

# *Ecosystem Restoration through Managing Socio-Ecological Production Landscapes and Seascapes (SEPLS)*

**Satoyama Initiative Thematic Review  
Volume 8 (SITR-8)  
8 July 2023**

MAIKO NISHI, RESEARCH FELLOW

INTERNATIONAL SATOYAMA INITIATIVE, BIODIVERSITY & SOCIETY (BDS), UNU-IAS



UNITED NATIONS  
UNIVERSITY

**UNU-IAS**

Institute for the Advanced Study  
of Sustainability



**SATOYAMA  
INITIATIVE**

# OVERVIEW:

## *Satoyama Initiative Thematic Review (SITR)*

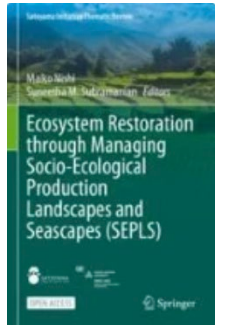
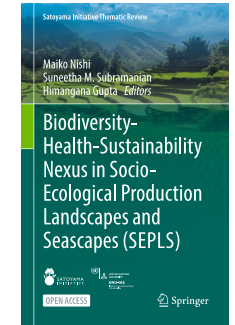
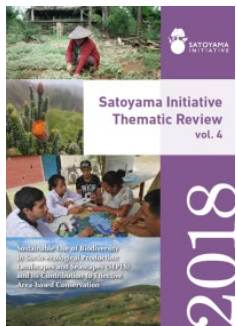
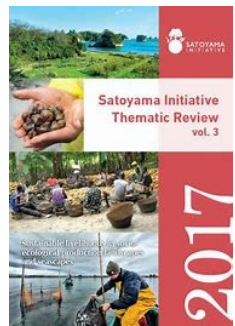
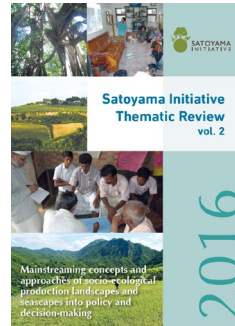
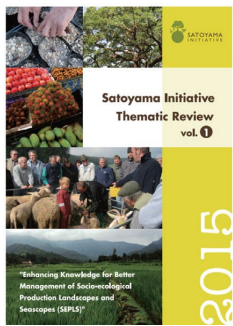
- A compilation of **case studies by IPSI members** providing knowledge and lessons related to **Socio-Ecological Production Landscapes and Seascapes (SEPLS)**
- Collects experiences and relevant knowledge, especially **based on activities on-the-ground**.
- Includes **a synthesis** to clarify the relevance to policy and academic discussion and to help feed lessons learned back to the field.



- ❖ Enhance **the understanding of SEPLS**
- ❖ **Feed into the IPSI** to accelerate and facilitate activities for SEPLS
- ❖ **Disseminate IPSI knowledge** to the international community and contribute to **policy recommendations**

The screenshot shows the 'CASE STUDIES' section of the IPSI website. It includes a navigation menu on the left, a world map with 285 results, and a list of case study thumbnails. The thumbnails include titles such as 'Investigation and screening of aboriginal plants to habitat creation plants for beneficial insects in Incheon' and 'Indigenous Pastoralist Conservation Through Establishment of Governmentally-Run Community Income Generating Activities in Tanzania'.

# Hot topics of the SITR volumes

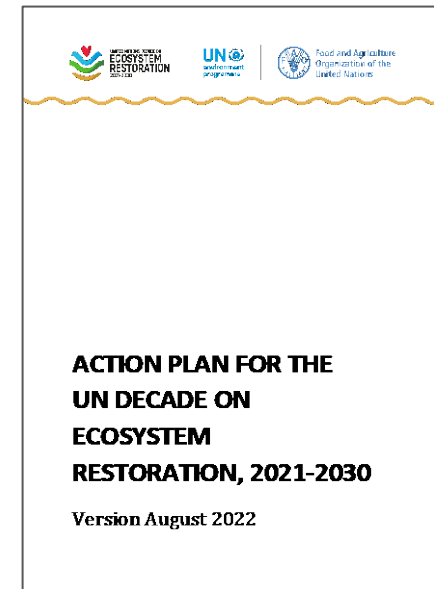
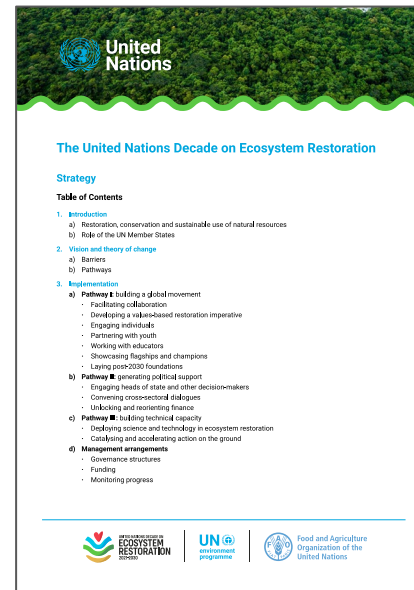


- Vol. 1: Enhancing **Knowledge for Better Management** of SEPLS (Tools and approaches)
- Vol. 2: **Mainstreaming** the Concepts and Approaches of SEPLS into Policy and Decision-Making (Mainstreaming strategies)
- Vol. 3: **Sustainable Livelihoods** in SEPLS (Natural and social resilience)
- Vol. 4: Sustainable Use of Biodiversity in SEPLS and Its Contribution to **Effective Area-Based Conservation** (Contribution to Aichi Biodiversity Target 11)
- Vol. 5: Understanding the **Multiple Values** Associated with Sustainable Use in SEPLS (Contribution to IPBES Value assessment)
- Vol. 6: Fostering **Transformative Change** for Sustainability in the Context of SEPLS (Contribution to IPBES Transformative Change assessment)
- Vol. 7: Biodiversity-Health-Sustainability **Nexus** in SEPLS
- Vol. 8: **Ecosystem Restoration** through Managing SEPLS

# UN Decade on Ecosystem Restoration

UN declared **2021-2030** as the “**UN Decade on Ecosystem Restoration**” with the aim at **supporting and scaling up** efforts to **prevent, halt and reverse** the degradation of ecosystems worldwide and **raise awareness** of the importance of successful ecosystem restoration.

- **March 2019: UNGA Resolution** adopted at the 73rd session
- **September 2020: Strategy** (and visual identity) released
- **June 2021: Officially launched**
- **August 2022: Action Plan** released
- **Lead agencies: UNEP and FAO**
- **Partners : 226 agencies** (2 lead agencies, 17 collaborating agencies, 3 funding partners, 14 global partners, 56 supporting partners, 136 actors)
- **UNU: a collaborative agency**



# “ECOSYSTEM RESTORATION” IS A PROCESS OF:

- **reversing the degradation of ecosystems to regain their ecological functionality**; in other words, to **improve the productivity and capacity of ecosystems to meet the needs of society** (UNEP 2019) – **UN Decade on Ecosystem Restoration**
- **assisting the recovery** of an ecosystem that has been degraded, damaged, or destroyed (SER, 2002)
- **assisting the recovery** of a degraded, damaged, or destroyed ecosystem to **reflect values** regarded as **inherent in the ecosystem** and to **provide goods and services that people value** (Martin 2017).



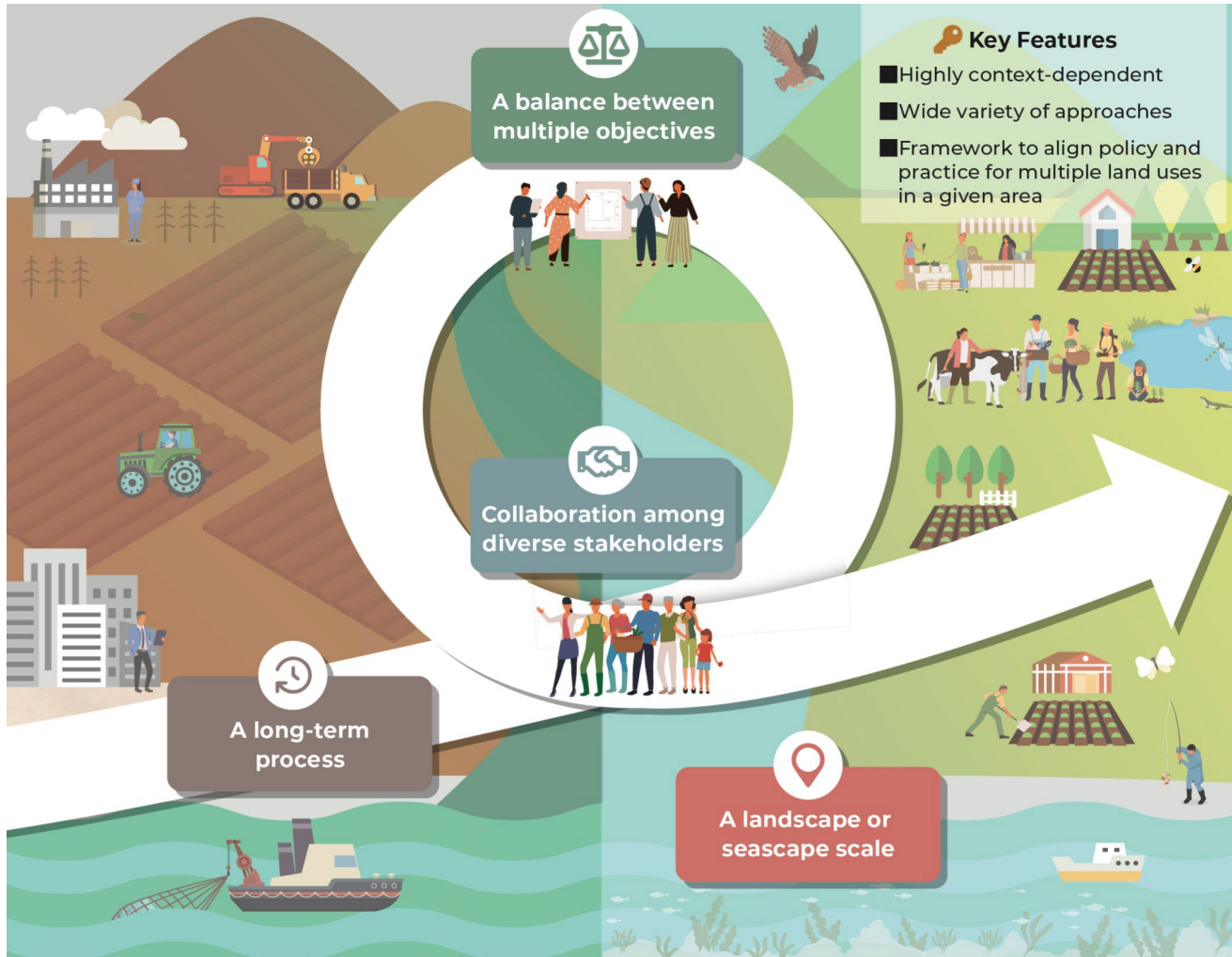
The links between the environment and Sustainable Development Goals (SDGs)

<https://www.decadeonrestoration.org/about-un-decade>

**The UN Decade on Ecosystem Restoration** is a rallying call for the protection and revival of ecosystems all around the world, **for the benefit of people and nature**. It aims to **halt the degradation** of ecosystems, and **restore them to achieve global goals**. Only with healthy ecosystems can we enhance **people’s livelihoods**, counteract **climate change**, and stop the collapse of **biodiversity**.



# Landscape approaches



## Key features



Space-based strategies



Reconciling competing demands



Iterative learning processes

# SITR VOL. 8: *Ecosystem restoration through managing SEPLS*

■ *How can the efforts in managing SEPLS **prevent, halt, and reverse land and sea degradation, contributing to ecosystem restoration and sustainable development?***



*The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.*

*\* Dotted line represents approximately the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the Parties.*

*\*\* Final boundary between the Republic of Sudan and the Republic of South Sudan has not yet been determined.*

## KEY FINDINGS:

# Landscape approaches to ecosystem restoration

- ❑ Landscape approaches can facilitate ecosystem restoration in a **synergistic** manner
  - Taking advantage of **social-ecological diversity**
  - Leveraging **indigenous and local knowledge**
  - Enhancing **context-specific cooperation** among stakeholders who engage in various activities associated with SEPLS management
- ❑ Embedding **biodiversity** in implementing landscape approaches to ecosystem restoration allows for **sustenance of biocultural heritage and diversity and human well-being.**



Ghana: Women carrying seedlings for restoration  
(Source: A Rocha Ghana, 2020, Photo credit: IUCN)



Nepal: Laying foundation stone by the Provincial  
Forest Minister (Photo credit: Back to Nature, 2020)



## KEY FINDINGS:

# Challenges & opportunities in meeting ecosystem restoration goals

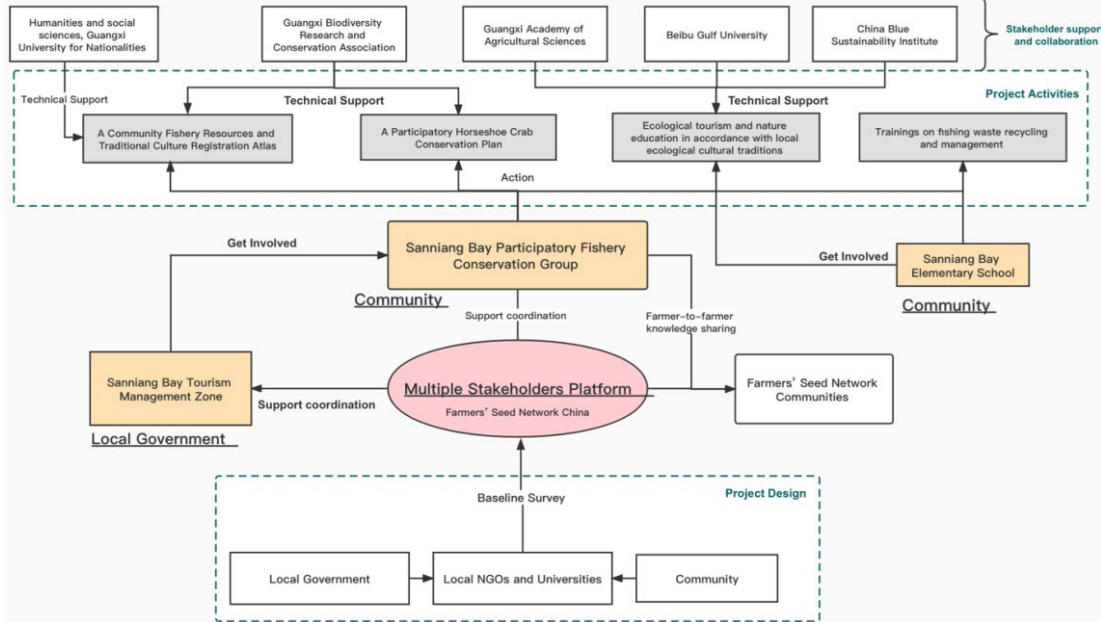
### ■ Challenges

- Secure or raise **capacities and resources** for **initiating** the effort
- Promote and facilitate the initiative in a **concerted and coordinated way** among different stakeholders
- **Sustain the effort** and if needed, **adapt** it to changes.

### ■ Opportunities

- Bringing together multiple stakeholders on **a common platform** through landscape approaches
  - **negotiate** different needs and interests
  - **share knowledge and learn** from each other
  - **motivated** to take action, mobilise resources, and collaborate on restoration.
- **Each of the stakeholders** (IPLCs, youth, women, private sector, government, scientists) plays a key role in planning and implementing restoration efforts.

# Multi-stakeholder platform for coastal ecosystem restoration and sustainable livelihood in Sanniang Bay in Guangxi, South China



**Roles of stakeholders related to the project**



**Villagers map out the community's natural and cultural resources**



种类	重量 (斤)	捕获器具	价格 (元/斤)
鲮鱼			
金鲮鱼	125斤	黄鱼网	6.2斤
沙头粗鱼			
圆头粗鱼/白腩粗鱼			
长圆黄 (大)/圆黄 (小)			
老鼠鳗			
沙姑鱼/沙丁鱼			
二穿鱼			
小鲮鱼			
黄鱼			
黄唇/天虾/大甲蟹			
黄唇			
大虾			
黄唇			
小蟹鱼			
花蟹			
青蟹			
海星			
半半蟹			
田螺			

今日海上观察与记录:



**Horseshoe crabs being released under the "Send Horseshoe Crabs Home" Initiative & Daily Catch Monitoring Form**

**"X" Plastic Concert**

# RECOMMENDATIONS

- **The process of ecosystem restoration through managing SEPLS should be:**
  - multi-lateral, iterative, and inclusive
  - navigated by communicating and interacting with the stakeholders across different sectors and levels
- **The three steps (not mutually exclusive) could be repeated and modified throughout the planning cycle:**
  - 1) start from a landscape or seascape scale
  - 2) promote peer learning and knowledge sharing
  - 3) institutionalize local solutions into coherent policies and frameworks



Ghana: Creation of fire belt by Community Fire Volunteers  
(Source: A Rocha Ghana, 2021, Photo by A Rocha Ghana)



Kenya: Stakeholders meeting (Photo: Agnes Nailantei, MWCT 2021)



Taiwan: Course on water quality assessment in the Mao'ao community

# CONTRIBUTORS



- **14 Chapters: 1 Introduction, 12 Case Studies, 1 Synthesis**
- **Synthesis chapter lead authors:**  
Nishi, M. (Editor), Subramanian, S.M. (Editor), and Alebel Melaku
- **Synthesis chapter contributing authors:**  
Archana Bhatt, Nancy Chege, Dhanya Sreenivasan Chemboli, Jyun-Long Chen, Camila I. Donatti, Devon Dublin, Godwin Evenyo Dzekoto, Kizito Echiru, Siddharth Edake, Ernest Ngulefack Forghab, Alexandros Gasparatos, Ade Bagja Hidayat, Kang Hsu, Paulina G. Karimova, Tom Kemboi Kiptenai, Chunpei Liao, Yufen Chuang, Guanqi Li, Hwan-ok Ma, Yoji Natori, Jacqueline Migalline Sapoama Mbawine, Anil Kumar Nadesapanicker, Louis Nkembu, Njukeng Jetro Nkengafac, Josephat Mukele Nyongesa, Samuel Ojelel, Raymond Owusu-Achiaw, Marivic Gasamo Pajaro, Dambar Pun, Vipindas P., Mark Edison Reopta Raquino, Pia Sethi, Xin Song, Jie Su, Aashish Tiwari, Tamara Tschentscher, Yaw Osei-Owusu, Paul Watts and Chemuku Wekesa.

To be published as an **“Open Access”**  
Book from **Springer Nature** **very soon**  
<https://link.springer.com/book/9789819912919>



SATOYAMA  
INITIATIVE

