climate change adaptation and environmental sustainability standards and measures into disaster management.

Maintaining Canada's Capacity to Respond to Crisis

1.2.6 Canadian Red Cross Society – Readiness for Global Emergency Response: This project ensures that skilled Canadian personnel are readily available for deployment to humanitarian crises as well as the materials and services required to offer effective assistance to affected populations. This readiness project incorporates all the elements that make rapid response possible, including the recruitment, training and development of expert humanitarian workers as well as the availability of state-of-the-art, modular Emergency Response Units (ERU) aimed at addressing the health needs of vulnerable people and especially the specific needs of girls and women affected by crises.

Disaster Risk Insurance

1.2.7 Canada also contributes to the Caribbean Catastrophe Risk Insurance Facility (CCRIF), which uses insurance schemes to provide rapid payouts without insurance claim investigation in the event of a large-scale disaster.

2. Promoting the Development of Early Warning Systems

2.1. Capacity Building and Development of Meteorological Observation Equipment

2.1.1 Canada contributes to the Climate Risk and Early Warning Systems (CREWS) initiative that was developed to improve Multi-Hazard Early Warning Systems in developing countries, particularly Small Island Developing States and Least Developed Countries. These systems have been proven to reduce loss of life and economic hardship caused by meteorological hazards such as tropical cyclones, floods, severe storms, forest fires, and heat waves.

2.2. Cooperation with International Organizations

Cooperation with the Red Cross and the Red Crescent

2.2.1 Canada contributes to the Disaster Relief Emergency Fund (DREF) Forecast-Based Action, which is a funding mechanism specifically designed to fund forecast-based Early Action Protocols developed by Red Cross and Red Crescent Societies in 2018.

Cooperation with the World Bank

2.2.2 The Canada-Caribbean Resilience Facility (through the World Bank) strengthens long-term resilience in Caribbean countries following natural disasters by mobilizing emergency funding. It also put in place public financial management systems, protocols and guidelines, which can be triggered in the event of a natural disaster or emergency. It benefits nine Caribbean countries; Antigua and Barbuda, Belize, Dominica, Grenada, Guyana, Jamaica, St. Lucia, St. Vincent and the Grenadines and Suriname.

2.3. Cooperation with the Private Sector

N/A

3. Other Cross-Sectional Activities

3.1 Knowledge Sharing

N/A

3.2. Contribution to the United Nations and Multilateral Frameworks

Contribution to the United Nations

3.2.1 Canada contributes to the UN Central Emergency Response Fund (CERF) that enables humanitarian responders to deliver life-saving assistance whenever and wherever crises strike.

3.2.2 Canada is a strong supporter of the Country-based Pooled Funds (CBPFs), recognizing their ability to provide timely allocations based on priority needs; efficiently provide funding to local actors; flexibility to adapt to specific country contexts. As the co-chair of the Pooled Fund Working Group, Canada is continuing to lead discussions on the revision of the CBPFs Global Guidelines. As part of this process, promoting anticipatory action has been added as one of the main thematic priorities for the CBPFs.

3.2.3 Canada contributes to the first replenishment of the Green Climate Fund. This replenishment

supports key transformative initiatives identified by countries in each of its eight results areas (energy generation and access; transport; buildings, cities, industries and appliances; forests and land use; health, food and water security; livelihoods of people and communities; ecosystems and ecosystem services; infrastructure and the built environment) to achieve the Paris Agreement goals.

3.2.4 In addition, Canada's Climate Change Action for Gender Sensitive Resilience Project (EnGenDER) with the UNDP is helping to further integrate gender equality and human-rights based approaches into disaster risk reduction (DRR), climate change adaptation and environmental management frameworks and interventions and identify and address some of the gaps to ensure equal access to DRR and climate change and environment solutions for men, women, boys and girls in nine Caribbean countries (Antigua and Barbuda, Belize, Dominica, Grenada, Guyana, Jamaica, Saint Lucia, Saint Vincent and the Grenadines and Suriname).

3.3. Promotion of Climate Disaster related Services and Technologies

3.3.1 Canada contributes to the Climate Technology Centre and Network (CTCN), which is a body created under the UNFCCC, to promote the accelerated development and transfer of climate technologies for energy-efficient, low-carbon, and climate resilient development. This initiative will provide developing countries with the technical assistance and capacity building support needed to meet technology needs in pursuit of implementing Nationally Determined Contributions and National Adaptation Plans.

[Country Sheet II: European Commission]

Comprehensive Support from Disaster Prevention to Disaster Relief and Recovery Assistance

1.1. Disaster Prevention

- The **10th EDF ACP-EU Natural Disaster Risk Reduction (NDRR)** supported **Disaster Risk Management and Climate Change Adaptation activities in Africa, Caribbean and Pacific countries through technical assistance, capacity development and advisory/analytical work.** It sought to prevent, mitigate and enhance preparedness to natural hazards at regional, sub-regional, national and local levels in ACP countries along priority areas: (i) Mainstreaming of DRR; (ii) Risk identification and assessment; (iii) Early warning systems and communication on DRR; and (iv) Risk transfer and integration of DRR into post-disaster recovery
- The **11th EDF Intra-ACP Natural Disaster Risk Reduction Programme** is a concrete example of a coordinated response to reduce the impact of natural hazards and disasters, including those related to climate change and biological hazards, and on increasing overall resilience in 79 African, Caribbean and Pacific countries.
- The **Global Climate Change Alliance+ (GCCA+)** has also for more than a decade supported communities in adapting to climate change by promoting sustainable livelihoods to reduce poverty, natural resource-depletion and disaster risk. EU GCCA+ commitments make it one of the largest climate initiatives in the world. Several projects under the Global Climate Change Alliance Plus (GCCA+) umbrella have tackled DRR more specifically, such as the **Scaling-up Pacific Adaptation (SUPA)** project or the **Pacific Adaptation Climate Change and Resilience (PacRes)** project.
- The **Up-Scaling Community Resilience through Ecosystem-based Disaster Risk Reduction (Eco-DRR) project** features scalable, community-based models of Ecosystem-based DRR in five countries- Ethiopia, Uganda, Haiti, India and Indonesia- and promotes the upscaling of community models and enhance community resilience by restoring the degraded ecosystems, improving livelihoods, and reducing climate risks with a strong women engagement and also

linking them to national policies or programme. The programme has been working since 2013 and it is currently in its second phase.

- The **Coalition for Disaster Resilient Infrastructure (CDRI)** has been working closely with its members, including the EU, and SIDS representatives in setting up Infrastructure for Resilient Island States (IRIS). Launched in 2021 at COP26 during the World Leaders Summit, IRIS is a dedicated initiative to achieve sustainable development through a systemic approach to promote resilient, sustainable and inclusive infrastructure in SIDS.
- The EU allocates more than €75 million of its annual humanitarian funding to targeted disaster preparedness actions. This includes investments in early warning systems, monitoring and building national and local capacities for response. In 2023, the EU is allocating invested €78 million to disaster preparedness actions. The EU also aims to mainstream disaster preparedness across all its humanitarian actions..

1.2. Disaster Relief and Recovery Assistance

- Over the last decade, the EU has supported various disaster risk financing activities. These include for example the **Global Partnership on Disaster Risk Financing Analytics project** and the **Africa Disaster Risk Financing Initiative (ADRF)** which were both implemented by the World Bank's Global Facility for Disaster Reduction and Recovery (GFDRR).
- Under the 11th EDF **Natural Disaster Risk Reduction Programme** some specific actions aim to strengthen disaster risk financing and insurance response to the impact of natural hazards:
 - A **grant to the African Risk Capacity (ARC)**, a specialised agency of the African Union (AU) currently assisted by the World Food Programme (WFP), will provide member states of the ARC with capacity building services, contingency planning and a risk pooling and transfer facility. The Action will leverage on synergies with the programme "Strengthening disaster risk responses to food crises in African countries through the Global Network Against Food Crises", signed in January 2020.
 - In the Pacific, the programme **Building Safety and Resilience in the Pacific – Phase II (BSRP II)** implemented by the Pacific Community (SPC) will increase the availability of risk financing tools and strategies in targeted countries in the Pacific.

- In the Caribbean, a financial contribution to the **Caribbean Catastrophe Risk Insurance Facility (CCRIF)** under the Caribbean-EU partnership on the Green Deal in the framework of the new Euroclima Caribbean Programme is foreseen, to be financed from the Caribbean Regional programme. The aforementioned Caribbean Resilience Programme will also enhance the capacity of Caribbean region in developing disaster risk financing and strategies.
- The newly launched **Team Europe Initiative (TEI) on Climate Change Adaptation and Resilience** in Africa will also promote **Climate and Disaster Risk Finance and Insurance (CDRFI)** mechanisms to protect vulnerable populations against residual risks, with a contribution to the **Global Shield against Climate Risks**.
- Furthermore, the EU has been supporting local governments' access climate finance via the Local Climate Adaptive Living Facility (LoCAL). LoCAL helps local government authorities in developing and least developed countries including SIDS access the climate finance, capacity development and technical support they need to respond and adapt to climate change. Climate and weather-related events requiring humanitarian assistance are intensifying. As a result, the EU humanitarian budget allocated for disasters caused by natural hazards has steadily grown over the years, integrating dedicated programmes and tools. The Emergency Toolbox is dedicated to emergency response outside of the EU. It is designed to rapidly respond to emergencies and provide first-line funding in the aftermath of a crisis. Within the Toolbox there are various mechanisms for disaster response. **ALERT (Acute Emergency Response Tool)** responds to large scale hazards and technological disasters and allocates funds within 24-48 hours. The **Small-scale tool** assists a limited number of people affected by a natural or human disaster. The **Disaster Response Emergency Fund (DREF)** belongs to the Red Cross and Red Crescent Societies (IFRC). The EU contributes to this fund up to €200,000 per action. In 2022, €29.5 million was provided through the toolbox mechanisms.
- The Copernicus Emergency Management Service, which provides information for emergency response and disaster risk management, counts with the "On Demand Mapping component", which provides detailed information for selected emergency situations that arise from disasters. It can provide geospatial information in the immediate aftermath of a disaster or

supply this type of information to disaster risk activities for prevention, preparedness and recovery phases.

2. Promoting the Development of Early Warning Systems

2.1 Capacity Building and Development of Meteorological Observation Equipment and 2.2. Cooperation with International Organizations

- Several actions on EWS have been funded by INTPA in the past years across developing countries, with a strong focus on ACP countries, LDCs and SIDS. Examples of ongoing INTPA programmes include:
 - **CLIMSA - Intra-ACP Climate Services and Related Applications programme:** we are supporting access to climate information and capacity strengthening of Regional Climate Centres to ultimately improve the provision of early warnings, and climate- and enhance risk-informed decision making in ACP countries
 - **CREWS – Climate Risks and EWS**, a contract with the Global Facility for Disaster Reduction and Recovery (GFDRR) of the WB has just been signed. This contract includes a contribution to CREWS ;
 - **GMES - Global Monitoring for Environment & Security (GMES) & Africa programme** focuses on the information services value chain in 45 African countries, including early warnings for coastal areas, through the Earth Observation data provided by Copernicus. Examples of actions implemented under the programme include marine and coastal areas management in Western Africa to monitor coastal vulnerability and ocean's health and the coastal ecosystems mapping in northern Africa (Egypt, Mauritania, Morocco and Tunisia).
 - **Copernicus** – the EU has a few ongoing initiatives linking Copernicus Earth Observation data and services with institutional and **private** users in developing countries.
 - As part of the intra-ACP Natural Disaster Risk Reduction Programme in the Pacific, **the Building Safety and Resilience in the Pacific (BSRP) – phase II** action provides reliable disaster and climate risk data to feed EWS and enhance preparedness and prevention.

- In addition, INTPA is designing with partners, including EU Member States, further actions in support of the **United Nation's Global Early Warnings for All initiative**, namely:
 - The **TEI on Climate Change Adaptation and Resilience in Africa** (EUR 1 billion) is comprised of 4 pillars: (1) Support collection, analysis, and aggregation of and access to risk data and support to regional and national early warning systems and mechanisms; (2) Strengthen policy, governance and risk-informed decisions; (3) Enhanced access to climate adaptation finance; and (4) Strengthen Climate and Disaster Risk Finance and Insurance solutions for Africa through e.g. enhancing the Global Shield against Climate Risks. **Support to early warning systems, is being addressed under pillars 1 and 2.**
 - The **Space and Earth Observation in Africa flagship** will leverage EU Space and Earth Observation Programmes such as Copernicus to support risk-informed, evidence-based and inclusive development in the Green Transition. It currently includes three pillars: (1) Space Dialogue, (2) Space and Earth Observation-based environmental services, and (3) Boosting the African private sector in the Space and Earth Observation fields. Support to key elements of the hydro meteorological services value chain, in particular observing and monitoring of weather, climate and water phenomena. **Support to early warning systems is envisaged under Pillar 2.**
 - The Sub-Saharan Africa Programme **Scientific and Technological Support to Regional Centres of Excellence related to Green Transition** includes climate and disaster resilience as one of the main priority areas. Through continued support to Regional Climate Centres, Regional Specialised Meteorological Centres, or regional situation rooms and other institutions this Programme would also support early warning.

- Under the **Copernicus programme**, the EU supports countries in the assessment of natural hazards by complementing their early warning and information systems in real-time. These tools contribute to early analysis and actions through early warnings. The **Global Disaster Alert and Coordination System** provides alerts and estimates the impacts of earthquakes, tsunamis, tropical cyclones, floods, volcanoes, and droughts worldwide.
 - The **European and Global Flood Awareness Systems** provides overview maps of flood probabilities up to 15 or 30 days in advance as well as seasonal streamflow outlooks..
 - The **European and Global Forest Fire Information Systems** forecast meteorological fire danger and provide near real-time information on active fires and burnt areas.

- The **European and Global Drought Observatories** give information on drought risks in Europe and worldwide, including meteorological indicators, soil moisture anomalies, vegetation stress, and low river flows.

3. Other Cross-Sectional Activities

3.1 Knowledge Sharing

- Many DRR programmes supported by the EU have knowledge sharing component. Some specific examples would include for example:
 - In January 2021, a **Massive Open Online Course (MOOC) on Nature-based Solutions (NbS) for Disasters and Climate Resilience** was launched on the edX platform (available until December 2022). It aims to inform people about the value of NbS in combatting the climate crisis as well as to call them to action. The course has been developed by UNEP experts and the Partnership of Environment and Disaster Risk Reduction (PEDDR); thanks to support from the EU. The course has brought together **60,000+ participants and 190+ countries**.
 - Under the **Making Cities Sustainable and Resilient: Implementing the Sendai Framework for Disaster Risk Reduction 2015-2030 at the local level programme** with UNDRR and UN-Habitat, **eleven capacity building and knowledge sharing workshops were organized at the global and regional levels**, including four kick-off workshops in each region, one global Training of Trainer programme, five regional sharing of experience and one global experience sharing workshop at the end of the Action. Additional to this, at least 59 workshops and many more meetings and consultations were held in each beneficiary city throughout the implementation period, involving more than **1,972 participants from various government and non-government sectors**.

3.2 Contribution to the United Nations and Multilateral Frameworks

- The EU is collaborating with a range of UN bodies and agencies such as UNDRRR, UNDP, WMO, UNEP or UN-Habitat, just to cite a few. See examples outlined in the sections above.
- The EU participates at different multilateral frameworks at continental, regional and national

level.

- As part of the Global Gateway, the EU Commission is working with several EU MS to develop and roll out Team Europe Initiatives (TEIs) with strong resilience and DRR components.

3.3 Promotion of Climate Disaster related Services and Technologies

- See 2.1. Capacity Building and Development of Meteorological Observation Equipment

[Country Sheet III: France]

1. Comprehensive Support from Disaster Prevention to Disaster Relief and Recovery Assistance

1.1. Disaster Prevention

1.1.1 Financial instrument and partnership

Disaster prevention as well as disaster preparedness are at the heart of the Disaster Risk Reduction (DRR) strategy set up by the French Development Agency (AFD) with its partners. AFD uses all of its range of financial instruments in loans or grants to finance and participate in strengthening its partners involved in the disaster risk reduction field.

The following projects illustrate the range of financial instruments mobilized by AFD to finance its own disaster prevention strategy:

➤ Loans

DRR Public Policy Loans (PPL) enables the financing of institutional reform within the framework of DRR.

- ✓ **Financing the Disaster Resilience Integrated Program in Tunisia (2021):** 40MEUR Loan + 1.5MEUR Grant for technical assistance had been granted in 2021 to the ministry of finance in order to strengthen risk management and financing to improve the protection of the Tunisian population and economic capital against natural disasters.

As well as PPL, the Program Budget Support (PBS) is a new financial instrument, within the loan category, in support of the strategy put in place by AFD to finance its disaster prevention strategy.

- ✓ **Disaster risk reduction in Himachal Pradesh in India (2023):** 89MEUR Loan Building resilient infrastructure, information and monitoring of climate and environmental risks and flood control in Himachal Pradesh.

➤ Grants

Grants are also another financial instrument available that allows AFD to finance its disaster prevention strategy and strengthen the capacities of its partners in this area.

- ✓ **Resilience of Mangrove Ecosystems and Natural Disaster Risk Reduction in Mozambique (2020):** 6.290MEUR Grant to Red Cross and WWF that aims to strengthen the ecosystem,

community and financial resilience of the Zambei Delta to the effects of climate change.

AFD also uses grants specifically allocated to conflict zones to finance its disaster prevention strategy (Minka Funding – Peace Building and Resilience Fund).

- ✓ **Flood risk reduction project for two watersheds in Lebanon (2020):** 13.6MEUR to NGO and Red Cross Partners (including 2.5M€ from DANIDA funding).

Furthermore, these projects highlight the diverse partnership approaches developed by AFD as part of its project financing activities.

1.1.2 Financial Amount

Please find below some information that fall under the scope of how France and AFD finance disaster prevention, while keeping in mind that it does not represent the full picture of the funding provided by France on disaster risk reduction.

	Year	2017	2018	2019	2020
Sectors					
41010: Environmental policy and administrative management		55,236	317,727	266,999	524,649
43060: Disaster Risk Reduction		1,657	8,267	17,129	49,361
74020: Preparation for multi-risk interventions		5,545	1,046	3,810	2,641
	TOTAL	62,439	327,040	287,938	576,651

DAC- OCDE (Million USD)

1.2. Disaster Relief and Recovery Assistance

1.2.1 Insurance mechanisms and sector

Insurance mechanisms constitute a key element of the disaster Relief and Recovery Strategy strategy put in place by AFD. The AFD Group's operational approaches to insurance are as follows:

- **Insurance mechanisms in response to climate change impact and losses and damages:**

Development of climate insurance products adapted to the needs of the most vulnerable States and populations.

- ✓ **Contribution to the Global Shield - Solutions Platform (2023):** 20MEUR grant funding. France through AFD is contributing to Global Shield initiative by funding the Global Shield - Solutions Platform. This project aims to meet the challenges of development, scaling up, viability and replicability of climate insurance products in developing countries vulnerable to climate change. The main objective of the project is to improve the financial resilience of vulnerable countries and populations in the face of climate shocks.
- ✓ **Contribution to the African Risk Capacity - ARC Group (2017-2022):** AFD supports regional mechanisms for pooling climate disaster risk through the contribution to ARC's initiative (5MEUR). The support aims to fund capacity building of ARC in the development of index insurance products and contingency plans. It contributes to promote integrated solution for risk transfer, technical and budgetary preparation within the framework of national contingency plans.

➤ **Support for national and regional insurance systems**

In addition to credit, savings and means of payment, insurance is a basic financial service essential to the economic and financial inclusion of populations. Examples of projects funded by AFD include:

- ✓ **Support the development, adoption and implementation of the Financial Inclusion Bill, involving a major reform of the Insurance Code, in Tunisia:** i) multisectoral public policy budget financing to Tunisian state – 150MEUR, ii) Technical Assistance to the General Insurance Committee – 0,45MEUR.
- ✓ **Support the national adaptive social protection in Mauritania:** by contributing 12MEUR to the National Response Fund to Food and Nutrition Crises (FNRCAN), AFD supports response mechanisms to food and nutrition crises set up by public and humanitarian actors, and supports people suffering the consequences of climate change (including drought), through monthly cash transfers over 4 months (El Maouna program).

1.2.2 Contingency funds

AFD provides post-disaster contingency loans and grants to developing countries that are most exposed to disaster risk, providing rapid assistance when a disaster occurs.

➤ **Contingency loans**

Contingent Public Policy Loans enable the financing of institutional reform within the framework of DRR with a contingent financing line that provides immediate liquidity to countries to address shocks related to natural disasters and/or health-related events.

- ✓ **Disaster Risk Management in Madagascar (2019):** 26,5MEUR loan provided in 2019 to the ministry of finance. The objective of this program is to strengthen the technical, institutional and financial capacity of the Malagasy government in disaster risk management.

➤ **Contingency grants**

Contingency grants provide immediate liquidity to NGOs and local partners to address shocks related to natural disasters and/or health-related events.

- ✓ **Haitian CSOs in preparation for crisis situations (2019):** 2MEUR granted in 2019.

1.2.2 Build Back Better :

The experience of past disasters has shown that the recovery, rehabilitation and reconstruction phase must be prepared upstream and is a crucial opportunity to “better rebuild” including integrating disaster risk reduction into development measures so that nations and communities become resilient to disasters. AFD, in post disaster emergencies after the humanitarian phase, promotes a Build Back Better approach as a sustainable disaster recovery and disaster prevention strategy.

2. Promoting the Development of Early Warning Systems

2.1 Capacity Building and Development of Meteorological Observation Equipment

France is a longstanding supporter of the development of early warning systems, especially through the CREWS (Climate Risk and Early Warning Systems) initiative that was launched at COP21 in 2015.

- ✓ **French contribution to the CREWS initiative (from 2016):** France launched the CREWS initiative at COP21 in 2015, to support the development of early warning systems in least developed countries and small island developing states. CREWS is now supported by 10 donor states, who have collectively dedicated 100MUSD for early warnings’ development since 2016. CREWS supports 16 projects covering more than 75 vulnerable countries. The contribution of France to CREWS represents 30MEUR for 2016-2022. As a contribution to the UNSG objective

to achieve universal coverage of early warning systems within the next 5 years, France announced that it will double its annual contribution to CREWS to reach 8MEUR per year, starting in 2023.

- ✓ **HYDROMET project supported by AFD in the Indian Ocean region (2021):** this project representing a 71MEUR funding aims at building regional resilience through strengthened meteorological, hydrological and climate services in the Indian Ocean Commission member countries, including enhanced early warning systems.

2.2 Cooperation with International Organizations

France supports the activities of international organizations related to early warning systems through its contribution to the CREWS initiative, as the UNDRR, the World Meteorological Organization and the Global Facility for Disaster Reduction and Recovery (GFDRR – World Bank) are implementing partners of CREWS since its inception.

2.3 Cooperation with the Private Sector

Created in 2002, Meteo France International (MFI) is a subsidiary of Météo France, the French national hydrometeorological service. MFI is a world leader in the field of design and implementation of integrated modernization projects for the benefit of NMHSs (National HydroMeteorological Services) worldwide. MFI main objective is to transfer know-how and technology and create a real warning and service capacity, thus leading to Socio-Economic Benefits for the country. MFI proposes a unique and successful approach based on PPP (Public Private Engagement, praised by WMO since Geneva Declaration was endorsed in 2019).

In response to the UNSG initiative Early Warnings for All, MFI has built a proposal called W4ALL (Warning for All) based on a set of high level principle to help the UN initiative be implemented on a timely, effective, and sustainable way:

1. Target integrated projects across the full Early Warning / Early Action value cycle
2. Dare PPE-DBO (Design-Build-Operate) approach
3. Qualify Public-Private Consortia to implement the initiative on a regional basis
4. Set up fitted financial mechanisms, compliant with aimed PPE approach.

MFI W4ALL approach was introduced during WMO Technical conference (Oct.2022) and Regional conferences (Nov.2022-Feb.2023).

Moreover, MFI has been actively involved in the representation of the Private Sector in support to the GWE (Global Weather Enterprise) aiming at a fruitful collaboration between Public, Private and Academic Sector in Meteorology.

3. Other Cross-Sectional Activities

3.1 Knowledge Sharing

3.2 Contribution to the United Nations and Multilateral Frameworks

France supports the activities of the UN Office for Disaster Risk Reduction (UNDRR) through voluntary annual contributions. A complementary contribution in 2022 supported the translation into French of the “Words into Action” publication dedicated to Nature-based Solutions, aiming at broadening its diffusion in French-speaking countries and areas.

France also supports activities related to disaster risk reduction and resilience to climate and environmental shocks through its contribution to global funds, such as the Green Climate Fund and the Global Environment Fund.

France is a member of the Coalition for Disaster Resilient Infrastructures (CDRI), supporting its activities through a French seconded expert working especially on the Initiative for Resilient Island States (IRIS).

The GFDRR was also supported by several French seconded experts since 2016. The recruitment process for the French secondee who will support GFDRR for 2023-2025 is ongoing.

3.3 Promotion of Climate Disaster related Services and Technologies

[Country Sheet IV: Germany]

1 . Comprehensive Support from Disaster Prevention to Disaster Relief and Recovery Assistance

1.1. Disaster Prevention

1.1.1 Team Europe Initiative (TEI) on Climate Change Adaptation & Resilience in Africa

The TEI was recently launched as a joint effort by Denmark, France, Germany, the Netherlands and the European Commission at COP27 in Sharm El Sheikh. It will support African partners by improving the understanding of risks, strengthening policy and governance, and leveraging resources for adaptation, resilience and activities to avert, minimise and address the risk of loss and damage. The TEI will also promote Climate and Disaster Risk Finance and Insurance (CDRFI) mechanisms and early warning systems to protect vulnerable populations against risks related to climate hazards. It will bring together existing and new programmes.

1.1.2 Strengthening climate risk-related planning and institutions

Germany supports consultations on strengthening climate risk-related planning processes and institution building in the field of climate change adaptation through international initiatives, including in particular: The NDC Partnership and the National Adaptation Plan Global Network. Climate risk management should be integrated into the adaptation planning of NDCs and NAPs as well as in the coherent implementation of the Sendai Framework.

1.1.3 Humanitarian Disaster Risk Reduction and Anticipatory Action

Germany has advocated for, and scaled up its own funding, for humanitarian disaster risk reduction and anticipatory action. For example, Germany has supported the development of tools to enable an enhanced response in urban settings by local humanitarian actors, but also to better reduce and anticipate disaster risks in urban environments.

The goal of anticipatory action is to proactively reduce the humanitarian impacts of predicted disasters before they strike, thereby contributing to the preparedness of humanitarian organisations and local communities. The provision of humanitarian assistance is triggered by early warning systems that predict both likely disasters as well as their humanitarian impacts. Financing and actions are pre-agreed.

By increasing the resilience of affected people, anticipatory action contributes to averting disaster-induced losses and damages and thus to adaptation to the consequences of climate change. It also contributes to the complementarity between humanitarian action and development cooperation.

For 2023, Germany has committed to spending 5% of its humanitarian budget on anticipatory action, amounting to ca. 135 million EUR. Anticipatory action has also been a humanitarian priority during the German G7 Presidency in 2022. A dedicated foreign ministers' statement in May 2022 recognised the centrality of a more forward-looking humanitarian assistance, also in the context of disaster risk reduction, and includes a commitment by the G7 to significantly scale-up funding for anticipatory action.

1.2. Disaster Relief and Recovery Assistance

1.2.1 Global Shield against Climate Risks

The Global Shield against Climate Risks is a joint initiative between the G7 and the Vulnerable Twenty Group of Finance Ministers (V20) and was officially launched at COP27 in Sharm El Sheikh. The Shield gathers activities in the field of climate risk finance and preparedness together under one roof. Under the Shield, solutions to provide protection will be devised that can be implemented swiftly if climate-related damages occur. This process is linked to contingency plans of developing countries. As a result, people and authorities will be able to access the assistance that they urgently need when disaster strikes more easily and more quickly. Furthermore, the Shield will mobilise additional funds in order to meet the growing demand for finance. At COP27, GER announced a contribution of around 170 million euros to the Global Shield and complementary programmes. Additional contributions by France, Canada, the USA, Denmark and Ireland amount to over 60 million EUR.

1.2.2 InsuResilience Global Partnership (IGP)

The aim of the [IGP](#) is to increase the long-term resilience of the poorest and most vulnerable groups in developing countries and emerging economies against climate risks. The expansion of climate risk financing and insurance instruments is intended to enable governments, enterprises and households to respond more quickly and effectively to natural disasters, thus minimising potential resulting costs. The various programmes within the Partnership support pre-agreed schemes (such as climate risk insurance) which provide protection against the financial risks of climate impacts and disasters. The

Partnership has set itself an ambitious target in its Vision 2025: to provide coverage to 500 million of the world's poorest and most vulnerable people by 2025.

1.2.3. Humanitarian Disaster Relief

Germany is the third-largest donor of humanitarian assistance globally, with a humanitarian budget of 2.7 billion EUR for 2023. Humanitarian assistance is vital to provide life-saving support in the aftermath of disasters.

2. Promoting the Development of Early Warning Systems

2.1. Capacity Building and Development of Meteorological Observation Equipment

2.1.1 The Initiative Climate Risk and Early Warning Systems (CREWS)

The G7 initiative Climate Risk and Early Warning Systems (CREWS) was initiated by France and is supported by Germany. It helps to protect infrastructure and livelihoods in developing countries by supplying the crucial technical components of multi-hazard early warning systems. CREWS facilitates the transmission of early warning systems and risk information in relation to extreme weather events. GER has contributed 13 Mio. Euros to this initiative.

2.1.2 Global Risk Modelling Alliance (GRMA)

The Global Risk Modelling Alliance (GRMA) brings access to climate and disaster risk insight where it is needed the most. Working side by side with officials and local experts in ministries and mayoral offices, it offers open risk management tools, data and access to operational risk finance expertise. Funded by the German government and supported by the international insurance sector, the GRMA offers countries open data, technology and practical learning through co-development of risk management strategies and applied risk finance projects. The Global Risk Modelling Alliance is unique in offering private sector risk analytics capability for the benefit of public sector programmes, for public good. Ministries will gain and use the financial metrics to develop risk strategy - and access risk capital - with confidence. These collaborations have potential to lead to long-term, trusted relationships for the benefit of all.

2.2. Cooperation with International Organizations

2.2.1 Cooperation with the WMO

Germany cooperates with the World Meteorological Organization (WMO) on the expansion of early warning systems worldwide. The BMZ has been actively involved in the development of the trust fund Systematic Observations Financing Facility (SOFF) and is examining further possibilities for support. The SOFF was established by WMO, UNDP and UNEP and has been operational since July 2022. The aim is to promote climate change adaptation and climate-resilient development by supporting developing countries in the generation and international exchange of weather observation data.

2.3. Cooperation with the Private Sector

3. Other Cross-Sectional Activities

3.1 Knowledge Sharing

3.1.1 Cooperation with the OECD

BMZ and OECD join forces in **developing policy and action-oriented solutions** to cope with climate change impacts. The primary and initial objective of this cooperation was to prepare a **state-of the art analysis and guiding policy report on losses and damages** taking into account most recent findings on climate impact projections, different types and levels of uncertainties as well as approaches for managing impacts. In that way, it aimed at providing an **overview and policy-relevant analysis of existing and emerging approaches** and the key scientific and socio-economic issues relevant to limiting and managing the risks of climate-related losses and damages. Two studies have been produced in this cooperation: 1) [Managing Climate Risks, Facing up to Losses and Damages](#) and 2) [Building Financial Resilience to Climate Impacts](#).

3.1.2 Cooperation with the Potsdam Institute for Climate Impact Research (PIK)

GER/BMZ has commissioned the **Potsdam Institute for Climate Impact Research (PIK)** to conduct comprehensive climate risk analyses for the agricultural sector in selected African partner countries. The climate risk analyses set out existing and future climate risks for the partner countries and identify different ways for agriculture to adapt to these risks. Together, PIK and BMZ also work on the Berlin

Insight Series which will focus on scientific insights on Loss and Damage this year.

3.1.3 Cooperation with the UNDRR

Germany has financed and closely cooperated with the UNDRR in the development of the [Technical Guidance on Comprehensive Risk assessment and Planning in the Context of Climate Change](#) as part of the work plan of the Technical Expert Group on Comprehensive Risk Management under the Warsaw International Mechanism for Loss and Damage. Germany also financed a potential analysis of this study in Colombia conducted by the GIDRM.

3.1.4 Cooperation with the Anticipation Hub

The German-funded Anticipation Hub gathers more than 100 partner organisations from the Red Cross Red Crescent Movement, UN, NGOs, government, think tank and academia. The Anticipation Hub has established itself as central 'one-stop-shop' for anticipatory action stakeholders to share evidence and lessons learnt, provide training courses on anticipatory action, and discuss emerging issues. It thereby contributes to the preparedness of local communities and humanitarian actors for (climate-induced) disasters.

3.2. Contribution to the United Nations and Multilateral Frameworks

3.2.1 Sendai Framework for Disaster Risk Reduction

Germany supports multilateral organisations that promote disaster risk management from the local to the global level, including the United Nations Office for Disaster Risk Reduction (UNDRR) as the main policy partner in this field. It is responsible for the implementation and review of the Sendai Framework. With respect to the World Bank, BMZ supports the Global Facility for Disaster Reduction and Recovery (GFDRR), which makes sure that World Bank investments are implemented in a disaster and climate-resilient manner. Together with these partners, we put disaster risk management on the agenda of global development policy fora and continue to develop innovative risk management instruments.

3.2.2 Warsaw International Mechanism for Loss and Damage

Germany has dedicated a member to the WIM's Executive Committee from the start of its establishment in 2013 – 2021. Germany has actively contributed to the workplans of the Task Force on Migration and the Technical Expert Group on Comprehensive Risk Management. Germany also

pledged 10 Mio. Euro for the Santiago Network.

3.2.3 Transitional Committee for Loss and Damage Funding Arrangements

Germany shares a seat with Ireland in the **Transitional Committee established to provide recommendations** for the operationalization of the new funding arrangements. Germany seeks to take a very active and progressive role in the Transitional Committee.

3.3. Promotion of Climate Disaster related Services and Technologies

3.3.1 Enhancing climate services for infrastructure investment (CSI)

In cooperation with the German National Meteorological Service (Deutscher Wetterdienst, DWD), the project is advising the national partners on how to make the most of the climate services. It provides help with processing climate data and shows how climate products and advisory services can be developed for infrastructure planning, e.g. through climate risk assessments. Particular attention is devoted to improving cooperation between those providing and refining climate data, decision-makers, planners and engineers in the infrastructure sector.

[Country Sheet V: Italy]

1. Comprehensive Support from Disaster Prevention to Disaster Relief and Recovery Assistance

1.1. Disaster Prevention

1.1.1 The Italian Department of Civil Protection (DCP)

The Civil Protection Department promotes projects and technical assistance activities with Third Countries to strengthen institutional capacities in risk reduction and prevention and planning emergency measures, mainly in the areas of the Western Balkans, North Africa and the Middle East. The aim of these initiatives is to facilitate dialogue between central administrations, strengthen cohesion with the territory and stimulate a greater culture of civil protection and risk reduction. Through the Civil Protection Department, Italy participates in the EU Civil Protection Mechanism, which aims to strengthen cooperation between the EU countries and 8 participating states on civil protection to improve prevention, preparedness, and response to disasters in Europe and beyond.

1.1.2 The Civil Protection Competence Centres

Prevention includes the knowledge and skills developed by institutions, communities and individuals to respond to ongoing, probable or imminent events by effectively anticipating their impact. The Civil Protection Competence Centers include research institutes and Universities, but also State Administrations, Agencies and Basin Authorities, that provide services, information, data, and technical-scientific support with respect to specific thematic domains. The Italian Center for Research on Risk Reduction – CI3R, under the auspices of the Department of Civil Protection, brings together several Civil Protection Competence Centres with the aim of establishing a network of multidisciplinary competences to carry out prevention and preparedness activities for civil protection and, more generally, towards disaster risk reduction with a multi-risk, multi-sectoral and systemic approach. CI3R promotes the coordination, enhancement and development of scientific research, technological transfer, and capacity development activities in the field of disaster risk reduction in Italy, the European Union and internationally.

1.1.3 International Environmental Cooperation

Disaster risk reduction, including prevention, is a key focus of Italy's international environmental cooperation. Bilateral cooperation today counts 45 cooperation agreements (in addition to these 31

agreements under negotiation), 72 countries involved and about 170 projects. Strong emphasis is given to scientific and technological cooperation, through the establishment of collaborations and partnerships with institutions, universities and research centers on environmental projects, training, capacity building and innovation. Bilateral cooperation is pursued in several vulnerable developing countries across Africa, Latin America and the Asia-Pacific region, and by prioritizing small island states. For instance, the cooperation agreement with Pacific Small Island Developing States resulted in more than 30 projects approved in the past 15 years, with a strong focus on climate change adaptation. In the Caribbean, Italy finances several bilateral cooperation projects to support small island developing states to adapt to extreme weather events by promoting early warning systems, building weather forecast models and strengthening marine meteorological platforms. Efforts to strengthen developing countries' forecasting capacity for extreme weather events through actions specifically targeting national early warning systems and climate services are also a major focus of bilateral environmental cooperation in Sub-Saharan Africa.

The Ministry of the Environment and Energy Security works in close synergy with the Ministry of Foreign Affairs and International Cooperation, the Italian Agency for Cooperation and Cassa Depositi e Prestiti, the Italian Financial Institution for Development Cooperation, in supporting projects and initiatives in vulnerable developing states.

1.1.4 International Development Cooperation

The Italian Agency for Cooperation and Development (AICS) is committed to support partner countries in preparing for the adverse effects of climate change and fostering resilience. For instance, AICS has been supporting flood forecasting and warning system in Vietnam since 2015; enhanced disaster prevention and operational readiness of vulnerable populations of the Tahoua and Tillabery Regions in Niger since 2020; and worked young Jordanians to promote cultural heritage protection and multi-hazard response preparedness at the Petra World Heritage site.

1.2. Disaster Relief and Recovery Assistance

1.2.1 The Italian Department of Civil Protection and the EU Civil Protection Mechanism

Through the Civil Protection Department, Italy participates in the EU Civil Protection Mechanism. Any country in the world, but also the United Nations and its agencies or a relevant international organisation, can call on the EU Civil Protection Mechanism for help. The Civil Protection Department, since the very establishment of the EU Civil Protection Mechanism, has provided relief and recovery

assistance in many parts of the world, from the Philippines hit by hurricane Haiyan in 2014 to Mozambique devastated by the Idai cyclone in 2019, up to the recent devastating earthquake in Turkey and Syria.

1.2.2 The Italian Agency for Cooperation and Development

The Italian Agency for Cooperation and Development (AICS) assists populations hit by humanitarian crises caused by catastrophic events, whether of human or natural origin, with the aim of protecting life, alleviating or preventing suffering and maintaining people's dignity, where governments and local operators are prevented from acting. The Italian Cooperation is committed to providing responses that are rapid, effective and efficient, and adapted to local needs in the three phases of humanitarian aid: first emergency (Relief), emergency (Recovery and Rehabilitation); post-emergency (LLRD - Linking Relief and Rehabilitation to Development). Recent examples of AICS's support include responding to drought in Ethiopia and related food insecurity by financing interventions in sectors like water and sanitation, agriculture and food security, protection, health and nutrition; contributing to reconstruction efforts in Mozambique after cyclone Kenneth; and supporting the Red Cross and Red Crescent Network to scale up anticipatory actions by setting and further developing Forecast-based financing systems.

1.2.3 Global Shield

Italy, as a member of the G7, supports the Global Shield against Climate Risks as an initiative to strengthen financial preparedness for rapid response to weather disasters.

2. Promoting the Development of Early Warning Systems

2.1. Capacity Building and Development of Meteorological Observation Equipment

Italy is fully committed to support vulnerable countries in building their capacity for the implementation of multi-hazard early warning systems (EWS). The Italian Ministry of Environment and Energy Security has supported the development of EWS in countries like Ethiopia, eSwatini, Belize, Saint Lucia, Cuba, the Maldives, Botswana, and Iraq, among others. Moreover, in the context of the Sendai Framework for Disaster Risk reduction, the 'Italian Cooperation Program with Small Island Developing States' supports the strengthening of early EWS through the collection, analysis,

management and use of relevant data, including the preparation of risk maps, for the prediction of evaluation of meteorological phenomena and their impact on society and ecosystems. The program also promotes the improvement of disaster risk management and national capacities for disaster prevention, mitigation, preparedness, response, recovery and rehabilitation, and fosters collaboration and partnership between mechanisms and institutions for the implementation risk reduction tools.

Italy further supports the development and uptake of EWS through its development cooperation. For instance, the Italian Agency for Cooperation and Development (AICS) supports the development of EWS for floods and wildfire in the Middle East region, with the aim of reducing the impact of increasing challenges in food security, energy, water, and disaster management on vulnerable communities in Lebanon. Another example is the project “Climate Change: early warning and civil protection for floods and draught in Sudan – APIS”, where AICS supports the Government of the Republic of Sudan in strengthening its capacity to prevent, manage and mitigate the impacts of disasters.

2.2. Cooperation with International Organizations

2.2.1 Situation Room to African Union Commission

The Italian Agency for Development Cooperation (AICS) has financed the establishment of the Africa Multi-hazard Early Warning and Early Action System (AMHEWAS) Situation Room at the African Union Commission (AUC). This is a key element of the Africa Road Map that improves continental, regional and national capacities to collect, exchange and analyse data relevant to multi-disaster and impact-based early warnings systems and cross-border disaster risk management in Africa. The project is coordinated by UNDRR, and it is implemented in partnership with the AUC, the Intergovernmental Authority on Development (IGAD), the African Centre of Meteorological Applications for Development (ACMAD), and Member States at the continental, regional and national level.

2.2.2 The EU Global Flood Awareness System (GloFAS) and the Global Drought Observatory

Italy, as an EU member State, provides support to developing countries to establish EWSs in their national systems through several initiatives. The European Commission implements the Global Flood Awareness System (GloFAS) and the Global Drought Observatory to support preparatory measures for flood and drought events worldwide, as part of the EU’s Copernicus Earth observation programme.

Within this Programme, the Italian National Institute for Environmental Protection and Research (ISPRA) is the National Copernicus User Forum (Coalition) Secretariat. ISPRA's area of expertise is earth observation, with coastal zone as field of application. Moreover, Italy hosts the new data centre of the European Centre for Medium-Range Weather Forecasts (ECMWF), which produces global numerical weather predictions and other data for Member and Co-operating States and the broader community.

2.2.3 Contribution to the UN Early Warnings Initiative "Early Warnings for All"

Italy supports the UN Early Warnings Initiative "Early Warnings for All" to be led by the United Nations Office for Disaster Risk Reduction (UNDRR) and the World Meteorological Organization (WMO), which aims to make every person on Earth protected by early warning systems within five years.

2.3 Cooperation with the Private Sector

Italy considers technical development and technology transfer as a key to assist communities and countries in strengthening their resilience to climate change. For instance, the Italian Ministry of Environment and Energy Security has funded the project 'Enhancing weather and climate monitoring and data management capacity of Maldives Meteorological Service (MMS) for reducing vulnerabilities of climate change in the Maldives' and involved the Italian private sector to build-up an efficient network of stations to enhance the Maldivian national real-time data collection to manage disaster and climate risks in an integrated manner.

3. Other Cross-Sectional Activities

3.1 Knowledge Sharing

The Italian Civil Protection is involved in several international projects aimed at knowledge development and sharing across Europe and beyond. An example is the PROCULTHER (Protecting Cultural Heritage from the Consequences of Disasters) project coordinated by the Italian Department of Civil Protection and funded by DG ECHO under the Knowledge Network of the Union Civil Protection Mechanism. The projects resulted in the development and improvement of technical and operational capacities for the safeguard of cultural heritage at risk of disaster. The follow up project

PROCULTHER-NET aims at strengthening and expanding the network of experts, delivering training activities, and building a community of practice in the field of cultural heritage in Europe and beyond.

3.2. Contribution to the United Nations and Multilateral Frameworks

3.2.1 The United Nations Office for Disaster Risk Reduction (UNDRR)

Italy, through the Civil Protection Department, has a longstanding and fruitful collaboration with the UNDRR. Recent activities in collaboration with UNDRR include the promotion of the World Campaign for Resilient Cities, “Making cities resilient”, with the involvement of the National Association of Italian Municipalities (ANCI), aimed at raising awareness of Mayors to disaster prevention policies. Moreover, Italy supports UNDRR in strengthening early warning systems and transboundary risk management in Africa.

3.2.2 The International Recovery Platform (IRP)

The Ministry of Foreign Affairs of Italy is an IRP member. The IRP is a joint initiative of United Nations organizations, international financial institutions, national and local governments, and non-governmental organizations involved in disaster recovery, and seeking to convert disasters into opportunities for sustainable development. IRPS’s work promotes progress on Priority 4 of the Sendai Framework for Disaster Risk Reduction 2015-2030, improving disaster preparedness for effective response and to “Build Back Better” in recovery, rehabilitation and reconstruction.

3.2.3 The Food and Agriculture Organization of the United Nations (FAO)

Italy and the Food and Agriculture Organization of the United Nations (FAO) have an established cooperation on disaster risk reduction initiatives and projects in the agricultural sector. For instance, in 2022, the Government of Italy and FAO, in cooperation with the Ministry of Agriculture, launched a project to increase the resilience of vulnerable communities in Jordan through the “Sustainable Production and Utilization of Agro-natural Resources (SPUAR)” initiative, funded by Italy through the Italian Agency for Development Cooperation (AICS). Furthermore, since 2014 Italy has been supporting FAO's Global Alliance on Climate Smart Agriculture (GACSA) to promote risk reduction measures and climate-resilient agrifood systems in developing countries. Within this initiative, the Italian Ministry of Environment and Energy Security has funded projects in Sudan, Botswana and Ecuador to strengthen national and local institutions and to implement Climate Smart Agriculture (CSA) practices at the field level.

3.3. Promotion of Climate Disaster related Services and Technologies

3.3.1 The Mydewetra.world platform

The Italian Civil Protection Department contributes to the realization of the Sendai Framework. One example is represented by the Mydewetra.world platform, which is the evolution of the Mydewetra application used for forecasting, monitoring and surveillance in real-time of all environmental risks. Mydewetra.world, the new open-source integrated system, is designed to be a single point of access to information and data available on a global, regional and local scale, provided by authoritative institutions and Agencies in the field. The Mydewetra system is employed within the Volta Flood and Drought Management Project (VFDM) which aims to provide the first large scale and transboundary implementation of Integrated Flood and Drought Management strategies through the complete chain of End-to-End Early Warning System for Flood Forecasting and Drought Prediction. The project aims to empower the National Meteorological and Hydrological Services (NMHSs) and other competent authorities of the six riparian countries (Benin, Burkina Faso, Cote d'Ivoire, Ghana, Mali and Togo) with robust and innovative solutions for disaster risk reduction and climate change adaptation, including capacity development for nature-based solutions and gender sensitive participatory approaches. The project runs from June 2019 to June 2023. Mydewetra.world is available to any country upon request.

3.3.2 Assessing Climate Change Vulnerability and Risk Assessment in Vietnam

The Ministry of Environment and Energy Security supports the project "Set up and implementation Geo-Information System for Climate Change Vulnerability, Risk Assessment and Environment monitoring for Vietnam based on remote sensing Technology". The project will establish a geo-information system for monitoring and assessing vulnerability to climate change and risk assessment based on remote sensing technology in Vietnam.

[Country Sheet VI: Japan]

1. Comprehensive Support from Disaster Prevention to Disaster Relief and Recovery Assistance

1.1. Disaster Prevention

1.1.1. Capacity Building for Disaster Prevention

1.1.1.1 Asian Disaster Reduction Center (ADRC)

Japan contributes to capacity building in developing countries and shares disaster information through the Asian Disaster Reduction Center (ADRC), which has 31 Asian countries as members. For example, visiting researchers are invited from member countries (125 from 27 countries in total as of March 2022) and are trained to contribute to the planning of disaster risk reduction policies in member countries through research on disaster risk reduction policies. The ADRC also collects information on disaster management systems and the latest disaster information in each country and provides them on its website, as well as satellite observations of disaster damage in the event of a disaster.

1.1.1.2 Technological Contributions to the Mitigation of Water-related Disaster Risks

Japan contributes to solving social issues related to water in each country through the development of technologies, e.g., satellite observation/prediction data and flood risk assessment, as well as the use of hybrid technologies in combination with both climate change adaptation and mitigation measures, e.g., the effective use of existing dams, and by communicating the results of these technologies to overseas countries.

1.1.1.3 Disaster Risk Reduction Infrastructure Assistance

In order to contribute to the realization of a "society with less risk of disasters," Japan supports developing countries to establish organizations in charge of structural measures and comprehensive disaster risk reduction promotion systems, and helps developing countries increase their prior investment in disaster prevention. Specifically, the JICA supports disaster risk reduction infrastructure development projects that can serve as models for developing countries to promote prior investment in disaster risk reduction through technical and financial cooperation, and also promotes human resource development by providing training in Japan and utilizing Japanese technologies, systems,

and knowledge.

1.2. Disaster Relief and Recovery Assistance

1.2.1 Disaster Risk Insurance

Japan, in cooperation with international organizations, has promoted the initiatives of disaster risk insurance, utilizing insurance schemes to provide rapid payouts without insurance claim investigation in the event of a large-scale disaster.

The Government of Japan has contributed to launching the initiatives of disaster risk insurance in Southeast Asia (Southeast Asia Disaster Risk Insurance Facility: SEADRIF), the Pacific region (Pacific Catastrophe Risk Assessment and Financing Initiative: PCRAFI), and the Caribbean nations (Caribbean Catastrophe Risk Insurance Facility: CCRIF). After launching the initiatives, the Government of Japan has made subsequent financial contributions to the SEADRIF and the PCRAFI.

1.2.2 Global Shield

At COP27, the G7 and V20 officially launched the Global Shield against Climate Risks as an initiative to strengthen financial preparedness for rapid response to weather disasters. Initial contributions include more than 210 million euros and first recipient countries (pathfinder countries) include Bangladesh, Costa Rica, Fiji, Ghana, Pakistan, the Philippines, Senegal.

As part of this initiative, Japan will make voluntary contributions to the Global Shield Financing Facility operated by the World Bank to strengthen support for loss and damage, including financial assistance and technical assistance for rapid recovery from natural disasters for vulnerable countries.

1.2.3 Post Disaster Stand-by Loan

Japan provides "Post Disaster Stand-by Loan" to developing countries that are exposed to a risk of natural disasters, which provides rapid assistance when a disaster occurs by having the Yen Loan signed in advance. Examples of signed agreements are the Philippines (50 billion yen in 2020), Fiji (5 billion yen in 2020), El Salvador (5 billion yen in 2015), Peru (10 billion yen in 2014), and the Philippines (50 billion yen in 2013).

1.2.4 Promoting "Build Back Better"

In the area of weather-related disasters, the project provided rehabilitation and reconstruction assistance in response to the 2022 Pakistan flood disaster, the 2021 Timor-Leste flood disaster, the

2019 Cyclone Idai disaster in Mozambique, and the 2013 Typhoon Yolanda disaster in the Philippines, and provided support for hazard assessment and rehabilitation and reconstruction planning.

2. Promoting the Development of Early Warning Systems

2.1. Capacity Building and Development of Meteorological Observation Equipment

2.1.1 Bilateral Support for Capacity Building of Early Warning Systems

Japan will continue to provide technical assistance and capacity development supports, in fields of weather observation, forecasting, and climate information, for National Meteorological and Hydrological Services responsible for early warning systems for weather-related disaster. In addition, Japan will continue to make efforts in cooperation with the public and private sectors to ensure that excellent technologies of the Japanese private sector, such as weather radar, are introduced and utilized in early warning systems around the world. Over the past ten years, Japan has provided such assistance to ten countries.

2.1.2 Development of Meteorological Observation Equipment

Japan supports the improvement of the observation capabilities of national meteorological agencies for meteorological phenomena through the development of meteorological radars and other measures.

2.2. Cooperation with International Organizations

2.2.1 Contribution to the UN Early Warnings Initiative “Early Warnings for All”

Japan has supported the UN Early Warnings Initiative “Early Warnings for All” to be led by the United Nations Office for Disaster Risk Reduction (UNDRR) and the World Meteorological Organization (WMO), which aims to make every person on Earth is protected by early warning systems within five years, and are providing support for the establishment of early warning systems in developing countries and others.

2.2.2 Collaboration with the World Meteorological Organization (WMO)

Under the framework of the WMO and other international organizations Japan has supported National Meteorological Services by providing information and technical cooperation through the operation of Regional Centers on weather observation, tropical cyclones, climate, etc., and capacity building through the WMO's programs.

2.2.3 Collaboration in Quad [JP, US, Australia, India]

Based on the "Quad Climate Change Adaptation and Mitigation Package (Q-CHAMP)" announced at the Quad Leaders' meeting in 2022, the Climate and Information Service Taskforce under the Climate Working Group has been discussing the development of early warning systems in the Pacific region.

2.3. Cooperation with the Private Sector

2.3.1 Initiative to Promote the Development of Early Warning Systems through Public-Private Partnerships in the Asia-Pacific Region

Japan is planning to establish a new and additional cooperative structure for Japanese companies interested in developing early warning systems (e.g., installation of observation devices, analysis and projection based on observation data, delivery of climate information services) to develop early warning systems for business sector and to create new business using the systems in the Asia-Pacific region, in a way that can be well adapted to the circumstance in each country. As the first step, Japan aims to build a prototype early warning system for business sector in the Asian region to pave the way for further development.

3. Other Cross-Sectional Activities

3.1 Knowledge Sharing

3.1.1 Asia-Pacific Climate Change Adaptation Information Platform (AP-PLAT)

Japan uses the Asia-Pacific Climate Change Adaptation Information Platform (AP-PLAT), which was launched to support climate change risk-informed decision-making and highly effective climate change adaptation in the Asia-Pacific region, to improve scientific findings related to climate change risks, to provide stakeholders with support tools, and to strengthen capacity related to climate change

impact assessment and climate change adaptation, in collaboration with countries and relevant institutions in the region. For example, the AP-PLAT provides forecasting tools (e.g., for precipitation, temperature) around the world based on climate scenarios, and information that can be used for averting and minimizing losses and damages and for adaptation planning in each country. In addition, e-learning courses are made available for officials of developing countries who are seeking funding from the Green Climate Fund (GCF) and other sources.

3.1.2 Sharing on Earth Observation Data and Climate Change Projection Data

Japan shares earth observation data and climate change projection data through the Data Integration and Analysis System (DIAS). It supports human resources development to assess disaster risk, based on satellite observation data and climate change projection data in each country through training programs using the DIAS.

3.2. Contribution to the United Nations and Multilateral Frameworks

3.2.1. United Nations

3.2.1.1 The United Nations Office for Disaster Risk Reduction (UNDRR)

The UNDRR was established in 2000 with its headquarters in Geneva, Switzerland, with the aim of enhancing the importance of disaster risk reduction as an essential element of sustainable development, reducing damage and losses caused by disasters, and mitigating disaster risks. Japan continues to support the efforts of the UNDRR.

3.2.1.2 International Recovery Platform (IRP)

IRP is a cooperative framework established to promote the "Build Back Better" principle in countries around the world with the participation of international organizations, including UNDRR. Japan continues to support its activities such as holding forums to gather and disseminate knowledge.

3.2.2. Other Multilateral Frameworks

3.2.2.1 Risk-Informed Early Action Partnership (REAP)

Japan has participated in REAP, an international partnership aiming to make people in developing countries safer with early action including early warning systems through supporting adaptation

planning in developing countries and the sharing of good practices.

3.2.2.2 Asia-Pacific Network for Global Change Research (APN)

Japan has contributed to APN activities as the host country (in Hyogo Prefectural Government) as well as one of the major donor countries. APN conducts various research projects related to losses and damages prevention and adaptation. More than one hundred research papers supported by APN have been cited in the Sixth Assessment Report (AR6) of the Intergovernmental Panel on Climate Change (IPCC).

3.2.2.3 Enhancing community resilience to climate change in mountain watersheds in developing countries through Food and Agriculture Organization of the United Nations (FAO) Contributions

As part of efforts in the forestry sector to promote disaster risk reduction and mitigation, Japan supports the project to enhance community resilience through sustainable forest conservation and utilization based on the risk-based watersheds management approach in the Philippines and Peru and disseminate it at global level.

3.3. Promotion of Services and Technologies for Climate Disaster Risk Reduction

3.3.1 Collaboration between the "Public-Private-Academic Networking Meeting on Climate-related Risks in Japan" and the Asia Pacific Climate Change Adaptation Information Platform (AP-PLAT)

Japan has promoted the global expansion of climate related services and technologies that can be used against losses and damages, such as disaster prevention technologies, in collaboration with the "Public-Private-Academic Networking Meeting on Climate-related Risks in Japan" and the Asia Pacific Climate Change Adaptation Information Platform (AP-PLAT).

3.3.2 Japan International Public-Private Association for Disaster Risk Reduction (JIPAD)

The Japan International Public-Private Association for Disaster Risk Reduction (JIPAD), a public private liaison group consisting of 206 companies and organizations, is holding public-private disaster risk reduction seminars to promote the overseas deployment of disaster risk reduction technologies of Japanese companies. Most recent events include: an online seminar concurrently held with the Asian Conference on Disaster Reduction (ACDR) organized by the Asian Disaster Reduction Center (ADRC); an online seminar co-hosted by the Cabinet Office, Government of Japan, and the ASEAN Secretariat; and, a seminar at the Asia-Pacific Ministerial Conference on Disaster Risk Reduction (APMCDRR) 2022

held in Brisbane, Australia.

3.3.3 “Climate Change Adaptation Good Practices”

Japan has been identifying and disseminating good practices of adaptation businesses by Japanese private sector in the publication “Climate Change Adaptation Good Practices” to encourage the diffusion and deployment of technologies from Japanese private sector that can be used against losses and damages, such as early warning systems and compact weather radars.

3.3.4 Sustainable Business of Adaptation for Resilient Urban future

Through the SUBARU Initiative (Sustainable Business of Adaptation for a Resilient Urban Future), together with the United Nations Human Settlements Programme (UN-Habitat) Regional Office for Asia and the Pacific in Fukuoka, Japan is working to improve the resilience of cities in the Asia-Pacific region against weather-related disasters by utilizing the technologies and know-how of Japanese SMEs and start-ups.

[Country Sheet VII: United Kingdom]

1. Comprehensive Support from Disaster Prevention to Disaster Relief and Recovery Assistance

1.1. Disaster Prevention

1.1.1 The UK is funding a number of programmes aimed at anticipating, preventing, and acting ahead of crises, including the Integrated Phase Classification, CERF, START Network, and DREF. We have supported CERF pilots on anticipatory action through our core funding to the Fund. In addition, a number of in-country programmes have Risk Facilities that allow funds to be released if a spike in need is anticipated. We have been strongly supportive of the Central Emergency Response fund anticipatory action pilots.

1.2. Disaster Relief and Recovery Assistance

1.2.1. Disaster Risk Insurance

The UK is a strong supporter of disaster risk finance (DRF). DRF ensures that money is available reliably and quickly after a disaster, enabling rapid responses that can pre-empt damage and help communities to recover faster. Alongst the G7, World Bank and other partners, the UK helped set up regional parametric insurance schemes in the Caribbean, Africa, South-East Asia and Pacific. We fund premium subsidies to help countries (including fragile and conflict affected states) afford the cover they need through the World Bank's Global Shield Finance Facility and the African Disaster Risk Finance (ADRFi) programme at the African Development Bank, as well as to humanitarian organisations such as START Network and the World Food Programme. We have supported OCHA to develop 'anticipatory insurance', bringing DRF benefits even further upstream and also the Inter-American Development Bank and Caribbean Catastrophe Risk Insurance Facility (CCRIF) on insurance for Caribbean water utilities companies. The UK-funded Centre for Disaster Protection in London provides expert technical advice on DRF.

1.2.2 Global Shield

At COP27, the G7 and V20 officially launched the Global Shield against Climate Risks to strengthen

financial preparedness for rapid response to extreme weather and other shocks. The UK will contribute to the success of the Shield through our existing pledge of £120m for premiums, new DRF and investment into the regional risk pools. The UK has also agreed that the Global Risk Finance Facility at the World Bank which currently holds over \$102m of UK funds, alongside contributions from Germany, will evolve into the Global Shield Financing Facility as one of the global financing vehicles for the Shield.

2. Promoting the Development of Early Warning Systems

2.1. Capacity Building and Development of Meteorological Observation Equipment

The UK is engaged in the Systematic Observations Financing Facility (SOFF), a newly proposed initiative spearheaded by WMO, UNEP & UNDP on behalf of the Alliance for Hydromet Development, to provide financing to LDCs and SIDs for real-time weather observations. SOFF aims to address the challenges in infrastructure and resource capacity to deliver Global Basic Observing Network (GBON) compliance through a single global initiative.

The UK also supports a range of capacity building and development activities in the meteorological space, predominantly through the nationally-mandated Met Office (part of UK government). The UK Voluntary Cooperation Programme (VCP), implemented through Met Office, has worked in partnership with developing countries for over 40 years to install, support and maintain a number of remote, but significant, weather observation sites, enhancing the provision and access to global observations and supporting the local NMHSs. Human capability building is also provided and supported by UK VCP, to help staff in developing country NMHSs develop the skills required to deliver effective climate and weather services.

2.2. Cooperation with International Organizations

COP26 and COP27 announcements set out our commitments to act ahead of crises and supporting countries and communities to manage crises better. This includes scaling up the availability of Early Warning Systems and the ability of people at risk to act on those warnings, as a concrete way to mitigate against the impacts of Climate Change.

CREWS and Early Warning for All: The UK is the current Steering Committee Chair of Climate Risk and Early Warning Systems (CREWS). CREWS has experience and a commitment to building connections and testing assumptions on the flow of information and action between national bodies and households that is so crucial for achieving implementation and reach of EWS. It is also playing a significant role in the Early Warning for All initiative, especially relating to the effectiveness of the financing component. UK plans to support driving and build on this work, linked to the people-centred approach, increasing scale and ensuring EW translates to early and anticipatory action.

REAP: The UK has had a key role in the Risk-informed Early Action Partnership since its establishment and is CO-Chair of the Board alongside Saint Lucia (whom Samoa and current Chair of AOSIS will be taking over from in the coming months). The UK is committed to supporting REAP drive alignment, coherence and complementarity of efforts to scale up EWEA by convening key actors around common objectives, thereby reducing fragmentation, increasing impact and driving cost efficiencies.

2.3. Cooperation with the Private Sector

Increasing private investment in climate resilient infrastructure

The risk profile of investments impacted by climate change is a critical barrier to countries and companies gaining sufficient investment in infrastructure – whether that be water treatment infrastructure, renewable energy assets, or public transport infrastructure. Investors want to know what risks climate change poses to assets through weather events, to be able to appropriately price the capital of investments.

So the UK has supported the Coalition on Climate Resilient Investment (CCRI) to develop tools to more efficiently and effectively price physical climate risk so that the cost of capital is not needlessly inflated. With over 120 members managing \$27 trillion in assets by COP27, CCRI estimated that by creating tools to integrate physical climate risk into investment decisions up to \$10 billion of investment could be unlocked. CCRI has piloted tools in Jamaica, reviewing critical infrastructure investment gaps, modelling climate risks to that infrastructure, and enabling the government and investors to identify investment priorities.

3. Other Cross-Sectional Activities

3.1 Knowledge Sharing

The UK supports knowledge sharing between institutions, regulators, government and industry to promote best practice. Our WISER programme, a collaboration between the Met Office and Foreign Commonwealth and Development Office (FCDO), is delivering transformational change in the quality, accessibility and use of weather and climate information at all levels of decision making for sustainable development in Africa. To date, WISER has helped to avoid over £200 million worth of losses in East Africa through application of climate information and helped to improve the resilience of over 8 million people who use WISER services. The programme has now expanded into the Middle East, North Africa and Asia.

3.2. Contribution to the United Nations and Multilateral Frameworks

The UK's International Development Strategy sets out our commitment to act ahead of crises and supporting countries and communities to manage crises better. This includes scaling up the availability of early warning systems and the ability of people at risk to act on those warning, and access to finance to build resilience to the impacts of climate change. The UK is committed to driving progress, working in partnership with others to ensure timely, sufficient and high quality climate finance is getting to where it is needed most to meet needs and ambition. We are fully supportive of the need to invest in early warning systems and the UN-led Early Warning for all Initiative that was launched at COP 27 and calls for every person to be protected by EWS within 5 years.

We are supporting this through our WISER and other programmes. The UK has also taken a key role in REAP since its establishment and is CO-Chair of the Board alongside Saint Lucia. The UK is committed to supporting REAP drive alignment, coherence and complementarity of efforts to scale up EWEA by convening key actors around common objectives, thereby reducing fragmentation, increasing impact and driving cost efficiencies.

3.3. Promotion of Climate Disaster related Services and Technologies

Working with international financial institutions to scale up adaptation finance

Multilateral Development Banks and Development Finance Institutions are key actors in scaling up adaptation finance, and the UK is supporting them by, such as by investing £200m in a new African Development Bank Climate Action Window, which also seeks to attract private investment and will

invest in adaptation projects in some of the most vulnerable countries to climate change. Furthermore, British International Investment is working with other DFIs through the Adaptation and Resilience Investors Collaborative (ARIC), to improve understanding of investment in adaptation solutions and developing tools to support the mobilisation of private finance. ARIC will also bring together industry leaders to support in the scaling of adaptation finance.

[Country Sheet VIII: United States]

1. Comprehensive Support from Disaster Prevention to Disaster Relief and Recovery Assistance

1.1. Disaster Prevention

1.1.1. Integrating Disaster Risk Reduction into Relief and Recovery Efforts

USAID's Bureau for Humanitarian Assistance supports programs and activities that reduce the risks posed by hazards (either single, sequential or combined), emphasizing our core strengths of early warning, preparedness, mitigation, and prevention; integrating preparedness and mitigation with humanitarian response when possible, including early recovery and transition, to foster resilience; and supporting diversified, resilient livelihood strategies. For more information about USAID Bureau for Humanitarian Assistance's support for early recovery, risk reduction and resilience, see:

<https://www.usaid.gov/humanitarian-assistance/what-we-do/early-recovery-risk-reduction-and-resilience>. Several examples are provided below.

1.1.1.1 Climate Smart and Disaster Ready Program

USAID is, for example, investing in grants for community adaptation for communities at greatest risk to climate-related disasters under our new Climate Smart and Disaster Ready program. Through these grants, USAID will implement innovative adaptation solutions in current and foreseeable humanitarian settings. USAID will invest in locally-led solutions, enhance local partnerships, amplify climate thought leadership, and scale up proven climate-risk reduction actions for adaptation of communities with greatest vulnerability.

<https://www.federalgrants.com/Climate-Smart-and-Disaster-Ready-92771.html>

1.1.1.2 Addressing food insecurity

USAID is promoting sustainable, climate resilient agriculture activities that complement emergency food assistance in regions that face recurring emergencies. In El Salvador, Guatemala, and Honduras, we built the capacity of drought-affected subsistence farmers across the Dry Corridor – an area characterized by frequent droughts and difficult farming conditions – to increase yields and protect their crops against droughts.

1.1.1.3 Nature-based solutions

Together with IFRC and Red Crescent Societies, USAID is integrating nature-based solutions into disaster risk reduction approaches at all levels. We developed the Nature Navigator, a handbook for disaster management practitioners, to utilize nature-based solutions to reduce climate related risks.

1.1.1.4 Collaboration with UNDRR

USAID has an agreement with UNDRR to advocate DRR and advance implementation of Sendai Framework for Disaster Risk Reduction to prevent new and reduce existing disaster risks.

1.1.2. President's Emergency Plan for Adaptation & Resilience (PREPARE)

PREPARE is a whole-of-government effort to help more than half a billion people in developing countries adapt to and manage the impacts of climate change, including weather- and water-related disasters. Through PREPARE, we are working with partners to strengthen climate information services and early warning systems to equip people and institutions with the information they need to make sound decisions and take effective actions; building capacity to mainstream adaptation into policies, programs, and budgets; and working to unlock finance to support climate adaptation action. PREPARE was launched in November 2021. For more information about the PREPARE Action Plan, see: www.whitehouse.gov/prepare. For information about announcements of PREPARE initiatives and programs, see <https://www.whitehouse.gov/briefing-room/statements-releases/2021/11/01/fact-sheet-president-biden-renews-u-s-leadership-on-world-stage-at-u-n-climate-conference-cop26/> and <https://www.whitehouse.gov/briefing-room/statements-releases/2022/11/11/fact-sheet-president-biden-announces-new-initiatives-at-cop27-to-strengthen-u-s-leadership-in-tackling-climate-change/>.

1.1.2.1. Examples of PREPARE programs and activities

1.1.2.1.1 The Federal Emergency Management Agency (FEMA) collaborates with the United Nations Office for Disaster Risk Reduction to promote resilient infrastructure systems. In 2022 and 2023, FEMA participated in global and regional platforms for disaster risk reduction to share information about the Building Resilient Infrastructure and Communities (BRIC) program, the Agency's building codes strategy and action plan, and other resilient infrastructure best practices and programs with thousands of international partners. FEMA encourages smart investments in system-based, community-wide projects to protect those most at risk for experiencing the severe impacts of climate disasters. FEMA's BRIC program seeks to shift the focus from reactive disaster spending toward research-supported, proactive investment in community resilience so when a hurricane, flood, wildfire, extreme heat, or other disaster occurs, communities are more resilient.

1.1.2.1.2 The Peace Corps supports host country efforts to adapt to the impacts of climate change. In 2022, the Peace Corps helped 16 countries integrate adaptation into agriculture and environment projects.

1.1.2.1.3 The State Department supports the Least Developed Countries (LDCs) Initiative for Effective Adaptation and Resilience (LIFE-AR), which is an LDC-led initiative intended to achieve a low-carbon, climate resilient future by focusing on locally-led adaptation efforts in LDCs. Through LIFE-AR, LDC front-runner countries are integrating climate resilience and adaptation into national and local development objectives; developing strong climate finance architecture to ensure that at least 70% of finance supports locally-led climate action by 2030; and building capacity and strengthening governance to develop more effective and inclusive climate decisions.

1.1.2.1.4 The Development Finance Corporation (DFC) is incorporating a climate risk assessment tool that will be used to screen for the climate risks of every potential transaction. At COP 27, DFC announced a major push to accelerate investment in climate adaptation with an emphasis on agriculture, water, built environment, and health.

1.1.2.1.5 Modeled after USDA's domestic Climate Hubs, USDA is creating an International Climate Hub to conduct science translation and delivery to support global science-based, climate-informed decision-making. USDA Climate Hubs serve as the premier model for developing and delivering science-based, region-specific information and technologies to U.S. agricultural and natural resource managers to reduce risk, build resilience, and enable climate-informed decision making. The USDA International Climate Hub is a new mechanism to share research and best practices with international partners to help support the goals of PREPARE.

1.1.2.1.6 The National Oceanic and Atmospheric Administration (NOAA), National Science Foundation (NSF), the Department of the Interior (DOI) and other U.S. government participants in the U.S. Global Change Research Program have worked with the Belmont Forum, a partnership of science and funding organizations to support multi-country transdisciplinary research to advance understanding of the nexus between climate, environment, and health. This includes in-kind support from experts. In 2023, NOAA, DOS, and DOI will support efforts to catalyze transdisciplinary project proposals, particularly from Latin America, Asia, and Africa, that build collaboration, understanding, and capacity to respond to health risks that emerge from the impacts of climate change on nature.

1.2. Disaster Relief and Recovery Assistance

1.2.1 Bilateral relief and recovery assistance

As the largest humanitarian donor, the United States has a longstanding history of standing in solidarity with people affected by disasters caused by natural hazards and complex emergencies. For more information about our humanitarian assistance, see: www.usaid.gov/humanitarian-assistance.

1.2.2 Support to global funds for emergency response and early recovery

The United States provides funding to UNOCHA's Central Emergency Response Fund (CERF) and UNOCHA's Country Based-Pooled Funds. For more information about these funds, see <https://cerf.un.org/>. <https://www.unocha.org/our-work/humanitarian-financing/country-based-pooled-funds-cbpf>. We also support the IFRC's Disaster Response Emergency Fund (DREF): <https://www.ifrc.org/happening-now/emergency-appeals/disaster-response-emergency-fund-dref>

1.2.3 Support to Multilateral Development Banks for emergency response, early recovery, reconstruction and rehabilitation

The United States is a shareholder of the World Bank as well as several regional banks including the Asian Development Bank, African Development Bank and Inter-American Development Bank. The World Bank supports countries in managing climate risks and shocks through its country programming and the Global Risk Financing Facility. The Asian Development Bank fast tracks grants to eligible member countries in the immediate aftermath of disasters as well as provides finance for reconstruction. The Inter-American Development Bank provides support for rehabilitation, reconstruction and recovery; it is also the only regional bank at this time to provide climate and weather extreme event-related debt deferment clauses.

1.2.4. Disaster Risk Insurance

1.2.4.1 Regional insurance risk pools

The United States provides support to the Africa Disaster Risk Financing Program (ADRIFI), ARC Ltd, and ARC Replica, all of which work together to help African member countries cope with extreme weather events, food insecurity, and other issues exacerbated by climate change. The United States also supports the Caribbean Catastrophic Risk Insurance Facility and the Pacific Catastrophe Risk

Assessment and Financing Initiative.

1.2.5. Social Protection

1.2.5.1 Global partnership for Universal Social Protection 2030

USAID joined the global partnership for Universal Social Protection 2030 (USP2030). Under the co-leadership of the World Bank and the International Labour Organization, USP2030 partners work together to increase the number of countries that provide universal social protection, supporting countries to design and implement universal and sustainable social protection systems, in line with the 2030 agenda for sustainable development, and in particular target 1.3 of the sustainable development goals (SDG 1.3). Actions include coordinating country support to strengthen national social protection systems, knowledge development to document country experience and provide evidence on financing options and advocacy for integrating universal social protection. For more information see <https://usp2030.org/>

1.2.5.2 Bilateral support for social protection

USAID provides bilateral support to strengthen adaptive and climate shock-responsive social protection. For example, USAID has provided funds to kickstart a new social protection multi-donor trust fund and support the Government of Malawi to scale-up and strengthen existing shock responsive safety nets and their delivery systems, which serve to help the most vulnerable populations including in the face of climate change impacts. The trust fund will enable the Government of Malawi to provide unconditional cash transfers to the most vulnerable Malawians and deliver cash for work to households at risk of extreme hunger. For more information see <https://www.usaid.gov/malawi/news/feb-22-2023-usaid-provides-44-million-help-establish-social-protection-multi-donor-trust-fund-malawi>

1.2.6 Global Shield

The United States, as part of the G7, supports the Global Shield. We worked for more than two years with the G7 Disaster Risk Financing Group and through our membership in the InsuResilience Global Partnership to help develop the Global Shield in a way that would best protect lives and livelihoods in the face of climate shocks, including by ensuring that the Global Shield includes social protection. We will continue to support the Global Shield as it moves into its implementation phase.

2. Promoting the Development of Early Warning Systems

2.1. Capacity Building and Development of Meteorological Observation Equipment

2.1.1 Early Warning for All

Through PREPARE, the United States is responding to the UN Secretary General's call for Early Warning for All. Our bilateral programs will help vulnerable countries, including in Africa, Small Island Developing States and Least Developed Countries establish and advance early warning systems on floods, droughts, cyclones and heatwaves. We are integrating climate information into our Famine Early Warning System Network (FEWS NET); Global Flash Flood Guidance System and Climate Smart; and Weather Ready Nations programs. As an example, together with the WMO, we are supporting national meteorological and hydrological services to monitor flash flood risks. Through the introduction of new technologies, trainings and technical assistance, we are enabling national authorities to monitor and provide flash flood early warnings to more than three billion people in 67 countries.

2.1.2 WMO's Systematic Observations Finance Facility

The United States supports the Systematic Observations Financing Facility, with our initial contribution in 2022 focused specifically on the African continent. The SOFF will help fill weather, water, and climate observation gaps that serve as the basis of forecasts and early warnings.

2.2. Cooperation with International Organizations

2.2.1 Collaboration with the World Meteorological Organization (WMO)

In addition to our support to the UN Secretary General's Early Warning for All initiative, USAID has an agreement with WMO on multi-hazard hydrometeorological early warning and capacity building. The agreement focuses on collaboration on advancing hydrometeorological end-to-end early warning systems and capacity to enable countries to take early action and reduce the risk of climate, weather and water related hazards such as floods, flash floods, cyclones, storm surge, extreme temperatures, droughts and working on climate change. Through the agreement, USAID and WMO are working with NMHSs to advance their capacity on climate, weather and hydrological early warning systems.

2.2.2 Collaboration with Systematic Observation Financing Facility

The State Department has an agreement with the Multi-partner Trust Fund for the Systematic Observation Financing Facility administered by UNDP to support the collection and exchange of critical weather and climate observations that are used for weather forecasts, early warnings, and climate services.

2.3. Cooperation with the Private Sector

Through the [PREPARE Call to Action](#), the United States is collaborating with the private sector on developing and delivering climate information services that improve climate resilience for consumers and communities in developing countries who are experiencing climate impacts. Companies have made climate information-related [commitments](#) related to flood forecasting, using artificial intelligence to develop insights on adaptation options, and providing open reference data, metrics, and projects to help promote climate resilient development.

3. Other Cross-Sectional Activities

3.1 Knowledge Sharing

The co-creation and sharing of knowledge, about what works and what does not, is a critical component of disaster risk management. The United States supports this through multiple programs. We are a partner, for example, of the Resilience and Adaptation Mainstreaming Program (RAMP), which is working with local universities on the African continent to develop adaptation curriculum for this and the next generation of African policymakers, particularly in central ministries. We also support applied research on climate adaptation, through a partnership between USAID and University of Arizona with researchers, faculty and students in the PeriPeri University network of African universities. Youth are also critical; we bring together climate disaster management experts with young professionals to help them become the next leaders and decision-makers on climate risk management policy.

3.2. Contribution to the United Nations and Multilateral Frameworks

3.2.1. Support to respond to climate related displacement and migration

In line with the recommendations of the White House Report on the Impact of Climate Change on Migration, released in 2021, the United States is pursuing ways to work collaboratively with other countries, international organizations and bodies, non-governmental organizations, and localities to respond to migration resulting directly or indirectly from climate change.

3.2.1.1 Collaboration with UNHCR and IOM

Through our work with UNHCR, IOM, ICRC, and other humanitarian partners the State Department's Bureau of Population, Refugees, and Migration (PRM) funds programs that address the nexus between migration, displacement, and climate change. These activities are often included within larger programs. For example, PRM funds IOM to promote safe, orderly and humane migration management in the Western Hemisphere and other regions which includes attention to climate.

3.2.1.2 Bilateral Programs

USAID's migration-related activities focus on the safety and wellbeing of all people, including investing in supportive environments for migrants and potential migrants. Support includes addressing key drivers of migration, including social, political and environmental drivers; ensuring safety and wellbeing for people on the move, including countering trafficking in persons (C-TIP); helping to secure and maintain access to essential services and social protections once a destination is reached; and maximizing the benefits of migration.

3.2.1.3 Migration Multi-Partner Trust Fund

The Department of State Bureau of Population, Refugees, and Migration contributed to the Migration Multi-Partner Trust Fund to support climate-affected vulnerable migrants. This program underscores the United States' commitment to the vision of the Global Compact for Migration, including improving cooperation on international migration. It also advances the Biden Administration's climate strategy, reflected in the 2021 White House Report on the Impact of Climate Change on Migration, to address the impact of climate change on vulnerable populations across the globe.

3.2.2. Other Multilateral Frameworks

3.2.2.1 Risk-Informed Early Action Partnership (REAP)

USAID joined REAP in 2021 and committed to contribute towards targets on investment in early

warning systems and advancing coverage early warning system. <https://www.early-action-reap.org/>

3.3. Promotion of Climate Disaster related Services and Technologies

The United States promotes climate disaster related services and technologies through a range of programs and activities. For example, in Kenya, USAID provides farmers with seeds, tools, and training in drought-resistant farming methods, water conservation, and adaptation to increase crop productivity amid drought conditions. The U.S. Trade and Development Agency (USTDA) is supporting climate adaptation in Jamaica by providing technical assistance to Jamaica's Ministry of Science, Energy and Technology (MSET) to advance the development of national emergency communications infrastructure and strengthen the country's ability to adapt to and manage the impacts of climate change.