

Indigenous Peoples' Knowledge and Climate Adaptation

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On the International Day of the World's Indigenous Peoples, this factsheet highlights the ways in which **traditional and indigenous peoples' knowledge contributes to climate change adaptation** and how it can reinforce the resilience of vulnerable communities in climate hotspots.

Indigenous peoples safeguard 80 per cent of the world's biodiversity while representing 6 per cent of the world's population. Their sustainable use of natural resources protects nature and helps communities build resilience to climate change. Indigenous peoples are the best guardians of global biodiversity.

More than **20 per cent of the carbon stored in forests is found in land managed by indigenous peoples**, preserving vital carbon pools which continuously capture CO₂ and release oxygen into the atmosphere, thereby **reducing climate change impacts**.

LOCAL KNOWLEDGE TO ADDRESS THE GLOBAL CLIMATE EMERGENCY

Indigenous peoples bear the brunt of the climate emergency. They are particularly exposed and vulnerable to the adverse impacts of climate change due to their reliance on nature for their survival and sources of economic livelihoods. For generations, indigenous communities have monitored climatic and environmental changes, and developed adaptive practices. Traditional knowledge can be key to building resilience for vulnerable populations in the face of climate change.

Traditional knowledge relies on nature-based solutions, passed on by their elders over generations and it can effectively contribute to adaptation strategies at the local, national and global levels. Their time-tested practices should inform policy decisions and be reflected along with indigenous peoples' rights into adaptation frameworks.

Traditional knowledge emphasizes balance, respect and harmony between human beings and the rest of the natural world, particularly regarding use of resources. Traditional practices aim to have a minimal impact of the environment and foster self-sustaining ecosystems and biodiversity.

INDIGENOUS PEOPLES AND DISPLACEMENT RISKS

Climate change disrupts local economies especially in rural communities and increasingly interacts with the root causes of conflict and population flows. Global data on minorities and indigenous peoples in forced displacement situations is not available. Enhanced disaggregated information would help to better understand the distinct challenges that minorities and indigenous peoples face, and improve access to aid, safe refuge and protection.

The frequent absence of land rights documentation or the legal recognition of communal lands may increase the risk of displacement and decrease the likelihood for return. Finding durable solutions is particularly challenging when changes to climate or environmental degradation render certain indigenous lands uninhabitable, or where there has been occupation or confiscation of land for development projects. ^[1]

Indigenous peoples face specific vulnerabilities during transit and resettlement that affect their access to protection and assistance, yet global humanitarian crises discussions often ignore the plight of indigenous peoples.

1. *No escape from discrimination: minorities, indigenous peoples and the crisis of displacement*, Minority Rights Group, December 2017

Lessons Learned from the Intergovernmental Panel on Climate Change (IPCC)

In 2014, the IPCC stated that "indigenous, local, and traditional knowledge systems and practices, including indigenous peoples' holistic view of community and environment, are a major resource for adapting to climate change" ^[2]. Five years later, the IPCC additionally acknowledged that "indigenous and local knowledge can contribute to overcoming the combined challenges of climate change, food security, biodiversity conservation, and combating desertification and land degradation" ^[3].

Response by Indigenous and Local Communities leaders: "*Finally, the world's top scientists recognize what we have always known. **We—Indigenous Peoples and local communities—play a critical role in stewarding and safeguarding the world's lands and forests.** For the first time, the Intergovernmental Panel on Climate Change (IPCC)... recognizes that strengthening our rights is a critical solution to the climate crisis.*"

"Where our rights are respected...we provide an alternative to economic models that require trade-offs between the environment and development. Our traditional knowledge and holistic view of nature enables us to feed the world, protect our forests, and maintain global biodiversity." ^[4]

Learning from Indigenous and Local Communities to Adapt to a Changing Climate



Indigenous knowledge, whether it relates to agriculture, resource use, biodiversity, or weather prediction, provides the **basis for many successful climate adaptation measures**. It can offer best practices and serve as inspiration for the provision of climate-sensitive humanitarian assistance to refugees living in climate vulnerable areas.

Restoration of degraded lands: In [Africa](#), a water harvesting technique originating from the Sahel and known as *zai* pits or *tassa* helps restore degraded drylands through **climate-smart agriculture**. The planting pits capture erratic rainfalls allowing infiltration of water to irrigate the seeds, which increases soil fertility and crop yields. In [Bangladesh](#), the restoration of degraded lands around Rohingya settlements is a key objective of the humanitarian response. Environmental rehabilitation combined with alternative energy sources have brought real improvements to life in the settlements. The introduction of LPG has led to a staggering 80 per cent drop in demand for firewood. Together with intensive reforestation, this has resulted in a remarkable “re-greening” of the area and enhanced the capacity to mitigate the risk of landslides during the monsoon and cyclone seasons.

Indigenous lifestyle and livelihoods: In [Pakistan](#), “Suri Jagek” which translates to “observing the sun” is a local knowledge used by the Kalasha people to predict weather patterns, plan harvests and raise livestock. As climate change leads to more extreme weather conditions, Suri Jagek reinforces the community’s ability to adapt and sustain its way of life. In [Niger](#), UNHCR supported Tuareg refugees from Mali move to safety together with their livestock, maintaining their means of subsistence as nomadic herders. Their relocation was not only life-saving but respectful of their traditional lifestyle most suited to the climate and local environment.

Local building techniques: In [Vanuatu](#), traditional architecture proved to be a key factor in disaster risk reduction. Nakamals, the island’s communal buildings used as evacuation centres during Cyclone Pam (2015) were found much safer and stronger when built using local materials and building skills, demonstrating how traditional knowledge can be a vital means of promoting communities’ resilience to climate hazards. In [Yemen](#), UNHCR has for several years applied local know-how in the design and construction of shelters provided to internally displaced persons (IDPs). Made from mud, *halfa* and other local material, shelters are built with the help of IDPs using their traditional knowledge. As opposed to plastic sheeting, the local materials insulate against extreme heat in summer, thereby enhancing the communities’ resilience against the rising temperatures.

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