

# 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: T7a**

Weaving a Basket of Benefits: Bargaining over Ecosystem Service Value Interactions across Landscapes, Scales, and Institutions

**Hosts:**

	Name	Organisation	E-mail
<b>Host:</b>	Andrew Buckwell	Griffith University	a.buckwell@griffith.edu.au
<b>Co-host(s):</b>	Edward Morgan	Griffith University	ed.morgan@griffith.edu.au

**Abstract:**

Landscapes generate a range of ecosystem service benefits at multiple geographic and temporal scales. Sustainable management of these landscapes is pre-requisite to the achievement of the SDGs, the Paris Agreement, and the objectives in the Kunming-Montreal Global Biodiversity Framework. Combined, we describe these as a ‘basket of benefits’ (Morgan et al., 2022). Some services in this ‘basket’ generate benefits that are readily bankable and are reflected and often captured in markets for products. This has historically commonly resulted in unsustainable industrial extraction and loss of ecosystem integrity. Other benefits can be harnessed within the regenerative capacity of the ecosystem. Commonly, these benefits are non-market in nature and are rarely sources of monetary income or investment into their sustainable managed.

These landscapes are also home to communities who commonly rely directly on local ecosystem service benefits for their livelihoods and indirectly from ecosystem integrity and who conserve and manage those landscapes that generate positive externalities. However, conventionally, they rarely receive any benefits for the ecosystem services that accrue to others at other non-local scales, e.g. water quality, from downstream communities, or climate regulation services, from the global community. Instead, others receive these benefits, and the local communities suffer opportunity costs – costs associated with choosing not to exploit the landscape unsustainably. As a result, communities are often faced with a false choice between conservation and development.

A number of mechanisms already exist that try to capture the ecosystem service values that sustain ecosystem integrity: e.g. (i) non-timber forest products, ecotourism and eco-labelling, (ii) payments for ecosystems services, and (iv) forest carbon mitigation schemes (reducing emissions from deforestation and degradation). However, they can lack integrity and consideration of scale, and consequently have been insufficient in attracting investment to meet our global goals. Today, emerging frameworks, technologies, and disciplines, such as ecosystem accounting, remote sensing, and economic valuation of ecosystem services can be combined to evaluate and value ecosystem service gains and losses at multiple scales, to provide robust data to demonstrate the value of sustainable landscape management, making the capturing of this value feasible and defensible. These systems potentially provide the opportunity for communities across the landscape to ‘bargain’ and generate benefit-sharing that better reflects the whole ‘basket of benefits’ of ecosystem services across the landscape. This could in turn widen access to and improve the integrity of existing sustainable finance schemes.

### Goals and objectives of the session:

We propose an interactive workshop session in the format of a 'scientific game' – our approach to the bargaining component is definitely 'gamified'. We propose a session of 2 hours to explore a process to map and evaluate the basket of benefits at the different scales for a hypothetical landscape (but based on real environmental economic data) from different perspectives (e.g. community, investor, policymaker). In this session we will use ecosystem extent and economic values of ecosystem services to generate a series of ecosystem accounts for two connected communities. We will then introduce a series of development scenarios and revisit the ecosystem accounts to identify starting points for bargaining options. Towards the end will investigate what suites of institutional settings and levers are needed to test how the basket of benefits framing can promote local livelihoods, sustain ecosystem integrity, and potentially be captured through sustainable finance.

### Planned output / Deliverables:

Data will contribute to the session facilitators' ongoing research projects (PhD thesis) and an article for a peer reviewed journal in the field of landscape economics and Coasian bargaining. Participants will be asked to sign a consent form.

Participants will benefit from a novel interactive exploration of the connections and interactions between ecosystems across physical landscapes, spatial and temporal scales, and institutions both possible and probable!

### Session format:

Total for session: 2 hours.

0–15 minutes: Introduction to the concepts being tested

15–50 minutes: Building starting point ecosystem accounts

50–80 minutes: Running first development scenario and bargaining

80–100 minutes: Running second development scenario and bargaining

100–120 minute: Reflecting on outcomes; discussion on funding sources

### Voluntary contributions accepted:

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

### Related to ESP Working Group:

[TWG 7 – Economic & Monetary valuation](#)