

Valuing Nature: Satoyama Satoumi Renaissance

Overview of Japan Satoyama-Satoumi Assessment Anantha Kumar Duraiappah Executive Director, UNU-IHDP Co-chair JSSA Science Assessment Panel



Why Satoyama-Satoumi?

CBD COP10 Decision on Satoyama



What are Satoyama and Satoumi landscapes?



A dynamic mosaic of different ecosystem types







Why are Satoyama and Satoumi important?



These mosaic landscapes are managed to produce a bundle of ecosystem services for human well-being



The Japan Satoyama Satoumi Assessment (JSSA)



GOAL

Credible, policy-relevant information on ecosystem services & their contributions to economic and human development



FIRST OBJECTIVE

Improve our understanding of the relationships between:

- Landscapes
- Biodiversity
- Ecosystems
- Human well-being



SECOND OBJECTIVE

Act as a foundation for:

- Policy-making
- Baselines on ecosystem services
- Predicting future trends
- Sound policy responses
- International application



How was the JSSA conducted?



RELEVANCE

- Health
- Food Security
- Material Wealth



LEGITIMACY

- Government Advisory
- Multi-Stakeholder Board

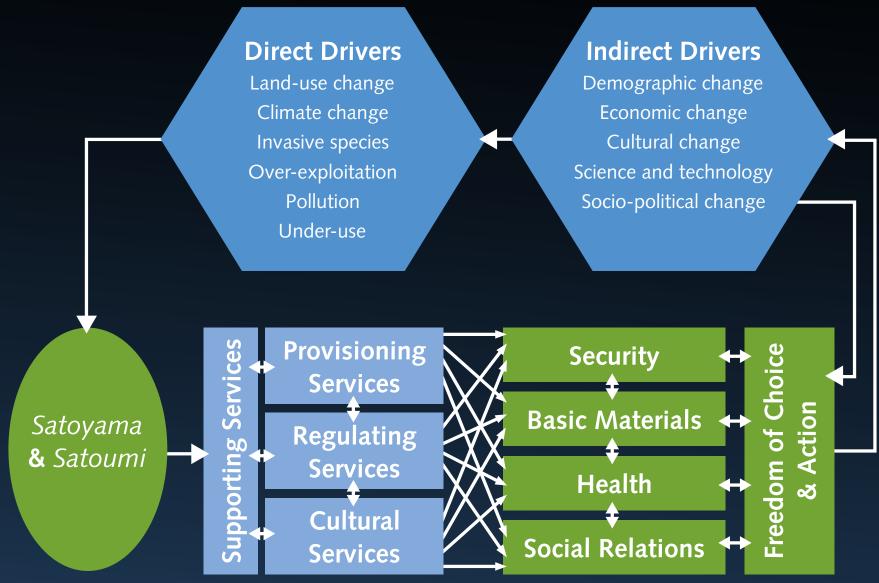


SCIENTIFIC CREDIBILITY

- Science Assessment Panel
- Independent review
- Leading scientists as authors

METHODOLOGY







What did we learn?



Managed mosaic has higher biodiversity and more services than abandoned or degraded ecosystems.



Resiliency of the coupled socio-ecological system is under threat



Consequences for humans and biodiversity:

- Dependancy on global trade
- Loss of cultural identity
- Loss of biodiversity and thereby regulatory services



Integrated & holistic interventions that include citizens and multiple sectors have the most success



A "new commons" that can govern the mosaic is critical to the success of ecosystem management



What can policy-makers do?



Develop policies that take a satoyama-satoumi approach to managing ecosystem services



Decentralize decision making on the use of land and water bodies within the mosaic



Design institutions to complement the "new commons" to provide equitable access and use of services



Establish a 10-year research programme to better understand dynamics of *satoya-ma* and *satoumi* ecosystems



Assess potential satoyama and satoumi ecosystems internationally



Key Research Questions



RESEARCH QUESTION 1: THE NEW COMMONS

Can a cooperative landscape institution with rules for use & benefit transfer provide a solution? Or is a meta-institution needed?



Current Institutions manage single Ecosytem Service

- Scale dependent
- Single Property right approach
- Lack of holistic ecosystem perspective

NESTED INSTITUTIONS



Institutional Arrangements: Efficiency as main criteria

Regional/Global

Ecosystem Services

Regulating Services

Cultural Services

Provisioning Services

Public Regulating Institutions

Community Based Institutions

(Collective Action)

Markets

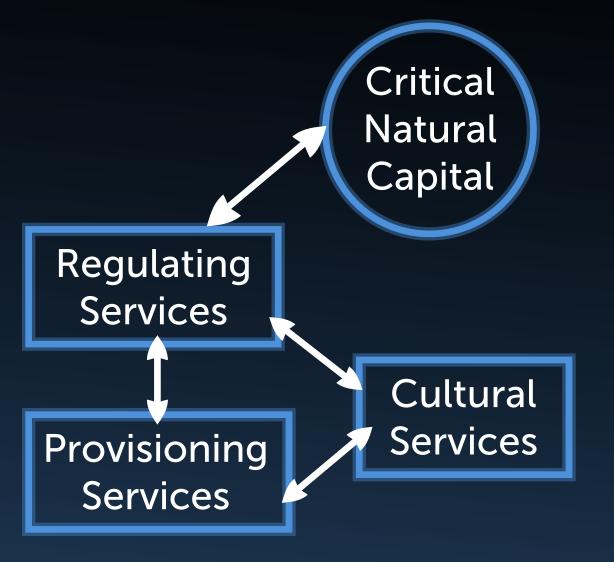
(Individual based decisions)

Local

NESTED INSTITUTIONS



Institutional Arrangements: Equity as main criteria



Public Regulating Institutions

Community
Based Institutions

Markets



Isolated institutions can only manage single services, managing bundled ecosystem services requires multiple nested institutions

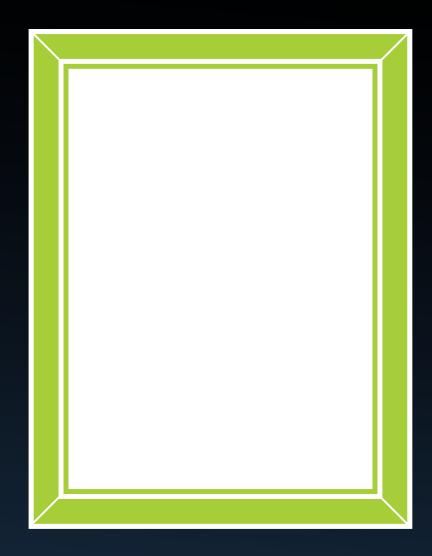


RESEARCH QUESTION 2: VALUATION OF ECOSYSTEM SERVICES

Is the whole greater than the sum of the parts?



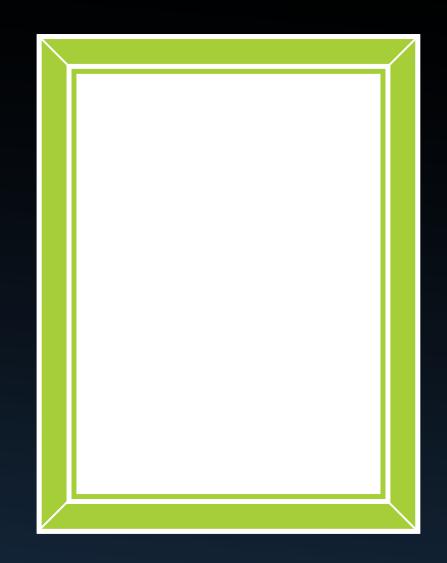
Canvas - \$40 Frame - \$500





Frame - \$500

Paints - \$50



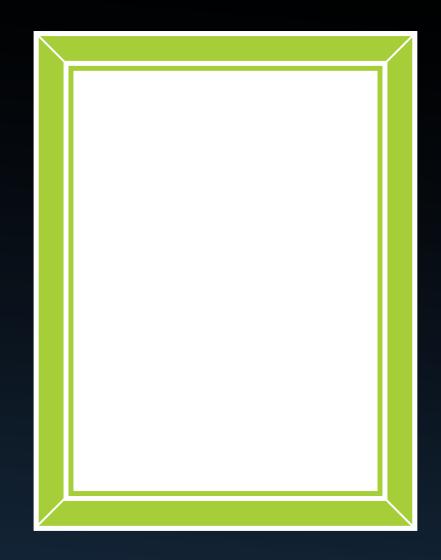




Frame - \$500

Paints - \$50

Supplies - \$35





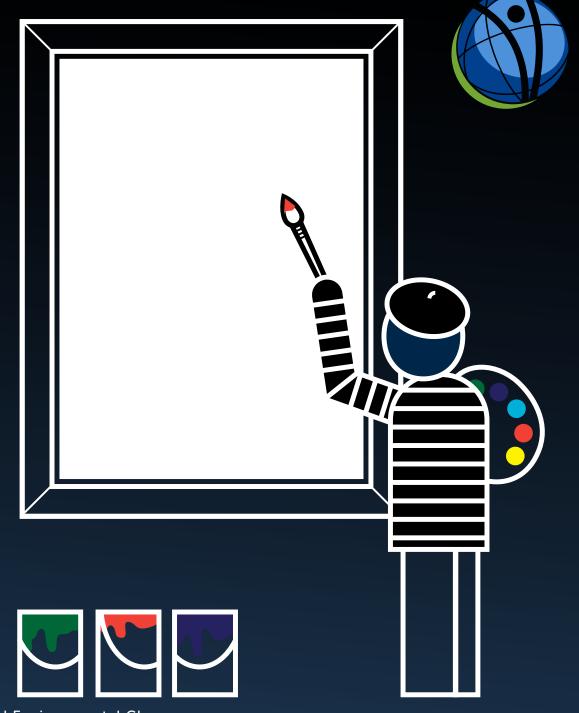


Frame - \$500

Paints - \$50

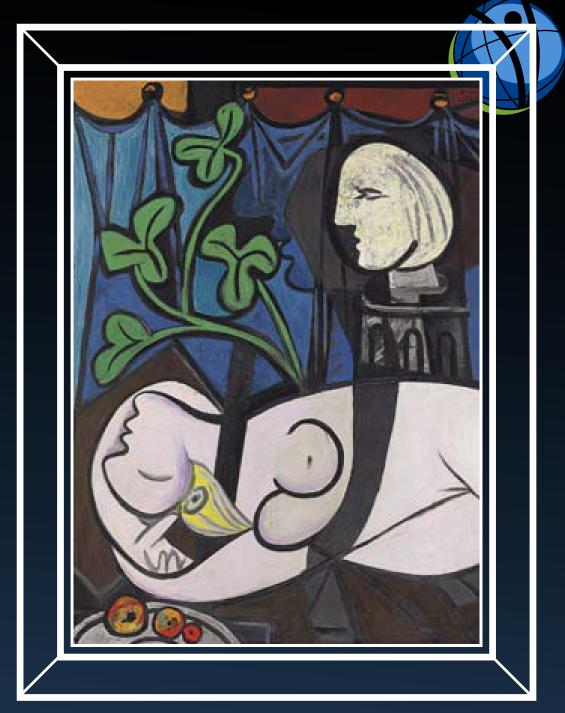
Supplies - \$35

Labour - \$7000



PARTS: \$7625

WHOLE: \$106,500,000





What is the International Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES)?



Integration of the assessment into the larger global context through for example, IPBES