

**3<sup>rd</sup> Global Conference  
on Strengthening Synergies  
between  
the Paris Agreement and the 2030  
Agenda for Sustainable Development**

**Side Event:  
“Catalysing Nature-based  
Solutions for Biodiversity,  
Climate Change and  
Sustainable Development  
through Ecosystem  
Restoration”**



***Biodiversity-Health-Sustainability Nexus  
in Socio-Ecological Production Landscapes  
and Seascapes (SEPLS)***

Tokyo, Japan

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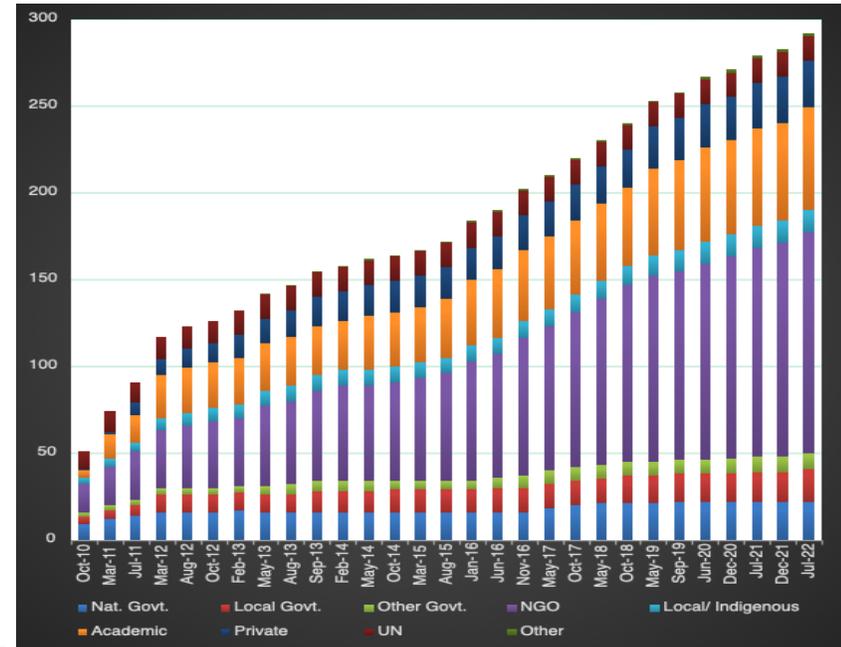
United Nations University Institute for the Advanced Study of Sustainability (UNU-IAS)



# The Satoyama Initiative & International Partnership for the Satoyama Initiative (IPSI)

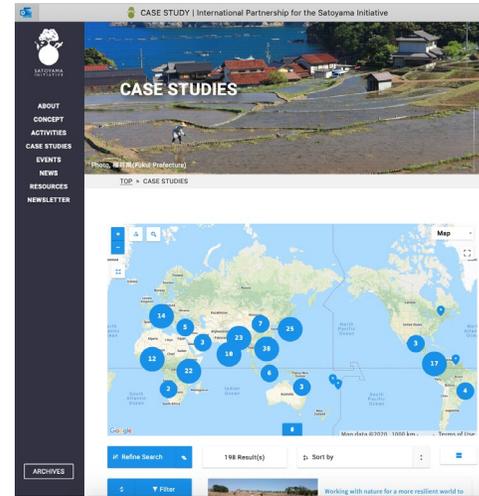
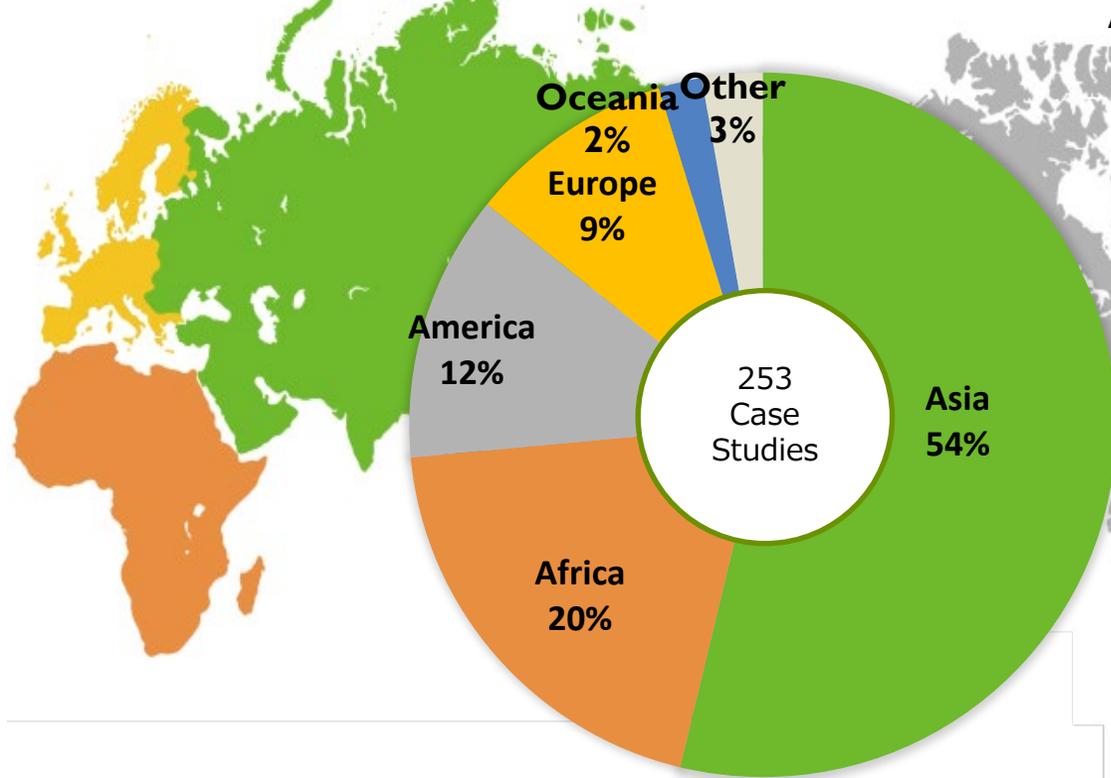
- **The Satoyama Initiative**: a global effort to realize “**societies in harmony with nature**” – building on the concept of **socio-ecological production landscape and seascapes (SEPLS)**
- **IPSI**: Launched at CBD COP 10 in 2010 as **a global platform** to promote networking and collaboration on SEPLS management – contributing to CBD’s second objective: “**Sustainable use of biodiversity**”
- A partnership made up of **292 member organizations** (e.g., government, NGOs, private sector, academia, IPLCs) dedicated to working together - fostering **synergies in the implementation**
- IPSI Secretariat at UNU-IAS

**SEPLS**: Areas where **production activities** help to maintain **biodiversity** and **ecosystem services** in various forms while sustainably supporting the **livelihoods** and **well-being** of local communities (UNU-IAS and IGES eds. 2015)

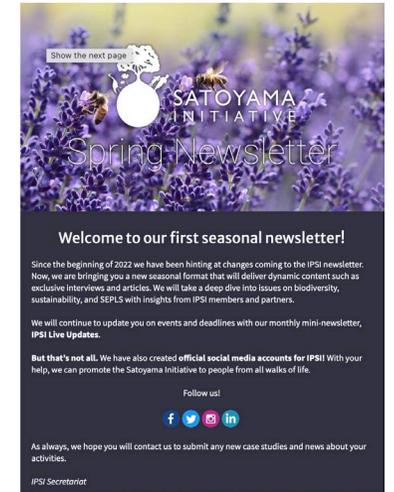


# IPSI Case Studies

As of July 2022



<https://satoyama-initiative.org>



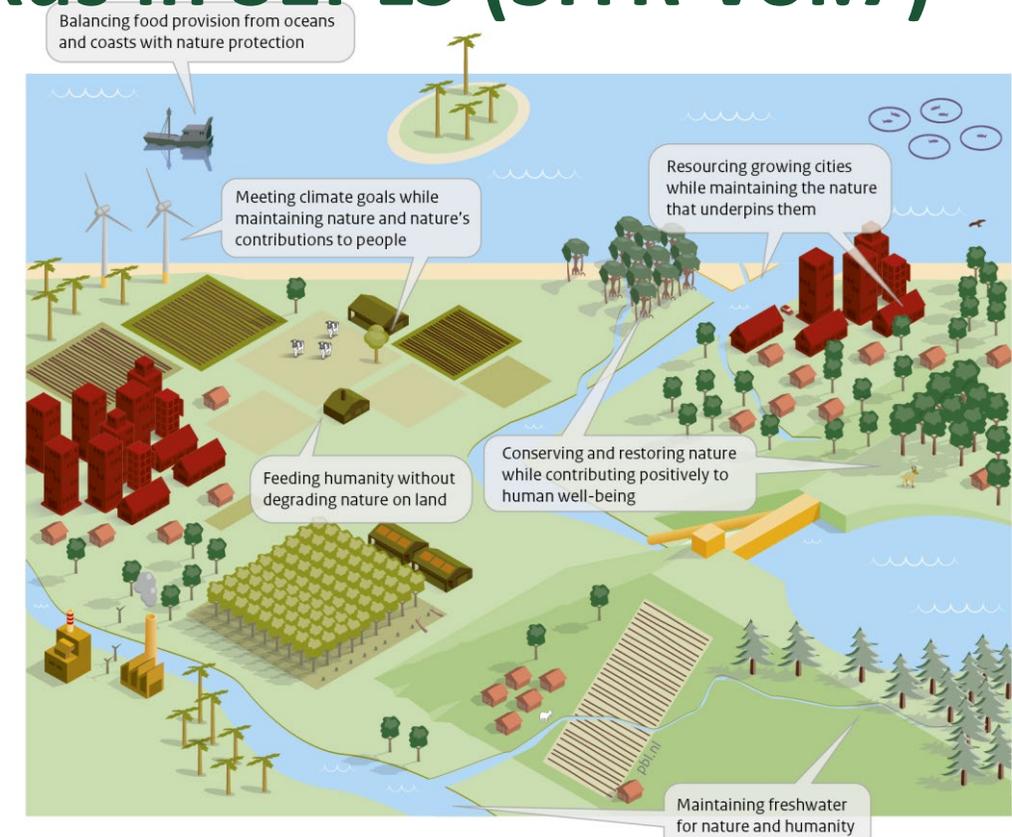
## Satoyama Initiative Thematic Review (SITR)

### Ecosystem types



# Biodiversity-Health-Sustainability Nexus in SEPLS (SITR Vol.7)

- **Integrated Solutions** for Sustainable Futures
  - The 2030 Agenda for Sustainable Development:
    - SDGs are **integrated** and **indivisible: Integrated solutions** to balance the three dimensions (Target 17.14: Enhance **policy coherence**)
  - **Global Warming of 1.5°C: An IPCC Special Report**
    - “Limiting warming to 1.5°C above pre-industrial levels would require **transformative systemic change, integrated with sustainable development.**” (IPCC 2018, p. 40).
  - **Post-2020 Global Biodiversity Framework:**
    - Kunming Declaration (Oct 2021): “**urgent and integrated action for transformative change** through **policy coherence** at all levels of government ...”
  - **One Health Joint Plan of Action (2022-2026)**
    - A comprehensive definition by One Health High-Level Expert Panel (FAO, WHO, OIE, UNEP): An **integrated, unifying approach** that aims to **sustainably balance and optimize** the health of people, animals and ecosystems
    - Further the quadripartite collaboration for **mainstreaming One Health approach** at the global, regional, national and local levels



The nexus in the landscape (IPBES 2019)

**Nexus:** A perspective which emphasizes the **inter-relatedness** and **interdependencies** of ecosystem components and human uses, and their **dynamics** and **fluxes across spatial scales and between components** (IPBES 2019).

# Biodiversity-Health-Sustainability Nexus in SEPLS: Case study approach

*How do **SEPLS approaches on the ground** contribute to more sustainable management of natural resources, achievement of global goals for **biodiversity and sustainable development**, and **good health for all**?*



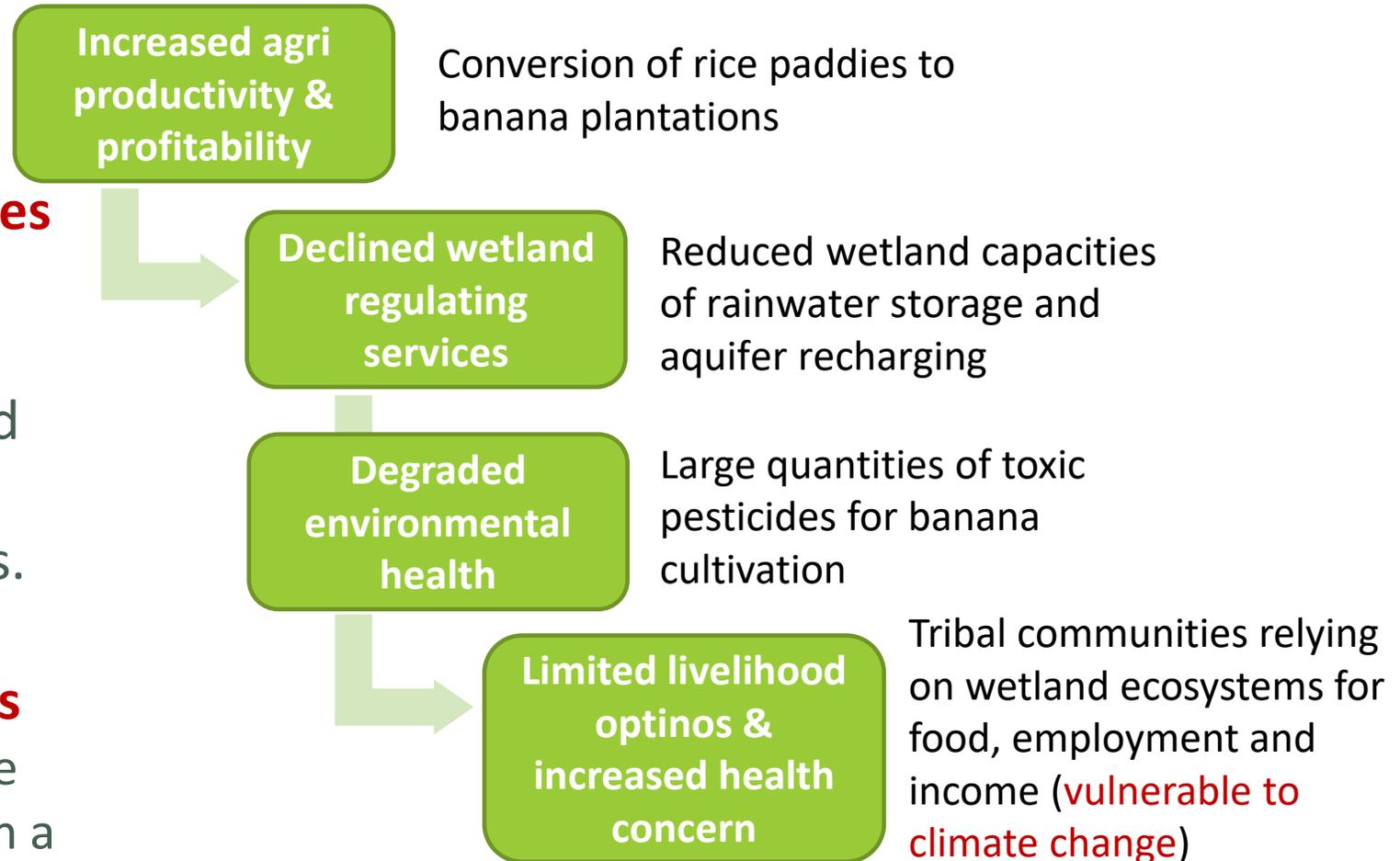
## ■ 11 case studies

1. **Multiple benefits** from SEPLS
2. **Trade-offs** and **synergies** between efforts in managing SEPLS
3. Measurement of the **effectiveness** of SEPLS management
4. **Challenges** and **opportunities**

## ■ Online Workshop: 28-30 June 2021

# Integrated Solutions in SEPLS: Inevitable trade-offs

- An **inherent challenge** in SEPLS management
- Trade-offs cut across **sectors, scales and levels**, manifested **between**:
  - **Ecosystem services** (e.g., provisioning vs. regulating, food quantity vs. quality)
  - **Stakeholders** (e.g., upstream vs. downstream)
  - **Human well-being components** (material, relational and subjective HWB across stakeholders or within a community or individual)
- **Political and gendered**

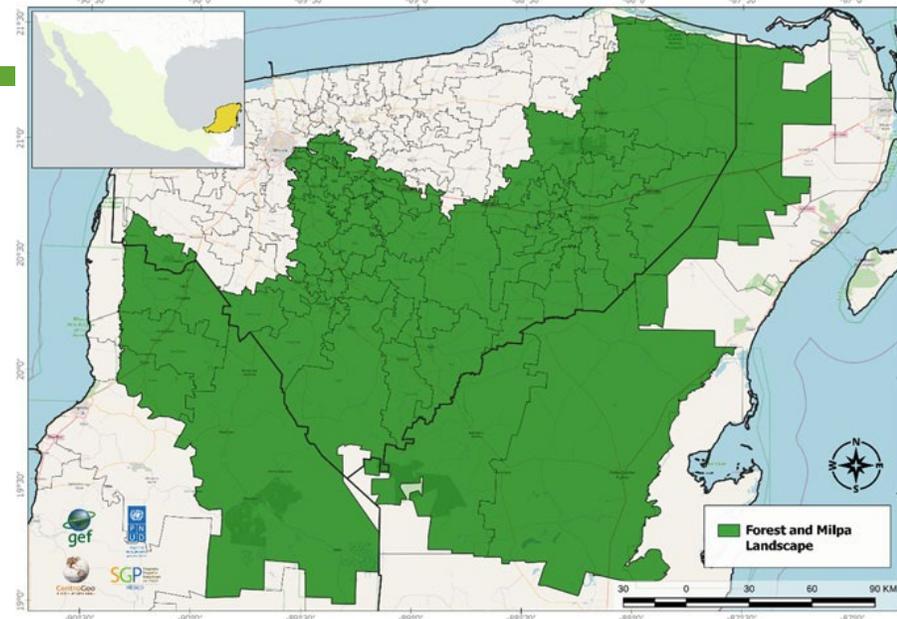


**Cascading effects from ecosystem change in paddy wetland in Wayanad District, Kerala, India**

(by Kumar et al. forthcoming: M.S. Swaminathan Research Foundation)

# Integrated Solutions in SEPLS: Creating synergies

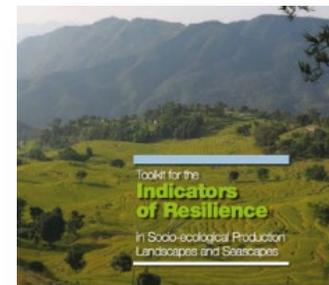
- **Forest and Milpa Landscape (FML) in Yukatan, Mexico** : An essential **carbon reservoir** worldwide
- **Participatory Resilience Assessment: The 2020-2030 Country Strategy of the GEF Small Grants Programme (SGP)**
  - Used “**Indicators of Resilience in SEPLS**”: 2 Workshops attended by **40 peasants**
  - Collectively identified “**human health**” as a priority – **interlinked local threats** (e.g., agricultural chemicals, water, dietary habits, etc.)



Region of the forest and milpa landscape

**Milpa:** a system dependent on the rainfall and soil’s ability to retain water

- Develop **local strategies:**
  - Share the **values of milpa** (e.g., healthy traditional diets) with children
  - **Communicate with the locals** about the pesticide problems
  - **Make alliances** with other organizations to resolve the water contamination
  - Create **medicine hospitals** to overcome the shortage of health services

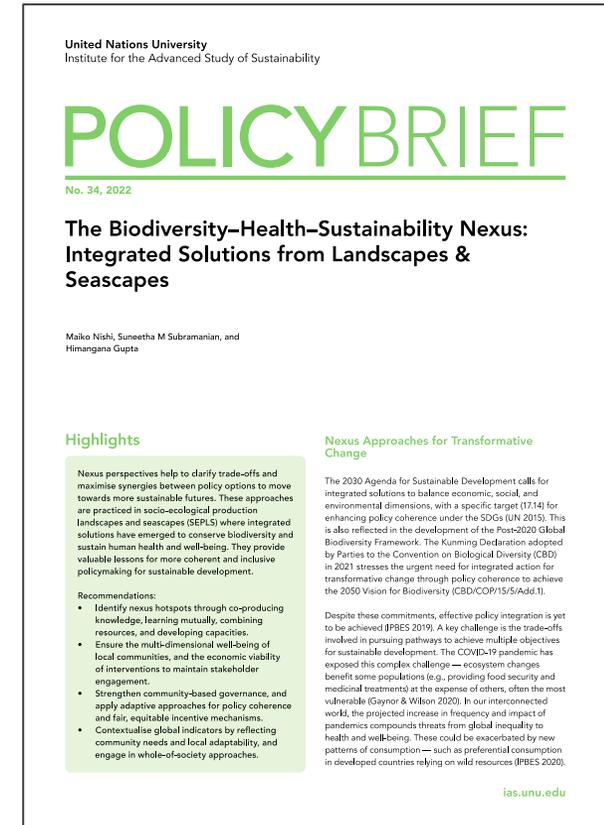


Indicator	Evaluation
<b>Livelihoods</b>	
16) Socio-economic infrastructure	Regular
17) Human health and environmental conditions	Low
18) Productive diversification	High
19) Biodiversity-based livelihoods	High
20) Socio-ecological mobility	Regular

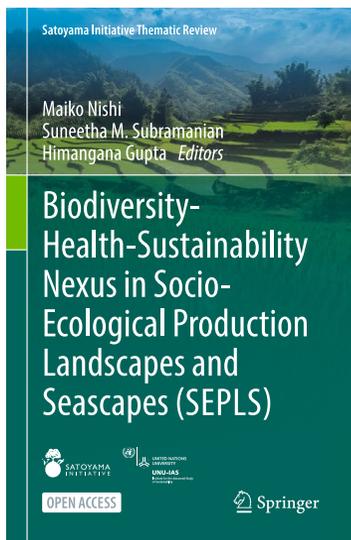
(by Méndez-López et al. 2022)

# Policy recommendations:

- **Four steps** to materialize nexus approaches for biodiversity mainstreaming:
  1. Identify **nexus hotspots** through **knowledge co-production** by stakeholders
  2. Ensure **multi-dimensional well-being** of local communities and safeguard **economic viability** of interventions
  3. Strengthen **community-based governance institutions** and take **phased and adaptive approaches** to enhance **policy coherence** and **fair and equitable incentive mechanisms**
  4. Contextualise **globally accepted indicators** by reflecting community needs and local adaptability, and **engage in 'whole-of-society'** approaches throughout the **entire planning cycle**.



<https://collections.unu.edu/view/UNU:8880>



- **13 Chapters: 1 Introduction, 11 Case Studies, 1 Synthesis**
- **Synthesis chapter lead authors (Volume Editors):** Nishi, M., Subramanian, S.M., Gupta, H.
- **Synthesis chapter contributing authors:** Nadia Bergamini, Valerie Braun, Jung-Tai Chao, Dipayan Dey, Andrea Fischer, Chris Jacobson, Paulina G. Karimova, N. Anil Kumar, Kuang-Chung Lee, María Elena Méndez López, Patrick Maundu, Yasuyuki Morimoto, William Olupot, Yaw Osei-Owusu, Raymond Owusu-Achiaw, Md. Shah Paran, Vipindas P, Andrés Quintero-Ángel, Sara Catalina Rodriguez Dias, Jeeranuch Sakkhamduang, Fausto O. Sarmiento, V.V. Sivan, and Rashed Al Mahmud Titumir.
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Thank you for your attention!

