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Socio-Ecological Production Landscapes and Seascapes for a Society in Harmony with Nature

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CBD Objectives and COP 10

Three objectives:

1. Conservation of biological diversity
2. Sustainable use of biodiversity
3. Access and benefit sharing (ABS) of genetic resources

IPSI Secretariat, UNU

At the **CBD COP10 (Nagoya, Japan in 2010)**,

- The Strategic Plan for Biodiversity 2011–2020 and the Aichi Biodiversity Targets (20 targets to be achieved by 2020) were adopted with its vision "Live in Harmony with Nature".
- A decision recognizing the Satoyama Initiative (X/32) (related to objective 2) was adopted, and International Partnership for the Satoyama Initiative (IPSI) was launched.

Decision X/32

Recognises the Satoyama Initiative as a potentially useful tool to better understand and support human-influenced natural environments for the benefit of biodiversity and human wellbeing

The Satoyama Initiative

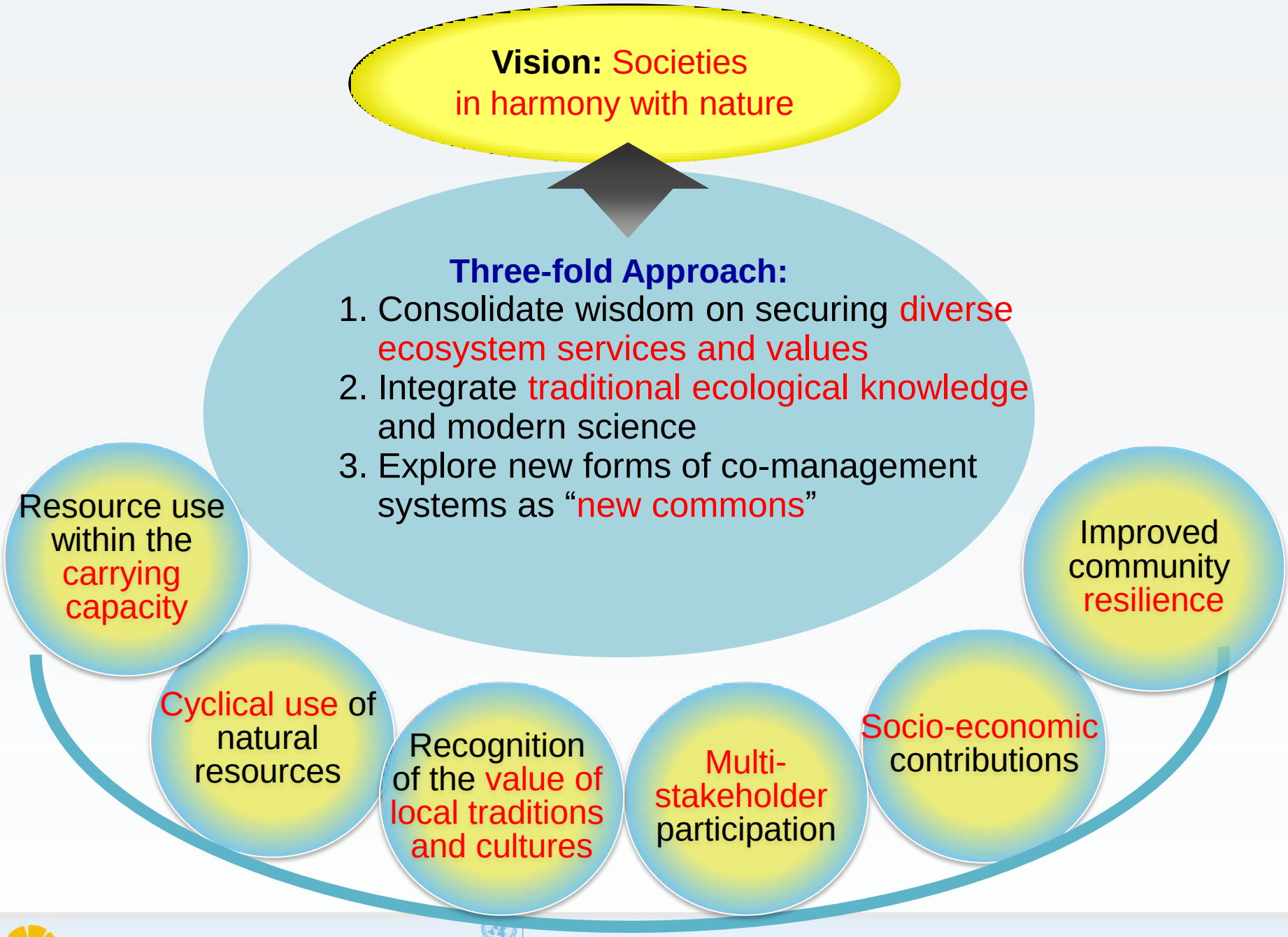
- A global effort to realize "societies in harmony with nature"
- Contributes to the CBD's second objective: "Sustainable use of biodiversity"
- Socio-Ecological Production Landscapes and Seascapes (SEPLS)
  - Dynamic mosaics of habitats and land uses
  - Providing humans with the natural capital and ecosystem services for their wellbeing while conserving biodiversity

Paddy-dominated landscape in Bali
(Photo: Kazuhiko Takeuchi)

Agroecological system in Peru
(Photo: Akira Nagata)

Satoyama in Japan
(Photo: Kazuhiko Takeuchi)

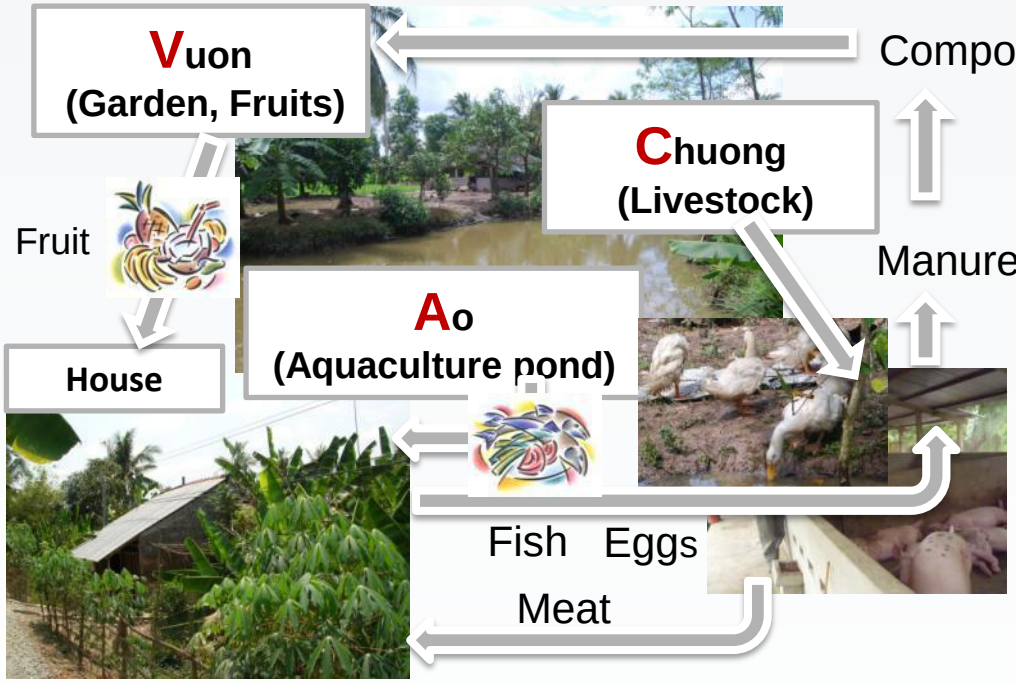
Threats and Challenges



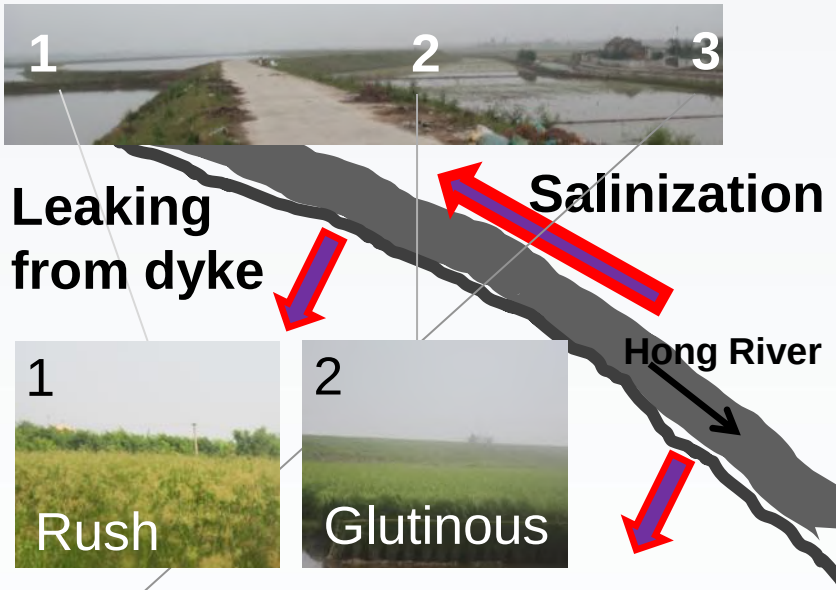
(Modified after IPSI Secretariat, UNU, 2016)

VAC system and Paddy Production: Viet Nam

- The VAC system, which is a traditional home garden system, is more resilient but not economically efficient.
- Integrating high yielding and traditional variety, which can respond to salinization around the Hong River in Viet Nam.



VAC system



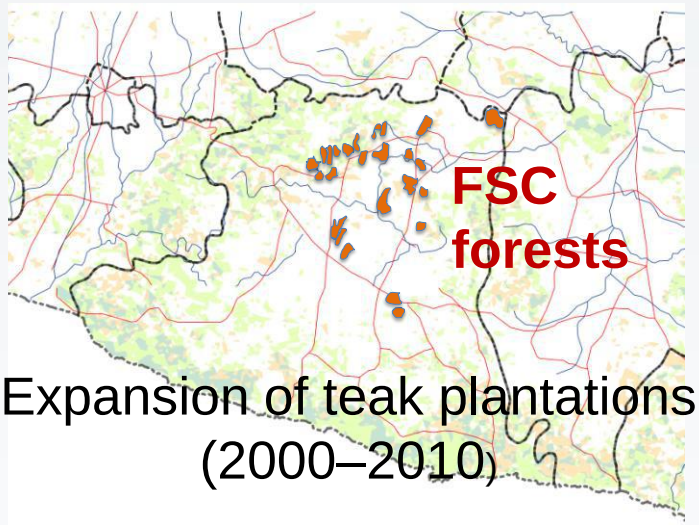
Response to salt intrusion

Combination of Bio-Production Systems: Indonesia

Traditional bio-production

Pekarangan
High biodiversity features:
- Diversity of plants
- Variety of biota

Role of Pekarangans:
- Community use in daily life
- High value trees are sold in emergencies
  - healthcare
  - disaster



Expansion of teak plantations (2000–2010)

- Biodiversity conservation: agroforestry and forest certification
- Socio-economic changes: Commercial reforestation
- Enhancing resilience by integrating of these two systems

Modern bio-production

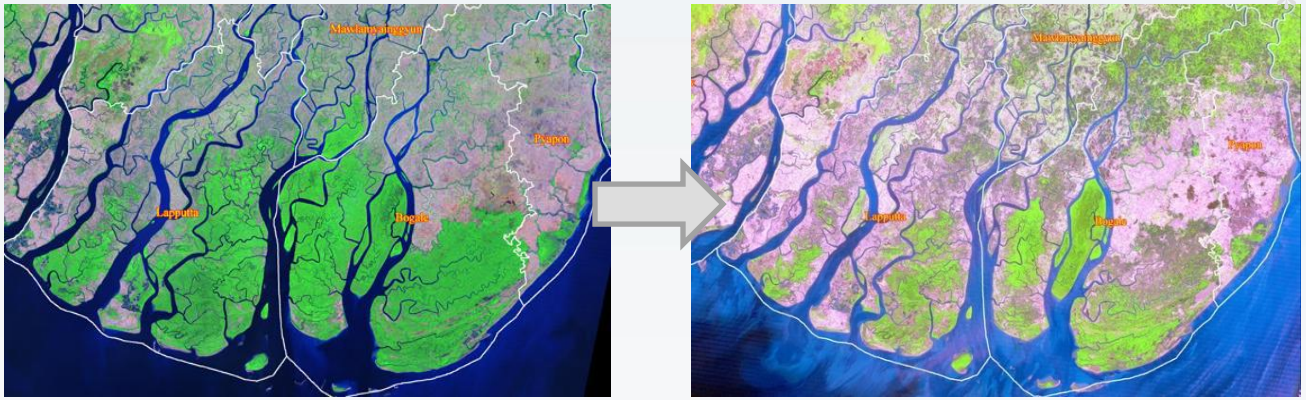
Commercial Reforestation
- Extracting oil from leaves and branches
- High inputs of agrochemicals

Forest Certification System (FSC)
- Sales channels
- Regulating agrochemicals
- Biodiversity conservation

(Modifying RIHN, 2012)

EcoDRR in Ayeyarwady, Myanmar

1990 Present

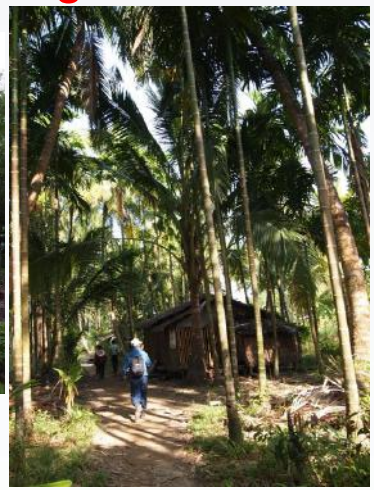


(Map source: Forest Research Institute, Myanmar)

Local livelihoods in the area rely on the mangrove forest for its DRR function and its contribution to fisheries, but the forest is declining.

Mangrove forests around a village have been rehabilitated and wind and salt-tolerant species have been selected for home gardens, in order to enhance local resilience together with artificial facilities for disaster risk reduction.

Mangrove forests around a village



Home garden around a house

Diversification of Livelihoods: Northern Ghana

- Household members — both men and women — look for diverse livelihood opportunities inside and outside of their communities.
- Livelihood diversity (on-farm, off-farm, non-farm opportunities) can enhance the resilience of the community.
- Expanding the value chain to sell products in the community.

Promoting pepper and okra (crop diversification)

Selling honey (livelihood diversification)

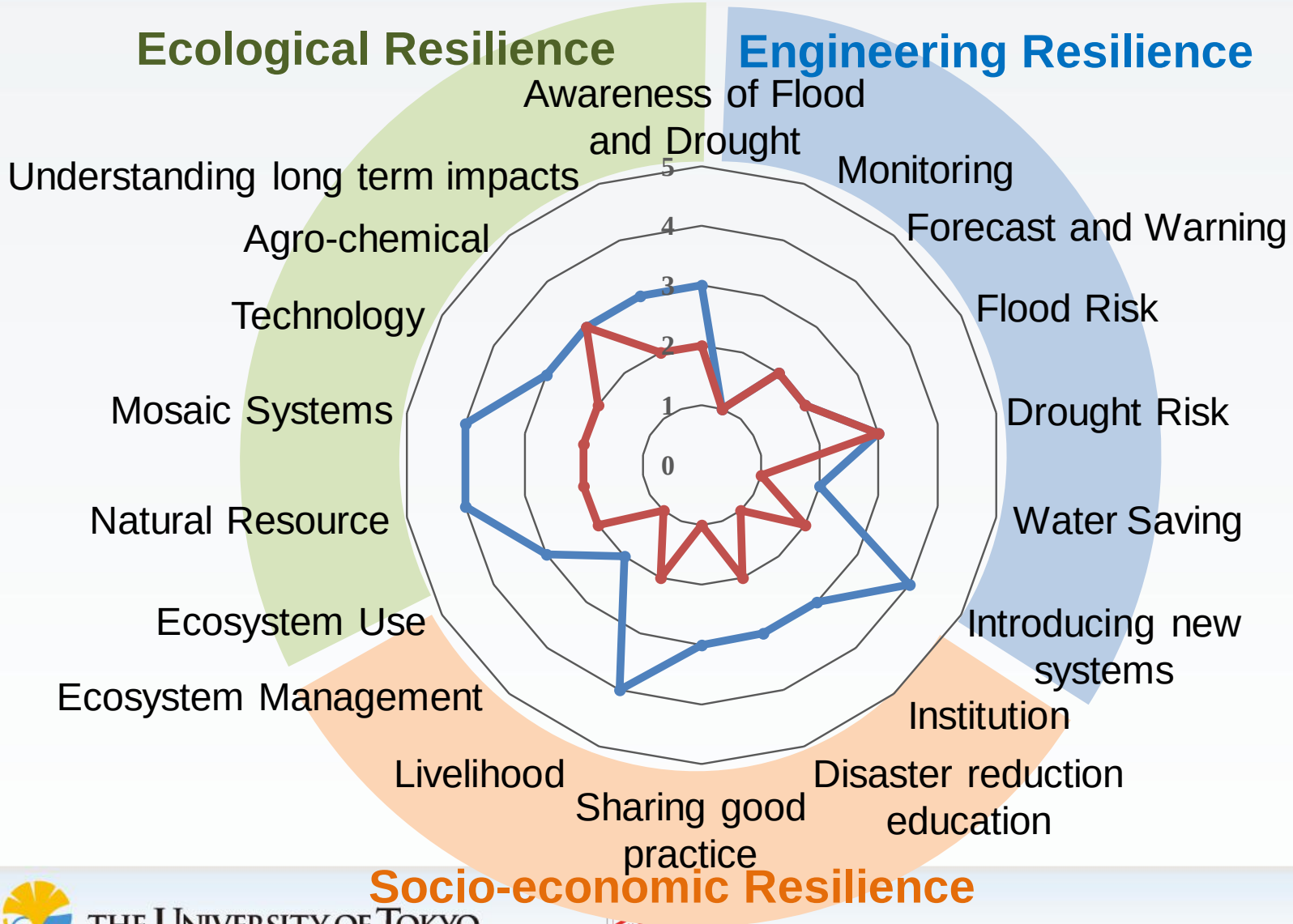
Shea Butter and Women's Empowerment in Northern Ghana

- Access to ecosystem services in local community are continuously suffering from land degradation, and unpredictable rainfall.
- Women are disadvantaged in accessing fertile land and other income sources.
- Shea butter:
  - strong in droughts & floods
  - generating additional value
  - women's empowerment

Shea tree and fruit

Women's empowerment and shea

Example of Community Resilience Assessment and Interventions



Co-Creating Drama with Communities

- There are major challenges in effectively engaging communities and disseminating scientific findings where illiteracy rates are high.
- Locals draw on traditional culture and practices to tell stories of changes in their community.
- An opportunity to empower local communities to understand research findings and promote self-action beyond immediate project interventions.

Key Messages in Theatre

Past
- Predictable weather
- Fertile land

Present
- Unpredictability in weather
- Shortage of fertile farmlands

Future
- Extreme weather
- Multiple livelihood sources
- Integrating knowledge
- Climate-smart agriculture

A Sustainable Society in Harmony with Nature and SDGs

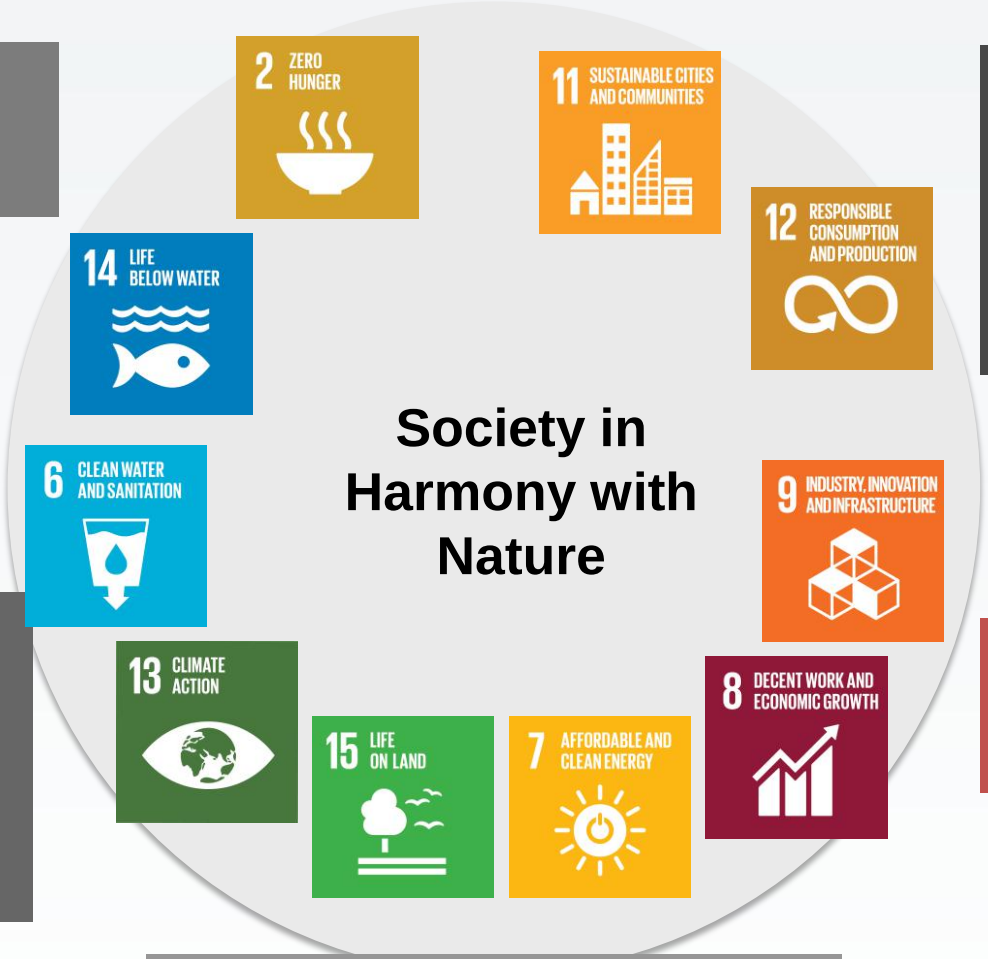
Agriculture and fisheries

Sustainable production and consumption

Sustainable use and conservation of resources

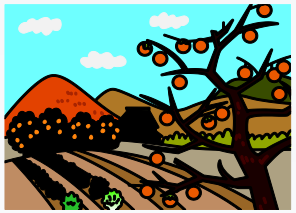
Revitalization of industry

Sustainable energy

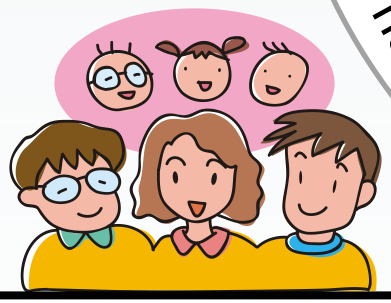


Promoting the Social-Ecological Sphere through Rural–Urban Linkages

Forests



Farmland

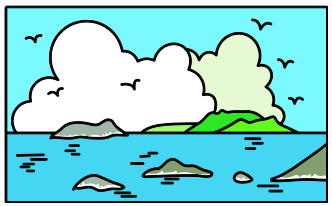


Participatory approach

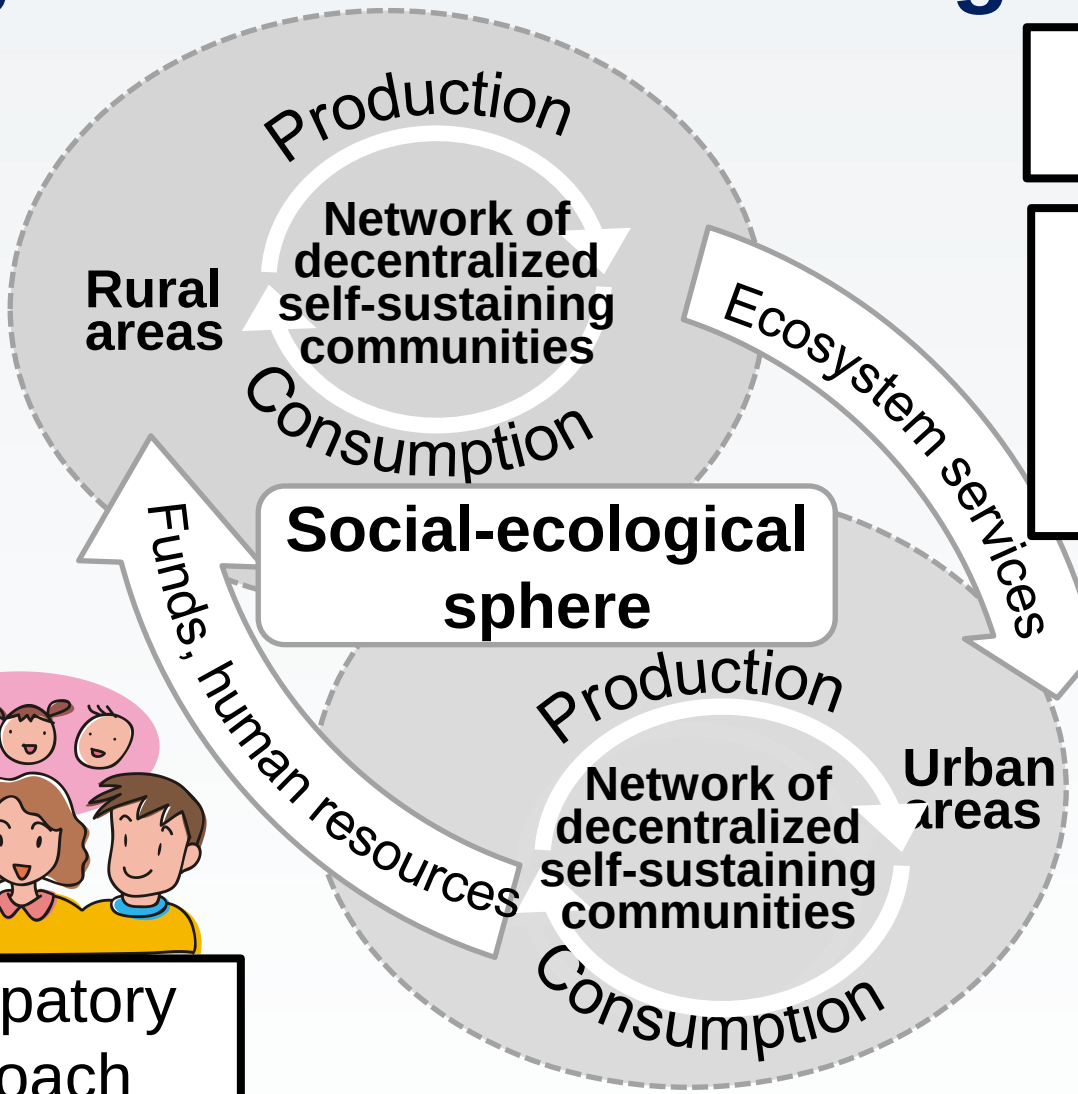
Disaster risk reduction

Daily ecosystem services such as food & water provisioning & recreation

Rivers



Oceans



(MOEJ, 2012)