The Satoyama Initiative and IPSI: Potential for the Bio-Bridge Initiative

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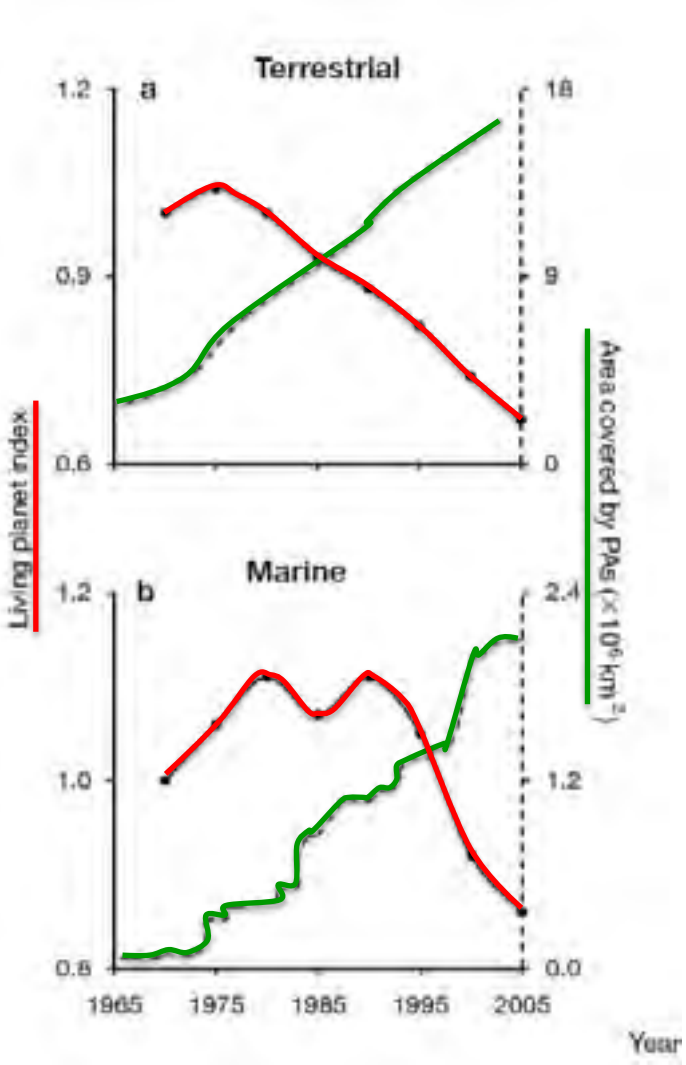
SATOYAMA INITIATIVE

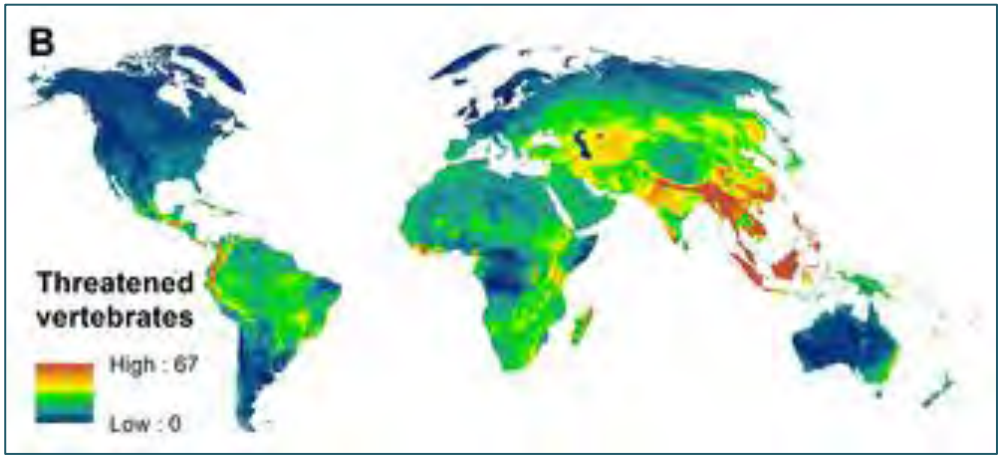
What is the Satoyama Initiative?

SATOYAMA INITIATIVE

- Jointly initiated by UNU and MoEJ
- A global effort to realize "societies in harmony with nature"
- Promotes revitalization & sustainable management of **S**ocio-**e**cological **P**roduction **L**andscapes and **S**eascapes "SEPLS" around the world

Ongoing Global Biodiversity Loss & a tool needed beyond protected areas





Venter O, Fuller RA, Segan DB, Carwardine J, Brooks T, et al. (2014) Targeting Global Protected Area Expansion for Imperiled Biodiversity. PLoS Biol 12(6): e1001891. doi:10.1371/journal.pbio.1001891

Camilo Mora, Peter F. Sale. (2011) Ongoing global biodiversity loss and the need to move beyond protected areas: a review of the technical and practical shortcomings of protected areas on land and sea. Inter-Research Vol. 434: 251–266, 2011. doi: 10.3354/meps09214

Production Landscapes & Seascapes

Photo: PEXEL, Creative Commons

Photo: PEXEL, Creative Commons

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Socio-ecological production landscapes & seascapes

S E P L S

The **dynamic mosaics** of habitats and land- and sea-uses shaped by the interactions between people and nature in ways that **maintain biodiversity** and provide humans with **goods and services** needed for their well-being in a sustainable manner.

Photo: Prasanth Chandran Creative Commons CC BY-NC-SA 2.0 (cropped)

Dehesa (Spain)

An agrosilvopastoral system formed from the clearing of evergreen woodlands where trees, native grasses, crops, and livestock interact positively under management

SEPLS case around the world

Ahupua'a (Hawaii)

Traditional land use system, which consisted of vertical landscape segments from the mountains to the near-shore ocean environment, and into the ocean as deep as a person could stand in the water

Source: http://alohavalley.com/ahupuaa-ancient-hawaiian-self-sustaining-land-system/

Chitemene (Malawi)

The local method of *chitemene* slash and burn. The branches stacked in the middle will be burnt when dry, and will provide a short-lived nutrient spike for growing crops in this poor soil.

https://bangweulufish.wordpress.com/2012/04/08/miombo-madness/

Threats and Challenges

Land-use change

Over-exploitation

Under-use

Invasive species

Climate change

Pollution

Indirect drivers

- Demographic change
- Economic change
- Cultural change
- Science & technology
- Socio-political change

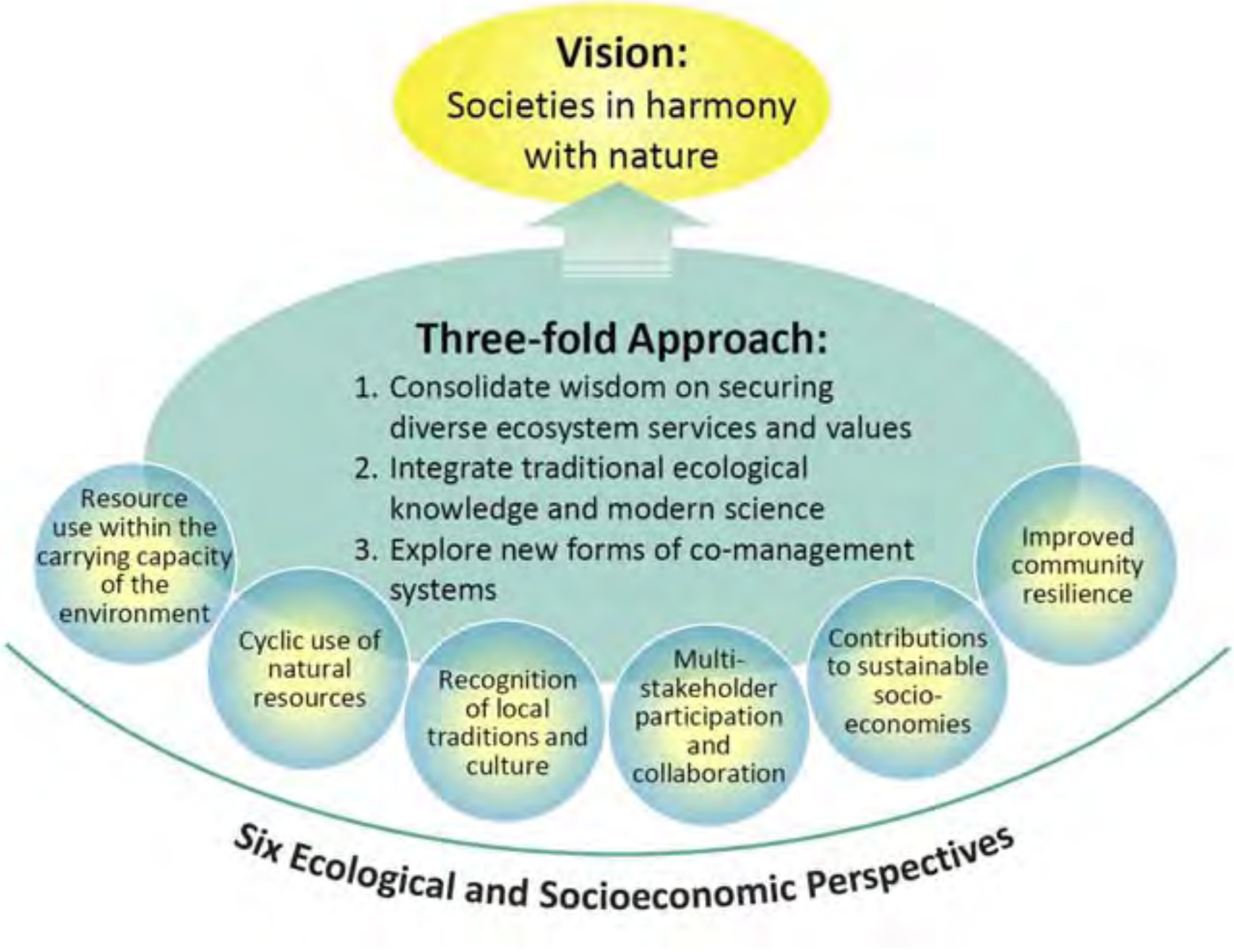
A Three-fold approach

The approach is intended to maintain and rebuild landscapes in which land and natural resources are used and managed in a more sustainable manner

Consolidating wisdom on securing diverse ecosystem services and values

Integrating traditional ecological knowledge and modern science to promote innovation

Exploring new forms of co-management systems or evolving frameworks of “commons”


Vision:
Societies in harmony with nature
Three-fold Approach:
1. Consolidate wisdom on securing diverse ecosystem services and values
2. Integrate traditional ecological knowledge and modern science
3. Explore new forms of co-management systems
Resource use within the carrying capacity of the environment
Cyclic use of natural resources
Recognition of local traditions and culture
Multi-stakeholder participation and collaboration
Contributions to sustainable socio-economies
Improved community resilience
Six Ecological and Socioeconomic Perspectives

Development of the Satoyama Initiative

2006-2010	• Initial research and the "Japan Satoyama Satoumi Assessment"
2009	• Preparatory meetings in Tokyo (July) and Penang (October)

January 2010	• Global Workshop on the Satoyama Initiative in Paris (UNESCO)
	  • "The Paris Declaration on the Satoyama Initiative"
	  • Calls for creation of an International Partnership

May 2010	• Paris Declaration submitted to CBD SBSTTA-14 as an info document
October 2010	• **IPSI launched at a CBD COP 10 Side Event in Nagoya** • **Recognition of the Satoyama Initiative and IPSI by CBD COP 10**
2010-2017	• Continued research on SEPLS, development of IPSI activities, growth of membership • Further recognition at CBD COP and other meetings

Recognizes the Satoyama Initiative as a potentially **useful tool to better understand and support human-influenced natural environments for the benefit of biodiversity and human well-being**, and affirms that the Satoyama Initiative is to be used consistent and in harmony with the Convention, internationally agreed development goals, and other relevant international obligations;

Takes note of the International Partnership for the Satoyama Initiative as one mechanism to carry out activities…

CBD COP-10 Decision X/32

What is IPSI ?

International Partnership for the Satoyama Initiative

I P S I

- Launched during CBD COP 10 (2010) in Nagoya, Japan
- Diverse partnership of organizations working for SEPLS
- Facilitates and accelerates activities among members
- A platform for sharing knowledge and fostering collaboration
- **IPSI Steering Committee**: responsible for guidance and management
- **IPSI Secretariat**: UNU-IAS

IPSI activities

On-the-ground activities

Resource mobilization / Capacity building

GEF Satoyama Project

SATOYAMA INITIATIVE

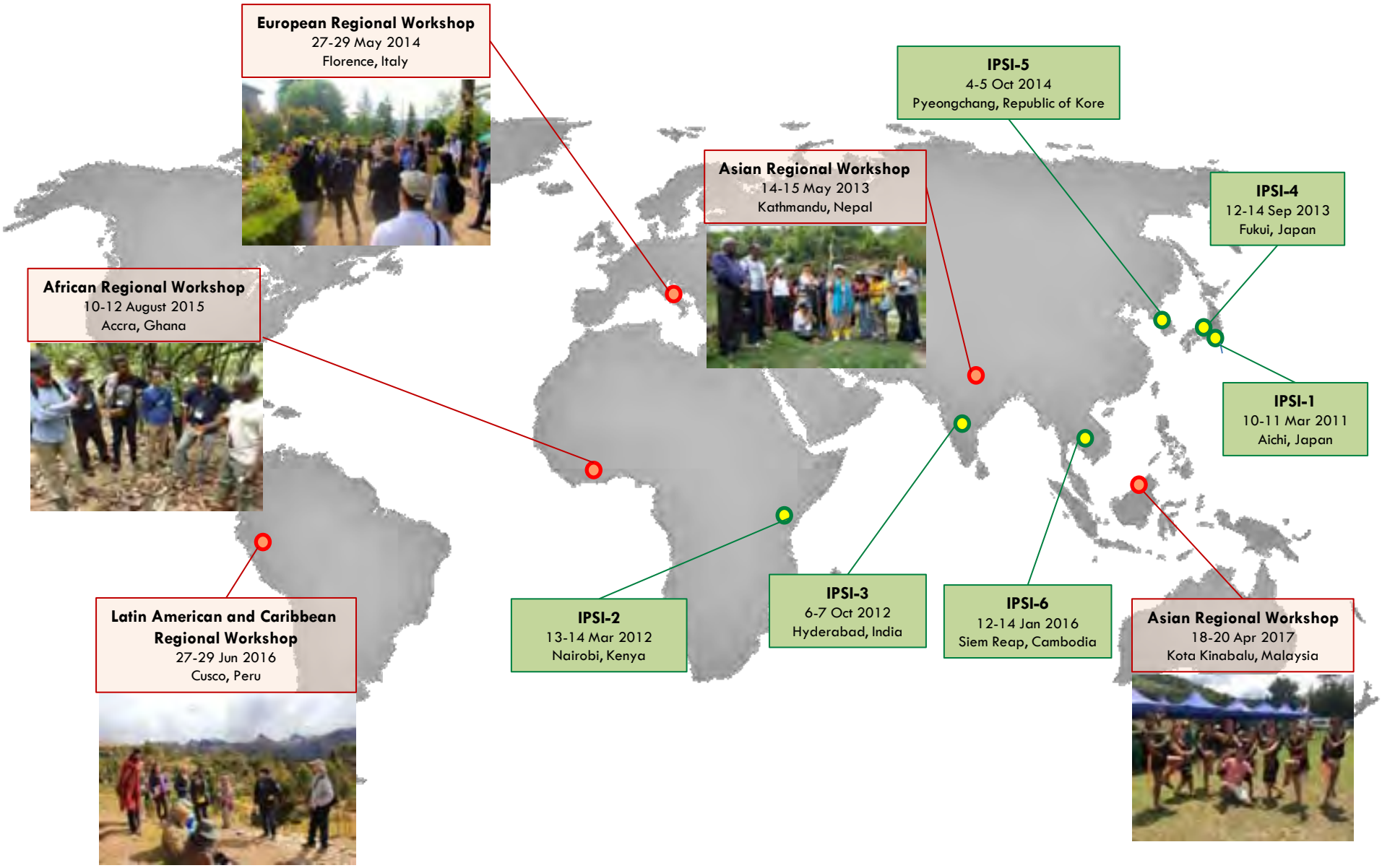
Networking / Collaborative activity

Research / knowledge facilitation

Policy incorporation

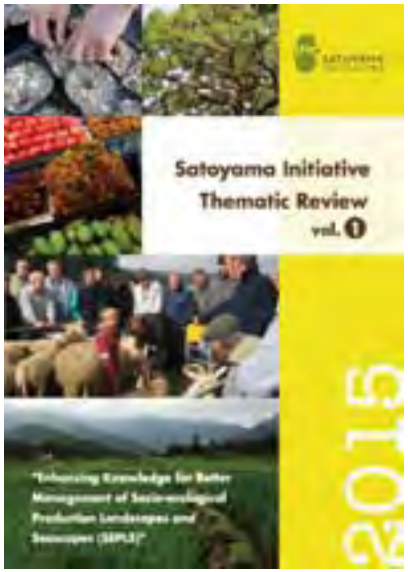
Events

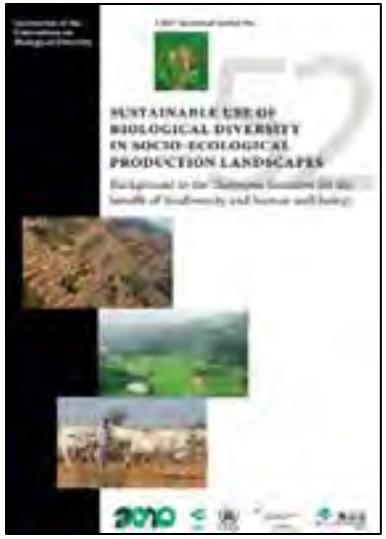
- IPSI Global conference
- Satoyama Initiative Regional Workshop
- Ant many others



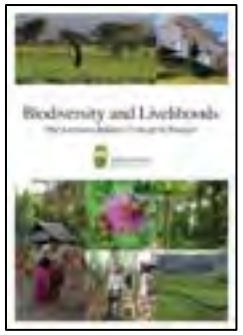
Publications

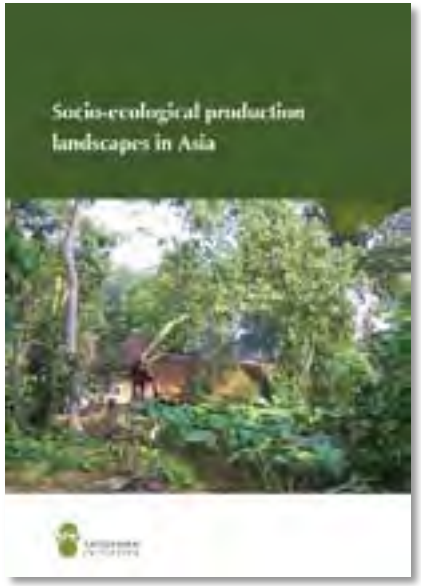
Available for free download: go to “UNU Collections”





CBD Technical paper





Regional specific

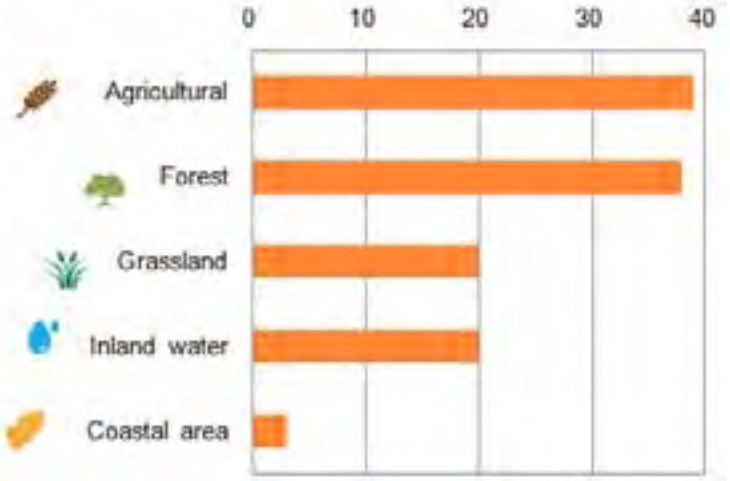
Thematic Review

UNU Policy report

Many others

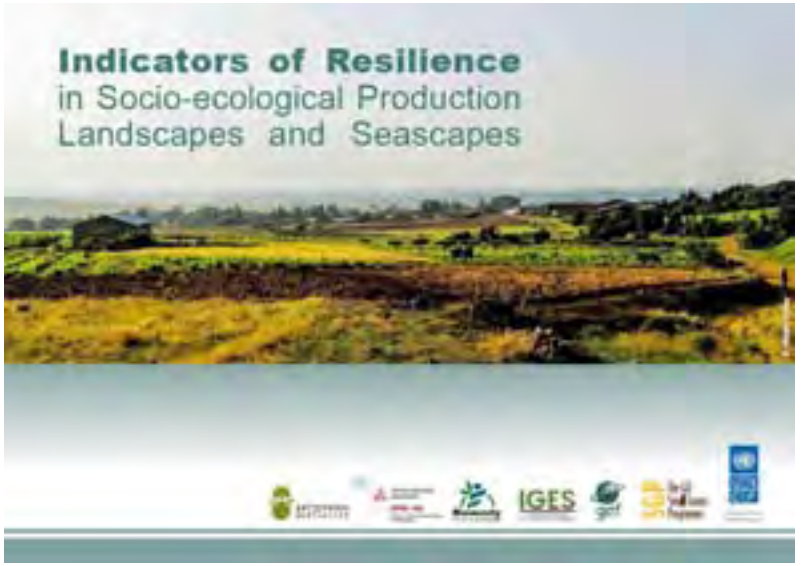
IPSI Case Study

- Knowledge facilitation is one of IPSI's key functions
- collected over 100 case studies of good practices and example of SEPLS worldwide
- To capitalize on the wealth of information contained in the case studies, a publication series titled the "Satoyama Initiative Thematic Review" is produced each year with specific topics



Indicators of Resilience in SEPLS

- Collaboration between Bioversity International, UNU-IAS, IGES and UNDP
- A set of 20 indicators (biodiversity, knowledge, governance, livelihoods, etc.)
- A tool for local communities assessed based on the local community's understanding and perceptions
- to understand the status of their landscapes/seascapes
- to enhance participation and communication with different stakeholders
- It can be adjusted depending on local context



Bergamini et al 2013

GEF-Satoyama Project

To mainstream conservation and sustainable use of biodiversity and ecosystem services, while improving human well-being in priority SEPLS in target areas of Asia, Africa and Latin America.

Implementing Orgs:

- CI Japan
- IGES
- UNU-IAS

Project period:

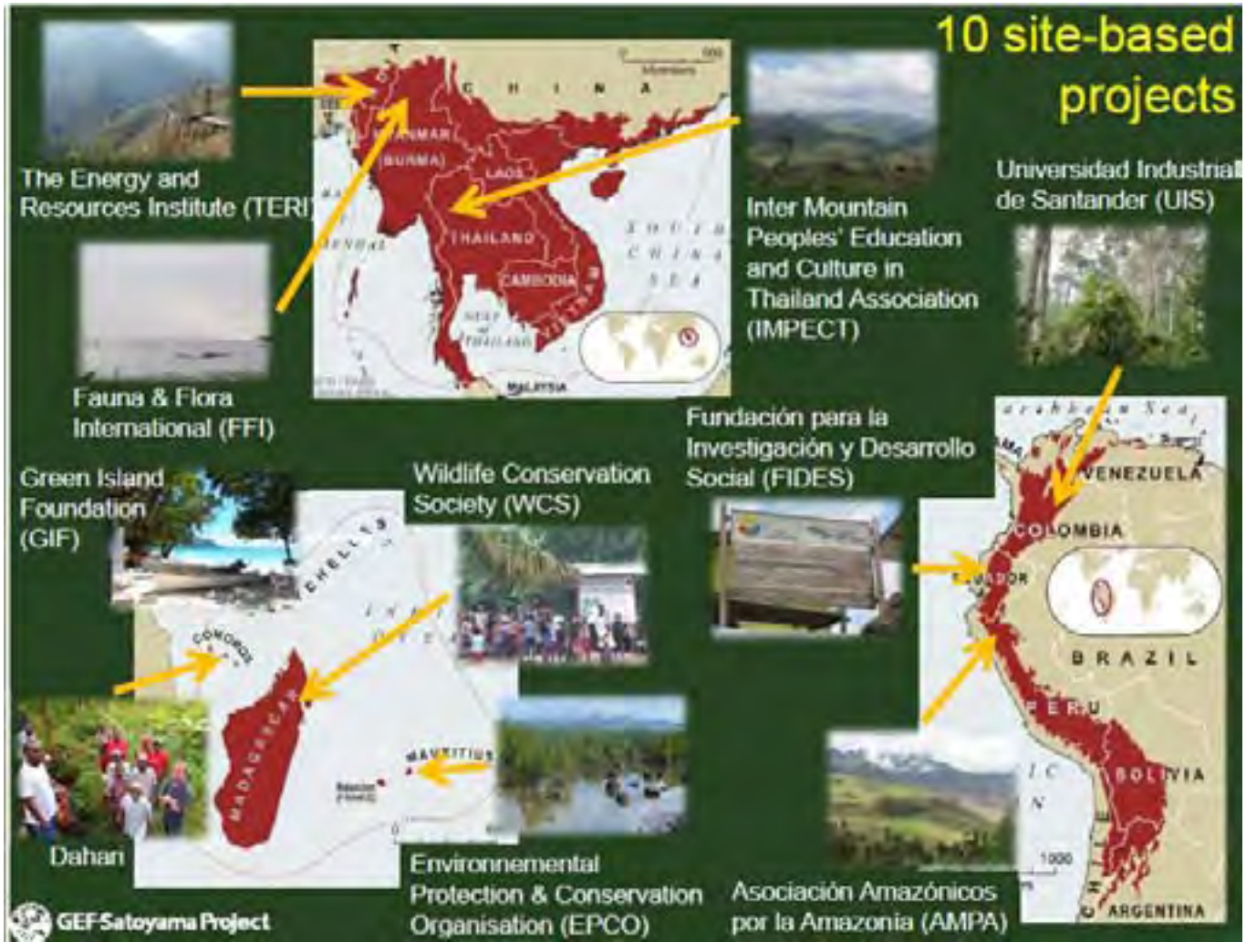
2015-2018

Budget:

US$ 2 mill. in total

Project components:

1. Site-based demonstration
2. Knowledge generation
3. Capacity building



SDM: Satoyama Development Mechanism

- Established and operated by UNU-IAS, MoEJ, and IGES
- Seed funding to promising projects by IPSI members
- 30 projects (including Kenya, Uganda, Ghana) have been supported so far

Contribution and relevance of each project to the 2020 Aichi Biodiversity Targets
(based on self-evaluation by grant recipients)

Project type	Recipient	Year of completion	Aichi Biodiversity Targets*2																	
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Community/ field based implementation	SPERI	2016	●	■			■		■							●				●	■	
	Conservation Alliance International	2016	●	■			■		●							●	●			●	■	
	A Rocha Ghana	2016	●				■		■							●				●		
	National Dong-Hwa University	2016	■	●		●			●				●		●	●				●		
	IKAP	2015		■					●				●		●	●				●		
	AERF	2015	●			●	●		●					●		●	●					
	KAFCOL	2014	■													■				■	■	
Research	Nature & Livelihoods	2015			●				■						■							
	APAIC, Peru	2015	■	■					■							■	■					
	SWAN International	2014	■		●	●			●	■												
CB/OR	Center Zapovedniks	2016	●	■		■			■							●				●		
	APAIC, Peru	2016	■	●			■		■							●	●					
	EPIC, Uganda	2016	●			●		■								■						
	Landcare Germany	2016	■	●	●				■					■		■						
	Center Zapovedniks	2014	■										●							●		

● Contribution ■ Relevance

Experimenting on production of high value market products from indigenous wild fruits (Nature and Livelihood/Uganda)

Background

- Native vegetation outside protected areas is being rapidly lost to conversion to crop fields
- Even the fruit trees that had been maintained in a traditional '**parkland**' agroforestry system in smallholder farms is now cut and exploited for charcoal production.

Experimenting on production of high value market products from indigenous wild fruits (Nature and Livelihood/Uganda)

In order to halt the loss of native vegetation

- Identified edible wild fruits
- Scientific analysis on the nutritional composition and explored its market potentials by making jams and wines from those fruits
- The potential market value of the wild fruits attracted the attention of locals to revisit the multiple benefits from the traditional mosaic parkland farming system.







Converting pests as allies in tea farming

(SWAN International /Chinese Taipei)

Background

- Conventional tea farming requires the application of herbicides / pesticides to control pests
- In Hualien County, however, at least two tea farming families completely stopped the use of pesticides and are using tea pests as their allies to produce a value-added tea product.
- Tea leaves damaged by green leafhopper gave the tea a unique honey flavor which was highly appreciated by consumers.

Converting pests as allies in tea farming

(SWAN International /Chinese Taipei)

To mainstream biodiversity into tea farming

A combination of biological and socio-economic surveys clarified a cascade effect of the green leafhopper population on tea leaf production –the higher the population of green leafhopper is, the less quantity of harvest but higher quality and unit prices of tea leaves.

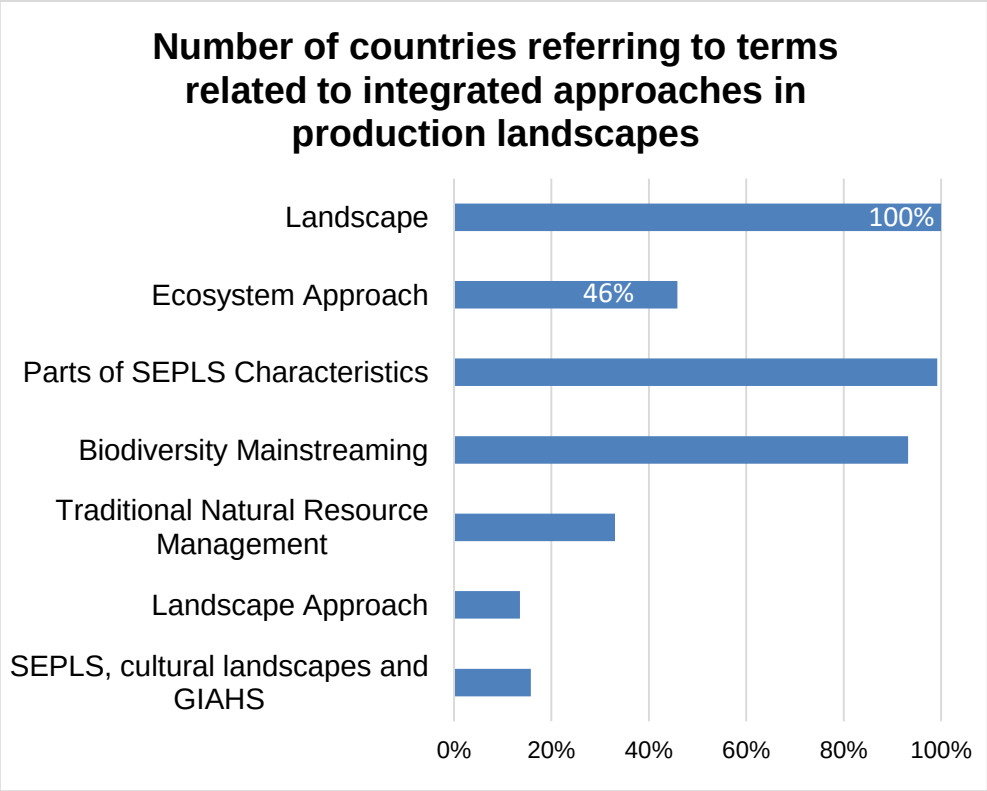





NBSAP Analysis from the Perspective of the Satoyama Initiative

- Research question: **"Are concepts and measures related to integrated approaches in production landscapes incorporated in NBSAPs effectively?"**
- **Text mining analysis of 133 NBSAPs to grasp overall trends.**

  (NBSAPs which were available in English as of 31 July 2016)
- Result: **About half of NBSAPs referred to "integrated approaches in production landscapes".**



Next step

- ✓ **In-depth study on the incorporation of concepts and measures in NBSAPs.**
- ✓ **International workshop on good practices.**

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IR3S

Convention on Biological Diversity

CBD COP Decisions involving the Satoyama Initiative and IPSI

Decision XI/25. Sustainable use of biodiversity

"… recognizes the contribution that the Satoyama Initiative is working to make in creating synergies among the various existing regional and global initiatives on human-influenced natural environment…"

Decision XII/18: *Sustainable use of biodiversity*

"Notes that the International Partnership for the Satoyama Initiative, …is working towards the sustainable use of biodiversity and its integration into the management of land, forests, and water resources;

Decision XIII/3: Strategic actions to enhance the implementation of the Strategic Plan for Biodiversity 2011-2020

"Requests the Executive Secretary, subject to the availability of resources…To prepare and disseminate to Parties…further guidance on the concept of "sustainability" in food and agriculture with regard to biodiversity, and to promote and strengthen support for relevant information-sharing and technology transfer among Parties, in particular for developing countries, building on existing initiatives, where feasible, such as the Satoyama Initiative…"

Ongoing and future development for IPSI

- **Post-2020 CBD plans and SDGs**
  - Post-Aichi Targets: landscape approaches, production activities in harmony with nature, etc.
  - NBSAP incorporation
- **Engagement with IPBES (LoA signed with UNU-IAS)**
  - Providing inputs into assessments and disseminating outcomes
- **Expansion and mainstreaming of on-the-ground successes**
  - Continued research and knowledge management
- **Diversification of membership and support**
  - Particularly national governments and international organizations