

## **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.