



SATOYAMA  
INITIATIVE



UNITED NATIONS  
UNIVERSITY

**UNU-IAS**

Institute for the Advanced Study  
of Sustainability

**Building on and strengthening the  
evidence:**

**Developing policy lessons from  
experiences of partners for socio-  
ecological resilience**

Presented by  
Suneetha M Subramanian

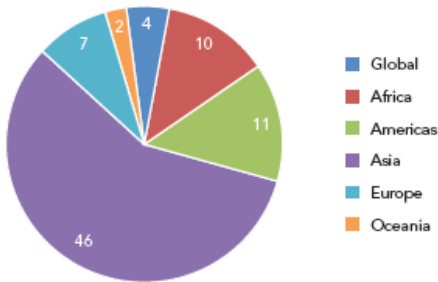
# What the Satoyama Initiative seeks to achieve in fostering solutions to socio-ecological resilience

- Act as bridge between local stakeholders and policy forums and academics
- Bring together partners to learn, share and build capacity in systematic writing and communication
- Transdisciplinary approach, knowledge co-production, acknowledging and integrating/ bridging between different knowledge systems and sciences

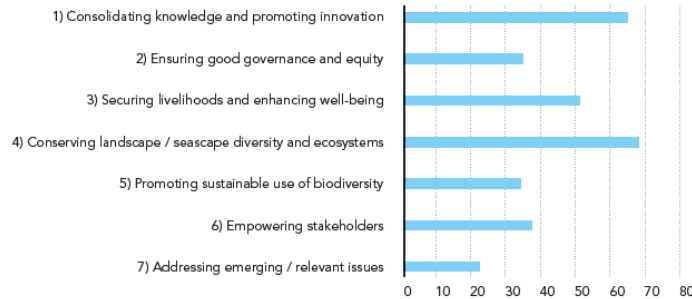
# Case Study Analysis

- 80 Case Studies analyzed: IGES and UNU-IAS (2015)

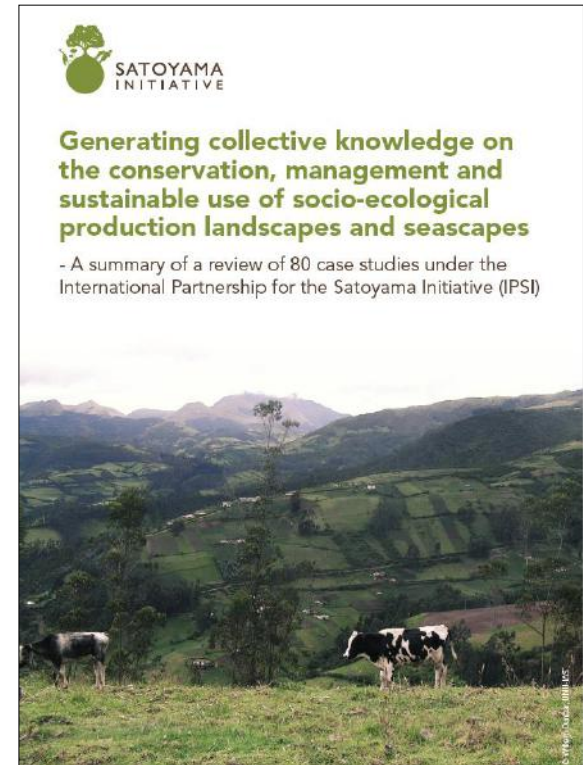
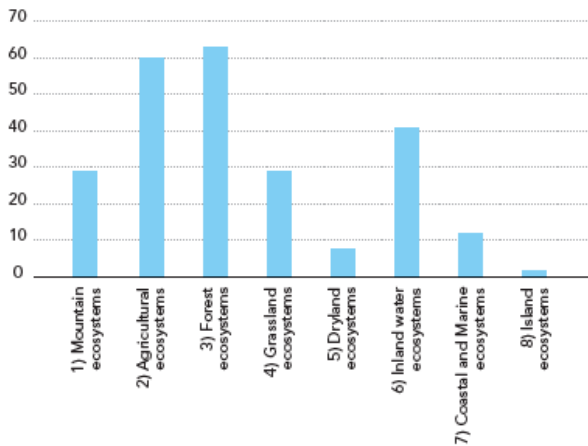
**Regional Distribution of Case Studies**  
(number of cases by region)



**Number of Case Studies by Theme**



**Number of Case Studies by Ecosystem Type**



# IPSI Case Study Guidelines

## Revised guidelines (2015-)

1. Accept any forms of case study such as video
2. IPSI Case study summary sheet was developed for:
  - I. Making it easier for readers to understand
  - II. Ensure consistency that all necessary information is described
  - III. Indicate how case study activities contribute to Aichi Target and SDGs.

IPSI Case Study Summary Sheet			
<b>Basic Information</b>			
Title of case study ( <i>should be concise and within approximately 25 words</i> )			
Assessment of Ecosystems and Ecosystem Services in Barshong, Bhutan			
Submitting IPSI member organization(s)			
Royal Society for Protection of Nature (RSPN)			
Other contributing organization(s)			
International Centre for Integrated Mountain Development (ICIMOD), Nepal.			
Author(s) and affiliation(s)			
ICIMOD and RSPN (Partners)			
Format of case study	Manuscript	Language	English
Keywords ( <i>3-5 key concepts included in the case study</i> )			
State and dynamics of ecosystems and their services and the nexus with human wellbeing			
Date of submission	March 2017		
Web link	<a href="http://ip.icsimod.org/record/32572">http://ip.icsimod.org/record/32572</a> ; <a href="http://www.icsimod.org">www.icsimod.org</a>		
<b>Geographical Information</b>			
Country	Bhutan		
Location(s)			
Barshong Gewog (sub-district) in Tsirang Dzongkhag (district), located in the south-central part of Bhutan			
Longitude/latitude or Google Maps link			
NA			
Ecosystem(s)			
Forest	X	Grassland	X
Dryland	X	Mountain	X
		Urban/peri-urban	X
		In-land water	X
		Other	
		Coastal	
Socioeconomic and environmental characteristics of the area			
Barshong is located in the south- central part of Bhutan. Major portion of the area is under forest cover, comprising mainly of broadleaf and chir pine species, combined with agricultural land. Agriculture is the main source of livelihoods with combination of livestock rearing and a small section in waged labor.			
Description of human-nature interactions in the area			
Main land-cover types in the study area include agriculture, fallow land, forest, bare area, and water bodies. Records from 1989 to 2014 shows very minimal changes in land uses and land cover. The three major ecosystems— forest, freshwater, and agro ecosystems— largely contribute to the livelihoods of the local population.			
<b>Contents</b>			
Status	completed	Period	Jan 2014 to Dec 2014
<b>Rationale</b>			
Ecosystem valuation of Bhutan by Kubiszewski et al. (2013) estimated USD 4,944 million worth of benefits derived from ecosystem. However, the state of ecosystem is challenged by fragile mountain ecosystem, increasing economic growth and anthropogenic activities. Development of policies and strategies to address the complexities of ecosystem management and enhance its services for human wellbeing is hence imperative.			
<b>Objectives</b>			
To develop a comprehensive understanding of the state and dynamics of the ecosystems and their services in Barshong Gewog in Tsirang, Bhutan and the nexus with human wellbeing.			
<b>Activities and/or practices employed</b>			

Besides secondary information, Participatory rural appraisal, household survey geospatial tools were used to assess the state and dynamics of ecosystems and their capacity to provide goods and services; community vulnerability to drivers of change and their coping strategies to perceived changes. Additionally, ecosystem services were also mapped bases on importance and dependency.

**Results**

Nearly 80% of the population are farmers with 100% dependent on varied ecosystems for livelihoods. Majority (29.3%) of households reported vulnerability in relation to poor production. The social and economic sectors indicated improvement in the last decade. Considering the significance on their livelihood, around 87% of households expressed willingness to pay for the management of ecosystems.

**Lessons learned**

The study was limited to identification of ecosystem services and their utility. Understanding the trends in ecosystem services in relation to the wellbeing of people is key to know the real value of the ecosystem. While the dependency on resources is high, the ecosystem health is still maintained. However, for sustainable management, alternative livelihood options like tourism, cottage industries and market for ecosystem services payment are recommended as opportunities to be tapped.

**Key messages**

Integrating ecosystem service perspectives, based on local context into policies provides significant opportunities to contribute to key targets of sustainable natural resource management improvement on the quality of life of local people who depend on these systems.

**Relationship to other IPSI activities** NA

**Funding**

The study was supported by the International Centre for Integrated Mountain Development (ICIMOD), through European Union funding, under the broad program of "Support to Rural Livelihoods and Climate Change Adaptation in the Himalayas (Himalica)".

**Contributions to Global Agendas**

The table below shows based on the self-evaluation by author(s). ● indicates the "direct" or "indirect" contributions to the following global agendas respectively to which the work described in this case study contributes to.

**CBD Aichi Biodiversity Targets** (<https://www.cbd.int/sp/targets/>)

Strategic Goal A		Strategic Goal B			
1	2	3	4		
5	6	7	8		
9	10				
Strategic Goal C		Strategic Goal D		Strategic Goal E	
11	12	13	14	15	16
17	18	19	20		

**UN Sustainable Development Goals (SDGs)** (<https://sustainabledevelopment.un.org/sdgs>)

1	2	3	4	5	6	7	8	9
10	11	12	13	14	15	16	17	

# Satoyama Initiative Thematic Review

- A compilation of **case studies by IPSI members** providing knowledge and lessons related to SEPLS.
- To collect experiences and relevant knowledge, especially **based on activities on-the-ground**.
- Also includes a **synthesis chapter** to clarify its relevance to policy and academic discussion and to help make lessons learned practical in the field.
- Facilitated by **IPSI Secretariat (UNU-IAS) and IGES**.  
(IPSI collaborative activity)

# Satoyama Initiative Thematic Review

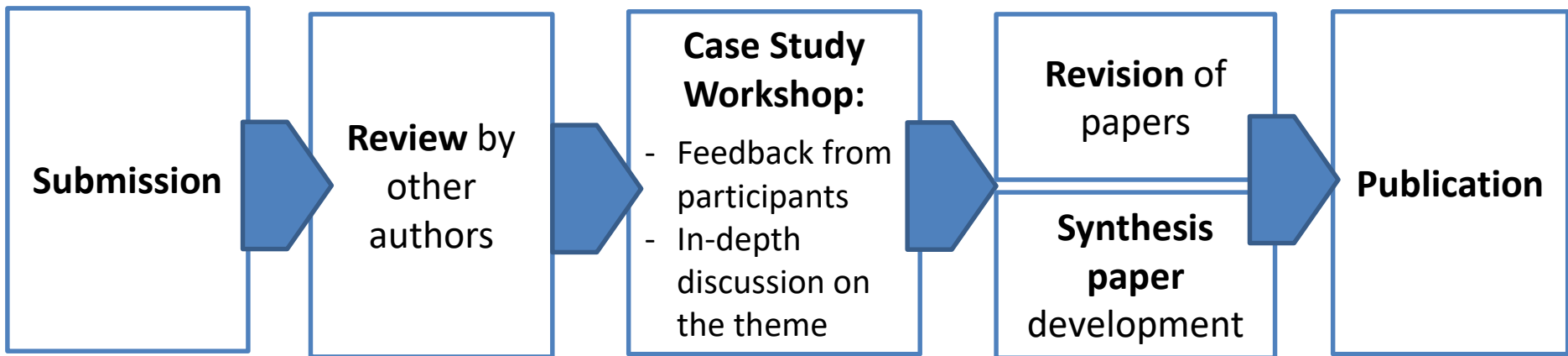
- Specific themes covered
  - Vol. 1: Tools and approaches for enhancing knowledge for SEPLS management
  - Vol. 2: Mainstreaming concepts and approaches of SEPLS
  - Vol. 3: SEPLS and Livelihoods
  - Vol 4 (ongoing): SEPLS and area based conservation measures (AT 11)





# Publication process

- Developed through a multi-stage process
- Provide feedback on papers among authors
- In-depth discussion among authors



## SITR vol.1 (UNU-IAS and IGES, 2016)

# “Enhancing knowledge for better management of SEPLS”



### Examples of tools and approaches covered:

Field data measurement and collection; questionnaires; literature surveys; indicator assessment; participatory mapping; community dialogues; “Farmers Field Schools”; anthropological research ; community-based monitoring; daily and continuous interaction and networking.

### Synthesis of the case studies

#### Positive outcomes of using tools and approaches:

- (1) Value articulation
- (2) Knowledge creation
- (3) Policy advocacy
- (4) Awareness-raising
- (5) Better networking
- (6) Better understanding of trade-offs and synergies

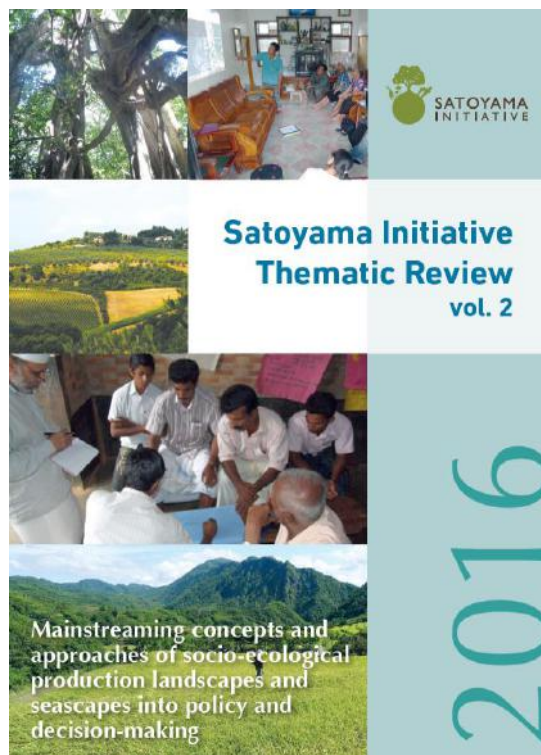
#### Eight principles to consider :

- (1) Select and design tools and approaches to fit into the local context
- (2) Understand local contexts first
- (3) Find entry points to local communities and ensure wider engagement
- (4) Familiarize the community with tools and approaches, and make objectives clear
- (5) Sufficiently consider pros and cons of using different tools and approaches
- (6) Ensure capacity building
- (7) Provide feedback
- (8) Feedback cycles: adjust tools and approaches after implementation



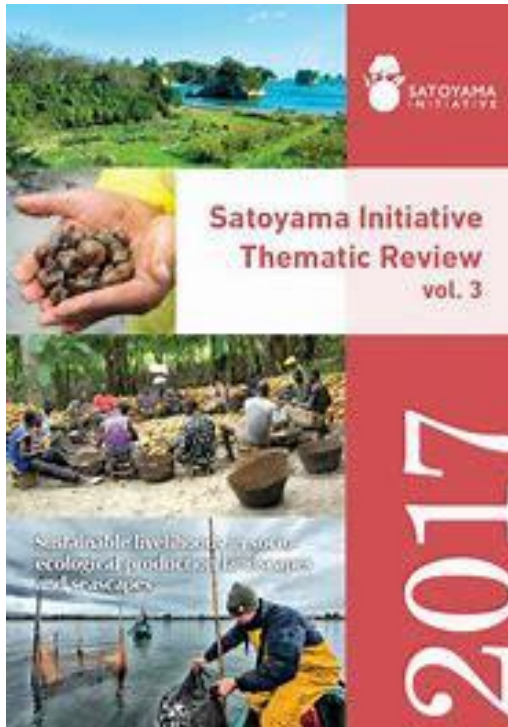


# “Mainstreaming the concepts and approaches of SEPLS into policy and decision-making”



Chapter number	Authors	Sites	Major actors	Activities
2	Liu and Liu	H Village, Yunnan Province, China	University, research institutes, government, NGOs, donor agencies, local communities	Use of policies and development interventions that affect forest use from the perspective of activating traditional forest-related knowledge (TFRK) through community participation
3	Gualandi and Gualandi	Montespertoli, Tuscany, Italy	NPO, university, local council, government, farmers, processors, local stakeholders	Revitalizing ancient wheat varieties through coordinated links among producers, processors, consumers and other stakeholders
4	Kieninger et al.	Wachau, Austria	EU, government and state authorities (Federal state, province), local authority, market parties, civil society actors/NPOs	Use of policy tools and market mechanisms for conservation of cultural landscapes including subsidies for environmentally friendly farming, community development programmes and Geographical Indication for branding products
5	Lee et al.	Ciharaay Cultural Landscape, Hualien County, Taiwan	University, local management committee, farmers	Tailoring the concept of SEPLS to the national planning process on protected areas through designation and planning of the Ciharaay Cultural Landscape
6	Olupot and Isabirye-Basuta	Mabira Central Forest Reserve, Uganda	University, National Forestry Authority, NGO, local forestry organization	Documentation and evaluation of landscape values (attractions) and biodiversity characteristics for ecotourism in a Reserve Forest area
7	Kumar et al.	Wayanad, Kerala, India	Research institute, NGOs, farmers (indigenous people)	Four programs for conservation of agrobiodiversity and cultural diversity; livelihood improvement; and capacity building
8	Pandit et al.	Syafu (Rasuwa District), Kushadevi (Kavre District) and Shaktikhor (Chitwan District), Nepal	University, local government (e.g. VDC/DDC), district line agencies, local groups (including forest or buffer zone user groups), farmers	Development of local biodiversity strategies and action plans (LBSAPs) Domestication of endangered wild herb species

## “Livelihoods and socio-ecological production landscapes and seascapes (SEPLS)”



- The volume compiles eleven case studies covering diverse challenges and opportunities in sustaining livelihoods, social and ecological changes and approaches being deployed to strengthen natural and social resilience in the landscapes and seascapes where they work. The synthesis chapter identifies drivers linked to sustainable livelihoods in SEPLS that are crucial to meet needs for human well-being and to foster sustainable use of natural resources.

### Principles for sustainable livelihoods in SEPLS

**Responsibility towards, and stewardship of, the landscape or seascape**, including all members of communities that reside there and different stakeholders involved in their use and maintenance

**Inclusiveness in decision-making and building capacity to make appropriate decisions, and in participation in economic activities** including access to financial services and markets

**Acknowledgment of interactions between people and nature**, respecting the interdependent relationships between elements that affect the sustainable management and use of natural resources

**Harmonious relationships between humans and nature** to the carrying capacity of the landscape or seascape

# SITR vol. 4

## **Sustainable use of biodiversity in socio-ecological production landscapes and seascapes (SEPLS) and its contribution to effective area based conservation**

The primary focus of this volume highlights how the sustainable use of biodiversity as practiced in well-managed SEPLS can contribute to effective area-based conservation of biodiversity.

The volume will also explore how such approaches on-the-ground can contribute to the goals of the global conservation agenda, especially in the context of the CBD and its **Aichi Biodiversity Target 11**—which contains the concept of **protected areas and “other effective area-based conservation measures”** and their integration into the wider landscapes and seascapes—while at the same time being **effective and equitable for various stakeholders**.

# What the Satoyama Initiative seeks to achieve...progress so far

- Transdisciplinary approach, knowledge co-production, acknowledging and integrating/ bridging between different knowledge systems and sciences (**Learning by doing with encouraging response from our partners and audiences**)
- Brings together partners to learn, share and build capacity in systematic writing and communication (**good progress**)
- Act as bridge between local stakeholders and policy forums and academics (**Efforts moving positive direction**)
- ....Requires active uptake of lessons and partnership goals

Thank you for your attention