

The Satoyama Initiative Regional Workshop in Peru
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Living in Harmony with Nature: The Satoyama Initiative

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SATOYAMA
INITIATIVE

Interconnected Challenges Faced by the World

Population pressure

Increasing demand for food, water, and energy

Poverty

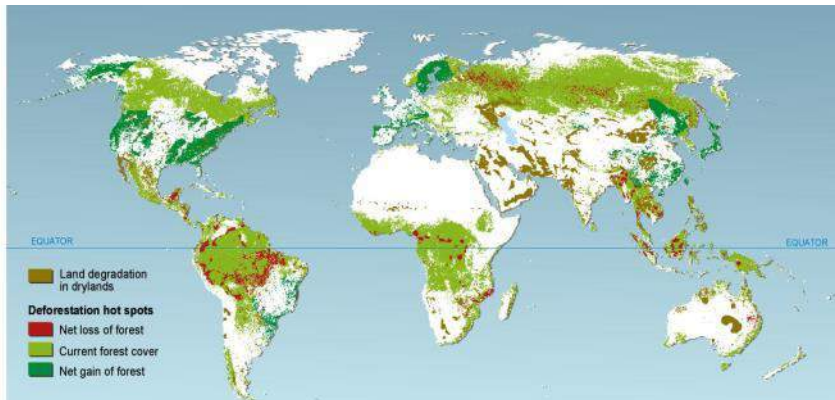
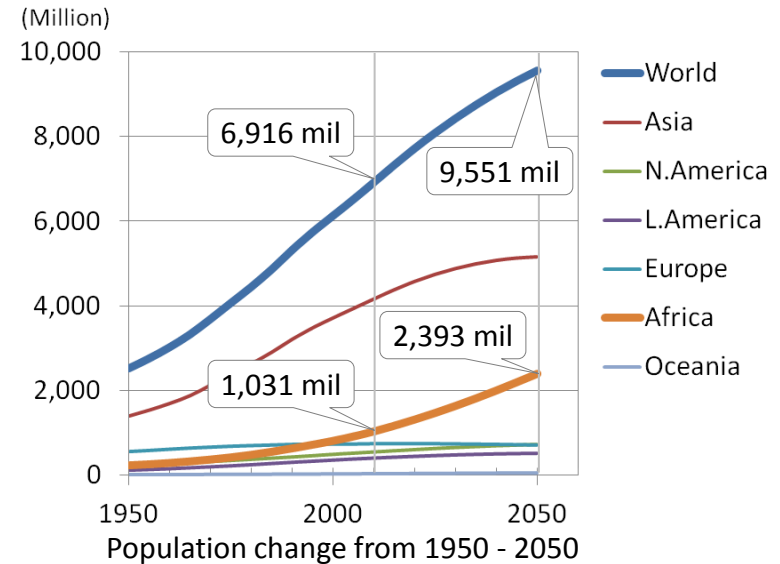
12% living on less than 1.25 US dollars/day

Ecosystem degradation

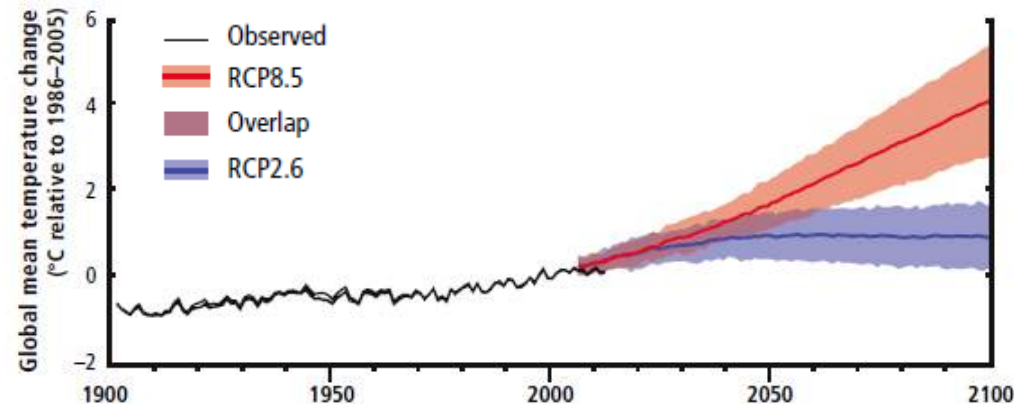
Deforestation, land degradation, biodiversity loss, water resource scarcity

Climate change

Global warming, floods, droughts, wildfire



Deforestation hotspots
(Source: Millennium Ecosystem Assessment)



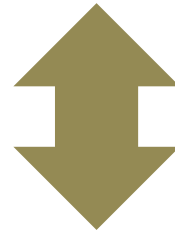
Observed and projected future global annual average temperature relative to 1986-2005. (Source: IPCC AR5)

Contrasting Problems in Production Landscapes



Overuse

- Overexploitation
- Mono-cropping
- Excess use of agrochemicals



Underuse

- Abandonment of farmland
- Neglect of management of natural resources and related facilities (e.g., irrigation ponds and canals)



Realizing Society in Harmony with Nature through the Satoyama Initiative

- Aichi Biodiversity Targets, with the vision of “**Life in harmony with nature**”, were adopted at CBD COP 10.
- The International Partnership for the Satoyama Initiative (**IPSI**) was launched during CBD COP 10. The Satoyama Initiative embodies the second objective of the CBD, “**Sustainable use of biodiversity**” and shares the same vision of “**realizing society in harmony with nature**”.
- It aims to conserve and restore “**socio-ecological production landscapes and seascapes (SEPLS)**”:
 - **Dynamic mosaics** of habitats and land-uses shaped through harmonious interactions between humans and nature.
 - Provide goods and services that contribute to **human well-being** while maintaining biodiversity.



IPSI Launching Ceremony (Nagoya, Aichi, Japan)



Agroforestry
(Brazil nut and cacao forest)



Paddy dominated landscape in Bali



Abandoned paddy fields in
Japanese *satoyama* (© S. Okubo)



Homegarden in Kerala (© BM Kumar)

The International Partnership for the Satoyama Initiative (IPSI)

- A **multi-stakeholder platform** for **fostering synergies** and **sharing knowledge** on the conservation and restoration of SEPLS.
- Grown to **190 member** organizations from 51 founding members.
 - National / local governments
 - NGOs
 - Indigenous/local community organizations
 - Industry/private sector organizations
 - academic/educational institutions
 - UN or other inter-governmental organizations
- Various activities
 - Collection and dissemination of knowledge
 - Research
 - On-the-ground activities
 - Capacity-building, etc



IPSI-4 held in Fukui, Japan



IPSI-2 held in Nairobi, Kenya



Regional Workshop in Accra, Ghana

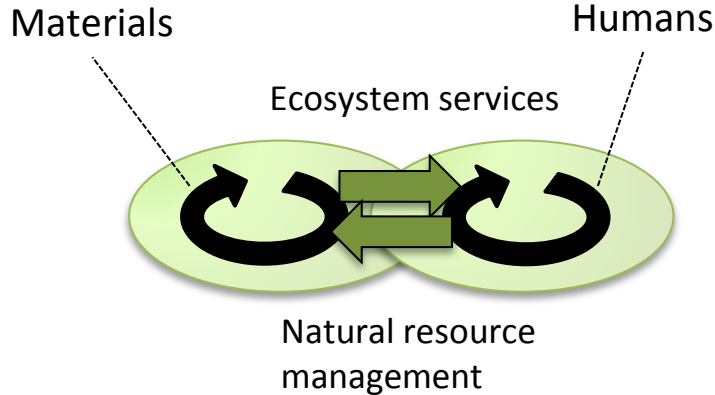


IPSI-6 held in Siem Reap, Cambodia

Changing Human-Nature Relationship

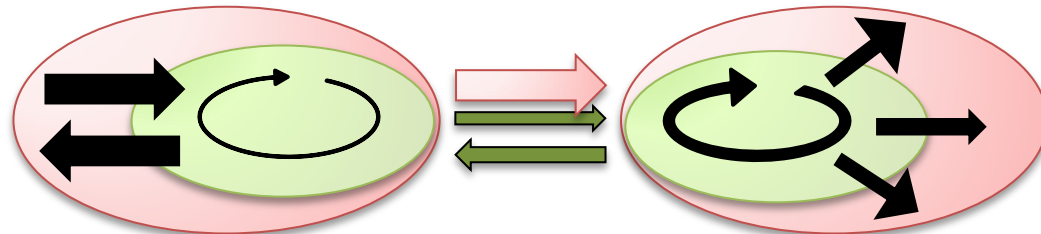
Past

Closed and coupled
social-ecological
system



Present

Open and decoupled
systems

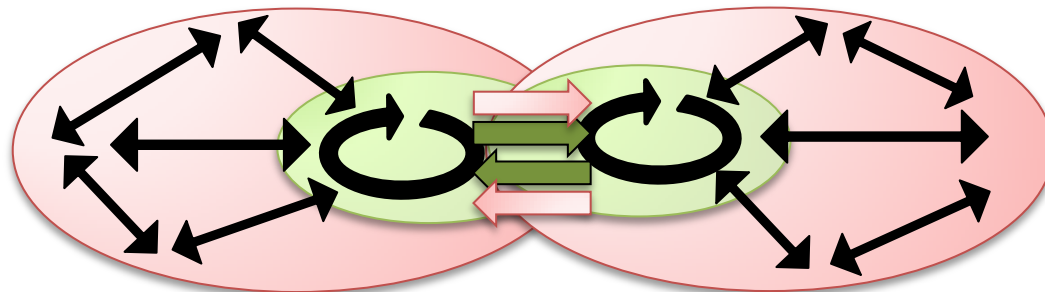


e.g., Intensification of monoculture

e.g., Migration to urban areas

Future

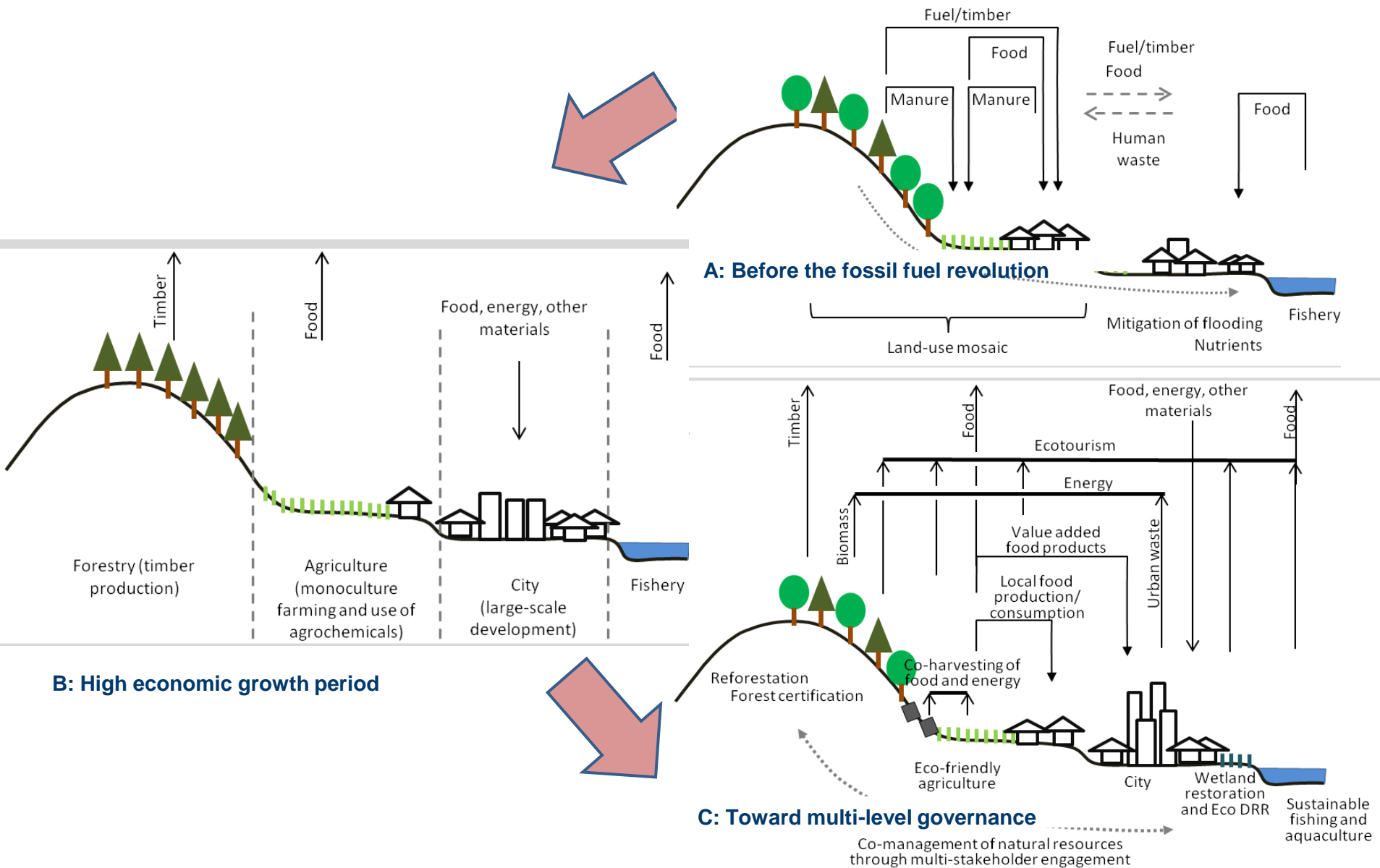
Toward multi-level
governance:
**Cross-scale,
connected and
coupled** social-
ecological system



Ecological System

Social System

Transformation of Relationships among Landscape Units



Rio+20 and SDGs: Contribution of the Satoyama Initiative

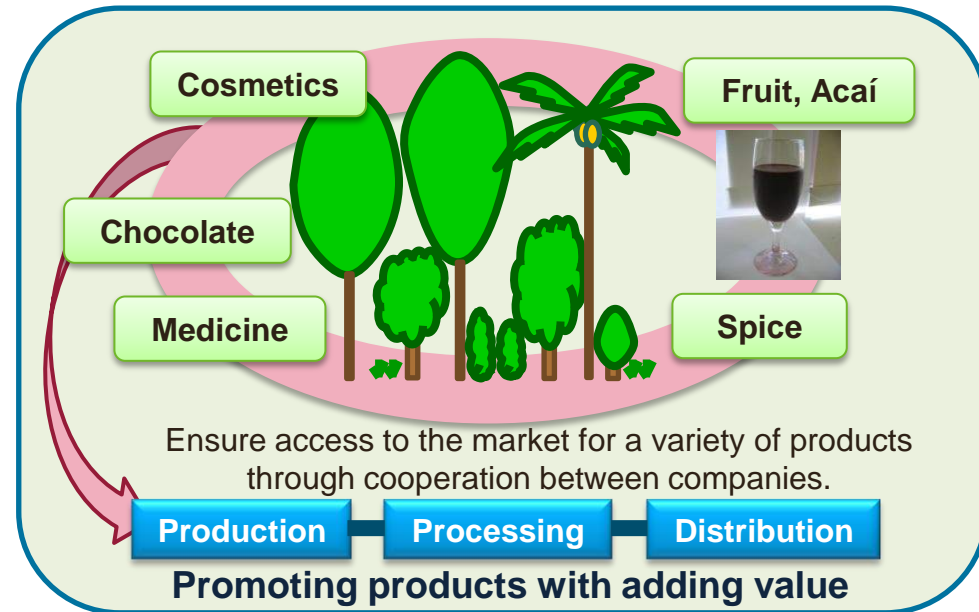
- **Rio+20** in Rio de Janeiro in 2012 focused on achieving **sustainable development** and alleviating poverty by transitioning to a **green economy**.
- Promoting the green economy should be through activities that **build on and secure real “green” capital (i.e. natural capital)**.
- Addressing issues on **biodiversity and ecosystems** is essential for **sustainable development**.
- **SDGs** include many goals related to the Satoyama Initiative:
 - Goal 2 on **hunger and food security**
 - Goal 6 on **water and sanitation**
 - Goal 12 on **sustainable consumption and production**
 - Goal 14 on **oceans**
 - Goal 15 on **biodiversity, forest, desertification**
- **Socially and ecologically sound approaches** in production activities will play key roles in **conserving biodiversity and ecosystems** while contributing to **poverty reduction**.



Strengthen Market Chains with SEPLS Products



**Agroforestry
(Brazil nut and cacao forest)**



Agroforestry Business Model, Brazil

- Biological production utilizing biodiversity and ecosystem services is **more resilient** against climate/ecosystem and economic changes.
- **Amazon agroforestry** by Japanese Brazilians in Tomé-Açu offers a **green economy model** based on a society in harmony with nature.
- A new **high value-added business model** relying on natural capital is required in order to be competitive in modern society.

Andean Agricultural System as GIAHS

Globally Important Agricultural Heritage Systems (GIAHS)

- FAO initiative to safeguard the **traditional agricultural systems** that contribute to **sustainable development**.
- **Holistic approach** (food security, biodiversity, knowledge systems, cultures and landscape).

Andean region: Climatic conditions vary by altitude, creating heterogeneous environments, each characterized by specific field and crop rotation practices, terraces and irrigation systems, and the selection of many animals, crops, and crop varieties.



Rich agrobiodiversity

- Several hundred varieties of potatoes have been domesticated by generations of Aymara and Quechua
- Farmers also grow tubers, fruit trees, maize and quinoa, etc.



Terrace system

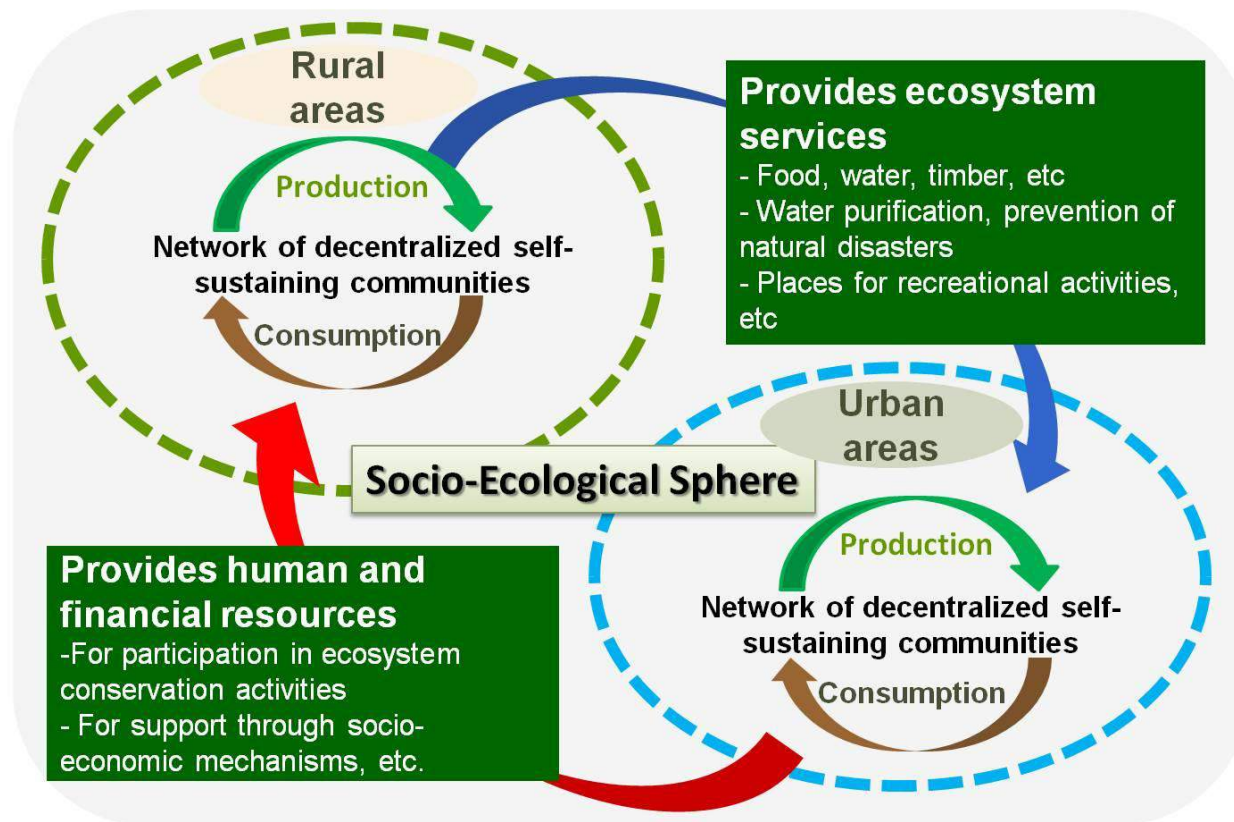
- Controls land degradation
- Various crops and varieties have adapted to different altitudes
- Different ecological zones are used to reduce risk



Trenches filled with water around raised fields

- Water is warmed during daytime and protects crops from frost at night at altitudes of nearly 4000m

Human Well-being Enriched by Ecosystem Services: An Integrated Regional Perspective



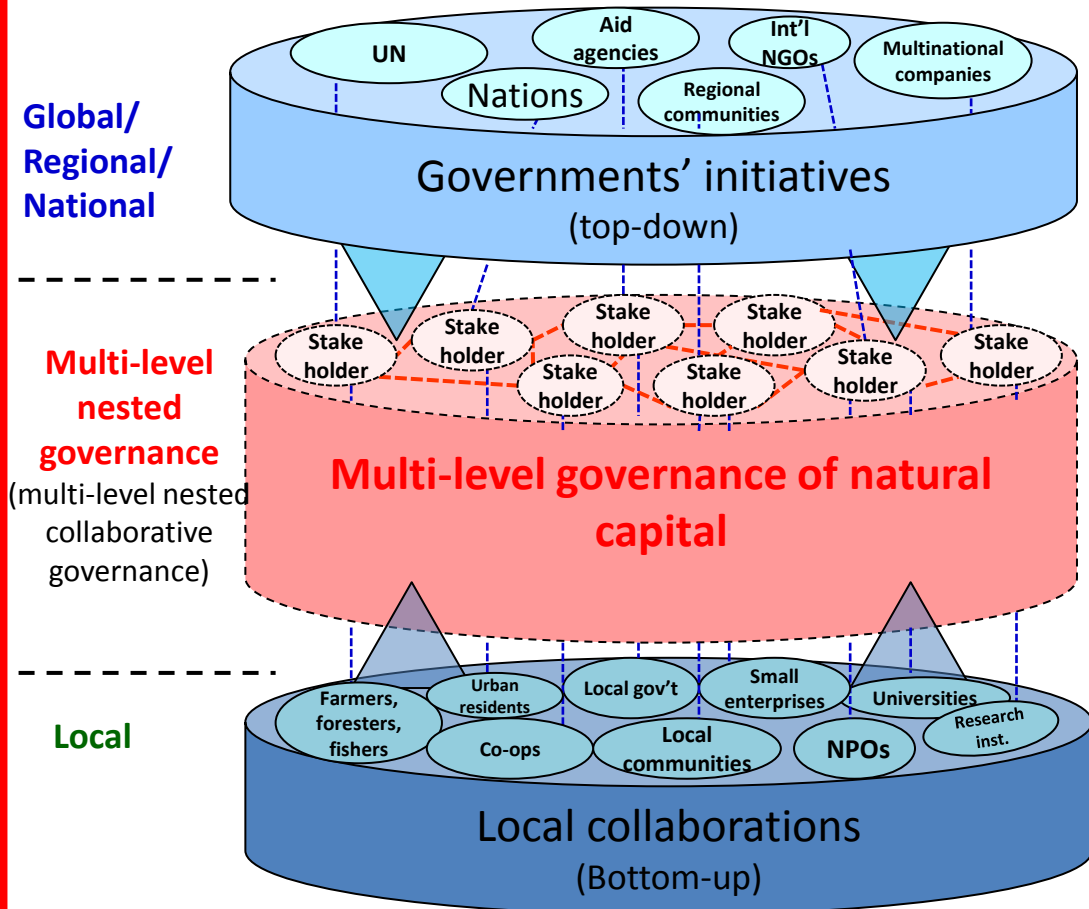
Proposed concept in Japan's newly revised
NBSAP in September 2012

Multi-level Nested Governance of Natural Capital

With the Satoyama Initiative, it is necessary to create mechanisms for collaborative management in order to avoid degradation of **natural capital as stock**, and to promote sustainable provision of **ecosystem services as flows**.

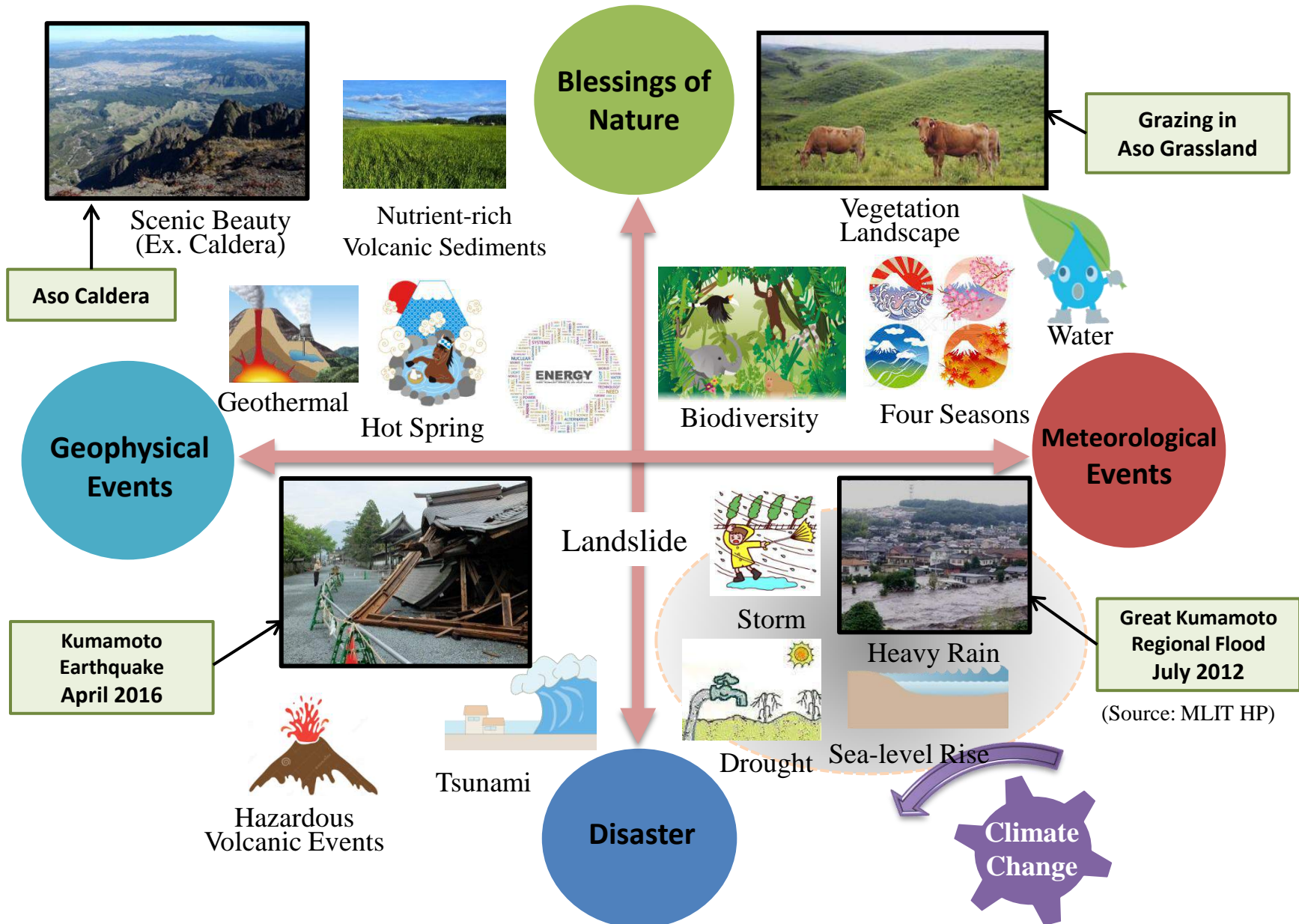
It is necessary to explore new governance (collaborative governance) structures, or “**new commons**” - to complement traditional commons - where **various stakeholders** engage in horizontal cooperation.

It would be effective to build **multi-level and nested governance structures** that value bottom-up activities at the local level while connecting with global networks.



Mechanism for cooperative management of natural capital based on nested collaboration among different stakeholders

Blessings and Threats of Nature in Japan



Promoting Ecosystem-based Disaster Risk Reduction (Eco-DRR) in Tohoku Region

- People in disaster-affected areas in the Tohoku region in Japan are now thinking about a future vision for living in harmony with nature.
- Building **social/ecological resilience** will increase security and contribute to enhanced **quality of life**.
- Urban neighborhoods need to be relocated from tsunami-affected areas or subsided land – utilizing vulnerable land for farming and **restoring natural marshlands** will strengthen regional resilience.
- Reconstruction of safer coastal forests, partly using recycled debris from the disaster.
- The roles of ecosystems, including coastal wetlands and forests, in preventing and mitigating disaster risks in different parts of the world (**Eco-DRR**) was discussed at the Third World Conference on Disaster Risk Reduction held in Sendai City in 2015.



Restoring natural marshlands



Planting trees for rehabilitation
(Photo by Mr. Takao Ogawara)

Thank you for your attention.