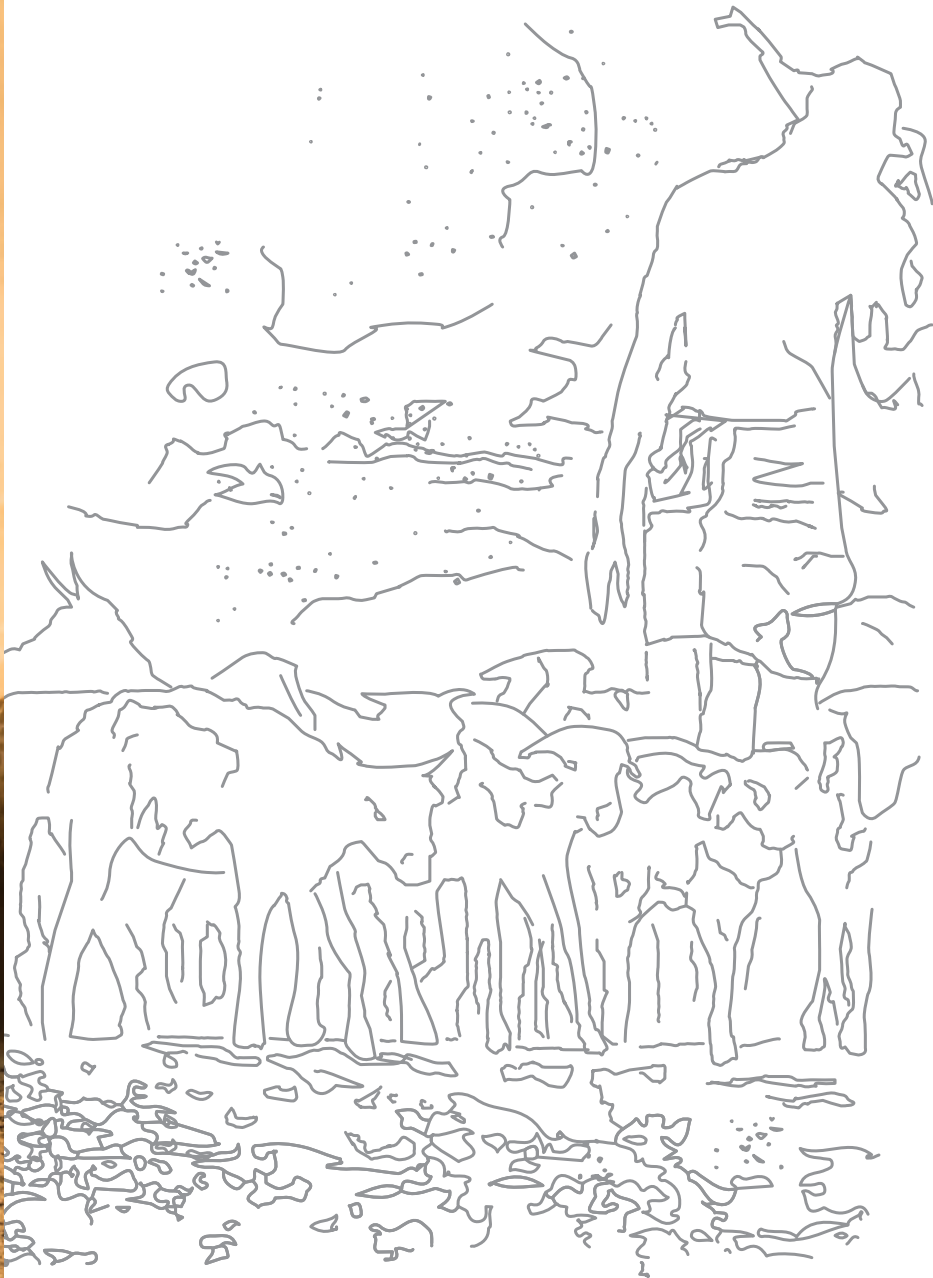


DISASTERS AND CONFLICTS

**MINIMIZING
ENVIRONMENTAL
THREATS**



DISASTERS AND CONFLICTS

In its work on disasters and conflicts, which aims to minimize threats to human well-being from environmental degradation, UNEP focuses on achieving results in two areas:

- **Risk reduction** – Improving countries' ability to use environmental management to prevent and reduce the risks of natural hazards, industrial disasters and conflict.
- **Response and recovery** – Supporting countries in the aftermath of a disaster or conflict to identify and address environmental risks that could have serious social and economic impacts.

Risk reduction

Over the last two years, UNEP supported 28 countries to reduce the risks of natural disasters, industrial accidents and conflicts.

At the global level, a key measure of success is how well UNEP can integrate ecosystem-based solutions for disaster risk reduction (DRR) and peacebuilding into the wider UN's guidelines, policies and programmes. Ten significant UN policies, guidelines and programmes now reflect best practice in sustainable natural resource management, bringing the total number to 23. This exceeds the target of 20 for the end of 2015. UNEP is now also directly reaching the next generation of policymakers through online training on DRR (see In Focus feature on page 19).

28

COUNTRIES

SUPPORTED TO REDUCE THE RISKS OF NATURAL DISASTERS, INDUSTRIAL ACCIDENTS AND CONFLICTS.



A grain miller at work in Les Anglais, Haiti, where a sustainable micro-grid is providing energy to households and small businesses – part of long-term support for recovery from the 2010 earthquake. © Marc Lee Steed

Highlights of UNEP support on risk reduction

Madagascar

UNEP conducted an assessment of major risks posed by hazardous ammonia storage in an industrial site. The containers were safely removed and neutralized.

Peru, Thailand

Emergency preparedness was improved through regional (Asia-Pacific and Latin America) training of trainers in the Awareness and Preparedness for Emergencies at Local Level (APELL) methodology.

Tajikistan

Environmental emergency preparedness training; support to dam safety; training and support in the safe management of debris and asbestos waste; training in ecosystem approaches to Disaster Risk Reduction (eco-DRR).

UNEP policy influence on crisis reduction

Who we influenced	What we influenced	What we did	Why it's important
Member states, the humanitarian and development communities	The Sendai Framework on Disaster Risk Reduction (SFDRR)	UNEP worked to ensure the environment was included as a key factor in disaster risk and taken into account as a solution.	The Sendai Framework sets the goals for disaster risk reduction policies for the next 15 years.
The UN, World Bank and EU	Post Disaster Needs Assessments (PDNA)	UNEP led the environmental section of the development of the PDNA guidelines, including a guideline on environmental issues.	The PDNA is the principal framework used by the UN, the World Bank and the EU to gauge post-disaster needs. The inclusion of the environment should ensure more sustainable spending of billions of dollars of post-disaster assistance.
The High Level Independent Panel on UN Peace Operations	Uniting our Strengths for Peace report	UNEP provided input on the environmental impacts of peacekeeping operations and the potential of green technology.	This high-level review will shape the future of UN peace operations.

Response and recovery

UNEP responds to acute environmental emergencies as part of humanitarian response teams. It also conducts post-crisis assessments of environmental damage and recovery needs, and provides guidance to those involved in recovery. UNEP responded to crises and supported recovery in 22 countries over the last two years – ten of which were acute environmental emergencies. UNEP has carried out post-crisis or rapid environmental assessments in 29 countries since 2010. Between 2010 and 2014, in 88% of the assessments where UNEP identified serious risks, national governments or the UN took action to reduce those risks.

BETWEEN 2010-2014 IN

88%

OF THE ASSESSMENTS WHERE UNEP IDENTIFIED SERIOUS RISKS, ACTION WAS TAKEN* TO REDUCE THOSE RISKS.

*BY NATIONAL GOVERNMENTS OR THE UN.



UNEP provided advice to the Government of Nepal, international agencies, and the UN system on dealing with environmental issues linked to the earthquake, which killed over 8,000 people in April 2015. UNEP also participated in a Post Disaster Needs Assessment (PDNA). UNEP is now developing a multi-year programme to support green recovery and environmental resilience in Nepal. © Adnan Abidi / Reuters

DISASTERS AND CONFLICTS

Highlights of UNEP emergency response to crisis situations

Country	UNEP support	Result
Serbia	Assessment of flood-related risks of chemical leaks and landslides	Follow-up activities have been conducted by the Serbian government to implement the recommendations from the assessment. Post-flood planning has been integrated into a regional climate change adaptation project for South East Europe.
Solomon Islands	Assessment of flood-weakened gold mining tailings dam	The government is using UNEP's assessment to pursue a claim against the previous mine owner. Plans and the equipment to lower the level of water are now in place.
Ukraine	Recovery and post-conflict needs assessment as part of the UN team with the EC and the World Bank	The assessment informed the development of the Donbas Recovery Programme, which was the basis for €1.4 billion in loans.

Highlights of long-term support

Haiti 430 households and business have been provided with clean and reliable electricity as part of a project aiming to provide 1,600 households with electricity by 2016.

 **1600**
HOUSEHOLDS

 **ELECTRICITY**
BY 2016

Afghanistan Four major projects linked ecosystem-based disaster reduction with climate action to deliver capacity building to seven government departments, and support 35 local communities in projects for watershed management across four provinces.

35 LOCAL
COMMUNITIES

 **WATERSHED**
MANAGEMENT

Sudan More than 10,000 people from 20 villages benefited from the first successful harvest in the area of the Seil Gideim water-spreading dam, North Darfur.

 **10,000**
PEOPLE

 **HARVEST**
CROPS

While UNEP provides environmental assessments immediately after a crisis on request from the country or UN system, the organization also provides long-term support to countries that require more-sustained environmental assistance for recovery, which has meant longer-term support in Afghanistan, the Democratic Republic of Congo (DRC), Haiti, South Sudan and Sudan.

For more information on UNEP's work on Disasters and Conflicts, visit unep.org or follow us on Facebook or Twitter.



The natural beauty of Bamyan, Afghanistan. The nation is working with UNEP on ecosystem-based disaster reduction and climate action. © AFP Photo / AFP



NEW ONLINE APPROACH TO TRAINING BUILDS RESILIENCE TO DISASTERS

Over the last ten years, UNEP and its partners have run in-person training courses on how to manage ecosystems to increase resilience to natural disasters. These courses have reached hundreds of people in over 40 countries. But this hasn't been enough to meet demand, or to tackle the scale of the problem.

In 2015, UNEP launched the world's first Massive Open Online Course (MOOC) on Disasters and Ecosystems. Run in collaboration with the Cologne University of Applied Sciences, Global Universities Partnership on Environment for Sustainability and the Partnership for Environment and Disaster Risk Reduction, the course reached over 12,000 people in 183 countries. Focusing on ecosystem-based approaches to disaster risk reduction (Eco-DRR) and climate change adaptation, the course aims to reach one million people over the next five years and enable a new generation to promote more sustainable and resilient development. The community is growing; its MOOC Facebook group now has over 10,000 members, and students' experiences show change is already happening.

Nkembeteck Henry Nkwa, Cameroon

A row of mature trees protected Nkembeteck Henry Nkwa's family home until road developers tore them down. Three days later, a storm damaged his house. The experience prompted him to learn more about how the natural world can buffer disaster impacts. He is working toward a master's at the Higher Institute of the Sahel in Cameroon,

majoring in desertification and natural resources. To complement his studies, he signed up for UNEP's course. The course inspired him to build a grassroots organization, The Rural Women Resilience Bedrock, which helps rural women become more financially resilient to the effects of climate change through cultivating fruit trees.

"In the face of a changing climate, no development can be sustainable if disaster risk reduction and climate change adaptation are not integrated in development planning," he says.

Heba Anna Philip, India

In the summer of 2013, Heba Anna Philip's homeland in the Kuttanad region of Kerala, southern India, suffered devastating floods. Many people lost their property, others their livelihoods. As a result, she took the course, which taught her how to work with communities to reduce disaster risk. Ms. Philips, now a 9th-grade student, is helping farmers in her home region prepare for floods, encouraging them to invest in growbags – sacks of soil that can be used to grow vegetables even if fields have flooded. A minimum of 25 growbags would make households more food secure during three months of heavy rains and floods. For a place like Kuttanad, implementing green infrastructure, such as Eco-DRR and ecosystem-based adaptation measures, is an effective solution.

"We hope to bring awareness to people at the grassroots level – the simple villagers whose voices are often not heard or ignored by the government," she says.

Floods in India inspired Heba Anna Philip to join UNEP's course and learn more on how to prepare for natural disasters. © Reuters / Rupak De Chowdhuri

Dr. Naeem Shahzad, Pakistan

Following the 2005 earthquake and 2010 flooding in Pakistan, which killed tens of thousands of people, the National University of Sciences and Technology (NUST) developed a graduate-level programme on disaster management, the first of its kind in the country. Dr. Naeem Shahzad, an Assistant Professor in the programme, signed up for UNEP's course to broaden his view of disaster management.

"Interactions with international experts [in] this course helped me gain knowledge and experience," he says. "We learned how disaster risk reduction, climate change adaptation and ecosystem[s] are interrelated."

The course is going to have "long-lasting effects", Dr. Shahzad says, because the measures it advocates are economical, effective, and easy to implement. He is working to have the course included as an elective in the curriculum of his university's master's programme.

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12,000
PEOPLE IN 183 COUNTRIES.