Healthy Ecosystems Reduce Vulnerability to Disaster Risk

Statement to the Asian Ministerial Conference on Disaster Risk Reduction, Ulaanbaatar, 3rd to 6th July 2018

Distinguished Chairperson, Your Excellencies, Distinguished Delegates

I am pleased to make a statement on behalf of the International Union for Conservation of Nature at this important Asian Ministerial Conference for Disaster Risk Reduction.

The International Union for Conservation of Nature is the world’s oldest and largest global environmental organization with around 1,300 member organisations that include States and Government Agencies, NGOs, Indigenous Peoples organisations, scientific and academic institutions and business associations. This democratic union helps the world find pragmatic solutions to our most pressing environment and development challenges.

I am honoured to be in the presence of a number of IUCN Members and partners including our host, Government of Mongolia which is a State Member of IUCN.

This year IUCN celebrates its 70th anniversary and with 7 decades of experiences in nature conservation, we are of the view that, investment in ecosystem-based approaches as a response to disaster risks provides a concrete way for countries to demonstrate their disaster risk reduction commitments and can also support regional policy frameworks through coherent actions. In our view, investment in ecosystem-based approaches as a response to disaster risks provides a concrete way for countries to demonstrate their disaster risk reduction commitments and can also support regional policy frameworks through coherent actions. Investments in Eco-DRR actions can not only form part of disaster risk reduction solutions but they can be used as indicators of countries’ progress against the Sendai Framework for DRR.

Healthy intact ecosystems have been proven to: 1) reduce the direct impact of natural hazards; 2) reduce underlying vulnerabilities related to factors such as livelihood options, poverty and soil degradation; 3) enable disaster stricken communities who rely on ecosystem services to recover faster. In this regard, IUCN has been working very closely with a number of UN organisations including ISDR and other partners within the framework of the Partnership on Environment and Disaster Risk Reduction.

Numerous recent studies, based on the Science-Practice and Policy Approach including those from the German government funded IUCN project on ‘Ecosystems Protecting Infrastructure and Communities’ in Nepal, suggest that there are strong economic and social returns in investing in ecosystem-based...
disaster risk reduction. EPIC Nepal has successfully demonstrated that ecosafe roads involving community based scientific bio-engineering approaches combined with traditional knowledge systems — an ecosystem-based approach to disaster risk reduction —are cost-effective and locally adapted, with great potential for reducing risk while increasing the resilience of communities living in landslide-prone areas. This is apparent from the evidence generated through the ecosystem quantification studies, cost benefit analysis of regular rural roads versus eco-safe roads, rhizotron-led studies on appropriate species for bioengineering, hazard and risk mapping among others.

IUCN has also collated evidence that biodiverse ecosystems can support risk reduction in an effective manner. For example, in Vietnam, the planting of mangroves has reduced the risk of disasters and enhanced communities’ livelihoods. Planting 9,462 hectares of forest (of which 8,961 hectares were mangroves) in 166 communes in disaster-prone northern Vietnam, was found to reduce damage to dykes from typhoons by an estimated USD 80,000-295,000. In another example from the Philippines: on November 2013, 5,500 people died from strong storm surges along exposed coastlines when Typhoon Haiyan hit the Philippine province of Leyte. However, other communities in the same area remained relatively unaffected. Their relative safety is credited to the presence of mangroves that protected these communities from the impact of the typhoon.

Since its inception in 2006, Mangroves for the Future (MFF) - a partnership-based regional initiative working in 11 member countries throughout South and Southeast Asia to strengthen resilience of ecosystem dependent coastal communities to the impact of climate change and natural hazards. The MFF initiative is promoting development and application of knowledge and best practices, community empowerment, and good governance and sees strategic investments in coastal ecosystems as a key factor for sustainable development. The MFF initiative is overseen by regional and national steering committees and has more than 500 institutional and implementing partners from governments, civil society organizations and the private sector. Through its grant facilities, over the years MFF has supported implementation of nearly 400 projects of which more than 70% contributed to improving livelihoods and food security, and almost 80% directly respond to women’s needs and interests.

We feel that It is important to establish and enforce mechanisms to protect healthy ecosystems that provide regulatory ecosystem services so as to avoid the creation of new disaster risks. Disaster risk reduction and management efforts including engineered grey infrastructure, recovery and reconstruction processes need to be implemented without affecting the integrity of natural ecosystems.