UN 2023 Water Conference Side Event

Protecting & Restoring Critical Water related Ecosystems in Mountains: the Role of Indigenous Peoples & Biocultural Territories

24th March 2023, UN HQ.
IIED, International Network of Mountain Indigenous Peoples (INMIP), Asociacion ANDES (Peru), Potato Park Association, Mountain Partnership Secretariat, Kenya Forestry Research Institute, Farmer Seed Network (China).

Background on the event: Mountains provide critical water resources for millions of people in mountains and downstream, including towns and cities that rely heavily on mountain watersheds and annual snowmelts. Mountain Indigenous Peoples and their biocultural territories play a crucial role in protecting and restoring mountain water related ecosystems (eg. forests, wetlands, grasslands, lakes and streams) through cultural and spiritual values, customary laws, sacred sites, agroecological practices, drought-tolerant crops and customary water management systems. However, above average warming in mountains is leading to rapid melting of glaciers, increased risk and erratic rainfall, adding to pressures from unsustainable development. In this side event, Quechua community experts presented directly from the Andean Potato Park and the Chalakuy (barter) Park in Cusco, Peru – including elders, women, youth and a girl who presented a water poem.

Water Action Agenda - INMIP has committed to establishing a global network of Indigenous Biocultural Heritage Territories to protect and restore mountain water related ecosystems, with support from IIED. INMIP's Water Temples Initiative will protect the sacred nature of water and conserve traditional water management systems. We are looking for funding partners to join this initiative.

Key Issues discussed (5- 8 bullet points)

- Mountains provide c.60-80% of the world's freshwater. Major cities like Rio de Janeiro, New York, Nairobi, Tokyo, Lima & La Paz depend almost entirely on freshwater from mountains. Mountains are also home to 50% of global biodiversity hotspots, provide critical food and medicines for downstream populations, economic benefits (eg. 15% of Peru's GDP) and climate mitigation (through extensive forests, grasslands and wetlands). But they also have high levels of poverty and food insecurity – hence they are vital for achieving the SDGs, the Global Biodiversity targets and the Paris Agreement.
- The impact of climate change on the cryosphere and hydrological cycle is already affecting water availability, and causing glaciers to melt, which is expected to lead to drought for downstream populations by 2060 (IPCC). But customary water management systems, often characterised by sacred sites, water management committees and sustainable use regimes (eg. for forest conservation) have prevented water scarcity (eg. for the Naxi in Yunnan China, and the Lepcha and Limbu in Northeast Indian Himalayas). Here and in semi-arid coastal Kenya, Indigenous Peoples are establishing biocultural territories for integrated and holistic water management, to protect all elements of the ecosystem including water, biodiversity, crops and related indigenous knowledge, spirituality and ethics. The Potato Park in Peru, where 6 communities collectively govern 9,200 ha based on customary laws and a pre-

hispanic holistic wellbeing concept (Sumaq Kausay), helps to provide water to the city of Cusco, while conserving 1400 potato varieties and rich Andean wildlife.

- As FAO explained, mountain wetlands and grasslands are often managed by Indigenous Peoples to promote the functionality of the water cycle. Their valuable traditional knowledge and practices in crop cultivation, livestock production, water harvesting, forestry and agroforestry are well adapted to management of the water cycle. Pastoralists and their animals often act as custodians to grasslands and biodiverse landscapes, preserving soils that sequester carbon, regulating water cycles, regenerating natural vegetation, and preventing natural hazards. Mountains are centers of animal and crop domestication for many species, providing valuable and endangered genetic resources.
- As Alejandro Argumedo (INMIP coordinator and Quechua from Peru) explained, the holistic nature of water – including the cultural and spiritual values that sustain it - is threatened by western scientific approaches that do not take indigenous knowledge into account. Water towers are also threatened by pollution in mountains. As a result, sacred mountains and water will be lost which will be very damaging for mountain communities, for whom **water is associated with the blood of Mother Earth**. Water gives life, it flows through the whole body of Pachamama (Mother Earth). It is important to plan water management from the sacred perspective of communities.
- As Potato Park experts explained: "we have to see water as the blood that flows through our bodies and through the mountains and crops; it is not just for humans but for all our relations, including wildlife". "We need to keep our respect for Mother Earth and Mother Water. Since before the Incas, people in these lands have always seen water as sacred and we need to maintain that. Since our ancestors we've practiced sowing and harvesting water – this is very important, without blood we will die". As expressed by a girl's poem in the Chalakuy Park, Lares (Adali Oblitas): "Mother water we remember you on your day, you give life to our animals and plants, you walk in the clouds, from you is born the snow, rain and rivers, from you the whole world lives".
- The communities highlighted the **impacts of climate change**. In the Chalakuy Park, "with climate change, the rains come very late, this is affecting us". In the Potato Park, "it has been very hard as we had a dry spell due to climate change. We have 3 lakes, every year we worry about the level of water – over the last few years we've had less and less water. This is very concerning as we depend on this water and so do downstream communities. It is going to affect our crops and we have to be mindful that the lack of water affects wildlife and everyone in the community suffers, including animals, birds etc."
- The Potato Park communities **manage water resources** through: 1) Amunas, an ancestral water harvesting system that captures and regulates the volume of water in the upper parts of the mountain that runs through ravines during the rainy season, channelling water to the infiltration area for storage in the subsoil; 2) their our own traditional small dams; 3) creating rows for planting crops in a certain direction so that water is not wasted and soil is not eroded; 4) looking after pasturelands that act as sponges, starting at the top of the mountain; 5) using terraces to plant on slopes and keeping different plants at the margins of farmers' fields to capture rain and manage risk. The most important rituals are water ceremonies eg. a traditional water festival on 20 May, where they offer sacred coca leaves to the water and celebrate communion so their "relationship with water can be respectful and water can be happy".

Key recommendations for action:

- Governments must recognise and protect the critical role of Indigenous mountain peoples and biocultural territories in protecting water towers, ensure their active participation in decision making, and recognise their cultural and spiritual values relating to water and water related ecosystems.
- Climate change is already significantly impacting water resources for mountain communities and downstream populations. Governments must implement more ambitious solutions for climate mitigation.
- Privatisation of water resources for water 'management' is a key threat to mountain communities who depend on communal water resources. Governments should support customary water management systems that have proved critical to cope with drought and water shortages.

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