
A global forum takes to the frontlines of climate change

In response to the outcry over the continuing absence of vulnerable groups from international debates on climate change, UNESCO's Coasts and Small Islands platform and Local and Indigenous Knowledge Systems programme launched an Internet-based discussion forum on 12 June.

The forum has been launched in partnership with the Secretariats of the Convention on Biological Diversity and United Nations Permanent Forum on Indigenous Issues, as well as the Office of the High Commissioner for Human Rights.

The Frontlines forum will explore the experiences of rural or indigenous communities living in small islands, the circumpolar Arctic, high-altitude zones, low-lying coastal areas, tropical forests, desert margins and other vulnerable environments. For many people, climate change is a distant threat but, for vulnerable communities, it is already a reality. Effects being felt by small islands, for example, include sea-level rise, storm surges and the consequential salinization of vital freshwater reserves and agricultural lands.

Rural, indigenous or island peoples are also keen observers of the impact of climate change. Confronted over the ages with repeated environmental change, many have built up a rich body of knowledge and skills which allow them to adapt to new situations. This knowledge can be crucial for debates on the impact of climate change and adaptation strategies.

In Sachs Harbour in Canada's western Arctic, Inuit are already using their detailed knowledge of animals and environmental change to modify their hunting and travelling practices in response to climate change. They now hunt polar bears earlier in the year than before and fish through the ice on different lakes and for a shorter duration in spring. Seals are being hunted more often from boats in open water, due to a lack of ice floes. Many Inuit are confident in their ability to cope with climate change, partly due to distinct philosophies which embrace rather than resist uncertainty and change.



In the Arctic, Inuit have proved adept at adapting to climate change. Coastal sea ice is increasingly preferred to inland routes for travel in the spring, for instance, to avoid bare ground and unreliable snow cover which make progress on snowmobiles laborious. Those travelling overland have forged new trails and routes to avoid slumps, mudslides and erosion caused by permafrost thaw

Despite their specific vulnerabilities, adaptation strategies and knowledge, indigenous peoples continue to be excluded from debates on climate change. They have voiced their frustration at this, notably through protests on 7 December last year at the United Nations conference in Bali (Indonesia) and at the most recent session of the United Nations Permanent Forum on Indigenous Issues in May 2008 in New York (USA).

On 28 March, small island states delivered a clear message on their plight when the Maldives government tabled a resolution on human rights and climate change to the United Nations Human Rights Council on their behalf. The resolution was adopted by consensus.

The Frontlines forum will explore all of these issues, heightening the profile of vulnerable communities in international debates while providing a platform on which communities can share their experiences. The forum will operate in English, French and Spanish, with possible expansion into other languages in the future. Participants will receive new postings and highlights of discussions via email.

To participate in the forum: links@unesco.org; the debates can also be followed at www.climatefrontlines.org

Better preparation for storm surges is possible

Nineteen days after tropical cyclone Nargis left more than 100 000 dead or missing in Myanmar, UNESCO's Intergovernmental Oceanographic Commission (IOC) and WMO convened a joint press conference in Geneva (Switzerland) on 21 May to recall the urgency of improving storm surge warning systems in zones threatened by tropical cyclones.

A tide gauge installed by the IOC in Moulmein had detected a storm surge on 2 May of about 1.5 m. Farther west where the storm made landfall, the Myanmar report of a surge of more than 3 m was corroborated by a WMO mission on 15–18 May. Whipped up by strong winds, storm surges can cause water to pile up above normal levels along the coast and lead to severe inland flooding

Mangrove forests can act as a buffer but, on parts of Myanmar's coast, they have been converted to agricultural land and fish ponds. FAO's Forestry Department estimates the mangrove area in the severely hit Ayeyarwady Delta, the country's rice basket, to be less than half its size in 1975.

The Joint WMO/IOC Committee on Oceanography and Marine Meteorology is currently preparing a *Guide to Storm Surge Forecasting* – for storm surges can be detected hours, even days ahead. But in order to warn populations at risk, the right data have to be available, such as high-resolution topographic and bathymetric charts, in order to model these phenomena and draw up risk maps, notably of flooding. These elements are lacking in a number of coastal states, including Myanmar.