



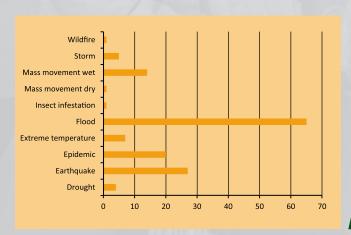
Surface area	652,864 km²	
Population, 2010 (est.)	32.4 million	
Population density, 2010	43.5/km <sup>2</sup>	
GDP in 2011	USD 18.1 billion	
GDP per capita in 2011	USD 585	
Remittances, 2011	Data not available	
HDI	0.374	
Net migration rate, 2010–2015	5.4 migrants/1,000 population	
Types of movement	Internal displacement, stranded/trapped population, return	
Displaced by disasters, 2008–2012	146,354	
Number of IOM staff working on disasters	78	
Location of IOM offices	Kabul, Bamyan, Daikundi, Badakhshan, Kunduz, Paktya, Ghazni, Khost, Paktika, Herat, Jalalabad, Mazar-e-Sharif, Jawzjan, Kandahar, Zabul	
Total DRR funding for 2013 in USD	900,000	
IOM site: www.iom.int/cms/en/sites/iom/home/where-we-work/asia-and-the-pacific/afghanistan.html		

Prevention	Preparedness	Emergency	Cross-cutting
Reducing hazards	Preparing communities Building institutional capacities	Tracking displacement Assisting the displaced	Livelihoods Health Infrastructures

# Top 10 natural disasters by size of affected population, 1980–2013

Disaster	Date	Affected
Drought	2000	2,580,000
Drought	2006	1,900,000
Mass mov. wet	2006	300,000
Drought	2008	280,000
Epidemic	2002	200,000
Extreme temp.	2008	170,684
Flood	1988	161,000
Earthquake	1998	116,935
Flood	1991	108,400
Earthquake	1994	100,330

#### Natural disaster occurrence, 1980-2013



## **Background**

Afghanistan is a landlocked country prone to a number of natural hazards, such as earthquakes, floods (including flash floods), droughts, landslides avalanches. Earthquakes are relatively frequent in the north and north-east, often triggering landslides. Due to the country's rugged topography and the location of human settlements, natural hazards often result in the isolation of entire communities, especially in the remote mountainous regions, posing significant challenges to humanitarian interventions, particularly when populations are displaced. As recently as the 2011-2012 winter, heavy snowfalls and avalanches in the Central Highlands region and in Badakhshan Province in the north-east resulted in road closures and the disruption of lifelines.

Due to the lack of mitigation measures, even small events can cause large-scale destruction of houses, agricultural lands and livelihoods, triggering movement of populations in search of more secure settlements. Widespread environmental degradation also acts as a trigger of hydrogeological hazards and undermines rural livelihoods and water and food security.

In addition, decades of external conflict and civil war have contributed to limiting employment and income options and have severely affected public infrastructure, health-care, education and social protection systems. Conflicts drain and destroy local livelihoods and hamper the government from investing in local development, including in measures that lower disaster risk. Impoverished and unable to access even the most basic services and assistance, many Afghans are forced to live in precarious conditions, exposed to natural hazards and with very limited capacity to cope with the shocks and hardships. In addition, violence poses significant security threats to development and humanitarian staff, often resulting in delayed interventions or the inability to provide assistance to people in need.

Over the last few decades, conflict has been the main driver of displacement (internal and external), with 76 per cent of the country's population forced to leave their homes due to violence, human rights violations, poverty and food insecurity. An estimated 185,631 people were displaced as a result of conflict in 2011 alone, and 203,457 IDPs were recorded for 2012. In addition, 50,000 people were displaced by the floods, droughts and the

harsh winter of 2011; floods displaced 13,755 more in 2012.

Until recently, institutional capacity for disaster reduction and management was limited. The Afghanistan National Disaster Management Authority (ANDMA), the main government counterpart of IOM in the country, has only recently started developing the capacity to deal with disasters affecting thousands of individuals all over the country.

### Responses

IOM intervention has focused mainly on strengthening the response capacity of the national disaster management authority, as well as making communities more independent in the aftermath of a disaster, especially in the most remote areas. Through its Humanitarian Assistance Program (HAP), the Organization directly assists people affected and displaced by natural disasters, in accordance with its role in the Inter-agency IDP Task Force and the Humanitarian Cluster System in the country.

In recent emergencies, IOM led joint assessments of the population's needs and directly provided nonfood items (NFIs) and shelter assistance. Affected populations were referred to relevant agencies for other forms of specialized assistance.

IOM directly contributed to strengthening the response capacity of ANDMA by providing IT equipment and vehicles. In addition, the Organization hired a national technical advisor that serves as a bridge between ANDMA and relevant relief providers, with the aim of better coordinating disaster response. ANDMA staff received training on the use of multi-cluster assessment tools, enabling them to autonomously conduct rapid assessments following disasters.

IOM also focused on reducing hazard exposure and building coping capacity at the local level. In 2010 and 2011, IOM distributed about 632,000 sandbags in flash flood-prone settlements throughout the Afghan north-east (e.g. in the provinces of Takhar, Kunduz, Baghlan and Badakhshan) for the reinforcement of irrigation canals/dams and riverbanks. The Organization also pre-positioned NFIs and emergency shelters throughout the most exposed districts, in order to ensure timely response, and supported the Government's efforts to respond to floods by providing NFIs and emergency shelters.

#### Results achieved

IOM activities have directly engaged local government counterparts in disaster assessment, distribution of relief items and the monitoring of intervention, thereby enhancing local capacities to tackle population movements. The ANDMA and Ministry of Refugees and Repatriations offices at the provincial level are now more active and independent and can collaborate better with other actors when responding to humanitarian needs. The strategic pre-positioning of NFIs and emergency shelter kits has also allowed for continued improvement in emergency response.

IOM deployed a displacement-tracking matrix (DTM) and collaborated toward the development of a natural hazard database, in order to support the operational and monitoring needs of HAP and allow swift information-sharing on natural disasters and the IDP movements that they cause.

The HAP emergency package has reached a cumulative total of 21,937 families (142,454 individuals). The provided assistance (28,047 kits in total) consisted of: 678 blanket modules, 6,450 emergency shelter kits, 767 family modules, 11,620 "family revitalization" kits, 8 solar modules, 1,930 tarpaulins and 6,593 winter kits.

The IDP tracking findings indicate that out of a total of 3,942 families displaced by a natural disaster recorded for the past years until the end of 2012, 2,238 (57%) moved back to their places of origins. The remaining families continue to be displaced due to the lack of employment and livelihood options, the unavailability of land and the lack of resources to rebuild their houses. The IDP tracking findings also indicate that natural disaster displacements are of a temporary nature and can be prevented by implementing risk reduction measures.





## **Future objectives**

The risk reduction efforts of government institutions, I/NGOs and UN agencies in Afghanistan remain limited. Government agencies' lack of capacity and resources has resulted in a large number of people being affected and displaced every year. IOM has contributed to improving preparedness at the institutional and community levels, reducing the suffering of affected populations and preventing them from being further displaced.

Future efforts will concentrate on shifting from emergency response to disaster reduction efforts. HAP will increasingly deal with activities that reduce disaster risk to prevent displacement. Any initiative will be performed in close consultation with national and local disaster management and reduction institutions, with the aim of identifying high-risk communities and implementing hazard prevention and mitigation measures (such as the construction of retention walls and the provision of gabions and sandbags). IOM plans to make this pilot project the first step toward the establishment of a full-fledged DRR strategy.

#### Relevant materials

- IOM Humanitarian Assistance Programme (HAP) Factsheet, available from www.iom.int/jahia/webdav/shared/shared/mainsite/activities/countries/docs/afghanistan/IOM-Afghanistan-HAP-Factsheet-2011-2012-March.pdf.
- *IOM in Afghanistan* photo book, available from www.iom.int/jahia/webdav/shared/shared/mainsite/activities/countries/docs/afghanistan/IOM-Afghanistan-photo-book.pdf.

## List of projects

# Afghanistan Rapid Humanitarian Assistance Programme (RHRA 2)

Project status	Completed
Project period	9 March 2012 to 28 February 2013
Beneficiaries	21,500 families of affected communities
Donor	United States Agency for International Development (USAID) and the Office of Foreign Disaster Assistance (OFDA)
Amount funded (in USD)	7,498,000
Partners	Government personnel of Afghanistan

# Community Outreach and Community Development Programme, Badghis, Afghanistan (Phase One)

(i hase one)	
Project status	Completed
Project period	1 August 2012 to 30 November 2012
Beneficiaries	Local authority staff, affected communities
Donor	Private Sector
Amount funded (in USD)	439,000
Partners	Ministry of Rural Rehabilitation and Development (MRRD), Ministry of Public Health (MoPH), Ministry of Labour, Social Affairs, Martyrs and Disabled (MoLSAMD), Ministry of Women's Affairs and other specialized Ministries

# Immediate Humanitarian Assistance to Vulnerable Populations (IHAV)

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Project status	Completed	
Project period	1 December 2009 to 31 May 2010	
Beneficiaries	10,000 families from affected communities	
Donor	Norway	
Amount funded (in USD)	700,000	

# Construction of Health and Education Facilities (CHEF)

Project status	Active
Project period	19 January 2008 to 18 June 2011
Beneficiaries	Government personnel and affected communities
Donor	USAID
Amount funded (in USD)	56,957,305
Partners	Ministry of Public Health and Ministry of Education

# Rapid Humanitarian Response Afghanistan (Phase I) (RHRA)

Project status	Completed
Project period	1 July 2010 to 31 December 2011
Beneficiaries	30,000 families of IDPs (233,240 IDPs)
Donor	USAID, OFDA
Amount funded (in USD)	4,984,602
Partners	Afghanistan Government personnel

# Humanitarian Assistance to Internally Displaced Persons

Project status	Completed
Project period	1 July 2011 to 30 June 2012
Beneficiaries	12,000 people
Donor	Australian Department of Immigration and Citizenship
Amount funded (in USD)	548,289
Partners	Afghanistan Government personnel and the UN High Commissioner for Refugees (UNHCR)



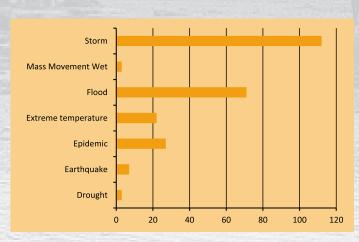
Surface area	147,570 km <sup>2</sup>
Population, 2010 (est.)	146.6 million
Population density, 2010	1,032.6/km <sup>2</sup>
GDP in 2011	USD 113.8 billion
GDP per capita in 2011	USD 700.59
Remittances in USD, 2011	USD 11.9 billion
HDI	0.515
Net migration rate, 2010–2015	- 0.8 migrants/1,000 population
Types of movement	Rural to urban migration, rural to rural migration, temporary migration, permanent migration, cross-border displacement, internal displacement
Displaced by disasters, 2008–2012	2,998,788
Number of IOM staff working on disasters	3
Location of IOM offices	Dhaka, Sylhet, Cox's Bazar
Total DRR funding for 2013 in USD	Data not available
	IOM site: www.iom.org.bd

Preparedness	Emergency
Preparing communities	Tracking displacement
Bridging responses	Assisting the displaced

# Top 10 natural disasters by size of affected population, 1980–2013

Disaster	Date	Affected
Flood	1988	45,000,000
Flood	2004	36,000,00 <mark>0</mark>
Flood	1984	30,000,000
Flood	1987	29,700,000
Drought	1983	20,000,000
Storm	1991	15,438,849
Flood	1998	15,000,050
Flood	2007	13,771,380
Flood	1995	12,656,006
Flood	1993	11,469,537

#### Natural disaster occurrence, 1980-2013



### **Background**

Bangladesh lies in an alluvial delta formed by the confluence of the Padma, the Brahmaputra and the Meghna Rivers. The country is divided into three zones – hills, terraces and flood plain – with big parts of it lying only a few meters above sea level. Its economy is largely dependent on agriculture and extremely vulnerable to weather and climate extremes. The frequent loss of lives and property due to natural hazards undermines the people's resilience and contributes to making Bangladesh one of the most disaster-affected countries in the world.

Bangladesh has a tropical climate and is regularly hit by violent storms and cyclones, which trigger floods and storm surges. Major cyclones hit the country every three years on average, sometimes causing enormous disasters (e.g. in 1970 and 1991, when cyclones killed 500,000 and 140,000 people, respectively).

Floods are a fact of life for many in Bangladesh, with around a quarter of the country inundated in a "normal" year. People living in regularly flooded areas have learned to adapt, for example, by raising their houses on plinths and adjusting their farming systems. However, once every few years a severe flood occurs that covers a considerably greaterthan-usual area, with much more significant damage to lives and livelihoods. For example, as many as 45 and 30 million people were displaced by the 1988 and 1998 floods, respectively. Protracted waterlogging in many areas due to sedimentation in drainage channels and rivers is further increasing the losses due to floods and storms, particularly in the south-western coastal region of Khulna Division (e.g. after Cyclone SIDR in 2007 and Cyclone Aila in 2009).

The country has also been hit by a significant array of major seismic events over the last century, and during the dry season, it has often suffered from dry spells and droughts.

Riverbank erosion is an additional threat to people living along Bangladesh's major rivers and on river islands (chars). It is thought that climate change, by increasing monsoon rainfall, may contribute to higher rates of erosion along Bangladesh's main rivers, possibly resulting in an increase in the loss of homes and agricultural land in the long term. At the same time, land accretion continuously creates chars and new land along the rivers, on which more than 2 million people are estimated to live.

The problem of displacement by riverbank erosion has long been recognized in Bangladesh. While erosion causes serious disruption, however, it is considered to be inevitable. Most families who lose their homes or agricultural land to erosion therefore choose to remain within the local area.

Climate change is also expected to negatively impact rural livelihoods by amplifying variability in the onset and the end of the monsoon season, as well as by causing unpredictable rainfall patterns, dry spells and low soil moisture. Alongside the growing economic pull of urban areas, these factors are likely to produce a steady flow of rural migrants. Environment-related displacement and economic migration cause most families to experience multiple displacements over the course of a lifetime.

A significant amount of short-term and seasonal migration in Bangladesh is rural-rural, with many poor or landless households engaging in labour migration during periods of high demand for agricultural labour. More than 60 per cent of the country's labour force remains engaged in agriculture, posing public health management issues in the temporary settlements of seasonal workers. However, natural hazards and environmental degradation tend to displace people over greater distances. In these cases the lack of available land, high population density and shortage of year-round work across rural Bangladesh, coupled with the availability of better employment opportunities in urban areas, induce the overwhelming majority of the displaced to move to urban areas.

Economic opportunities, social and family networks, and cultural, linguistic, and religious affinities between the populations of Bangladesh and the Indian region of West Bengal mean that cross-border migration — whether regular or irregular, or short-, medium- or long-term — is inevitable in both directions.

### Responses

IOM intervention has focused on supporting the humanitarian response to major events and on raising awareness of trafficking following disasters as a decisive factor of vulnerability.

In particular, after Cyclone Aila in 2009, IOM supported the Government's response activities by providing NFIs and shelter kits to 24,000 displaced families. The Organization also promoted regular coordination meetings, both at the district and the sub-district levels. IOM has been behind the organization of meetings within the framework of the government-led district disaster management structure. IOM also participated at national-level meetings, cluster-specific events and ad hoc meetings with national and international NGOs.

In order to inform future risk reduction efforts, IOM produced, in coordination with nine international and national organizations, the Joint Position Paper on Cyclone Aila (Priorities for Action) and promoted the National Policy Dialogue on Climate Change and Migration: Assessing the Evidence with Aila as the Case Study.

In addition, IOM engaged in awareness-raising activities by producing a short video documentary (entitled Aila, Climate Change and Trafficking), organizing a tour of journalists in Aila-affected areas (16 articles have been produced as a result) and creating a website to share reports and information on the devastating effects of Aila.

IOM also set up a displacement-tracking matrix (DTM) and a database of beneficiaries to monitor the field situation of the targeted communities, and launched a strong awareness campaign on human trafficking. The Organization also carried-out a series of orientation meetings with local leaders and presented a folk drama, reaching out to an estimated 47,000 people. Following the 2012 floods, IOM took part in the Government-UN-NGO Joint Needs Assessment Mission.

#### Results achieved

IOM took the lead in assisting the Bangladeshi Government at the district and *upazila* levels to hold disaster management committee meetings, which were previously almost non-existent. The Organization also established significant strategic partnerships with local and international NGOs and media and UN agencies, which proved essential in initiating discussions and mobilizing public opinion. In addition, IOM greatly improved its field presence, which allowed for access to updated information, quick distribution of resources and on-the-spot management decisions to address local problems.

The activities carried out in the Field exposed the issue of adolescent girls and boys living on the embankments, which IOM addressed through a successful awareness campaign on human trafficking with the displaced communities, as well as the local administration.

The data collected through the DTM and the database of project beneficiaries have been used by other organizations to provide more than 23,000 displaced families with early-recovery activities, mostly implemented by local NGOs, under their emergency support and livelihood projects.

### **Future objectives**

Bangladesh is undergoing severe environmental degradation, with riverbank erosion being a major driver of livelihood loss and displacement. With climate change expected to further threaten low-lying and coastal areas and increase the frequency and intensity of hydro-meteorological hazards inland, the prevention of forced migration and the management of mobility will increasingly become priorities for both national and local authorities in the country. Under the UNDAF 2012–2016, IOM will partner with other agencies on climate change, the environment and disaster risk reduction and response. IOM is aiming at directly tackling these issues over the coming years.

## **Relevant materials**

- National Plan for Disaster Management, 2010–2015, available from www.dmrd.gov.bd/index. php?option=com\_docman&task=doc\_download&gid=305&Itemid=236.
- Disaster Management Act of 2012, available from www.dmb.gov.bd.
- Standing Orders on Disaster, available from www.preventionweb.net/files/9469\_bangladesh.pdf.





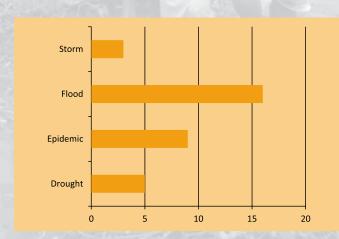
Surface area	181,035 km²
Population, 2010 (est.)	14.1 million
Population density, 2010	78.1/km²
GDP in 2011	USD 12.8 billion
GDP per capita in 2011	USD 897
Remittances, 2011	USD 364 million
HDI	0.543
Net migration rate, 2010–2015	- 0.1 migrants/1,000 population
Types of movement	Internal displacement
Displaced by disasters, 2008–2012	311,505
Number of IOM staff working on disasters	2
Location of IOM offices	Phnom Penh
Total DRR funding for 2013 in USD	USD 1.5 million
IOM site: www.iom.int/cms/en/sites/iom/home/where-we-work/asia-and-the-pacific/cambodia.html	

Preparedness	Emergency
Preparing communities Building institutional capacities	Assisting the displaced

# Top 10 natural disasters by size of affected population, 1980–2013

Disaster	Date	Affected
Drought	1994	5,000,000
Flood	2000	3,448,053
Flood	2001	1,669,182
Flood	2002	1,470,000
Flood	1996	1,300,000
Flood	1991	900,000
Drought	2002	650,000
Drought	2005	600,000
Flood	1999	535,904
Epidemic	1992	380,000

#### Natural disaster occurrence, 1980-2013



## **Background**

The geography of Cambodia is characterized by a central alluvial plain, which is dominated by the Tonle Sap Lake and the Mekong River and its delta and surrounded by uplands and elevations. The country has a typical tropical climate, with seasonal wet and dry cycles, which frequently expose the country to floods and droughts.

Between 1990 and 2012, floods were the most recurrent and most damaging disasters.

In particular, following the 2011 events that hit 18 of Cambodia's 24 provinces, the National Committee for Disaster Management (NCDM) registered 51,594 displaced households, with the highest numbers recorded in Prey Veng, Kampong Cham, Svay Rieng and Kampong Chhang Provinces. A total of 350,274 households were affected (with Prey Veng, Svay Rieng, Kandal and Kampong Cham Provinces in the Lower Mekong River Basin recording the highest numbers). Extensive damage to roads and other infrastructure impacted mobility to safe areas and the timely access of disaster relief and social services.

The floods revealed significant gaps in institutionaland community-level capacities for flood emergency preparedness and response and displaced many families from their homes. Lack of support further forced poor rural families out of their areas of origin to look for assistance and long-term opportunities for recovery and well-being.

Droughts tend to be less frequent. However, it is significant to note that drought periods have increasingly been followed by destructive floods. Successions and combinations of droughts and floods have resulted in a significant number of fatalities and considerable economic losses.

According to the NCDM and other development partners, at least 60,000 families were temporarily displaced by either floods or droughts in the 2011–2012 period alone.



## Responses

IOM has been active in addressing disaster risks in the country for several years. The Organization's programme of intervention has been aimed mainly at building capacities for response and risk reduction at the institutional and grassroots levels, in particular by implementing community-based disaster risk management activities. All actions have been informed by the hazard and vulnerability assessments conducted in 2009.

IOM has piloted institutional capacity-building models for disaster risk management in support of Cambodia's Strategic National Action Plan (SNAP) for DRR, 2008-2013. In addition, it works in close partnership with the National and Provincial Committees for Disaster Management (NCDM/PCDM), delivering training on community-based disaster risk reduction, risk assessment, and DRR/local development planning.

In 2010, IOM supported the development of a community-based disaster risk assessment and risk reduction strategy through the development of village disaster management teams (VDMTs) in 17 villages in two provinces.

During the 2011 floods, IOM provided emergency shelter distributions to Svay Rieng and Prey Vneg Provinces using Central Emergency Response Fund (CERF) money. A total of 5,800 shelter packs were delivered to households in 35 villages in the worst-affected communes in three disaster-prone provinces – Prey Veng, Svay Rieng and Kampong Cham. IOM has worked in collaboration with PCDMs under the NCDM and in coordination with UN agencies and the Cambodia Red Cross during the distribution.

### **Results achieved**

IOM has undertaken community-based risk-mapping exercises in 17 communities in the highlands of north-eastern Cambodia prone to natural disasters. The villages now have community-based disaster risk assessment and risk management mechanisms. Disaster preparedness and response capacities have significantly improved with the establishment of VDMTs; however, capacity-building activities are still ongoing and technical assistance is still needed.

Government and community leaders have been trained specifically on community-based disaster risk reduction, risk assessment and DRR/local development planning. As a consequence, local preparedness and response capacity, especially to floods, has been significantly improved.

In addition, IOM has directly supported emergency response activities by providing 5,800 households with shelter materials and shelter repair toolkits, allowing for a rapid improvement of their living conditions in the immediate aftermath of the 2011 floods.

IOM was awarded three certificates of appreciation by provincial and commune authorities in recognition of the assistance it has provided to affected and vulnerable communities.

## **Future objectives**

IOM has identified the improvement of coordination mechanisms for early warning/early action systems linking key PCDMs with communities in hazard-prone areas as a key future priority. The Organization aims at establishing provincial collective centers in disaster-prone provinces, in order to improve access to accommodation and protection for communities affected by disasters. IOM also supports the development of provincial contingency plans and related standard operating procedures, which include basic emergency response guidelines for times of disaster and will mainstream early-warning communication feedback protocols from meteorological monitoring agencies to villages through NCDM and line committees.

There remains a need to mainstream provincial contingency plans and related SOPs into disaster response planning at the commune, district and village levels. Past experience in working closely with the Government in the areas of providing training exercises, in particular to a number of national and provincial officials, puts IOM in a unique position as a key Government partner for future technical assistance. Nonetheless, scaling up and adapting successful community-based strategies to other provinces remains challenging, for operational and financial reasons.

#### Relevant materials

- Mapping Vulnerability to Natural Hazards in Mondulkiri: Final Report (2009), available from www. iom.int/jahia/webdav/shared/shared/mainsite/activities/countries/docs/Final-Report-Mapping-Vulnerability-Natural-Hazards-Mondulkiri.pdf
- Mapping Vulnerability to Natural Hazards in Ratanakiri: Final Report (2009), available from www.iom.int/ jahia/webdav/shared/shared/mainsite/activities/countries/docs/Final-Report-Mapping-Vulnerability-Natural-Hazards-Ratanakiri.pdf
- Rising Above Natural Disasters: *My Village's Story* (Village Disaster Management Teams in North-east Cambodia), video documentary, available from www.youtube.com/watch?v=QvEH6RrKzLM.
- 'Building Resilience to Natural Hazards in North-east Cambodia' project info sheet, available from www.
  iom.int/cms/en/sites/iom/home/what-we-do/migration-and-climate-change/operational-activities/
  building-resilience-againstbr-natural.html

## List of projects

#### Rapid Humanitarian Assistance to Flood-Displaced Households in Cambodia (RHAF)

Project status	Completed
Project period	1 November 2011 to 31 January 2012
Beneficiaries	25,000 IDPs
Amount funded (USD)	342,379

#### Mapping Vulnerability to Natural Hazards in Ratanakiri

Project status	Completed
Project period	1 January 2009 to 30 September 2009
Beneficiaries	Ethnic minorities/indigenous peoples
Amount funded (USD)	115,408
Partners	National Committee for Disaster Management (NCDM) and its line committees at the provincial (PCDM), district (DCDM) and commune (CCDM) levels, Ministry of Land Management, Department of Ethnic Minority Development and the Ministry of Rural Development



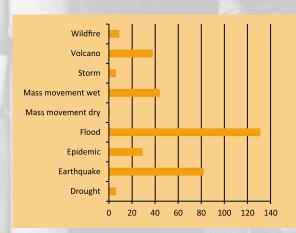
Surface area	1,904,569 km <sup>2</sup>
Population, 2010 (est.)	239.8 million
Population density, 2010	125.9/km²
GDP in 2011	USD 846.8 billion
GDP per capita in 2011	USD 3,495
Remittances, 2011	USD 7.1 billion
HDI	0.629
Net migration rate, 2010–2015	-0.7 migrants/1,000 population
Types of movement	Internal displacement
Displaced by disasters, 2008–2012	2,478,704
Number of IOM staff working on disasters	58
Location of IOM offices	Jakarta, Bandung, Banda Aceh, Yogyakarta, Makassar, Kupang, Bogor, Ciamis, Cianjur, Garut, Soreang, Sukabumi, Tasikmalaya, Bener Beriah, Aceh Tengah, Sinkil, Simeulue
Total DRR funding for 2013 in USD	9,000,000
	IOM site: www.iom.or.id

Preparedness	Emergency	Cross-cutting
Preparing communities	Assisting the displaced	Livelihoods
Building institutional capacities		Health
Bridging responses		
Providing information		

# Top 10 natural disasters by size of affected population, 1980–2013

Disaster	Date	Affected
Earthquake	2006	3,177,923
Wildfire	1994	3,000,000
Earthquake	2009	2,501,798
Drought	1997	1,065,000
Flood	2006	618,486
Flood	1996	556,000
Earthquake	2004	532,898
Flood	2002	500,750
Epidemic	1986	500,000
Earthquake	2007	459,567

#### Natural disaster occurrence, 1980-2013





## **Background**

Indonesia is the world's largest archipelago, with over 17,000 islands spread north and south of the equator. Located in the highly seismic Pacific Ring of Fire, the country is frequently exposed to geophysical hazards such as earthquakes, tsunamis and volcanic eruptions. The frequency of reported hydro-meteorological (e.g. tropical storms, landslides and floods) and climatological (e.g. droughts and fires) hazards has been increasing over the past few years.

Significant shares of the local population remain minimally resilient to disasters. The most important drivers of risk include environmental degradation, high population density and urbanization, settlement in high-risk areas, poor infrastructure, overexploitation of natural resources and unsustainable livelihoods.

Over the past decades, natural and man-made hazards, combined with high levels of vulnerability, have resulted in natural disasters that caused significant losses of life and property, displacement and violent shocks to local ecosystems. Climate change has been increasing the frequency and severity of hydro-meteorological hazards, exacerbating risk for local populations.

The Government of Indonesia has demonstrated its commitment to disaster risk reduction (DRR) through its efforts in support of the Hyogo Framework for Action (HFA) and its ratification of the Association of South-East Asian Nations (ASEAN) Agreement on Disaster Management and Emergency Response. As a consequence, the Government has established the National Disaster Management Agency (BNPB) and its subnational counterparts (BPBDs). As many of the provincial and district BPBDs are newly established, capacity development at the institutional level is still needed.

The Government focuses both on incorporating disaster risk reduction in development planning (in order to avoid the creation of risk and to tackle the existing causes of vulnerability) and in promoting risk reduction in post-crisis activities (in order to build back better and safer, avoiding the reproduction of risk conditions). Responsibilities of administrative authorities following disasters, including just fulfillment of rights of impacted communities and internally displaced persons (IDPs), are stated in Indonesia's Disaster Management Law.

### Responses

IOM intervention has focused mainly on strengthening the response capacity of the national disaster management authority, as well as making communities more independent in the aftermath of a disaster, especially in the most remote areas. Through its Humanitarian Assistance Program (HAP), the Organization directly assists people affected and displaced by natural disasters, in accordance with its role in the Inter-agency IDP Task Force and the Humanitarian Cluster System in the country.

In recent emergencies, IOM led joint assessments of the population's needs and directly provided nonfood items (NFIs) and shelter assistance. Affected populations were referred to relevant agencies for other forms of specialized assistance.

IOM Indonesia has been working in disaster response for more than three decades. Acknowledging the increased incidence and severity of natural disasters, it has become increasingly involved in DRR efforts. The Organization is an active member of the United Nations Country Team and is a signatory to the UN Partnership for Development Framework, which is the result of collaboration between the United Nations and Indonesia. Guided by the Indonesian Government's National Disaster Risk Reduction Action Plan, IOM has established a comprehensive strategy to support local efforts to reduce vulnerability and enhance the resilience of communities to natural disasters at all levels.

IOM DRR Indonesia's programme focuses on supporting the Government's efforts to reduce vulnerability and enhance communities' preparedness and resilience to natural disasters. The Organization helps to bridge the gap between the national and decentralized levels by strengthening the disaster management capacity of the provincial and district disaster management agencies; enhancing comprehensive multisectoral planning and preparedness activities of district and provincial government offices; and linking communities to government, civil society and private-sector DRR stakeholders, with the aim to drive the national DRR agenda.

In addition, IOM intervenes to directly address risk conditions at the local level, in order to reduce disaster losses and prevent and manage disaster-induced displacement. Applying a multidisciplinary and multi-hazard approach, the Organization works to strengthen the capacities of disaster

management agencies, local governments, civil society and communities to reduce disaster risk and mainstream disaster risk reduction in development planning.

Through technical support, coordination and technology, the Organization strengthens information and data management and builds risk assessment and monitoring capacity. At the community level, IOM promotes communitybased disaster risk management (CBDRM) and helps to increase communities' preparedness though village action plans. In addition, it has directly reduced hazard exposure and increased the resilience of income-generating activities, through structural hazard mitigation measures, as well as preparedness, wide communication and awareness-raising in various high-risk communities across the country.

#### **Results achieved**

IOM activities have contributed to supporting national and local authorities in their risk reduction efforts. The Organization has supported the development of local human resources, by training representatives from public administrations throughout the country. In particular, BPBDs and district health offices personnel received training in disaster management, preparedness and response, and comprehensive district-wide disaster management plans were built. In addition, IOM strengthened the capacities of the main risk assessment actors and widely improved earlywarning/early-action systems. As a consequence, government institutions and sub-national actors are today better prepared and can respond to disasters in a more coordinated fashion.

At the community level, IOM rolled out disaster preparedness and risk reduction trainings, created community-based disaster response committees and constructed hazard-mitigating infrastructure in 10 high-risk communities. The Organization also contributed to enhancing the resilience of communities through livelihood restoration and protection interventions. Activities at both the national and local levels were supported by a strong campaign to raise awareness on disaster risk. At least 1 million people have been reached by information, education and communication materials (e.g. newsletters and other publications).

Increased awareness allowed IOM to foster the participation of a broad range of stakeholders into disaster management and risk reduction activities,

thereby strengthening the linkages between communities and relevant authorities. Civil society DRR forums were able to work as recognized partners with subnational government bodies in the design and implementation of DRR projects, and collaboration and partnerships among DRR actors was significantly strengthened.

### **Future objectives**

Guided by the Government of Indonesia's National Disaster Risk Reduction Action Plan, IOM Indonesia will continue to support the Government's efforts to reduce vulnerability and enhance the resilience of communities to natural disasters. Sustainable development can only be pursued through effective risk reduction, better disaster preparedness and by addressing the impacts of a changing environment on human communities. Applying a multidisciplinary and multi-hazard approach, IOM will work to mainstream DRR into development policies and programmes at all levels.

The Organization will continue to equip disaster management stakeholders at the national and subnational levels with technical expertise and capacities, in order to contribute to national development goals. In particular, it will continue to promote risk awareness, strengthening in-country information and data management, risk assessment and risk-monitoring capacities.

At the community level, IOM will actively engage in promoting community-based risk management and climate change adaptation practices, in order to promote the safety of the people most at risk. The Organization aims at reducing existing vulnerabilities, in particular in high-risk areas threatened by a multitude of hazards, and at further improving preparedness and response capacities to increase resilience and self-reliance in the face of hazardous events. Throughout its intervention, IOM will continue to facilitate the participation of communities in local decision-making processes and multi-stakeholder DRR platforms. Partnerships and collaboration with multi-stakeholder parties, including universities and the private sector, will be actively pursued.

### **Relevant materials**

- Community-Based Disaster Risk Management: Experiences from Indonesia, available from www.iom. or.id/publications/pdf/30\_CBDRM\_Handbook\_english\_lo.pdf.
- Various IOM Indonesia publications, available from www.iom.or.id/publications.jsp?lang=eng.
- IOM Indonesia multimedia materials, available from www.iom.or.id/videogallery.jsp?lang=eng.



# List of projects

# Strengthening Disaster Risk Reduction (DRR) Capacity and Promoting Community Resilience in West Java

Project status	Active
Project period	15 May 2012 to 15 May 2014
Beneficiaries	1,000,000 people and 570 local authority staff
Amount funded (in USD)	3,850,390
Partners	National Development Planning Agency (BAPPENAS), West Java Development Planning Agency (BAPPEDA), National Disaster Management Agency (BNPB); subnational disaster management agencies (BPBDs) in targeted areas, and provincial and district government personnel

# Merapi Volcanic Eruption Livelihoods Recovery Programme

Project status	Completed
Project period	10 February 2012 to 09 February 2013
Beneficiaries	Affected communities and local authority staff
Amount funded (in USD)	329,662
Partners	UN Development Programme and the Food and Agriculture Organization

# **Emergency Operations Centres for Enhanced Disaster Preparedness and Response Capacity**

Project status	Active	
Project period	01 June 2012 to 31 March 2014	
Beneficiaries	Local authority staff and affected communities	
Amount funded (in USD)	2,917,767	
Partners	BNPB, BPBDs, Australia-Indonesia Facility for Disaster Risk Reduction	

# **Enhancing Disaster Preparedness and Response Capacity in Garut District, West Java**

Project status	Completed
Project period	01 June 2010 to 31 October 2011
Beneficiaries	Vulnerable groups
Amount funded (in USD)	470,000

#### Indonesia Geological Disasters Emergency Response – Mentawai Islands and Mount Merapi

Project status	Completed
Project period	27 October 2010 to 26 January 2011
Beneficiaries	13,000 IDPs
Amount funded (in USD)	674,631

#### Logistics Support: Earthquake- and Tsunamiaffected Mentawai Islands

Project status	Completed
Project period	02 November 2010 to 30 April 2011
Beneficiaries	14,983 affected communities
Amount funded (in USD)	400,000

# Strengthening Disaster Risk Reduction (DRR) Capacity and Promoting Community Resilience in Aceh

Project status	Active
Project period	22 August 2012 to 22 August 2014
Beneficiaries	100 Government personnel, 200 local authority staff and 500,000 people
Amount funded (in USD)	1,650,439
Partners	BAPPENASBAPPEDA, BNPB, BPBDs at the provincial and district levels and the provincial and district government

# Preparation Cost for AEDFF Project in Aceh Province

Project status	Completed
Project period	21 December 2010 to 31 March 2012
Amount funded (in USD)	3,687,089
Partners	BAPPENAS, BAPPEDA, Ministry for Disadvantaged Areas, Jembatan Massa Depan, Gaja Putih University, Aceh Coffee Forum, Speciality Coffee Association of Indonesia, Village Outreach Coordinator



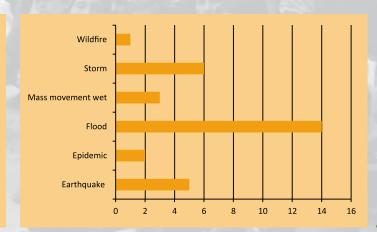
Surface area	652,864 km²
Population, 2010 (est.)	47.9 million
Population density, 2010	70.9/km <sup>2</sup>
GDP in 2011	Data not available
GDP per capita in 2011	Data not available
Remittances, 2011	USD 137 million
HDI	0.498
Net migration rate, 2010–2015	-0.6 migrants/1,000 population
Types of movement	Rural-to-rural migration, permanent migration, cross-border displacement, internal displacement, stranded/trapped
Displaced by disasters, 2008–2012	1,852,985
Number of IOM staff working on disasters	20
Location of IOM offices	Yangon, Thaton, Ye, Mawlamyine, Bogale and Mawlamyinegyun
Total DRR funding for 2013 in USD	USD 3,000,000
IOM site: www.iom.int/cms/en/sites/id	om/home/where-we-work/asia-and-the-pacific/myanmar.html

Prevention	Preparedness	Emergency	Mitigation	Recovery	Cross-cutting
Reducing	Preparing communities	Tracking	Mitigating	Durable	Livelihoods
hazards	Building institutional capacities	displacement	the impact	solutions	Health
	Bridging responses	Assisting the displaced			Infrastructures

# Top 10 natural disasters by size of affected population, 1980–2013

Disaster	Date	Affected
Storm	2008	2,420,000
Flood	1991	359,976
Storm	2010	260,000
Mass Movement Wet	2010	145,000
Flood	1997	137,418
Flood	2007	101,920
Storm	1994	64,970
Flood	2007	61,744
Storm	2006	60,106
Flood	2002	50,000

#### Natural disaster occurrence, 1980-2013



## **Background**

Myanmar is exposed to a variety of hazardous natural phenomena. The northern part of the country is seismically active, and the western and southern coastlines are exposed to cyclones, storm surges and tsunamis. Rainfall-induced flooding is a recurring phenomenon across the country. The hilly and mountainous regions in the upper reaches of the river systems are frequently hit by landslides and flash floods, while riverine floods are common in the deltas. In addition, large parts of the territory are at risk of fires. While the monsoon season has shortened over the last two decades, rainfall has become more intense, surpassing the usual levels and causing localized flooding from time to time in cities and towns.

South-east Myanmar is host to hundreds of "cluster communities" pushed into the region by livelihood vulnerability. Most of the households in these communities now make a living in rubber plantations, brick factories, fishing and fish processing operations and farming. Such communities are typically established in semi-

permanent settlements in marginal peripheries, often in remote, government-controlled or ceasefire areas. Aside from remoteness, these populations suffer from poor integration into their host communities, lack of access to basic services and poor living and working conditions. In addition, they tend to be highly vulnerable to natural disasters.

Settlements in the south-east are vulnerable to the possible influx of people fleeing disasters in neighbouring areas, as well as of displaced populations from lower and middle Myanmar. IOM documented the displacement in the aftermath of Cyclone Nargis in 2008 and highlighted the lack of adequate preparedness and capacity to cope with massive population movements in the communities of destination. Disaster preparedness planning does not take into sufficient account the threat of recurring natural events (e.g. flooding) and severe economic downturns (e.g. those of 1997 and 2008-2009) in neighbouring Thailand, which affect Myanmar's south-eastern border (e.g. short-term, large-scale migrant returns through key border-crossing points such as Mae Sot-Myawaddy, as witnessed in October 2011).



## Responses

The overall aim of the DRR (disaster risk reduction) interventions of IOM in Myanmar is to enhance the capacity of communities and institutions at different levels to adequately manage migration as well as reduce disaster risks faced by migrants, by populations displaced by natural disasters and by host communities. In collaboration with ministries and institutional task forces on preparedness, risk reduction and response, IOM Myanmar's DRR programme aims to support the Myanmar Action Plan on Disaster Risk Reduction (MAPDRR), 2009-2015.

IOM supports the development of village disaster management committees; rolls out training in internationally accepted humanitarian assistance management for local duty-bearing officials; and promotes the standardization of government response capacities in key sites in Myanmar affected by natural disasters. The Organization is working, for example, with township authorities in Hlaingbwe to comprehensively review the existing Township Disaster Management Plan (TDMP), which focuses on enhancing disaster management and coordination procedures. Revision of the Mon State TDMP will soon begin.

In Myanmar's south-east, which borders Thailand and suffers from frequent floods and occasional cyclones and storm surges, IOM has focused on reducing the vulnerability of displaced and migrant populations. The current DRR programme in the south-east aims to enhance the capacities of 55,000 individuals (as well as a number of government and township institutions); reduce risk; prepare for and manage emergencies; and plan for post-event recovery and rehabilitation. In particular, the Organization builds local capacities in camp management for national- and township-level disaster responders.

Lastly, IOM Myanmar was involved in the response to Cyclones Nargis (2008) and Giri (2010) by deploying its Displacement Tracking Matrix (DTM) and directly assisting the affected populations. Recovery activities have focused on collaborating with the Ministry of Health to strengthen health systems and rebuild damaged facilities and infrastructure. In partnership with local non-governmental organizations (NGO)s, the Organization also developed a model of psychosocial support to people traumatized by the disasters.

#### Results achieved

IOM awareness-raising activities have so far reached about 27,500 households in south-east Myanmar alone. The Organization is presently rolling out technical assistance and training to 60 target villages in the project area to develop the comprehensive Village Action Plans for Disaster Mitigation and Response. Thirty village-level assessments have been completed and 30 village disaster management committees have already been established.

In addition, the Organization was able to mainstream DRR measures into its cyclone response in 2008 and 2010. Displacement tracking was regularly performed in order to inform interventions which assist the most vulnerable households, and the Organization specifically trained cyclone-prone communities in enhanced construction techniques.

## **Future objectives**

IOM Myanmar seeks to work with national counterparts to implement key priorities of the MAPDDR. This includes a strong focus on community-based disaster risk reduction; the enhancement of capacities for disaster response and management at the upper levels of Government; investment in infrastructure for response (including support for the development of a national early-warning system); and a strong focus on the vulnerability of migrants and displaced communities, both in areas of origin and destination.

There is significant potential to mainstream the experience of IOM in Burma in reducing risk for migrant communities into national DRR and capacity-building policies in the near and medium term.

#### Relevant materials

- Myanmar Action Plan on Disaster Risk Reduction (MAPDRR,) 2012, available from www.rrdmyanmar. org/index.php?name=document&file=preview&m=&id=22.
- Hazard Profile of Myanmar (July 2009), available from www.adpc.net/v2007/IKM/ONLINE%20 DOCUMENTS/Default-DOCUMENTS.asp.
- Multi-hazard Risk Assessment in Rakhine State of Myanmar (January 2013). (Myanmar version only), available from http://themimu.info/mwg-internal/de5fs23hu73ds/progress?id=4XfMfr7Q5l.
- Consultation on Emerging DRR Needs in Exchange Context of MYANMAR, available from http://themimu.info/mwg-internal/de5fs23hu73ds/progress?id=ISWe9bOgDk.
- Manuals on earthquakes, floods fires and cyclones (English and Myanmar versions), available from http://themimu.info/DRRWG/index.php?name=publication&file=sorttype&page\_id=29&doc\_ type=23&page=2#tab1.
- Study on Disaster Vulnerability and Preparedness of Small and Medium Scale Fisher Folks in Coastal Region of Myanmar, available from http://themimu.info/download.php?file=DRRWG/doc\_file/MIMU\_FILE\_1338546510\_Fisher%20Folk\_Research.pdf.

## List of projects

# Community-based Disaster Risk Reduction Initiatives in South-east Myanmar

Project status	Active
Project period	4 June 2012 to 31 December 2013
Beneficiaries	55,000 people at risk, 180 Government personnel
Donor	United States Agency for International Development and the Office of Foreign Disaster Assistance
Amount funded (in USD)	1,000,000

#### 2012 ER Global Pre-positioning: Myanmar

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Project status	Completed
Project period	22 March 2012 to 22 March 2013
Beneficiaries	1,750 people
Donor	AmeriCares Foundation
Amount funded (in USD)	10,000
Partners	International NGO personnel and partners, local NGO and civil society organization personnel and the Myanmar Red Cross

# Physical Protection and Safe Water for Exposed and Vulnerable Households in Cyclone Giriaffected Areas in Rakhine State

Project status	Completed
Project period	1 May 2011 to 29 February 2012
Beneficiaries	18,900 people
Donor	ECHO
Amount funded (in USD)	1,731,006

#### Durable Shelter and Livelihood Solutions for Displaced and Other Vulnerable Persons in Cyclone-affected Areas

Project status	Completed
Project period	1 March 2009 to 31 December 2009
Beneficiaries	72,681 IDPs
Donor	Humanitarian Aid and Civil Protection Department of the European Commission (ECHO)
Amount funded (in USD)	2,000,000

#### Livelihood and Shelter Recovery in the Ayeyarwady Delta

Project status	Completed
Project period	10 June 2009 to 30 April 2011
Beneficiaries	1,000 families of affected communities
Donor	United Kingdom Department for International Development
Amount funded (in USD)	500,000



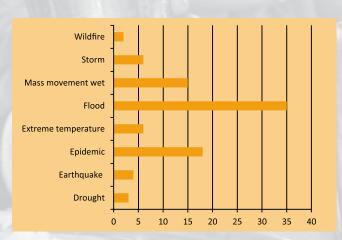
Surface area	147,181 km²
Population, 2010 (est.)	29.9 million
Population density, 2010	203.6/km <sup>2</sup>
GDP in 2011	USD 18.8 billion
GDP per capita in 2011	USD 619
Remittances, 2011	USD 3.9 billion
HDI	0.463
Net migration rate, 2010–2015	-0.6 migrants/1,000 population
Types of movement	Rural-to-urban migration, internal displacement
Displaced by disasters, 2008–2012	373,676
Number of IOM staff working on disasters	3
Location of IOM offices	Kathmandu and Damak
Total DRR funding for 2013 in USD	Data not available

Preparedness	Emergency
Preparing communities Building institutional capacities	Assisting the displaced

#### Top 10 natural disasters by size of affected population, 1980-2013

Disaster	Date	Affected
Flood	2004	800,015
Flood	2007	640,706
Flood	1993	553,268
Flood	1987	35 <mark>1,000</mark>
Drought	2009	303,000
Earthquake	1988	301,016
Mass mov. wet	2002	265,865
Flood	2009	257,786
Earthquake*	1980	240,600
Flood	1983	200,050

#### Natural disaster occurrence, 1980-2013



## **Background**

Nepal has a significant diversity of ecosystems resulting from its highly varied topography (land rises abruptly from 70 to 8,848 metres) and climatic conditions. The country lies on an active seismic zone on the boundary of the Indian and Eurasian plates. The combination of geological, topographic and hydro-meteorological features in Nepal exposes the country to frequent and severe natural hazards. The country is frequently hit by earthquakes, epidemics, fires, floods and climatic hazards (such as droughts and extreme temperatures). It is also one of the world's landslide hotspots. Kathmandu, the capital city, and its valley are seismically active and exposed to a variety of natural and man-made hazards.

According to the Ministry of Home Affairs, an average of one disaster and two deaths occur in the country every day, which significantly challenges the country's response and coping capacity. Risk is driven mainly by socioeconomic factors such as poverty, illiteracy and environmental degradation, the last of which due partly to rapid population growth and the prevalence of unplanned settlements. Many people, especially the poor and marginalized groups, live in unsafe sites and conditions.

Climate change is further aggravating the country's disaster risk, which, in turn, directly and indirectly affects population movements. In addition, a tenyear armed conflict, which has led to large-scale internal displacements and to a complex political transition, has further aggravated the vulnerability of people all over the country, as governmental and local institutions struggle to implement disaster risk reduction (DRR) measures and provide effective relief and responses in times of crisis.

In August 2008, Nepal was hit by recurring floods that affected 7,563 households and 42,765 persons in the eastern districts of Sunsari and Saptari, following the collapse of the Koshi River embankment. In July 2012, an estimated 2,200 households were affected and 145 families were displaced by a flash flood in the Dang District. In September, after several days of continuous downpour, more than 600 families were displaced by flooding from the different rivers in the Kanchanpur District.

Extreme weather events and associated landslides and floods result in rural-to-urban migration, as well as outmigration. According to a recent Asian Development Bank report, increasing flood risk is driving forced mobility, as floods cause crop and livestock losses, which ultimately lead to impoverishment and malnourishment. Climate dynamics, particularly the expected increase in the variability of rainfall regimes, suggest that agriculture in Nepal will face immense challenges as seasonal droughts become more frequent and severe.

### Responses

IOM has consistently focused on strengthening and supporting the response capacity of the Government of Nepal. In 2008, for example, the Organization supported 43,000 individuals from the 7,573 families affected by the Koshi floods. As the Camp Coordination and Camp Management Cluster Lead, it was responsible for a range of activities that included site planning, information management, coordination, procurement, distribution of non-food items, formation of camp management committees and disaster preparedness trainings. In addition, the Organization prepared draft emergency earthquake response plans for the Kathmandu, Lalitpur, Kirtipur and Madhyapur municipalities.

In order to address the specific challenges of preparedness and response in densely populated urban areas, IOM conducted an assessment of existing open spaces that could be used for humanitarian purposes in Kathmandu Valley in the event of disaster. A total of 83 sites were identified, and a national gazette notification is underway to protect these sites from encroachment. IOM is now undertaking a GIS (geographic information system) study of the 83 sites which will allow for future preparedness activities.

### **Results achieved**

Around 43,000 persons benefited from shelter, rehabilitation and relocation intervention that IOM carried out during the Koshi floods in 2008. IOM was also responsible for longer-term awareness-raising and capacity-building interventions, which enhanced the communities' preparedness for future floods.

Municipalities in the Kathmandu Valley can now rely on emergency response plans in the event of major earthquakes. One of the main bottlenecks of the response operations – the lack of sufficient space for internally displaced person camps and other humanitarian purposes –has been addressed through the identification and protection of 83 empty sites in the conurbation, while capacities at the municipal level is being built through training and simulations targeting municipal officials. Due to the collaboration of IOM with national and local authorities at all levels, there is now significant ownership of the DRR process by local stakeholders.

### **Future objectives**

The GIS mapping exercise of the 83 humanitarian sites is still ongoing, while the Government of Nepal has already approved the open spaces for inclusion in gazette notification. Upon completion, the project will have significantly strengthened the preparedness of the institutions governing the biggest urban community in the country. However, pre-positioning humanitarian items and protecting sites from encroachment will be a major challenge. In addition, IOM is working with the United States Agency for International Development (USAID) and Nepal's Ministry of Home Affairs on the possibility of piloting a rubble removal project in the aftermath of future earthquakes, in order to speed up reconstruction and allow for more effective recovery.



# List of projects

Site De-confliction and IDP Site Planning for 83 Open Spaces in the Kathmandu Valley

Project status	Completed
Project period	21 June 2012 to 20 November 2012
Beneficiaries	900,000 people at risk
Donor	United States Agency for International Development and the Office of Foreign Disaster Assistance
Amount funded (in USD)	82,740
Partners	Ministry of Home Affairs, Department of Urban Development and Building Construction, Nepalese Army, Ministry of Local Development, Ministry of Education, Ministry of Health and Population, Ministry of Defence, National Society for Earthquake Technology, Nepal Red Cross Society and the Office for the Coordination of Humanitarian Affairs



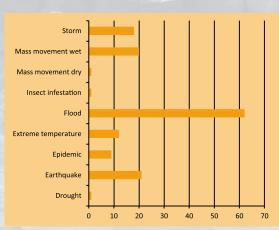
Surface area	796,095 km²	
Population, 2010 (est.)	173.5 million	
Population density, 2010	218.1/km²	
GDP in 2011	USD 210.2 billion	
GDP per capita in 2011	USD 1.189	
Remittances, 2011	USD 12.1 billion	
HDI	0.515	
Net migration rate, 2010–2015	-0.9 migrants/1,000 population	
Types of movement	Rural-to-urban migration, permanent migration, internal	
Types of movement	displacement, secondary displacement, return	
Displaced by disasters, 2008–2012	14,990,525	
Number of IOM staff working on disasters	129	
Location of IOM offices	Islamabad, Lahore, Karachi, Mirpur, Peshawar, Multan, Hyderabad	
	and Sukkur	
Total DRR funding for 2013 in USD	USD 1,288,750	
IOM site: www.iom.int/cms/en/sites/iom/home/where-we-work/asia-and-the-pacific/pakistan.html		

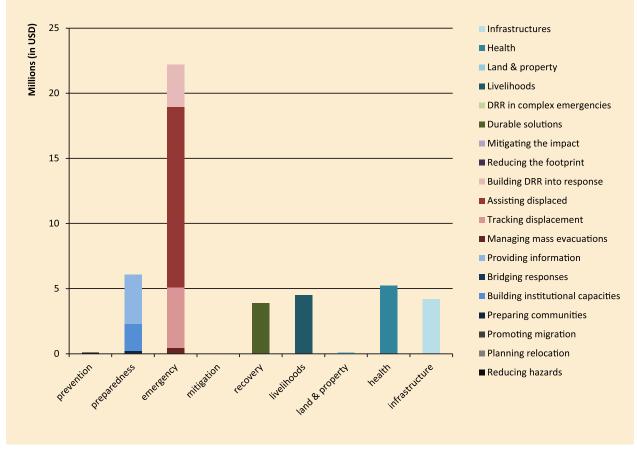
Prevention	Preparedness	Emergency	Mitigation	Recovery	Cross-cutting
Reducing hazards	Preparing communities Building institutional capacities Bridging responses Providing information	Managing mass evacuations Tracking displacement Assisting the displaced Building DRR into response	Reducing the footprint	Durable solutions	Livelihoods Land and property Health Infrastructures

# Top 10 natural disasters by size of affected population, 1980–2013

Disaster	Date	Affected
Flood	2010	20,359,496
Flood	2005	7,000,450
Flood	1992	6,655,450
Flood	1992	6,184,418
Flood	2011	5,400,755
Earthquake	2005	5,128,309
Flood	2012	5,049,364
Drought	1999	2,200,000
Storm	2007	1,650,000

#### Natural disaster occurrence, 1980–2013





Total funding used by IOM in Pakistan between 2009 and 2013, by type of activity

Pakistan is arguably the country where the disaster-related activities of IOM were more heavily targeted towards relief. Over the last years, the country was struck by a series of major natural disasters, leaving little room for long-term programming.

### **Background**

Pakistan is exposed to a wide range of natural hazards. In the North, the mountainous regions of Gilgit-Baltistan and Kashmir are prone to earthquakes, avalanches, glacial lake outburst floods, landslides, floods and droughts. The central drylands and plains are regularly hit by floods and flash floods, drought, insect infestations and river erosion. Coastal areas in the South are exposed to drought, in addition to cyclones and storm surges, while urban areas all across the country suffer from recurrent floods triggered by heavy rains.

The main factors behind social vulnerability include widespread poverty, gender-based discriminations, poor governance, insufficient access to services and risk transfer mechanisms, rapid urbanization, environmental degradation and low levels of education. In addition, conflict in the north-western part of the country has led to the disruption of local

livelihoods and key infrastructure, forcing hundreds of thousands of people out of the region.

Security issues, water and food scarcity, lack of access to land and income opportunities have resulted in forced population movements, which have further increased the vulnerability of local populations and hindered relief and recovery activities after the numerous disasters in recent times. As a result, the capacity of much of the Pakistani population to cope with crises is limited, especially in the case of migrant individuals and communities.

Until the 2005 earthquake that killed 73,000 and affected more than 5 million, with 3.5 million people displaced, disaster management in Pakistan had consisted only of post-disaster rescue and relief efforts, lacking institutional arrangements to facilitate the implementation of disaster risk reduction (DRR) programmes. In 2006, the promulgation of the National Disaster Management Ordinance, which is responsible for comprehensive

risk reduction activities before, during and after disasters, paved the way for the creation of disaster management authorities at the national, provincial and district levels.

In recent years Pakistan regularly suffered from natural disasters. In 2010, some of the heaviest floods on record left almost one fourth of the country under water, affecting 20 million people and displacing about 11 million. In 2011, floods again displaced 4 million people, mostly in Sindh and Balochistan, many of whom had already been displaced the year before. New floods affected 5 million more people in Sindh, Balochistan and Punjab in 2012. The most vulnerable of the displaced population were poor families who did not have the resources to flee to safe areas. These vulnerable people ended up trapped by rising waters in areas that were difficult to reach by aid providers. High waters heavily hampered ongoing efforts to provide durable solutions for the displaced.

### **Responses**

Over the past five years, IOM Pakistan has been increasingly involved in implementing various programmes in emergency management, recovery and reconstruction, community stabilization and disaster risk management (DRM) under the One UN Programme. Prevention and response to floods have been the main concern, with the Organization taking a leading role in pre-positioning and providing shelter and non-food items (NFIs).

In response to the 2012 floods, IOM has focused on providing humanitarian assistance to the displaced. Based on a strong partnership with the authorities and local partners, IOM has implemented humanitarian and recovery programmes that mainstream community-based, long-term risk reduction approaches. In order to inform emergency assistance activities provided by humanitarian actors and national authorities, the Organization set up the Humanitarian Communication (Hcomms) Project, which provides real-time, two-way communication to and from the field.

Capacity-building at the community and institutional levels is another main concern for Pakistan. IOM has been supporting local partners in developing hazard-resistant construction (and reconstruction) methods and land-use practices that reduce the population's exposure to hazards. In addition, local personnel have been trained to further guide beneficiaries in safe construction practices.

Starting 2011, IOM has been conducting camp coordination and camp management (CCCM) capacity-building activities in various parts of Pakistan, with the aim of enabling local actors to provide assistance and protection to internally displaced persons (IDPs) in camps and transitional settlements. In addition, community-based disaster risk management (CBDRM) trainings have been organized in three flood-prone districts of Punjab (specifically, Jhang, Bhakkar and Dera Ghazi Khan) identified by the National Disaster Management Authority as priority areas for DRR interventions.

#### **Results achieved**

A significant share of the victims of recent floods have been assisted though relief and recovery measures. Provision of emergency shelter and NFIs, health services and humanitarian communications benefited 2.7 million individuals in 2010, more than 1 million individuals in 2011 and 40,000 households in 2012. Recovery programmes which contained components in structural flood prevention and mitigation, rehabilitation of community infrastructure, female grants and the provision of agricultural tools reached approximately 1 million people. Around 22,500 households in 60 communities are being supported to build low-cost shelters that incorporate DRR and WASH (water, sanitation and hygiene) features, and winterization and early-recovery shelter interventions is expect to reach an additional 30,000 families. Through its Hcomms Project, IOM produced and distributed radio broadcasts, guidance notes and documents on emergency-related topics.

CBDRM training benefited 410 community members, including 101 women, in three flood-prone districts of Punjab from 2010 to 2012. Trainees were also provided with response equipment and worked with district disaster management authorities and district governments in relief and rescue operations following the 2010 floods.

Exactly 961 government officials, NGO and international NGO staff and community volunteers in 17 disaster-prone districts have been reached through CCCM capacity-building activities, which include training of trainers, practitioner's training, emergency training and workshops. (CCCM resources and training materials are available for dissemination on the initiative's website: www.cccmcapacitybuildingpakistan.com.)

Some 136 staff members from 25 local organizations have been trained as master trainers for the Building Back Safer with Vernacular Methodologies programme. These individuals thereafter conducted 1,371 shelter technical training sessions that benefited 31,368 people, including 12,316 women, already targeted by ongoing shelter programmes.

The key result of community involvement is the sustainability of community-level initiatives for disaster reduction. Community members have been empowered to make decisions and are involved during the implementation of DRM activities. The support for, and involvement of, the most vulnerable groups have been crucial for the successful implementation of these activities.

### **Future objectives**

IOM aims at empowering communities, vulnerable groups, grassroots organizations and local authorities in high-risk areas, so as to strengthen their capacity to prepare for, respond to and recover from disasters, as well as adapt to the effects of climate change. Through humanitarian assistance, the Organization seeks to prevent the loss of shelter and supports populations affected by natural and man-made disasters, to help them regain a minimum level of self-sufficiency without undermining existing coping mechanisms. The Organization also recognizes the critical role communities play in the sustainability of any risk

reduction measure and, building on its networks across the country, plans to expand its CBDRR/CBDRM programme to vulnerable districts in all provinces of Pakistan.

IOM is aware that national Government and local authorities serve as key actors in managing risk and reinforcing disaster resilience in communities. Therefore, improving the national, provincial and district capacities to provide a systematic and structured approach to assisting and protecting at-risk and already-affected populations especially IDPs in camps and collective centres - is essential. The Organization also aims to enhance operational linkages with the local government, local organizations and the private sector, through information management coordination, communications activities. The support will include the formulation and implementation of contingency plans provided to district government and local organizations in a minimum of 17 districts across six provinces.

The IOM intervention in Pakistan will follow an integrated approach in which components pertaining to preparedness, shelter/housing, camp coordination and camp management and humanitarian communications will become part of the One UN Programme, which features disaster risk reduction as a "Strategic Priority Area" (specifically, SPA-III). Activities will increasingly integrate phased exit strategies with periodic follow-ups by various designated stakeholders that allow monitoring and sustainability.

#### Related materials

- CCCM Cluster (Pakistan) webpage: http://iom.int/cms/en/sites/iom/home/what-we-do/humanitarianemergencies/cccm/pakistan.html
- Humanitarian Communications Project website: http://hcomms.iomapps.org.



# List of projects

#### Contingency-Planning Support for Disasteraffected Populations in Pakistan

	1
Project status	Completed
Project period	15 August 2011 to 29 February 2012
Beneficiaries	37,440 families from affected communities
Donor	United Kingdom Department for International Development (DFID)
Amount funded (in USD)	689,019

#### Emergency Shelter Support to the Most Vulnerable Population during the Sindh Floods of 2011

Project status	Completed
Project period	29 September 2011 to 29 March 2012
Beneficiaries	42,000 vulnerable and at risk people
Donor	Central Emergency Response Fund (through a Rapid Response grant)
Amount funded (in USD)	1,500,043

# **Emergency and Early-recovery Shelter Support for the Flood-affected Population in Sindh Province**

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Project status	Completed
Project period	31 October 2011 to 31 October 2012
Beneficiaries	Affected communities
Donor	DFID
Amount funded (in USD)	6,389,776
Partners	National Disaster Management Authority (NDMA), Provincial Disaster Management Authority (PDMA) – Sindh, Shelter Cluster partners

# 2011 Pakistan Monsoon Rains and Flood Appeal – Emergency Shelter and NFI Component (Shelter Support for the Flood-affected Population of Sindh Province

Project status	Completed
Project period	27 October 2011 to 31 March 2012
Beneficiaries	Affected communities
Donor	Canada, Canadian International Development Agency (CIDA)
Amount funded (in USD)	753,769

#### Emergency Shelter and Cluster Coordination Support for Flood-affected Populations in Pakistan

Project status	Completed
Project period	15 November 2011 to 14 May 2012
Beneficiaries	66,057 internally displaced persons (IDPs)
Donor	Humanitarian Aid and Civil Protection department of the European Commission (ECHO)
Amount funded (in USD)	2,000,000
Partners	International NGO personnel and partners; local NGOs and CSOs

#### Support to the Shelter and Non-food Item (NFI) Cluster, Temporary Settlements Support Unit and District Focal Points

Project status	Completed
Project period	1 November 2011 to 30 May 2012
Beneficiaries	37,200 people
Donor	United States Agency for International Development (USAID)
Amount funded (in USD)	1,800,000

# Early-recovery Support and Residual Relief to the Flood-affected Population of Sindh Province

Project status	Completed
Project period	1 January 2012 to 31 December 2012
Beneficiaries	5,000 families of affected communities, Government personnel and local authority staff
Donor	Poland
Amount funded (in USD)	299,350
Partners	Government personnel and partners, NDMA and PDMA (Sindh)

# Early Recovery Support and Residual Relief to the Flood-affected Population of Sindh Province

Project status	Completed
Project period	1 January 2012 to 31 March 2013
Beneficiaries	5,000 families of affected communities, Government personnel and local authority staff
Donor	Finland
Amount funded (in USD)	655,308
Partners	NDMA and PDMA (Sindh)

#### Non-Food Items, Transport and Humanitarian Communications for IDPs and Returnees to the Federally Administered Tribal Areas of Pakistan

Project status	Completed
Project period	1 April 2012 to 31 December 2012
Beneficiaries	2,259,965 IDPs
Donor	Private sector
Amount funded (in USD)	1,359,269

#### Provision of Security Awareness Induction Support to the Humanitarian Community in Pakistan

Project status	Active
Project period	14 June 2012 to 13 June 2013
Beneficiaries	571 staff members of civil society organizations (CSOs) and nongovernmental organizations (NGOs)
Donor	ECHO
Amount funded (in USD)	1,055,901

# Shelter Support for the Flood-affected Population in Sindh Province

Project status	Completed
Project period	1 May 2012 to 1 May 2013
Beneficiaries	19,500 people
Donor	USAID and Office of Foreign Disaster Assistance (OFDA)
Amount funded (in USD)	3,200,000
Partners	NDMA and PDMA (Sindh)

#### Citizen Damage Compensation Program (CDCP): Capacity Development of the Grievance Redressal System (Technical Support and Training of Allied Personnel)

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Project status	Completed
Project period	29 June 2012 to 15 February 2013
Beneficiaries	Affected communities and local authority staff
Donor	World Bank
Amount funded (in USD)	500,000
Partners	PDMA, National Database and Registration Authority (NADRA) and the World Bank

# Early-recovery Shelter Support for Flood-affected Families in Southern Sindh Province

Project status	Completed
Project period	1 June 2012 to 31 August 2012
Beneficiaries	315 people
Donor	Organization for Social Development Initiatives
Amount funded (in USD)	33,040
Partners	NDMA, PDMAs and IASC clusters

# **Emergency Shelter and CCCM Support for the Flood-affected Population of 2012 floods**

Project status	Completed
Project period	1 November 2012 to 30 April 2013
Beneficiaries	32,760 environmental migrants
Donor	CERF (under a Rapid Response grant)
Amount funded (in USD)	669,970
Partners	NDMA and PDMAs

# Research on Improved Shelters for Responding to Floods

Project status	Completed
Project period	15 December 2012 to 13 April 2013
Beneficiaries	Affected communities
Donor	DFID
Amount funded (in USD)	150,000



## Shelter Support for the Flood-affected Population of Sindh Province

Project status	Active	
Project period	11 February 2013 to 10 July 2013	
Beneficiaries	945 people	
Donor	Private sector	
Amount funded (in USD)	81,635	
Partners	NDMA, PDMA (Sindh) and cluster partners	

#### Shelter and NFI Assistance for the Most Vulnerable Affected Families of Pakistan Floods

Project status	Completed		
Project period	1 December 2012 to 31 March 2013		
Beneficiaries	25,200 people and 59,850 indirect beneficiaries		
Donor	Japan		
Amount funded (in USD)	1,000,000		
Partners	NDMA, PDMAs, district authorities and cluster partners		

## Joint UN Programme on Disaster Risk Management in Pakistan

Project status	Completed	
Project period	1 January 2010 to 31 December 2012	
Beneficiaries	Government personnel and affected communities	
Donor	UN Development Programme	
Amount funded (in USD)	171,198	

#### Human Resources, Logistics and Rapid Procurement Support to the National Disaster Management Authority for Flood-affected Vulnerable Populations

Project status	Completed	
Project period	17 August 2010 to 19 February 2011	
Beneficiaries	Affected communities	
Donor	USAID	
Amount funded (in USD)	500,000	

#### Mass Communications, Health and Coordination Support to Flood-affected Populations

Project status	Completed		
Project period	1 September 2010 to 30 November 2010		
Beneficiaries	Affected communities		
Donor	Canada, CIDA		
Amount funded (in USD)	3,302,401		
Partners	NDMA, PDMAs, Office for the Coordination of Humanitarian Affairs(OCHA)and Inter-agency Standing Committee (IASC) clusters (Shelter/NFI, Logistics, Health, WASH, Food/Nutrition and Community restoration)		

#### **Support for Flood-affected Populations**

Project status	Completed	
Project period	1 August 2010 to 31 May 2011	
Beneficiaries	Affected communities	
Donor	Sweden, Swedish International Development Cooperation Agency	
Amount funded (in USD)	2,965,599	
Partners	NDMA, PDMAs, OCHA and the Community Restoration Cluster of IASC	

## Humanitarian Assistance to the People Affected by the Flood in the Islamic Republic of Pakistan

Project status	Completed	
Project period	1 January 2011 to 31 December 2011	
Beneficiaries	450,000 people	
Donor	Japan	
Amount funded (in USD)	15,000,000	
Partners	NDMA, PDMAs and the Community Restoration Cluster of IASC	

#### Mass Communications for Flood Affectees to Support Cash Compensation Schemes

• •	•	
Project status	Completed	
Project period	1 March 2011 to 31 May 2012	
Beneficiaries	Affected communities	
Donor	DFID	
Amount funded (in USD)	2,228,754	

## **PHILIPPINES**



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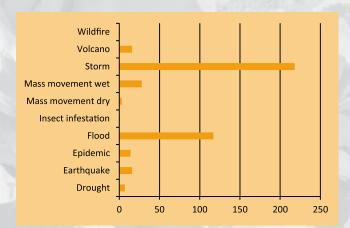
Conference	200.00 l2		
Surface area	300,00 km <sup>2</sup>		
Population, 2010 (est.)	93.2 million		
Population density, 2010	310.9/km <sup>2</sup>		
GDP in 2011	USD 224.7 billion		
GDP per capita in 2011	USD 2,370		
Remittances, 2011	USD 23 billion		
HDI	0.654		
Net migration rate, 2010–2015	-1.7 migrants/1,000 population		
Types of movement	Internal displacement, return		
Displaced by disasters, 2008–2012	12,342,896		
Location of IOM offices	Manila, Cateel, Davao, Tagum, Trento		
IOM	I site: www.iom.int/cms/nhilinnines		

#### **IOM DRR responses**

Preparedness	Emergency	Mitigation	Recovery	Cross-cutting
Preparing communities	Tracking displacement Assisting the displaced	Mitigating the impact	Durable solutions	Livelihoods Health Infrastructures

## Top 10 natural disasters by size of affected population, 1980–2013

Disaster	Date	Affected
Storm	1990	6,159,569
Storm	2009	4,901,763
Storm	2008	4,785,460
Storm	2009	4,478,491
Storm	1998	3,902,424
Storm	2006	3,842,406
Storm	1988	3,250,208
Drought	1998	2,600,000
Storm	2006	2,562,517
Storm	2000	2,436,256



The Philippines is a volcanic archipelago consisting of about 7,000 Islands. Lying on the Pacific Ring of Fire, the country is prone to earthquakes and the eruptions of its 23 active volcanoes. It also experiences a yearly average of 20 typhoons which trigger frequent floods and landslides. The consequences of these natural hazards include loss of lives and destruction of livelihoods, shelter and infrastructure, often resulting in forced migration and setting back development gains.

Typhoon Bopha, which struck the Philippines in December 2012, severely affected four regions and 12 provinces and was the strongest cyclone to ever hit the southern island of Mindanao. An estimated 6.2 million people were affected, including 1,146 dead and 834 missing, and 233,163 houses were damaged. As of February 2013, the overwhelming majority of the 925,412-strong cyclone-displaced population were living in spontaneous, temporary accommodations (e.g. with host families and in informal settlements), while only 8,925 were hosted in 66 registered sites in Compostela Valley and Davao Oriental.

After the actual storm, disruption of the provision of basic services is now being felt throughout the affected areas. Communities that, prior to the cyclone, were autonomous from the welfare point of view have now to deal with damaged or non-existent key infrastructure and services. Other communities relying on more-or-less remote centres for health care and education are now isolated as a consequence of the destruction of transportation networks.

### Responses

IOM Philippines' risk reduction response has focused on providing immediate assistance to disaster-affected populations, as well as building the capacities of community members and local and national authorities, in order to reduce vulnerability and build resilience. During emergencies, the Organization responded by providing temporary shelter and camp coordination and camp management (CCCM) services; distributing nonfood items (NFIs); and addressing health and psychosocial needs.

In order to inform the relief and reconstruction process, IOM used its Displacement Tracking Matrix, which gathers information about the

population moving to or through displacement sites. The Organization also trained national and provincial counterparts, to allow local institutions to better assess and monitor the living conditions of internally displaced persons (IDPs). Information materials were also produced, in response to the frequently asked questions of IDPs regarding food and shelter assistance. In addition, an Ushahidibased crowdsourcing mapping tool was developed for information-gathering and -sharing among affected communities, humanitarian partners and private donors. Reports can be made through text, calls, e-mails and even social media networks such as Facebook and Twitter.

In addition, IOM developed a manual entitled The Simple Guide to House Repair and Reconstruction to provide local officials and community members with construction and reconstruction instructions and practical tips for building typhoon-resistant houses. The Organization has also provided technical guidance to shelter beneficiaries, particularly in choosing appropriate construction materials for their homes, and has conducted shelter kit orientation to engineers and staff from the Provincial Engineering Office and the respective Municipal Engineering Offices of the affected towns. The Simple Guide also served as the module for the "Do It Yourself" seminars implemented in partnership with the Philippine Government's Technical Education and Skills Development Authority. The seminars were organized in each target municipality and attended by the beneficiaries, who would themselves construct their new shelters.

IOM included community members in the recovery and reconstruction phases after a crisis (e.g. in the construction of transitional and permanent shelters or in the fabrication of shelter material through cash-for-work schemes), thereby promoting the livelihoods of displaced people, the vast majority of whom have lost their sources of income. Finally, IOM has conducted trainings in the localization of disaster risk reduction (DRR) projects and in the formulation of community DRR management plans in four municipalities, which led to the establishment of local DRR committees and the production of local hazard maps and DRR plans.

### **Results achieved**

IOM Philippines' efforts in promoting typhoonresilient shelters over the last few years were particularly successful. In recent years, many beneficiaries rebuilt their houses following typhoonresistant construction methods and techniques, such as the installation of purlins, diagonal and horizontal bracing, truss with tension wires and post straps. Just a few months after Typhoon Bopha, an estimated 1,540 affected families have rebuilt or rehabilitated their homes with these hazard-resistant techniques. In the process, local government officials who have the potential to institutionalize hazard-resistant techniques have been trained. In addition, by including community members in the recovery and reconstruction phases, IOM has restored and enhanced local livelihoods and income opportunities for displaced and affected communities.

IOM continues to provide immediate life-saving assistance during emergencies through CCCM activities, NFI provision, shelter kit distribution and health and psychosocial assistance. In response to Typhoon Bopha, IOM assisted 15,549 families (7% of those whose homes were damaged) with shelter kits, transitional shelters, recovery shelters and essential NFIs. The population staying in the 66 IDP sites is receiving continued support. Those in spontaneous settlements are being identified and

registered by the CCCM support teams so that their needs can be better addressed. Through innovative humanitarian communications and information management tools, IOM is also better able to track displacement, as well as assess and respond to needs.

### **Future objectives**

Over the following months, IOM will be heavily involved in the humanitarian intervention to assist the population affected by the cyclone. The Organization has long recognized the need to include long-term risk reduction and resilience-building as components of emergency management programmes and will increasingly work to secure a rapid, effective recovery and reconstruction of safer and more sustainable settlements. IOM will also continue to engage in capacity-building activities, both at the institutional and grassroots levels, in order to strengthen the preparedness of the response system and make communities more self-reliant in reducing and managing risk.

### Relevant materials

- Typhoon Bopha Emergency Response Portal, available from www.iom.int/cms/philippines/situation-report/typhoon-bopha-emergency-response.
- National Disaster Management Act of 2010, available from www.ifrc.org/docs/idrl/878EN.pdf.

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## **List of projects**

Emergency Camp Coordination and Management (CCCM) and Essential Non-food itme (NFI)
Distribution Support to Flood-affected
Populations of Central Mindanao

Project status	Completed
Project period	15 July 2011 to 14 January 2012
Beneficiaries	500,000 people
Amount funded (in USD)	1,499,985

Emergency Relief Assist to the Typhoon- and Flood-affected Population in Region II & III, Philippines

Project status	Completed
Project period	14 November 2011 to 13 May 2012
Beneficiaries	Internally displaced persons (IDPs)
Amount funded (in USD)	933,333

## CCCM and NFI Support to Typhoon-affected Communities in Cagayan de Oro and Iligan City

Project status	Completed
Project period	21 December 2011 to 4 January 2012
Beneficiaries	1,530 families of affected communities
Amount funded (in USD)	52,500

## **Emergency Assistance to Typhoon-affected Families in Region 10**

Project status	Completed
Project period	20 December 2011 to 19 March 2012
Beneficiaries	22,470 people
Amount funded (in USD)	904,393

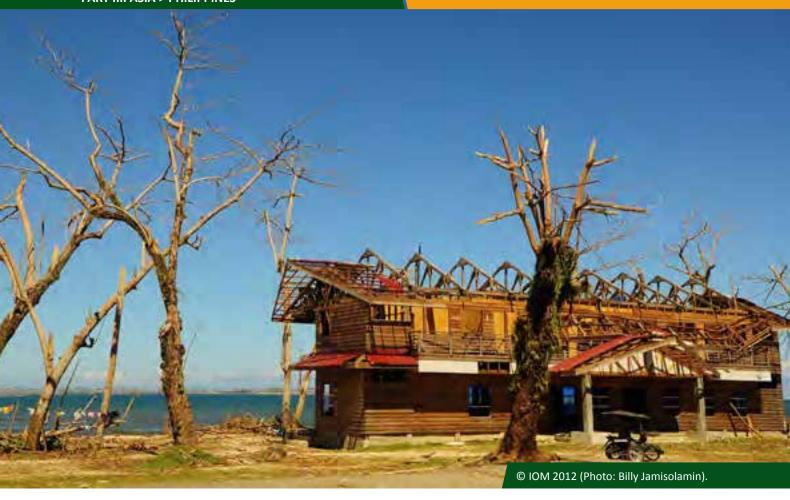
## **Emergency Shelter Assistance to Typhoon- affected Families in Region 10**

Project status	Completed
Project period	23 December 2011 to 22 June 2012
Beneficiaries	20,000 people
Amount funded (in USD)	1,000,025

## **Emergency Shelter Support to the Flood-affected Families in Region 10s**

Project status	Completed
Project period	19 January 2012 to 30 June 2012
Beneficiaries	4,000 IDPs
Amount funded (in USD)	600,000





## **Emergency Shelter and Information Management Support to Disaster-affected Areas in Mindanao**

Project status	Completed
Project period	1 April 2012 to 31 December 2012
Beneficiaries	160,000 people
Amount funded (in USD)	500,039

#### Continuing Emergency Assistance to Typhoonaffected Families in Region 10

Project status	Completed			
Project period	15 April 2012 to 29 January 2013			
Beneficiaries	21,000 people			
Amount funded (in USD)	683,230			
Partners	WHO, UNICEF, international non-government personnel and partners, local non-government personnel and civil society organizations and Red Cross Philippines			

# Emergency Shelter and CCCM Assistance, and Coordination to Typhoon-affected Families in Mindanao

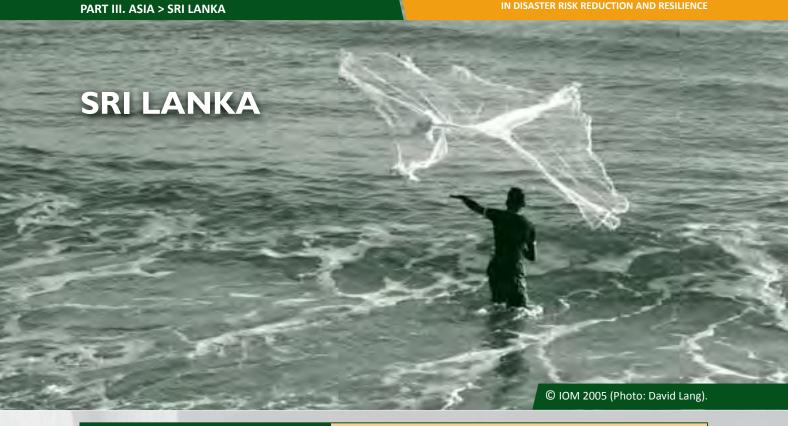
Project status	Active
Project period	17 December 2012 to 16 June 2013
Beneficiaries	100,000 people
Amount funded (in USD)	3,000,828

## Transitional Shelter and Livelihood Support to Typhoon-ffected IDPs in Region IV

Project status	Completed
Project period	27 June 2010 to 26 December, 2010
Beneficiaries	4,300 IDPs
Amount funded (in USD)	610,000
Partners	UN Partners

### Shelter Repair and Livelihood Rehabilitation Support to Typhoon-affected Families in Region II

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Project status	Completed
Project period	15 December 2010 to 14 June 2011
Beneficiaries	6,950 IDPs
Amount funded (in USD)	510,000



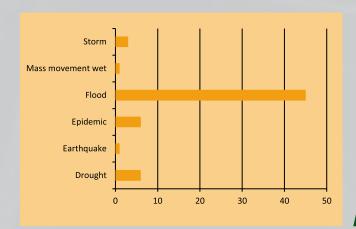
Surface area	65,610 km <sup>2</sup>		
Population, 2010 (est.)	20.8 million		
Population density, 2010	317.9/km²		
GDP in 2011	USD 59.1 billion		
GDP per capita in 2011	USD 2,835		
Remittances, 2011	4.5 billion		
HDI	0.715		
Net migration rate, 2010–2015	-2.9 migrants/1,000 population		
Types of movement	Internal displacement, return, relocation		
Displaced by disasters, 2008–2012	1,578,148		
Number of IOM staff working on disasters	15		
Location of IOM offices	Jaffna, Kilinochch, Vavuniya, Batticaloa and Nuwara Eliya		
Total DRR funding for 2013 in USD	1 million		
IOM site: www.iom.int/cms/en/sites/iom/home/where-we-work/asia-and-the-pacific/sri-lanka.html			

#### **IOM DRR responses**

Prevention	Preparedness	Emergency	Recovery	Cross-cutting
Reducing hazards Planning relocation	Preparing communities Building institutional capacities	Tracking displacement Assisting the displaced	Durable solutions DRR in complex emergencies	Livelihoods Infrastructures

#### Top 10 natural disasters by size of affected population, 1980-2013

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Disaster	Date	Affected
Drought	1987	2,200,000
Drought	1982	2,000,000
Flood	1983	1,250,000
Earthquake	2004	1,019,306
Drought	2001	1,000,000
Drought	1988	806,000
Flood	2003	695,000
Flood	1989	501,000
Flood	2002	500,000
Flood	1994	478,150



Sri Lanka is a tropical island nation located in the Indian Ocean. It is subject to a bimodal rainfall regime with distinct wet and dry seasons often characterized by floods and droughts. Many parts of the island, especially the coastal region facing the Bay of Bengal, are prone to torrential rains and heavy winds caused by depressions that normally develop during the monsoon period. In the northern, eastern and southern parts of the country, depressions also have the potential to develop into cyclones. Even though the region is not seismically active, Sri Lanka's East Coast is prone to tsunamis triggered by activity in the Sumatra-Andaman fault system. The hills in the central part of the country are prone to landslides, floods, violent winds and droughts. Environmental degradation induced by human activities increases the occurrence of hydrometeorological hazards.

Agriculture, which is highly dependent on weather and climate patterns, is the major incomegenerating activity in suburbs and rural areas. Water management plays a critical role in mitigating the impact of weather extremes on rural livelihoods and is traditionally pursued through irrigation systems, such as tanks, which collect and store rainwater during the rainy season and distribute it during the dry season. Over the last three decades, a civil war ravaged the Northern Province, triggering massive population displacements. Due to the conflict, irrigation systems were either poorly maintained or totally abandoned, which greatly increased the vulnerability of agricultural systems.

In 2010, following the end of the conflict, the return and resettlement of as many as 240,000 people took place in the Vanni area in the Northern Province. These displaced people and returnees, though, have been moving into areas cyclically exposed to natural hazards. The limited access that this population has to already-vulnerable rural livelihoods and the widespread lack of income diversification and risk transfer practices further limit the people's coping capacity.

### Responses

In 2007 and 2008, landslides affected 4,000 families, displacing 219 households. IOM has been supporting the Government of Sri Lanka in providing assistance to the affected population, first with camps for internally displaced persons

(IDPs), and then through the establishment of more durable housing solutions. A former tea plantation acquired by the Government was considered as a relocation site, and IOM constructed access roads, storm water canals, culverts, a water supply system, community halls and sanitation facilities. In addition, IOM provided training and resources to help generate adequate livelihood options. The Organization also trained relocated families and individuals in landslide risk reduction and soil and water conservation practices.

Following the torrential rain and floods of 2010 and 2011, 370,000 people were displaced in many parts of the country. IOM took the lead in the Emergency Shelter and Non-Food Item (NFI) Cluster, distributing essential NFIs to the displaced people to enhance their living conditions.

In addition, IOM has been supporting at-risk communities in the Northern and Central Provinces to build their resilience against the impact of natural hazards. The project focuses mainly on reducing the risk to rural livelihoods, by mitigating the impact of hydro-meteorological hazards, such as floods and droughts, and ensuring the availability of productive inputs. IOM has constructed and reconstructed tanks, saltwater exclusion bunds, drainage channels, culverts and key internal access roads. Local communities and authorities were provided training on the proper maintenance of the infrastructure facilities through the project.

### **Results achieved**

57,340 disaster-displaced have been assisted through the provision of NFIs.

A total of 165 landslide-affected families are now living in safe locations and are integrated with the local community in Johns Land. The relocation process was costly and difficult, but succeeded, mainly because of participatory procedures and partnerships with national and international institutions, NGOs and private actors.

In addition, relocated families now enjoy access to safe sources of potable water, and their community is connected to the main transportation networks. Storm water drainage facilities have been constructed or renovated to enhance hydrological stability in the community, and 248 people have been trained on soil and water conservation in hilly areas. Hiring local, community-based organizations (e.g. farmers' organizations) for construction

activities proved effective in injecting money into the community to stabilize the local economy.

Irrigation channels, drainage channels and other saltwater exclusion and flood mitigation infrastructures have likewise been constructed, in order to reduce the impact of droughts and floods on rural settlements and livelihoods, and to improve the availability and arability of agricultural land, the quality of groundwater aquifer and the coastal ecosystem of 1,500 hectares.

### **Future objectives**

IOM aims at further strengthening the disaster management structure by reforming disaster management committees at the village/community level and linking them with subnational and national authorities.

The improvement of the knowledge base on disasters and risk, through the development of resource and risk maps and disaster management plans at subnational levels (e.g. divisional and district levels) is essential in informing and coordinating future risk reduction efforts.

The Organization will also operate to reduce the vulnerability and increase the resilience of rural communities by providing essential disaster mitigation resources, as well as protecting and enhancing livelihood options for populations at risk.

### Relevant materials

 Towards a safer Sri Lanka, available from www. preventionweb.net/english/professional/ policies/v.php?id=17954.



## **List of projects**

Disaster Management, Community Stabilization and Development Initiative in Sri Lanka (DMMC)

Project status	Completed
Project period	11 November 2011 to 11 November 2012
Beneficiaries	1,250 families of affected communities, local authority staff, CSO (civil society organization) and NGO staff, Government personnel
Donor	Australia, Australian Agency for International Development
Amount funded (in USD)	1,021,450
Partners	National and local authority staff and line departments in the targeted districts

## 2012 ER Global Pre-positioning: IOM Sri Lanka (ERGP)

Project status	Completed
Project period	22 March 2012 to 22 March 2013
Beneficiaries	300 people
Donor	AmeriCares Foundation
Amount funded (in USD)	9,869

Community-based Reintegration and Economic Recovery Support to Vulnerable Communities in the Newly Resettled Villages in the Northern and Eastern Districts in Sri Lanka (CBRE)

Project status	Completed
Project period	1 August 2011 to 30 April 2011
Beneficiaries	120,000 people involved in mixed migration flows
Donor	United Kingdom
Amount funded (in USD)	315,214





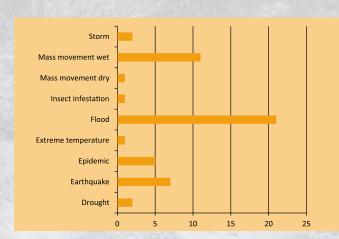
Surface area	143,100 km <sup>2</sup>		
Population, 2010 (est.)	6.8 million		
Population density, 2010	48.1/km²		
GDP in 2011	USD 6.5 billion		
GDP per capita in 2011	USD 935		
Remittances, 2011	USD 2.6 billion		
HDI	0.622		
Net migration rate, 2010–2015	-2.7 migrants/1,000 population		
Types of movement	Rural-to-urban migration, temporary migration, permanent migration, internal displacement, secondary displacement, return, relocation		
Displaced by disasters, 2008–2012	8,399		
Number of IOM staff working on disasters	1		
Location of IOM offices	Dushanbe		
Total DRR funding for 2013 in USD	Data not available		
IOM site: www.iom.tj/			

#### **IOM DRR responses**

Prevention	Preparedness	Recovery	Cross-cutting
Promoting migration	Building institutional capacities Bridging responses Providing information	Durable solutions	Livelihoods

## Top 10 natural disasters by size of affected population, 1980–2013

Disaster	Date	Affected
Drought	2000	3,000,000
Extreme temp.	2008	2,000,000
Drought	2008	800,000
Flood	2004	400,000
Flood	1996	180,000
Mass mov. wet	1993	75,357
Flood	1992	63,500
Flood	1998	40,974
Flood	2007	17,184
Epidemic	1997	15,618



Tajikistan is a landlocked, overwhelmingly mountainous State prone to natural hazards, including moderate-intensity earthquakes, landslides, rockslides and floods. Over the last decades, natural disasters have killed around 4,500 and affected more than 6 million people in the country, causing losses worth an estimated USD 500,000 and regularly displacing affected populations.

Tajikistan is the poorest country in the post-Soviet area—and one of the poorest in the world—and relies heavily on international aid and foreign revenue. Its Government lacks adequate capacity for hazard identification, mitigation and preparedness, such that natural events have a devastating impact on communities and slow overall development efforts in the country.

Pollution and overexploitation of natural resources are drastically degrading the local environment, leading to desertification, salinization and loss of fertile soil. These processes, which are further aggravated by climate change (especially through increased glacier melt, droughts and extensive heat waves), are significantly threatening local water and food security, affecting in particular the most vulnerable populations (e.g. women in rural areas).

Environmental factors help trigger migratory movements (especially labour migration) both internally, that is, from rural to urban areas, and externally, especially to the Russian Federation. (See box on p. 50 for more information.) At present, more than 1 million people (out of a total population of 8 million) are estimated to be migrant workers in the Russian Federation. The overwhelming proportion of this figure is made up of low-skilled, male individuals from rural households looking for better economic opportunities and more sustainable livelihood options.

### Responses

The intervention carried out by IOM in the country focuses on building the capacity of local institutions to respond to disasters and emergencies and on better understanding the linkage between environmental factors and population mobility.

Beginning in 2011, the Organization contributed to the establishment of an Emergency Operations

Centre (EOC), which is responsible for the strategic overview of the disaster management response. Its principal functions are to collect and analyse data on hazards and disasters, protect lives and property, maintain continuity of the Organization within the scope of applicable laws and inform all concerned agencies and individuals of pertinent decisions. Prior to project implementation, the Committee of Emergency Situations (CoES) had no central command and control facility responsible for carrying-out disaster management activities.

IOM also conducted a research study examining the impact of environmental degradation and climate change on migration in Tajikistan. Among other findings, the report noted that many of the families which resettled following sudden-onset natural disasters or gradual environmental degradation were poorly integrated into their new communities and resettlement areas and often had to move again to improve their financial situation (either by migrating to urban areas or out of the country, or returning to their native communities whenever possible).

### **Results achieved**

The establishment of the EOC has allowed the country to accumulate a wealth of sound hazard and disaster knowledge with which to inform risk management activities. The EOC contributes to more effective decision-making before, during and after a disaster at the local and national levels, complementing the activities of the CoES.

The study on environmental migration has been released, which would lead to an improvement in the understanding of current trends and future challenges in preventing, and responding to, environmental migration, including environmental displacement.

### **Future objectives**

IOM will continue to support the CoES by further building its capacity to respond to natural disasters. Institutional capacities to properly plan for the effective integration of migrants in their host communities following natural disasters or emergencies can also be vastly improved.

In addition, the Organization aims to enable local authorities to take more preventive measures to reduce the vulnerability of rural households while fostering their adaptability to a changing environment. This translates in making use of remittances for creating sustainable economic opportunities in rural areas, with a particular focus on internal job creation, sustainable agricultural practices, natural resource management and hazard mitigation.

### **Related documents**

- National Disaster Risk Management Strategy, available from www. preventionweb.net/files/27582\_ tajikstrategyenglishbjedits19sep11b.pdf.
- Environmental Degradation, Migration, Internal Displacement, and Rural Vulnerabilities in Tajikistan (IOM report), available from http://publications.iom.int/ bookstore/index.php?main\_page=product\_ info&cPath=41\_7&products\_id=820.





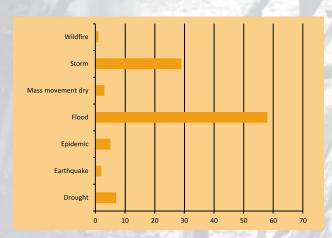
Curface area	E12 120 km²		
Surface area	513,120 km <sup>2</sup>		
Population, 2010 (est.)	69.1 million		
Population density, 2010	134.7/km <sup>2</sup>		
GDP in 2011	USD 345.6 billion		
GDP per capita in 2011	USD 4,972		
Remittances, 2011	USD 2.1 billion		
HDI	0.690		
Net migration rate, 2010–2015	0.3 migrants/1,000 population		
Types of movement	Rural-to-urban migration, internal displacement, cross-border		
Types of movement	displacement, stranded/trapped		
Displaced by disasters, 2008–2012	3,234,255		
Number of IOM staff working on disasters	2		
Lacation of IOM offices	Bangkok, Mae Sot, Mae Hong Son, Mae Sariang, Pawai, Chiang Mai,		
Location of IOM offices	Ranong, Phang Nga, Nakhon Phanom, Phayao, Chanthaburi		
Total DRR funding for 2013 in USD	262,000		
	IOM site: th.iom.int/		

#### **IOM DRR responses**

<u> </u>				
Preparedness	Emergency	Mitigation	Recovery	Cross-cutting
Preparing communities	Assisting the	Mitigating the impact	Durable solutions	Livelihoods
Building institutional capacities	displaced			
Bridging responses				

## Top 10 natural disasters by size of affected population, 1980–2013

Disaster	Date	Affected
Drought	2008	10,000,000
Drought	2010	6,482,6 <mark>02</mark>
Drought	1999	6,000,000
Drought	2002	5,000,000
Flood	1996	5,000,000
Flood	1995	4,280,984
Flood	2010	3,583,327
Flood	2002	3,289,420
Flood	2000	2,500,000
Drought	1991	2,500,000



Thailand is exposed to a number of natural and manmade hazards which threaten in diverse ways the lives and well-being of communities throughout the country. Meteorological and hydrological disasters are among the most common, especially during the rainy season, when storms and tropical cyclones sweep through the country, triggering landslides, floods and flash floods.

Major occurrences of flooding in Thailand were recorded in 1917, 1942, 1983, 2001, 2005 and 2011. In the latter episode, floodwater covered large parts of Bangkok and its conglomeration, affecting a total of 13.5 million people and killing 680, in particular children who were drowned. Total economic losses amounted to 1.43 trillion baht (about USD 48 million), 90 per cent of which were borne by the private sector (industries in six estates in Ayutthaya and Pathum Thani). A total of 2,600 shelters were set up in 2011 to host more than 165,000 people, and the Ministry of Public Health highlighted the prevalence of high levels of stress, depression and suicide risks among the displaced.

Hydrogeological risk is exacerbated by urbanization and ecosystem degradation. Unsustainable agricultural practices and the proliferation of human settlements in low-lying, flood-prone areas have resulted in the construction of buildings and infrastructure that disturb and disrupt water flows. These factors have led to a tangible increase in the frequency and severity of floods, landslides and flash floods. Land-use practices and human behaviour are also directly responsible for the thousands of fires that hit the country each year.

Aside from floods, Thailand is also prone to droughts, often triggered by a delayed start or an early end of the rainy season, which result in water shortages for rural and urban households. Recent occurrences of drought were recorded in 2001, 2005 and 2010, when drought in 40,500 communities impacted over 16.5 million people and caused about USD 4.5 billion in losses.

The western and northern regions of Thailand are seismically active, and its coast is prone to tsunamis caused by earthquakes originating from the nearby Sumatra fault. The 2004 "Boxing Day" tsunami hit the west coast of the country, killing 5,395, injuring 8,457 and resulting in over USD 1 billion in losses to the local communities, particularly the tourism sector.



In addition, as Thailand shares borders with a number of countries experiencing political, economic and social turmoil, it experiences recurrent flows of displaced populations and cross-border migrants from its neighbours, which put the capacity of institutions in charge of assistance and the livelihood options of host communities under strain.

### **Responses**

The IOM response in Thailand has so far focused on strengthening the disaster preparedness and response capacities of national authorities. More specifically, IOM supports the Government's efforts to respond to disasters (particularly flooding) by directly providing affected populations with nonfood items and shelter in the emergency phase. The Organization also supports capacity-building and training of local authorities to improve their preparedness to future floods and aims to provide capacity-building in camp coordination and camp management (CCCM) to personnel of the Department of Disaster Preparedness and Mitigation.

The activities in response to the prolonged and widespread flooding that affected Thailand in 2011 were carried out in collaboration with the Flood Relief Operations Centre, the Bangkok Metropolitan Administration, the Relief and Community Health Bureau of the Thai Red Cross, the Thai Action Committee for Democracy in Burma, Médecins Sans Frontières, the Foundation for Education and Development and the Department of Disaster Prevention and Mitigation (DDPM) as well as with several ministerial partners.

The DDPM is the core Royal Thai Government agency to carry out disaster prevention and mitigation, as well as raise public awareness in disaster management in Thailand. Up to now, IOM has provided continuous support to the Government on CCCM- and mobility-related needs. In order to assist migrant workers and their families, who risk being *de facto* excluded from humanitarian response (mainly due to language and other barriers), the Organization has established mechanisms to disseminate up-to-date information on the needs of migrant communities and on the emergency relief they receive.

### **Results achieved**

IOM contributed to strengthening the national authorities' capacity to effectively respond to natural hazards. Following the 2011 flooding, national authorities successfully distributed nonfood items (NFIs) and other relief goods to 5,200 beneficiaries. Because of funding from the Office of Foreign Disaster Assistance, the Organization was able to rapidly procure and distribute boats, water dispelling pumps, power generators, water purifiers and life jackets. In addition, IOM distributed 4,600 "dignity" kits (for women) and 4,600 hygiene kits (for men), 1,000 "vector" kits, 7,200 medical kits, 1,000 infant kits, 50 water filters and 50 alcoholic soaps in five provinces, including greater Bangkok. No major disease outbreaks (e.g. cholera or dengue fever) were identified in any of the locations covered. With support from the Office for the Coordination of Humanitarian Assistance, a total of 2,500 relief kits were distributed to migrant households from Myanmar, Cambodia and Laos.

IOM also provided CCCM training and held information sessions to 150 participants from the various government ministries and civil society and trained 80 government officials. IOM also participated in DDPM-led community-based DRM trainings on disaster preparedness and collective centres. A Thai version of the Collective Centre Guidelines was also produced and was delivered to schools, disaster prevention and mitigation provincial offices, temples and other institutions. The activity has helped identify and establish 2,500 collective centres nationwide.

### **Future objectives**

IOM Thailand's future objectives focus on tackling some of the key drivers of disaster risk in the country, by contributing to managing urbanization and reversing deforestation. In addition, the Organization has acknowledged that displacement induced by the effects of climate change (e.g. more intense and frequent floods and droughts, sea level rise and coastal erosion) will increasingly be a challenge in the country and is therefore engaged in promoting adequate adaptation actions in the coming years.

### Relevant materials

- IOM Thailand documents on emergency and post-crisis management, available from http://th.iom.int/index.php/migration-resources/Movement-Emergency-and-Post-crisis-Migration-Management/Emergency-and-Post-crisis-Management.
- Strategic National Action Plan (SNAP) on Disaster Risk Reduction, 2010–2019, available from www. disaster.go.th/dpm/index.php?option=com\_docman&itemid=221.
- ADPC 2009 DRR policy review www.adrc.asia/publications/drr/pdf/Thailand\_2009.pdf.

## List of projects

Direct Assistance to the Royal Thai Government personnel – Department of Disaster Preparedness and Mitigation in Thailand

Project status	Completed
Project period	20 October 2011 to 30 January 2012
Beneficiaries	Local authority staff, 275,000 people
Donor	United States Agency for International Development and the Office of Foreign Disaster Assistance
Amount funded (in USD)	500,000
Partners	Government personnel partners, Royal Thai Government personnel and the Department of Disaster Preparedness and Mitigation

Livelihoods and Community: Sustainable Solutions for the Forgotten Rohingyas and Host Communities in Mae Sot

Project status	Active
Project period	15 January 2013 to 14 January 2015
Beneficiaries	80 at-risk youth, 800 families of refugees, affected Communities
Donor	European Union and the European Commission
Amount funded (in USD)	715,967
Partners	Tak Community College and Thailand Compassion Relief and Development (Compasio)





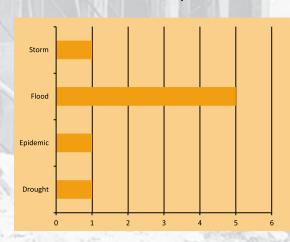
Surface area	14,874 km²
Population, 2010 (est.)	1.1 million
Population density, 2010	75.6/km²
GDP in 2011	USD 1 billion
GDP per capita in 2011	USD 896
Remittances, 2011	Data not available
HDI	0.576
Net migration rate, 2010–2015	1.6 migrants/1,000 population
Types of movement	Internal displacement, stranded/trapped
Displaced by disasters, 2008–2012	Data not available
Number of IOM staff working on disasters	4
Location of IOM offices	Dili
Total DRR funding for 2013 in USD	518,738
IOM site: www.iom.int/cms/en/sites/io	om/home/where-we-work/asia-and-the-pacific/timorleste.html

#### **IOM DRR responses**

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	Preparedness	Cross-cutting
	Preparing communities	Livelihoods
	Building institutional capacities	
ŀ	Bridging responses	

## Top 10 natural disasters by size of affected population, 1980–2013

Disaster	Date	Affected
Storm	2006	8,730
Flood	2001	2,508
Flood	2007	947
Flood	2003	600
Flood	2003	450
Epidemic	2005	336



Duetoitsgeographic location, Timor-Lesteis exposed to droughts, typhoons, sea level rise, earthquakes and tsunamis, all of which pose significant threat to the social and economic development of the country and the lives of its citizens. In addition, the combination of heavy monsoon rains and steep topography makes many parts of the country prone to the impacts of flooding, landslides and shifting riverbeds.

Timor-Leste also experiences the cyclical effects of the El Niño-Southern Oscillation and related weather anomalies. Associated floods have resulted in decreased agricultural production, soil degradation, damage to infrastructure, displacement of communities and loss of property and livelihoods.

Deforestation increases the likelihood of landslides and leads to sediment build-up in rivers, exacerbating river shifting and flooding. Poor road design and drainage also increases the likelihood and effects of flooding and landslides. Although rain episodes have not caused enormous casualties to date, they often lead to severe disruption of road networks, cut off access of communities to markets and contribute to food insecurity.

Climatologists predict that climate change will increase the frequency and intensity of natural disasters in the country. The weather in the region is likely to become hotter and drier, increasing the risk of droughts, and rainfall is expected to become more concentrated and erratic, increasing the risk of floods. The low-lying atolls in the region are highly susceptible to rising sea levels, coastal erosion and coral bleaching, threatening the integrity of settlements and the livelihoods of local communities.

Widespread poverty, socioeconomic imbalances and environmental degradation are major drivers of local vulnerability to natural hazards. In addition, low levels of development multiply the risk faced by the local population, and disasters erode the gains of past and current poverty reduction programmes. The rugged nature of the local topography and the remoteness of many communities serve to cut them off from assistance and resources in times of disaster. While there were no major instances of disaster-related mobility in 2012, according to the Government's disaster information system, DesInventar, local communities remained vulnerable to flooding, strong winds, landslides, drought, fires and torrential rains.

The National Disaster Risk Management (NDRM) Policy was enacted in 2008 by the Ministry of Social Solidarity; however, formalized initiatives in disaster risk reduction (DRR) remain insufficient at the national and subnational levels. Strengthening coordination mechanisms and technical expertise will thus be essential for the implementation of DRR activities. The NDRM Policy outlines the need for further capacity-building in disaster risk management (DRM), as well as the need to establish cross-sectoral coordination mechanisms to respond to natural disasters. There has been some engagement by international agencies such as IOM, the Australian Agency for International Development and the UN Development Programme, with other actors working in partnership with local governments and non-governmental organizations (NGOs) at the grassroots level to establish disaster management committees (DMCs) at the district, village and community levels. While some communities at risk, particularly those in more isolated settlements, pursue traditional disaster management activities, their local knowledge is not appropriately valued and supported.

### **Responses**

The IOM response focused on improving Timor-Leste's capacity for risk management at the institutional and community levels. IOM directly targeted Government officials and staff from relevant authorities at the national and subnational levels, in order to increase their understanding of the DRR needs of the country, as well as their capacity to plan and allocate resources for risk reduction activities. In particular, it supported the inclusion of field-level data in government policy formulation and DRR decision-making. The Organization also facilitated communication and coordination among government ministries and across administrative authorities at different levels.

In addition, IOM strengthened the capacity of the National Disaster Management Directorate (NDMD) to identify and address needs and priorities in times of crises, as well as provided logistics and technical support for local preparedness initiatives and training in camp management.

In collaboration with local partners and NGOs, IOM supported and strengthened the capacity of local DMCs, conducted participatory disaster risk



assessments and emergency response trainings and supported communities in the development of DRR materials, contingency plans and other preparedness initiatives. Among other things, activities included the provision of motorbikes, computers, cameras and community radio equipment to establish early-warning systems.

### **Results achieved**

In order to guide its efforts, IOM produced a baseline assessment of DRR and climate change adaptation knowledge, initiatives and practices. The Organization also enhanced the ability of governmental institutions to prevent, mitigate and manage disasters by strengthening coordination among ministries and between national and subnational DRR actors. It also supported the development of a database on recovery package assistance distribution, in order to enhance the integration of field-level data in policy formulation and DRR decision-making. The Organization also delivered on-the-job training to the Office of the Secretary of State of Social Assistance and Natural Disasters (SoS SAND) in DRR projects and proposal analysis; as well as in the provision of direct policy guidance to support the Ministry of Social Solidarity. Overall, IOM built the capacity of staff members of the SoS SAND at the national and subnational levels.

At the subnational level, IOM enhanced districtlevel capacity for assessing and addressing risk through the preparation of district disaster risk action plans. The Organization helped create a total of 156 DMCs operating at different administrative levels and trained personnel and volunteers to develop and implement community-based disaster risk management, participatory disaster risk assessments (PDRAs), integrated community action plans (ICAPs) and district emergency preparedness plans. PDRAs and ICAPs were prepared in 98 communities in 9 different districts. In addition, the Organization delivered a community-based DRR "Training of Trainers" programme covering early-warning systems, risk mapping, disaster risk analyses and DRR measures.

IOM also supported local NGOs and community groups in implementing community-based DRR initiatives, including in the training in and the actual construction of keyhole gardens in target districts, establishment of 17 community stockpiling facilities and evacuation centres across the country and upgrading of the Dili Gymnasium Complex to meet minimum standards for use as a collective evacuation centre in case of major displacement. The Organization also developed a series of materials for dissemination in target districts, such as the Community Learning Systems for DRR, the Hazard Resistance Construction Manual and a

series of educational materials for primary schools that target both students and teachers. A total of 164 schools were targeted for DRR education; 166 simulation exercises were implemented at the local level and 288 community members were trained in the delivery of first aid.

Throughout its interventions, IOM involved youth leaders, women and other community representatives, in order to empower them to undertake key roles in disaster preparedness and response, including serving as first aid providers in the event of emergency.

### **Future objectives**

Issues that still need to be tackled include the development of an early-warning/early action system for rural areas, a community-based DRR strategy including livelihood enhancement and climate change adaptation and the strengthening of the disaster preparedness system. IOM has been successful in implementing its activities at the community level, and will further engage in promoting them to national and subnational institutions. This would help foster the capacities of these institutions, enhancing cross-sectoral communication and better coordinating authorities and actors in charge of disaster risk reduction and disaster risk management.

Financial support for DRR activities remains an issue at the local level, mainly due to administrative procedures that make it difficult for communities to access public funds. More straightforward procedures for the allocation of resources might also foster dialogue and trust between communities and institutions. In addition, Timor-Leste does not yet have a wealth of skilled manpower and trained professionals, hampering DRR and DRM efforts at all levels. Despite the involvement of IOM, gender inequality remains a noticeable issue at both the community and government levels, due to entrenched gender norms and the limited local NGO and government capacity to engage on the issue.

### Relevant materials

 IOM Timor-Leste Strategic Plan, 2011–2013, available from http://publications.iom.int/ bookstore/index.php?main\_page=product\_ info&cPath=1&products\_id=701.

### List of projects

#### Disaster Risk Reduction in Timor-Leste (Phase II)

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Project status	Completed
Project period	1 November 2009 to 31 December 2011
	31 December 2011
Beneficiaries	Government personnel
Donor	Australia, Australian Agency for International Development
Amount funded (in USD)	2,000,000
Partners	National Disaster Management Directorate, Ministry of Social Solidarity including the Secretary of State for Social Assistance and Natural Disasters (SoS SAND) and district disaster management committees (DDMC)

## Disaster Risk Reduction through Building Community Resilience

Project status	Active
Project period	15 June 2012 to 13 December 2013
Beneficiaries	30,000 people and 90 Government personnel
Donor	United States Agency for International Developmen and the Office of Foreign Disaster Assistance
Amount funded (in USD)	518,738
Partners	National Disaster Management Directorate (NDMD), Ministry of Social Solidarity, DDMCs, the Catholic Church, the Timor-Leste Red Cross Society and the UN Development Programme