From Science to Implementation: Strengthening the Science Policy Interface (SPI) to Integrate Climate Change, Resilience, and the SDGs

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“From Science to Implementation: Strengthening the Science Policy Interface (SPI) to Integrate Climate Change, Resilience, and the SDGs” on 11th July 2019, UNHQ, NY
Global Agreements related to Sustainability

- Paris Agreement (UNFCCC)
- 2030 Agenda and SDGs
- Aichi Biodiversity Targets & Post-2020 Biodiversity Framework (CBD)

Need to take integrated actions towards new sustainable society

Need to be implemented locally
Role of Science for Achieving SDGs

**Role of Science**

- Identify “what we should do”
  - “Normative”
  - e.g. Planetary Boundary

- Identify “what we can do”
  - “Action-oriented”
  - e.g. Regional CES (Circulating and Ecological Sphere)

**2030 Agenda Process**

- **Future We Want**
  - VLR Lab
  - Ecosystem to create solutions with collective actions

- **Follow-up and Review**
  - Thematic review
  - Goals review
  - Voluntary National Review

- **Vertical integration**
  - with transparency, inclusive, participatory

- **Voluntary “Local” Review**
  - Cities, SMEs…………
The Satoyama Initiative

- Promotes “landscape and seascape approaches” to biodiversity conservation and sustainable use:
  - Socio-Ecological Production Landscapes and Seascapes (SEPLS)
    - Support biodiversity while providing humans with goods and services needed for their well-being.
    - Mutual benefits between people and nature.
    - Dynamic mosaics of habitats and land uses.
    - Deeply linked to local culture and knowledge.
Indicators of Resilience in SEPLS

- **IPSI Collaborative Activity**
  (developed by UNU, IGES, Bioversity International, UNDP)

- Assessing multiple aspects of SEPLS using 20 indicators in five categories

- Self assessment results by stakeholders interpreted by external party(agency)

- Indicators relate to all 17 SDGs

- Promote partnerships between local communities and external partners to act toward strengthening resilience through participating in assessments

- Establish process for monitoring and evaluation

SEPLS Resilience Indicators Workshops in Namibia (Left), Bhutan (Center) and Japan (Right)

Responses of Kiyokawa Town and Hiki Town, Japan
Japan’s 5th Basic Environment Plan

Challenges Facing Japan

- Utilizing the concepts of SDGs, realizing the Integrated Improvements on Environment, Economy and Society.
- Innovation of lifestyles towards environmentally-friendly, healthy and high quality life.
- Maximize the sustainable use of regional/local resources for improvements in economic and social activities.
- Promoting Partnerships with a wide range of stakeholders.

Basic Approach

Environment

Lifestyles

Economic

Social

Integrated Improvements on Environment, Economy and Society

Source: Ministry of the Environment, Japan
Regional/Local Circulating and Ecological Sphere (CES)

Integration of environmental, economic and social dimensions
Integrated response to declining and aging population, Local revitalization
CES to achieve **integrated solution** for those local issues

- **Harmony with Nature**
- **Safe and Secure Community (e.g. Eco-DRR, EbA)**
- **Interaction of People, Information and Technologies**
- **Connect to Global Communities**

- **Smart Grid**
  - Renewable Energy, Energy Saving
  - Decarbonization

- **Reduce, Reuse and Recycle**
  - Resource Circulation

- **<Rural> Natural Capital**
- **<Urban> Produced Capital**

(IGES, 2019)
Hokusetsu Satoyama CES Model in Hyogo Prefecture

Hokusetsu Area

Rural residents

Co-harvesting (PV over farms)

Forest/rural landscape conservation

Charcoal making

Wood biomass

Livestock manure

Local transport system (EV, biofuel)

agro-products

power

transportation

power

heat

heat & power

biogas

fuel/heat

Education, learning & experiences

Learning /green tourism, migration

Demand & supply matching & sharing

(EIGES, 2019)

Urban farms

Local food production & consumption

Wood biomass

Local food production & consumption

Urban farms

Finance & people

Rural

Ecosystem services

Urban

Power

Urban residents

Hokusetsu Area

8
Existing Platform Project toward CES

National Body

Contract

CES Platform

Pool of Experts

Community businesses
Tourism
Environment
Agriculture forestry, and fishery
Information Technology
Enterprise
Financing

Municipalities

Organize

Administrative officer

Citizen

Local banks

Local companies

Local consortium

Support team

Based on the request

Participate and Advise

Support management

Appoint a coordinator

Coordinator

NPO&NGO
Voluntary Local Review (VLR)

VLRs have the potential to inform the drafting of future Regional/Local CES strategies.

Conducting VLRs can provide a space for self-assessment, policy integration, accountability and peer-learning.

Shimokawa Town, Hokkaido
Toyama City, Toyama
Kitakyushu City, Fukuoka

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