

# **BOOK OF ABSTRACTS**

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### I. SESSION DESCRIPTION

#### ID: R4

### Does a single swallow attract the storm? Community conservation initiatives in the Global South

	Name	Organisation	E-mail
Host:	Albaluz Ramos-Franco	Young Ecosystem Services Specialist Network YESS - Juan de Castellanos University Colombia	aramosf@jdc.edu.co
Co-host(s):	Diana Sofía López- Cubillos	University of Melbourne	d.lopezcubillos@uq.edu.au

#### Abstract:

This session will explore the transformative role of local, rural, and indigenous-led conservation initiatives across the Global South in addressing global environmental challenges. While large-scale policies and international agreements often dominate discussions on biodiversity and ecosystem services, local communities are frequently at the forefront of on-the-ground efforts to safeguard natural resources. This session will bring together researchers and practitioners to highlight how these grassroots efforts are contributing to nature-based solutions, often in highly biodiverse yet vulnerable regions.

Through a series of case studies, we will examine the measurable ecological and socio-economic impacts that community-driven conservation efforts are generating. From preserving indigenous knowledge to enhancing biodiversity and fostering sustainable livelihoods, these initiatives offer powerful examples of how local action can ripple into broader regional and even global outcomes. We will also explore the challenges these communities face, including land tenure conflicts, limited access to resources, and the increasing pressures of climate change.

By sharing successes, lessons learned, and ongoing challenges, this session aims to elevate the importance of integrating local conservation efforts into global environmental strategies. Are these initiatives enough to spark larger-scale transformations, or do they risk being isolated examples of success in an otherwise stormy global landscape? Join us to discuss how the power of collective community action could reshape the pathways to nature-based solutions, inspired from the unique context of the Global South.

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#### Goals and objectives of the session:

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'- To showcase the ecological and socio-economic impacts of local, rural, and indigenous-led conservation initiatives in the Global South, highlighting their contributions to biodiversity conservation and nature-based solutions at regional and global scales.

- To facilitate knowledge exchange between researchers, practitioners, and community leaders by sharing successful case studies, challenges faced, and best practices in community-driven conservation efforts.

- To explore the potential of scaling up local conservation initiatives and integrating them into broader environmental policy frameworks, examining how grassroots actions can influence national and international conservation strategies.

Planned output / Deliverables:

Memories of the presentations and summary document with the final discussions of the session.

#### II. SESSION PROGRAM

Room: Waterfront 1 Date of session: Tuesday, 24 June Time of session: 15:30-18:00 (2,5 hr)

Timetable speakers:

Time	First name	Surname	Organization	Title of presentation
15:30 - 15:45	Albaluz	Ramos-Franco	Juan de Castellanos University Colombia -	Welcome speech





Time	First name	Surname	Organization	Title of presentation
			Young Ecosystem	Does a single swallow attract the
			Services Specialist	initiatives in the Clobal South
			NELWOIK TESS	initiatives in the Global South
	Carlos		Universidade Eederal da	Plural Values of Nature in Potiguara
15:45 - 16:00	Alberto	Isaza Valencia	Paraíba (LIEPR)	Coastal Communities: Conflicts,
	Alberto			Identity and Territoriality
				Empirical Evidence of Climate
				Change Adaptation Benefits of
	Yvonne	Githiora	Wildlife Works	Community Co-Designed REDD+
16:00 - 16:15	Wambui			Projects in Africa: Case of Mai
				Ndombe and Kasigau Corridor
				REDD+ projects
				Community perceptions and
				governance of Tree planting
16:15 - 16:30	Yitbarek	Weldesemaet	Environmental Society of	schemes in Ethiopia: insights for
	Thebe		Ethiopia	sustain-able ecological and
				socioeconomic outcomes
				farm system design principles
16.20 16.45	Ectalla	Dominati	Agrosparch	based on indigenous knowledge:
10.30 - 10.43	Estene	Dominati	Agresearch	the case of Maori farmland in New
				Zealand
				Including Indigenous Values and
16:45 - 17:00	Diane	Jarvis	James Cook University	Mental Models for Improved
				Human–Nature Systems
			Achoka Trust for	Place-based weeds to wealth
17.00 - 17.15	Harisha	Puttahariyappa	Research in Ecology and the Environment (ATREE)	approach: A case study on a
				community-based, localized model
				for managing invasive



Time	First name	Surname	Organization	Title of presentation
17:15 - 17:30	Amon Ngasha	Kabango	Ministry of Natural Resources & Climate Change	Advancing Ecosystem Restoration: Empirical Insights from Malawi
17:30 – 17:45	Eren	Turak	NSW Department of Climate Change Energy, The Environment and Water	Using biocultural indicators of climate adaptation to maintain and enhance ecosystem services at a Ramsar
17:45 - 18:00	Kamal	Melvani	Neo Synthesis Research Centre	Coastal forest restoration and climate resilience: learning from Sri Lanka
18:00 - 18:15	Albaluz	Ramos-Franco	Juan de Castellanos University Colombia – Young Ecosystem Services Specialist Network YESS	Questions, conclusions and session close

### III. LIST OF ABSTRACTS

The first author is the presenting author unless indicated otherwise.

# 1. Plural Values of Nature in Potiguara Coastal Communities: Conflicts, Identity and Territoriality

First authors(s): Carlos Alberto Isaza Valencia

**Other author(s):** George Emmanuel Cavalcanti de Miranda, Márcia Batista da Fonseca, Alexander Rincón Ruiz

First author affiliation: Universidade Federal da Paraíba (UFPB)

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## Contact: carlos0isaza@gmail.com

Keywords: Ecosystem Valuation, Environmental Justice, Indigenous Knowledge, Protected Area

The valuation of nature reflects multiple perspectives that vary according to culture, territory, and social relations. This study examines the diverse values of nature in two Potiguara communities located within the Barra de Mamanguape Environmental Protection Area, Brazil.

This qualitative study employs interviews, document analysis, and participatory workshops. Preliminary findings indicate that a sense of loss emerges as a central relational value, revealing the impacts of real estate speculation and conservationist neocolonialism on local ways of life.

Although only 2 km apart and separated by the estuary, these communities share strong blood ties, including siblings and children. However, one community lies within federally demarcated Indigenous Land, while the other does not. This legal distinction results in substantial differences in their perceptions of spirituality in nature and in the nature of conflicts arising from land use.

Additionally, Pentecostal churches have reshaped community perceptions of nature, leading to distinct spiritual interpretations of the land and its resources. The revitalization of the Tupi language and Potiguara historical narratives has become a key strategy for strengthening identity and autonomous territorial management.

The study suggests that land ownership—or its absence—directly influences how natural resources are valued and managed. By addressing these dynamics, this research enhances the understanding of interactions between traditional communities, environmental conservation, and territorial policies.



2. Empirical Evidence of Climate Change Adaptation Benefits of Community Co-Designed REDD+ Projects in Africa: Case of Mai Ndombe and Kasigau Corridor **REDD+ projects** 

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First authors(s): Yvonne Wambui Githiora

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Other author(s): Geoffrey Mwangi, Wambugu, Simon, Kasaine, Evariste Biembe, Loliki, Mwangi, Githiru

First author affiliation: Wildlife Works

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**Keywords:** sustainable agriculture, water security, food security, forest protection, community

This study describes the climate change adaptation benefits of community co-designed project activities under the Reducing Emissions for Deforestation and Forest Degradation (REDD+) model. Showcasing a Theory of Change (TOC) approach and associated data from household-level surveys from two ongoing projects, we demonstrate that REDD+, primarily a climate mitigation tool, can also foster significant local-scale adaptation in agriculture and forestry. We demonstrate how activities co-designed by the communities through the respective projects' theories of change and their associated indicators lead to measurable outcomes for both projects, despite differing operational contexts. In the Kasigau Corridor and Mai Ndombe REDD+ projects in Kenya and the DRC, respectively, key adaptation strategies include addressing water scarcity, promoting agricultural diversification (including "climate-smart" agriculture and multi-crop agroforestry), and diversifying livelihoods. These result in better food and water security, improved sustainable land management practices and increased incomes, and reduced forest loss and forest degradation. Key factors for successful adaptation outcomes are co-developing project interventions with communities, strengthening community decision-making structures, and

practicing adaptive management. However, the success of certain activities may be affected by broader external drivers, including legislation, market demand, socio-economic factors, and government programs. We end by underscoring the importance of aligning the indicators to project data collection methodologies to measure outcomes and suggest ways in which qualitative and quantitative data reflecting indicators along the theory of change could enhance the robustness of results. Given the complexity of social (and biological) impacts desired under REDD+ projects, classic counterfactual designs may not be practical, thereby underscoring the importance of alternative research methodologies to assess the impacts of such projects.

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# 3. Community perceptions and governance of Tree planting schemes in Ethiopia: insights for sustain-able ecological and socioeconomic outcomes

First authors(s): Yitbarek Tibebe Weldesemaet

Other author(s): No

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First author affiliation: Centre for Agroecology Water and Resilience, UK

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Keywords: Africa, communities, scheme phases, satisfaction, implementation

Historically, tree planting was primarily implemented to achieve economic functions; more recently, environmental and social goals have also been emphasised. This is due to the realisation that schemes operate in a socioecological system; hence, understanding and fulfilling local social (community) in-terests is imperative. Our study engaged with local communities to analyse their perceptions of the landscape challenges, scheme governance processes, and proposed improvements. We conducted 13 focus group discussions and 40 interviews with communities at

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13 Ethiopian tree planting scheme sites. We analysed the survey responses qualitatively and scored the level of community satisfaction with the governance of each scheme. The results indicated that the communities understood and felt the impact of the landscape challenges while being optimistic about tree planting schemes' potential to avert these issues. However, the communities differed markedly in their satisfaction with the scheme's governance, indicating that the degree to which schemes met their goals was related to the community's satisfactory engagement. Most respondents discussed issues about proper community consultation, engagement, institutionalisation, and capacity building, starting from the input phase to the scheme governance process. Therefore, communities' perceptions are valuable at all scheme phases and should be employed to improve a scheme's governance, outputs, and impacts. We hope the results will help to encourage local communities' participation in steering and refining the govern-ance of inclusive and appealing tree planting schemes with sustainable ecological and socioeconomic outcomes.

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# 4. Farm System Design Principles Based On Indigenous Knowledge: The Case Of Maori Farmland In New Zealand

First authors(s): Estelle Dominati Other author(s): No First author affiliation: Agresearch, New Zealand **Contact:** estelle.dominati@agresearch.co.nz Keywords: Māori indigenous knowledge, farm planning, farm system design

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Māori people, the indigenous people of New Zealand, make up about 15% of New Zealand's population nowadays. Māori land is about 5.6% of NZ total land area, and is mostly administered by trusts and incorporations, with many having an interest in agriculture, and also including native forests, conservation areas and fragile ecosystems providing a range of ecosystem services.

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In the past, a lot of Māori agricultural land was leased to non-Māori farmers. Nowadays, owners want to review the way their farmland is used and plan long-term, according to their cultural values to ensure the well-being of their people and the strong sustainability of farming activities.

This calls for collaborations and a trans-cultural approach to farm system design, embedded in Te Ao Māori, led by Māori owners, and applied to modern farm systems.

Over the last 10 years, A process has been co-developed to engage with Māori landowners to design farm systems, using integrated farm planning (IFP) as a base, while ensuring rangatiratanga (chiefly autonomy). IFP is used by some industry bodies, as well as regional and national government (MPI, MfE).

A Te Ao Māori view (Māori world view) is holistic and encompasses the following elements:

- Aspirations, goals, and priorities of the landowner(s), for multiple generations going forward.
- Tikanga Māori (Māori cultural values and practices) and Te Reo Māori (Māori language).
- Traditional environment and whenua (land) management methods, practice, and guidance.
- Te Tiriti o Waitangi (Treaty of Waitangi) principles.

This paper will detail how, each step of the IFP process, when Māori led, has been tailored to focus on the elements mentioned above, to deliver, not only economic value, but also environmental, social and cultural benefits and Ecosystem Services from all parts of the land.



# 5. Including Indigenous Values and Mental Models for Improved Human-Nature Systems

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First authors(s): Diane Jarvis

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**Keywords**: Indigenous Knowledge, Ecosystem Services, Nature-based Solutions, SEEA EA, First Nations peoples

Including Indigenous values in the United Nations System of Environmental-Economic Accounting Environmental Accounts (UN SEEA EA) may be one way to better ensure that values of the traditional owners are reflected in government management and planning frameworks, and that these frameworks are useful for traditional land and sea owners; as well as that they influence investment in nature within government departments and businesses.

Based on two case studies we present potential avenues, learnings, and obstacles, for incorporation of Indigenous value systems related to ecosystem services (ES) into development of policy and planning that operates under SEEA framework. The first case study reports on Nywaigi people of Australia conceptualisation of the ES linked to the Mungalla Station on their Country, and restoration of wetlands of national significance situated within the Station boundaries. The second case study explores avenues for and obstacles in evaluating benefits of nature–based solutions (NbS), with the custodians and owners of the coastal seascapes in Samoa.

We start by exploring how the Nywaigi concept of the ES of importance to Nywaigi people fits – and does not fit – with the SEEA flow accounts. We present development of the "mental map" of

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the Nywaigi people ES (and dis-services); and conceptualisation of the "spiral of Nywaigi wellbeing", with different levels on which ES co-produce contributions to their wellbeing, over time. In the second case study, we discuss how NbS and related approaches interact with the existing practices and traditional institutional arrangements, potentially affecting both the resilience of ecosystems and ecosystem services, and people and communities that depend on them, for better or worse. We close with the discussion on the potential for, and obstacles for, incorporation of the traditional value systems into accounting for ES benefits.

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# 6. Place-based weeds to wealth approach: A case study on a community-based, localized model for managing invasive Lantana camara from South India

First authors(s): Harisha Puttahariyappa

Other author(s): No

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First author affiliation: Ashoka Trust for Research in Ecology and the Environment (ATREE), India

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Keywords: Lantana invasion; localized integrated method; economic cost; environmental security

The development of inclusive management strategies and programs is necessary to deal with invasive alien species like Lantana camara (now onwards Lantana) in dry tropical forests. Better collaboration, and coordination among different stakeholders in formulating strategies and using an integrated management approach were the best management practices recommended by various review studies. Our study demonstrates the cost-effective weeds-to-wealth approach which is a tested, localized, and inclusive invasive management method. We used long-term



monitoring forest survey data and qualitative data from periodical community interviews for evaluation and comparison.

Soligas, the tribal artisans of South India in Male Mahadeshwara Hills (Karnataka) are ingeniously utilizing the invasive weed Lantana. The community involvement in conservation practices with place-based control and management tools is being used effectively in making 43 different furniture products, 46 utility products, lampshades, and a life-size elephant sculpture cheaper than cane and equally sturdy. Bangalore-based institution Ashoka Trust for Research in Ecology and the Environment (ATREE) has been facilitating the tribal and village communities on training, logistics, certification, and marketing support for Lantana products under the weeds-to-wealth approach for the past 20 years (2004 to 2024). This initiative showcased the localized innovation that generated livelihoods (more than Rs 4.1 crore) and reduced Lantana density in about 28-thousand-hectare forests by removing 800 tons of Lantana.

This long-term study revealed that the use of the invasive Lantana as an opportunity for control and generate livelihood. A long-term study showed that reduced density of Lantana and increased regeneration of native plant species in harvested sites. More inclusive policy and regulatory roles to ease accessibility and ownership to the local community in control and management of invasive is an urgent need for solving the Lantana problem.

## 7. Advancing Ecosystem Restoration: Empirical Insights from Malawi

First authors(s): Amon Ngasha Kabango Other author(s): No First author affiliation: Ministry of Natural Resources & Climate Change, Malawi



### Contact: amonkabango@yahoo.com

**Keywords:** Ecosystem Restoration, Bonn Challenge, Barriers, Policy Recommendations, Stakeholder Coordination

This study, conducted in collaboration with the United Nations Environment Programme—World Conservation Monitoring Centre (UNEP-WCMC), critically analysed ecosystem restoration initiatives, identified significant challenges, and offered evidence-based recommendations. Focusing specifically on Malawi, the research evaluated the country's restoration efforts within the framework of global commitments such as the Bonn Challenge and the UN Decade on Ecosystem Restoration. Malawi has pledged to restore 4.5 million hectares of degraded land by 2030, aligning with the Bonn Challenge. This comprehensive analysis was grounded in a thorough literature review and empirical data gathered from surveys with 25 subject matter experts. It meticulously assessed both effective interventions and persistent barriers to restoration. Key impediments identified include inadequate prioritisation of ecological restoration, limited financial resources, and fragmented governance structures. To tackle these challenges, the study advocates for the incorporation of restoration practices into national development agendas, increased financial investment, and improved coordination among various stakeholders. Moreover, the findings highlight the necessity for expanded comparative research across various geopolitical contexts, facilitating cross-regional analyses and the identification of best practices derived from successful restoration models globally.

# 8. Using biocultural indicators of climate adaptation to maintain and enhance ecosystem services at a Ramsar wetland under Indigenous joint management

First authors(s): Eren Turak



## Other author(s): No

First author affiliation: NSW Department of Climate Change Energy, the Environment and Water

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**Keywords:** Indigenous knowledge; Ramsar; ecosystem accounting; ecosystem services; decision making

Narran Lake Nature Reserve (Dharriwaa) is a Ramsar wetland in the traditional lands of the Yuwaalaraay/Euahlayi People in South-Eastern Australia. The reserve is managed by NSW Government (DCCEEW) jointly with Aboriginal people under a memorandum of understanding (MoU) which establishes the Narran Lake Nature Reserve Joint Management Committee (JMC). The revised plan of management creates new opportunities for Indigenous knowledge to be incorporated into conservation and protection by combining: cultural principles that guide joint management; the objects of the NSW National Parks and Wildlife Act; Australian Ramsar management principles and the principles for nature reserves in NSW. To take advantage of these new opportunities, a collaborative project is underway involving the JMC, DCCEEW and researchers from Macquarie University to develop biocultural indicators of climate change adaptation for identifying and assessing indigenous knowledge for inclusion into decision making along these principles and facilitating the engagement of Aboriginal communities in nature conservation. The first steps are to: 1) build community based- participatory monitoring programs 2) identify and map place-based cultural values; and 3) develop seasonal calendars. The indicators that come out of this will be used locally for measuring success of reserve management and to develop local ecosystem accounts using quantitative measures nature's contributions to local Aboriginal communities (ecosystem services). This will enable prioritising resources invested by the NSW government into reserve management to optimise the well-being and interests of local communities and the recovery and protection of threatened species and

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endangered ecological communities. These indicators will also feed into State-wide plans and strategies e.g. the NSW Climate Adaptation Strategy and Action Plan and the NSW First Nations Investment Strategy. Progressing such work requires bridging the divide between social, technical, and bioethical issues. The JMC recognises that this will be difficult but is ready for the challenge.

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## 9. Coastal forest restoration and climate resilience: learning from Sri Lanka

First authors(s): Kamal Melvani Other author(s): No First author affiliation: Neo Synthesis Research Centre, Sri Lanka Contact: neosynth@sltnet.lk

Keywords: Coastal forest restoration, climate resilience, Sri Lanka

Major risks from enhanced global warming that impact coastal communities are sea level rise, increasing temperatures, and frequent weather events (storms, cyclones, coastal flooding). After the 2004 Tsunami, the Neo Synthesis Research Centre established a 3km coastal forest at Kalmunai on Sri Lanka's east coast in 2005. Inhabitants of this densely populated area obtain freshwater from shallow wells dug within a sensitive Gyben Herzberg type groundwater lens. The coastal forest aimed to protect this area against future tsunamis and impacts of sea level rise exacerbated by climate change.

After discussions with local government, Forest, and Coast Conservation Departments, and previously mobilised members of 34 community groups, areas and strategies for forest establishment and management were determined. The nearest mature coastal forest at



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Sanghamankande which had withstood the Tsunami provided the landscape design model and species to be used. We constructed 75 cadjan enclosures between Kalmunai and Periyaneelvenai, added water hyacinth for soil enrichment, planted 23 species of mainly native trees and shrubs, mulched with paddy straw, and watered from wells dug on the shore. After project closure, the coastal forest was handed over to the community for management.

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Twenty-five years later, despite some gaps, there remains a contiguous green wall where trees exceed 15m in height. Tree roots are densely matted, hold the sand intact and protect land against sea water intrusion. Vegetation barriers are reducing flood inundation, bioremediating increasingly saline groundwater, reducing heat stress with shade, recreating habitat and sequestering carbon. Given the diverse ecosystem services provided, we are now engaged in discussions with numerous stakeholders on how to conserve this coastal forest model and replicate it in other sensitive coastal areas of Sri Lanka. Other small island states that are vulnerable to sea level rise would benefit from our knowledge and experience.