



## Indigenous Peoples' Knowledge and the Sciences

Combining knowledge and science on vulnerabilities and solutions for resilience



Indigenous Peoples worldwide have a dual relationship with climate change. On the one hand Indigenous Peoples represent a clear case of climate injustice, as they have contributed the least and are suffering the most from climate-related extreme events and ecosystem degradation. These changes have profound consequences on their livelihoods and wellbeing and their voices are often not heard at local or national levels. These peoples have very low historic and present-day greenhouse gas emissions while they are usually less supported by public policies and programs than other segments of societies.

On the other hand, indigenous peoples can play an important role to meet the challenges of climate change and biodiversity loss, and offer opportunities for health-related knowledge. They have rich and often neglected traditional knowledge systems, especially on ecology, management and restoration of natural ecosystems and response to climate change. There is an opportunity for an ideological bridge between their knowledge systems and science to develop new and innovative solutions for mitigation and resilience to climate change, as well as conservation of biodiversity.

Indigenous peoples often are at the bottom of the poverty pyramid and suffer from racism and other forms of discrimination. There is a need to increase the respect for the rights of indigenous peoples, especially in the face of the advance of deforestation and illegal logging and mining, among other economic activities worldwide.

Indigenous peoples inhabit diverse ecosystems around the globe, most of which less degraded

than those occupied by other populations. Indigenous peoples are often caretakers of key natural ecosystems and have an important role in bending the nature degradation curve, with positive impacts for, mitigation, adaptation and biodiversity challenges. Indigenous peoples can play a fundamental role in protecting natural ecosystems against degradation and in restoring ecosystems for multiple outcomes, including climate, biodiversity and water resources.

Nature-based solutions (NBS) are increasingly considered as having lower costs and delivering more co-benefits than other alternatives. Nature-based solutions now play an important role in the agenda of UNFCCC, but the concept has not yet been adequately incorporated in the CBD process. Combining Indigenous knowledge and NBS can lead to innovative solutions that address social and environmental challenges, including climate change impact and biodiversity loss while respecting cultural values and promoting social equity.

This Joint PAS and PASS Workshop will explore NBS and many of the effective medical and food systems innovations, and related indigenous knowledge.

The role of Indigenous Peoples in the climate agenda is being increasingly recognized in the UNFCCC processes. The COP 26 final statement on Indigenous Peoples recognised the critical role of Indigenous knowledge, innovations, and practices in protecting and conserving biodiversity and ecosystems. The statement emphasised the importance of promoting the full and effective participation of Indigenous Peoples in decision-making processes, especially those that affect their lands, territories, and resources. Additionally, the Indigenous Peoples' Climate Finance Facility was launched to provide financial resources and technical support to Indigenous Peoples' initiatives and projects.

More recently, the global indigenous communities under the leadership of the International Indigenous Peoples Forum on Climate Change (IIPFCC) had a strong presence in COP 27 in Egypt, with the participation of more than 300 delegates from indigenous groups worldwide and 70 events being organized.

The role of Indigenous Peoples in the biodiversity agenda is being increasingly recognized in the CBD process. Recently, in COP 15 in Montreal, indigenous peoples were given a special recognition. The final text, known as the Kunming-Montreal agreement, officially recognises Indigenous Peoples' work, knowledge, innovations and practices as the most effective tool for biodiversity protection.

Indigenous knowledge communities and advanced science communities are lacking platforms to exchange views and work jointly to develop innovative nature-based solutions for climate change impact and resilience. Overcoming that may contribute to advancements in sustainability, justice and equity. Indigenous knowledge communities and academicians in social science, natural sciences and others are called upon here, to explore opportunities for cooperation.

This conference will provide an opportunity to make bridges between the views and knowledge systems of Indigenous peoples and science to explore new opportunities for solutions to the global challenges of resilience to climate change and biodiversity loss.

The conference will create opportunities for dialogue among Indigenous Peoples and science community on how ethnoecological knowledge can play an important role in developing local solutions that can have global consequences for climate and biodiversity agendas.