

ESP 11 World Conference

“From global to local ecosystem services: pathways to Nature-based Solutions inspired from Down Under”

23-27 June 2025 | Darwin, Australia

SESSION DESCRIPTION

ID: S9a

Breaking Down Barriers – Incorporating Indigenous Knowledge on Ecosystem Services into Natural Resource Management, Policy, Planning

Hosts:

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Abstract:

Indigenous people rely heavily on natural ecosystems for a variety of needs, including food, health, a sense of place, cultural heritage, social cohesion and livelihoods, making them particularly susceptible to the adverse effects of climate change (e.g. increased temperatures, rainfall, sea level rise, storms) and non-climate changes (e.g. development, new technologies and communication services). Whilst many Indigenous people live in highly urbanized areas, many live in remote or isolated locations. In both urban and isolated locations climate change and non-climate changes can disrupt the delivery of and Indigenous people's access and connection to ecosystem services.

Although they contribute the least to them, Indigenous people are among the most vulnerable to climate and non-climate induced changes that impact ecosystems and species. Not only because of their direct dependence on ecosystem services, but because they are often underrepresented in decision-making processes that directly influence them, such as in natural resource management, land use planning, the installment of infrastructure, climate change adaptation strategies and economic development. Yet Indigenous people play a vital role in managing community natural resources and contributing to local, regional, state and national economies (e.g. through cultural and eco-tourism).

Across the world many Indigenous people are also still living with or healing from policies and practices associated with colonisation, dispossession, assimilation and loss of spiritual and religious freedoms. This has instilled a nervousness and a lack of understanding in researchers, government and business of Indigenous people's connections to nature and how to engage and collaborate with relevant Indigenous groups in meaningful and respectful ways. Hence Indigenous perspectives are often overlooked in research and decision-making processes. But Indigenous people hold valuable traditional knowledge and practices and incorporating this knowledge into research designs, project outcomes and high-level decision-making can strengthen

research, strategies, plans and policies. Western sciences should be complimentary, not substitutable, for local traditional knowledge.

Understanding how ecosystem services contribute to the traditional and cultural roles of Indigenous people; how climate and non-climate induced changes have and will influence their ability to receive, access and utilize essential ecosystem services; and combining western science with traditional knowledge on ecosystem management and climate change, is vital to developing inclusive, effective and equitable plans and policies that empower both Indigenous and non-Indigenous people to sustainably manage ecosystems, species and culture. This session focuses on ecosystem service approaches that capture Indigenous connections to nature, traditional knowledge and practices to managing ecosystems and species, and that apply or incorporate this knowledge in environmental management, policy, planning and decision making. It aims to identify global examples of the challenges, barriers, opportunities and solutions to building relationships and genuine collaborations with Indigenous people and incorporating and using traditional knowledge in ways that provide nature-based solutions.

Presentations are encouraged that show how Indigenous knowledge, values towards nature and their dependence on ecosystem services are being identified or used in the following ways (see dot points below). Presentations should focus not only on methods but provide examples of the challenges, barriers, opportunities and solutions to achieving outcomes.

- how Indigenous knowledge is identified, assessed and included in decision making.
- how Indigenous knowledge is being optimized to provide net benefits to society and the economy.
- how Indigenous knowledge is raising awareness of potential social and economic implications and averting unintended negative consequences arising from decision-making.
- how Indigenous knowledge is being used to communicate the broader ramifications of decisions, policies, strategies and plans to the community, industry or treasury.
- how Indigenous knowledge is broadening the scope of environmental and social impact assessments.
- how Indigenous knowledge is being incorporated into conservation and protection through park management plans, planning schemes and natural resource management strategies.
- how Indigenous knowledge is serving as a foundation for better collaborative and cross-stakeholder or jurisdictional management of nature.
- how Indigenous knowledge is being utilized to better engage local Indigenous communities in nature conservation, facilitating greater local action and strengthening their connections with nature.
- how Indigenous knowledge is being used to influence investment in nature within government departments and treasury.
- how Indigenous knowledge is being used to increase the long-term resilience of business decisions, policies and actions, sustaining economic growth.
- how Indigenous knowledge is being used to recognise and determine the value of the environment for Indigenous mental and physical health outcomes.

Goals and objectives of the session:

Through knowledge exchange we will build the capacity of conference participants and non-attending colleagues to include Indigenous values to nature and Indigenous knowledge in their research or decision making.



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Planned output / Deliverables:

- Through a journal article, showcase Indigenous people’s connections to nature and dependence on ecosystem services, and present researchers’ experiences engaging and collaborating with Indigenous people and including traditional knowledge in research, decision making and practices. By highlighting challenges, barriers, opportunities and solutions for building relationships and genuine collaborations and using traditional knowledge, the article will broaden the knowledge of professionals unable to attend the conference and build their capacity to incorporate such values into research and decision making.
- Through a short relevant brief for distribution to governments, we will develop a business case for why incorporating Indigenous values towards ecosystem services into decision making will add value to current approaches.

Session format:

3 hours

- 30 min – Introduction to topic, participant introductions, ice breaker etc,
- 30 min – 3 x 10min presentations
- 15 min – Q/A
- 30 min – 3 x 10min presentations
- 15 min – Q/A
- 60 min – discussion forum / brainstorming / workshopping

Voluntary contributions accepted:

Yes, I allow any abstract to be submitted to my session for review

Related to ESP Working Group:

Indigenous