

# BOOK OF ABSTRACTS

- I. SESSION DESCRIPTION
- II. SESSION PROGRAM
- III. ABSTRACTS

## I. SESSION DESCRIPTION

### ID: O2

Ecosystem services and human well-being in Latin America: a relationship or an assumption?  
/ Servicios ecosistémicos y bienestar humano en América Latina: una relación o un supuesto?

Format: Hybrid

#### Hosts

|          | Name             | Organisation         | E-mail             |
|----------|------------------|----------------------|--------------------|
| Host     | Victor H. Marin  | Universidad de Chile | vmarin@uchile.cl   |
| Co-Hosts | Luisa E. Delgado | Universidad de Chile | ldelgado@uchile.cl |

#### Abstract

One of the main ideas about ecosystem services (ES) is their contribution to human well-being. However, recent literature searches show that only 5% of the articles from Latin American (LA) countries analyze well-being data. Are there LA data showing that ES contribute to human wellbeing, or is it only an assumption on ES studies? We expect that participants will contribute to answering this question by showing the studies' results which should include ES and well-being data.

#### Goals & Objectives

To answer the question on whether or not data support the idea that ecosystem services contribute to human well-being.

#### Planned Output

Presentations on Latin American data on ecosystem services and human well-being.

#### Session Format

1. Presentations (10 minutes each)
2. Round Table (30 min)
3. Discussion (1 hour)

#### Acceptance of voluntary contributions

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

### Relation to ESP Working Groups or National Networks

Other

## II. SESSION PROGRAMME

**Date of session:** Thursday 9

**Time of session:** 14:00–14:50

### Timetable speakers

| Time            | First name | Surname       | Organization  | Title of presentation  |
|-----------------|------------|---------------|---|--|
| 14:00–<br>14:15 | Myriam     | Sánchez-Mejía | Corporación<br>Biotec,<br>Colombia  | Biodiversidad para todos.<br>Valoración y remuneración de la<br>biodiversidad y los servicios<br>ecosistémicos y su relación con<br>el bienestar, en los territorios<br>en Colombia. |
| 14:15–<br>14:30 | Felipe     | Benra         | Leuphana<br>University<br>Lüneburg,<br>Sustainability<br>Faculty,<br>Social–<br>Ecological<br>Systems<br>Institute,<br>Germany  | Mismatches in the ecosystem<br>services–wellbeing nexus: a<br>case study for Chilean<br>Patagonia  |
| 14:30–<br>15:45 | Matías     | Barceló       | Center of<br>Applied<br>Ecology and<br>Sustainability<br>(CAPES),<br>Departamento<br>de Ecología,<br>Facultad de<br>Ciencias<br>Biológicas,<br>Pontificia<br>Universidad<br>Católica de | Perceptions of land–sea<br>interactions and ecosystem<br>services and its contribution to<br>human well–being in the<br>Valdivian coast, Southern Chile.                             |

| Time | First name | Surname | Organization       | Title of presentation |
|------|------------|---------|--------------------|-----------------------|
|      |            |         | Chile,<br>Santiago |                       |

### III. ABSTRACTS

#### 1. *Type of submission:* Abstract / Resumen

O. Other sessions / Otras sesiones: O2 – Ecosystem services and human well-being in Latin America: a relationship or an assumption?/ Servicios ecosistémicos y bienestar humano en América Latina: una relación o un supuesto?

Biodiversidad para todos.

Valoración y remuneración de la biodiversidad y los servicios ecosistémicos y su relación con el bienestar, en los territorios, en Colombia.

*First author(s):* Myriam SANCHEZ-MEJIA

*Presenting author:* Myriam SANCHEZ-MEJIA

*Contact:* myriams@cgiar.org

Colombia es reconocida como país despensa mundial de alimentos para la humanidad (BID2014) por su riqueza natural, al tiempo que los índices de pobreza monetaria y hambre, sobrepasan el 40% (DANE2021).

En Colombia, la biodiversidad y los servicios ecosistémicos no están “valorados” como parte de dinámicas socioecológicas (Rincón-Ruiz A. et al (edits) 2021), a nivel microeconómico, y no se “remuneran”, al servicio del bienestar, en la construcción de bioeconomías locales sostenibles. Adicionalmente, no siempre se agrega valor a la biodiversidad local por desconocimiento o no reconocimiento (Sánchez M 2016), lo cual podría explicar el contraste de pobreza monetaria en territorios de especial riqueza en biodiversidad y servicios ecosistémicos.

En Colombia, las políticas y prácticas de valoración y remuneración de la biodiversidad y los servicios ecosistémicos-BySE, no reflejan relación con el bienestar en los territorios. No son reconocidos en las dinámicas socio ecológicas a nivel micro, como podría plantearse (IPBES2022) y no se remuneran en la construcción de una bioeconomía y una comunidad local sostenible.

Un reciente artículo registra 186 políticas relacionadas con la biodiversidad en el país (Echeverry A., 2023). Como parte de un estudio del estado del arte en el tema, en una

investigación doctoral, buscamos clasificar los tipos de valoración y remuneración que puedan identificarse en estas políticas, en relación con el bienestar en los territorios que albergan esta biodiversidad, con el interés de avanzar en la comprensión de los referenciales de los tomadores de decisiones y los actores locales, con orientaciones de valoración plural y remuneración en economías diversas.

*Keywords:* Biodiversidad y servicios ecosistémicos, Valoración y remuneración, Bienestar, Comunidades locales, Colombia.

2. *Type of submission:* Abstract / Resumen

O. Other sessions / Otras sesiones: O2 – Ecosystem services and human well-being in Latin America: a relationship or an assumption?/ Servicios ecosistémicos y bienestar humano en América Latina: una relación o un supuesto?

Mismatches in the ecosystem services–wellbeing nexus: a case study for Chilean Patagonia

*First author(s):* Felipe Benra

*Presenting author:* Felipe Benra

*Other author(s):* Laura Nahuelhual, Maria Felipe–Lucia, Rachel R.Y Oh, Jana Kachler

*Contact:* benra.felipe@gmail.com

The supply of ecosystem services (ES) is commonly assumed to be linked to human wellbeing within socio–ecological systems. However, these linkages are seldom assessed using quantitative approaches at large scales and low spatial resolution. Here, we investigated the complex bidirectional linkages between ES supply and material wellbeing (income) using data from 382,199 rural properties in 178 municipalities from Chilean Patagonia. We assessed two model groups using structural equation modeling (SEM), wherein the first group assumed an impact of ES supply on wellbeing and the second postulated the opposite impact, with wellbeing affecting ES supply. For each group we run a separate SEM per ES category (i.e. provisioning, regulating, and cultural), making a total of six SEM analyzed. We found that neither model group was significantly stronger than the other, as the linkage between ES supply and material wellbeing was not significant in any model. Each model differed notably in their significant path coefficients, with models for cultural and regulating ES showing a better fit than for provisioning ES. We therefore assert that previously assumed links between ES and material wellbeing do not necessarily hold at larger spatial scales and in contexts where rural economies are more diversified and less dependent on natural capital. Understanding ES supply–wellbeing dynamics and how they vary across spatial and temporal scales is important for fostering sustainable socio–ecological systems.

*Keywords:* Ecosystem services supply – Nature’s contributions to people – human wellbeing – human agency – income – socio–ecological system

3. *Type of submission:* Abstract / Resumen

O. Other sessions / Otras sesiones: O2 – Ecosystem services and human well-being in Latin America: a relationship or an assumption?/ Servicios ecosistémicos y bienestar humano en América Latina: una relación o un supuesto?

Perceptions of land–sea interactions and ecosystem services and its contribution to human well-being in the Valdivian coast, Southern Chile.

*First author(s):* Matías Barceló

*Presenting author:* Matías Barceló

*Other author(s):* María José Martínez–Harms, Stefan Gelcich

*Contact:* barcelo.matias@gmail.com

Coastal communities worldwide face numerous threats due to environmental changes, leading to a decrease in the productivity of fisheries and agricultural land at the land–sea interface. Understanding the diverse processes involved in land–sea interactions and their influence on ecosystem services provided by terrestrial and marine ecosystems is crucial. These ecosystems offer valuable benefits such as food provision, coastal protection, climate regulation, and cultural experiences to human populations. However, our understanding of their contribution to human well-being remains limited. This study aimed to investigate perceptions of land–sea interactions, changes in perceived ecosystem services, and their impact on human well-being in the coastal region of Valdivia. Semi-structured interviews were conducted with 99 participants in the Valdivian coast in Southern Chile. The participants were asked about their perceived changes in marine and terrestrial ecosystem services over the past five years and whether these changes were attributed to land–sea interactions. The findings revealed that local communities in the Valdivia region recognized the significance of land–sea interactions in relation to ecosystem services. Perceived changes in ecosystem services were predominantly negative, except for cultural services. However, despite the degradation of ecosystem services, human well-being was perceived positively, indicating a potential decoupling between ecosystem services and well-being. This supports the paradox of increasing human well-being despite the degradation of ecosystem services. These findings have important implications for the management and conservation of coastal ecosystems in the Valdivia region. The study highlights the need to enhance awareness and understanding of the importance of land–sea interactions for human well-being. It is crucial to determine the threshold at which this relationship may rupture, leading to declining human well-being. By incorporating these insights into decision-making processes,

policymakers and stakeholders can develop sustainable practices that ensure the long-term resilience and health of the coastal environment.

*Keywords:* Coastal communities; environmentalist's paradox, nature's contributions to people, perceived changes, ecosystem services, land-sea interactions, human well-being