

# Sustainable production and consumption in low carbon communities

– an Asian perspective

The logo for IGES (Institute for Global Environmental Strategies) features the letters 'IGES' in a bold, green, sans-serif font. A thick purple horizontal bar is positioned directly beneath the letters.

Institute for Global  
Environmental Strategies

Yasuhiko Hotta

Chen Liu

Atsushi Watabe

Lewis Akenji

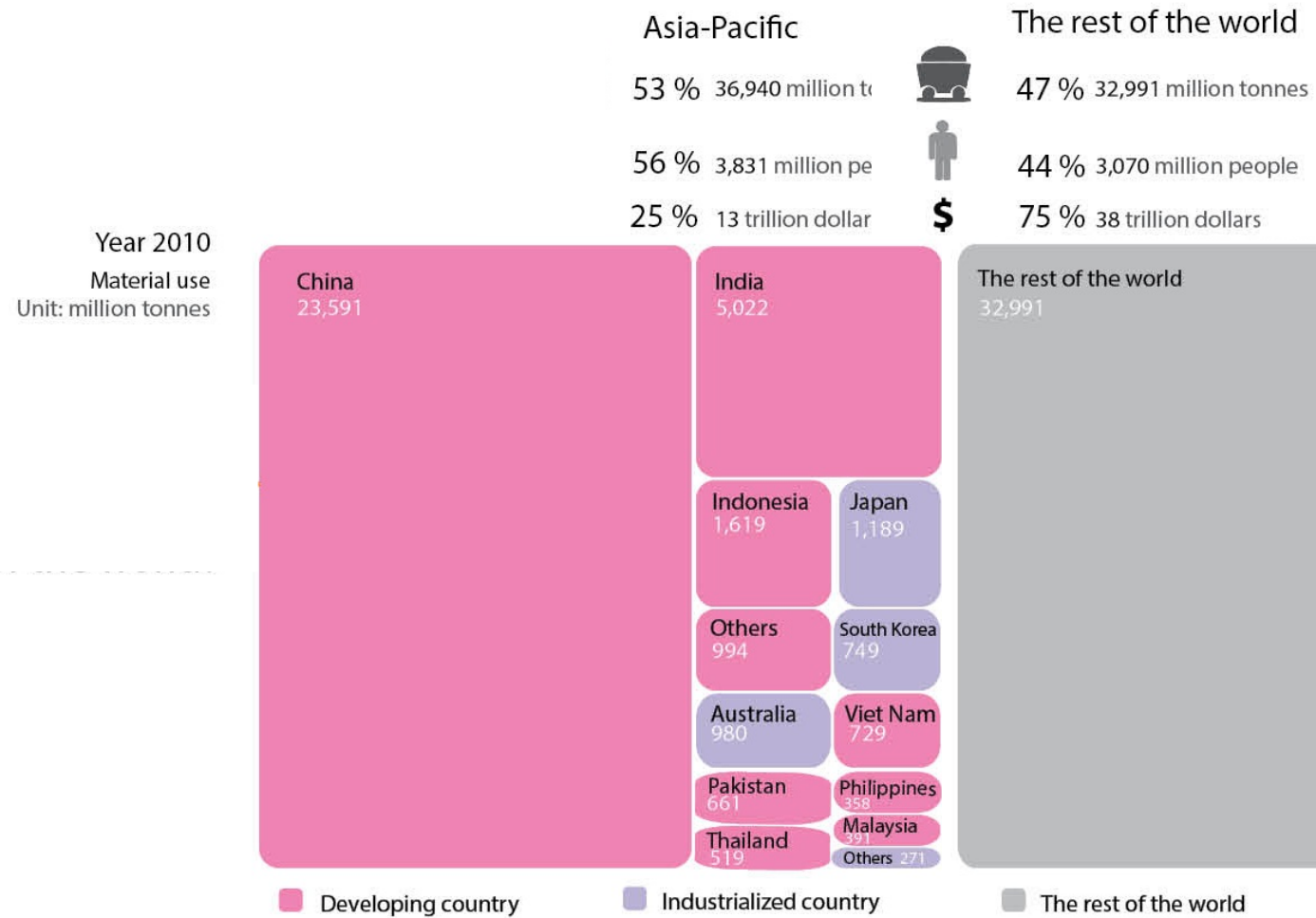
Ryu Koide

SCP Area, IGES, Japan

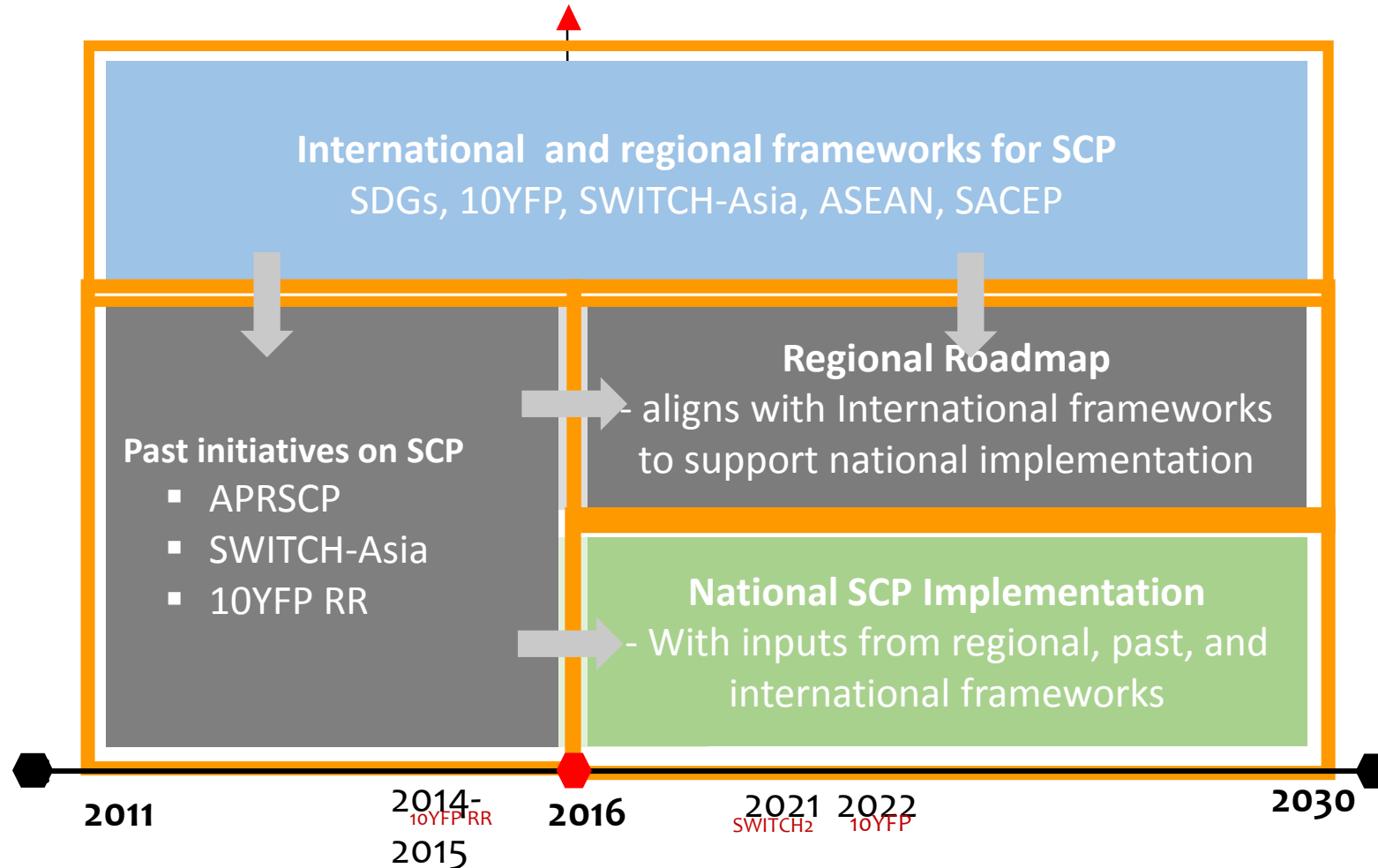
- Why Asia?
- Why SCP now?
- Case study of community practices in Asia
- IGES's engagement in SCP-related initiatives

Why Asia?

# Resource use in AP dominates global use...



# Building a SCP Regional Roadmap



Why SCP now?

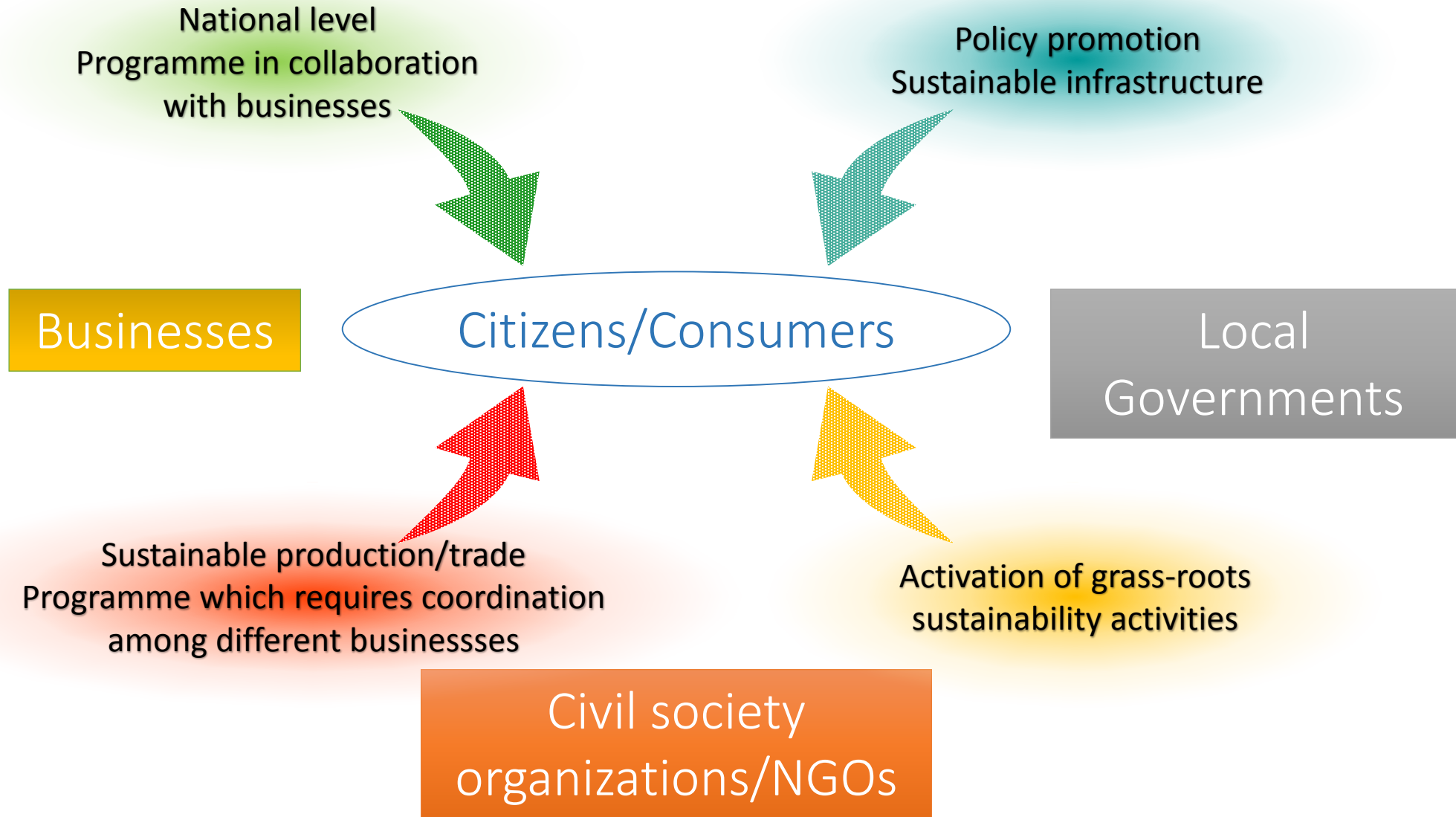
# Evolution of SCP concept

End-of-pipe (1970s) to Cleaner production (1980s)	From efficiency (1990s) to life-cycle approach (2000s)	Sufficiency approach
<ul style="list-style-type: none"><li>• From reactive to preventative measures</li><li>• From acute to chronic problems and sources of impacts</li><li>• From single-pollutant or single-media to multimedia and multi-impact pollutants</li><li>• From site-specific to supply chains</li><li>• From throughput to material cycles</li></ul>	<ul style="list-style-type: none"><li>• From production orientation to product life-cycle orientation</li><li>• From single-company search to life-cycle-wide search for solutions</li><li>• From consumers as objects to consumers as agents</li><li>• From adversarial stance to partnerships</li><li>• From regulation to voluntary initiatives</li></ul>	<ul style="list-style-type: none"><li>• From supply chains to value chains</li><li>• From green consumerism to sustainable consumption/lifestyles</li><li>• From focus on technical fixes to include social transformation</li><li>• From national level implementation to transnational approaches</li><li>• From growth to well-being (...almost)</li></ul>

# Case-study of community practices in Asia



# National Government



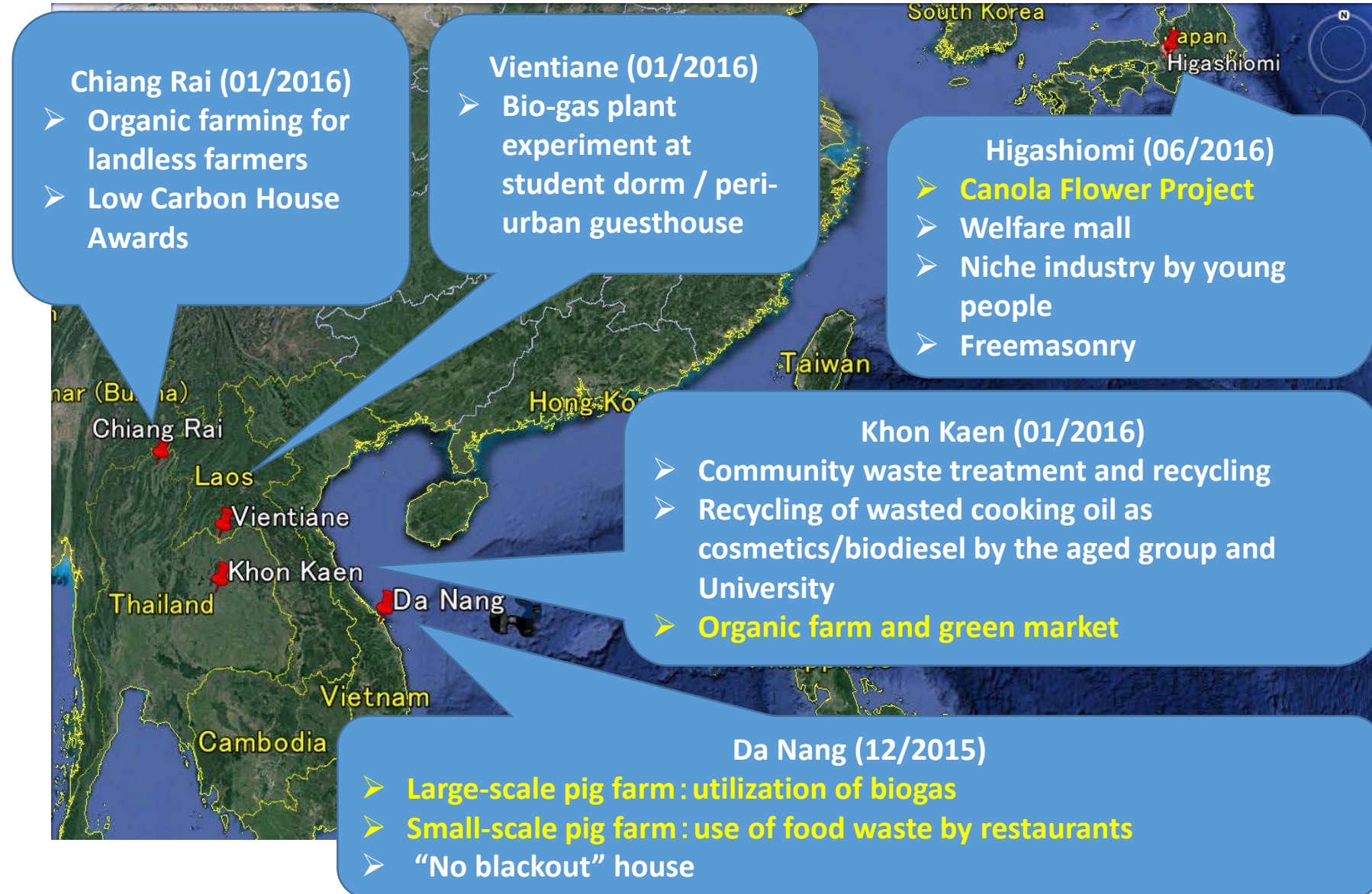
# Cases of local practices for sustainability

## Objectives:

To clarify the “conditions” to promote the SCP/SDGs-related initiative at the community level

## Questions:

Linkages between local awareness/concern on sustainability issues and actions;  
Interaction between local and national/global actors;



# Highlights of observation

1. Most initiatives were begun out of concern different from environmental sustainability;
2. Initiatives reframe the challenges & resources;
3. Various initiatives for diverse challenges are working concurrently, where local sustainability are actively practiced;
4. Local “loops” are created, but not bounded to “the local”

Observation 1:

Out of diverse & unique concerns

- Non-blackout house for “Adaptation” (Danang)
- Organic farming for landless farmers (Chiang Rai)
- Recycling cooking oil and biodiesel for health & community revitalization (Khon Kaen)

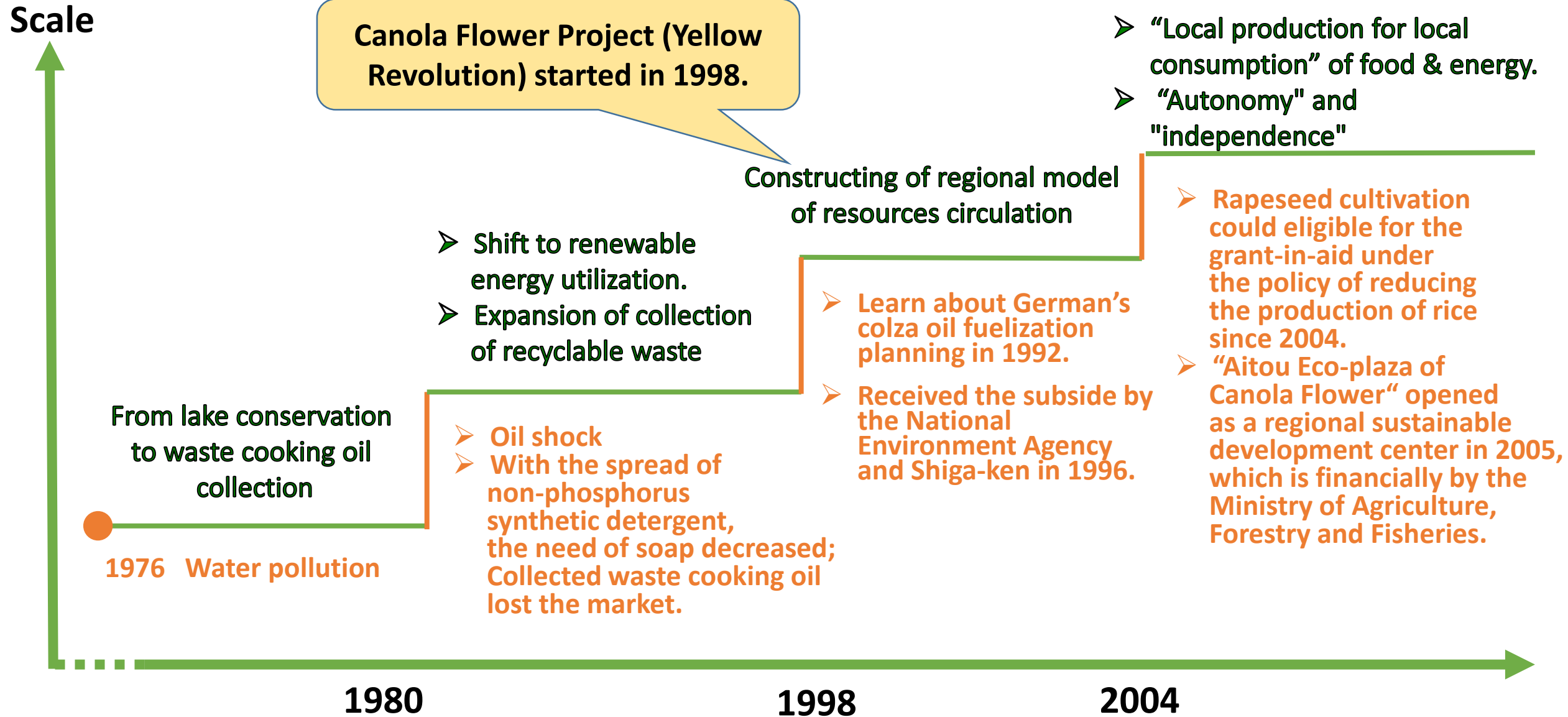
Observation 2:

## Reframing and Reconfiguration

- Higashi-omi: From “Soap Movement” for lake cleanup to Canola Flower Project for local resource circulation & energy supply
- Khon Kaen: Urban organic farming for various issues.

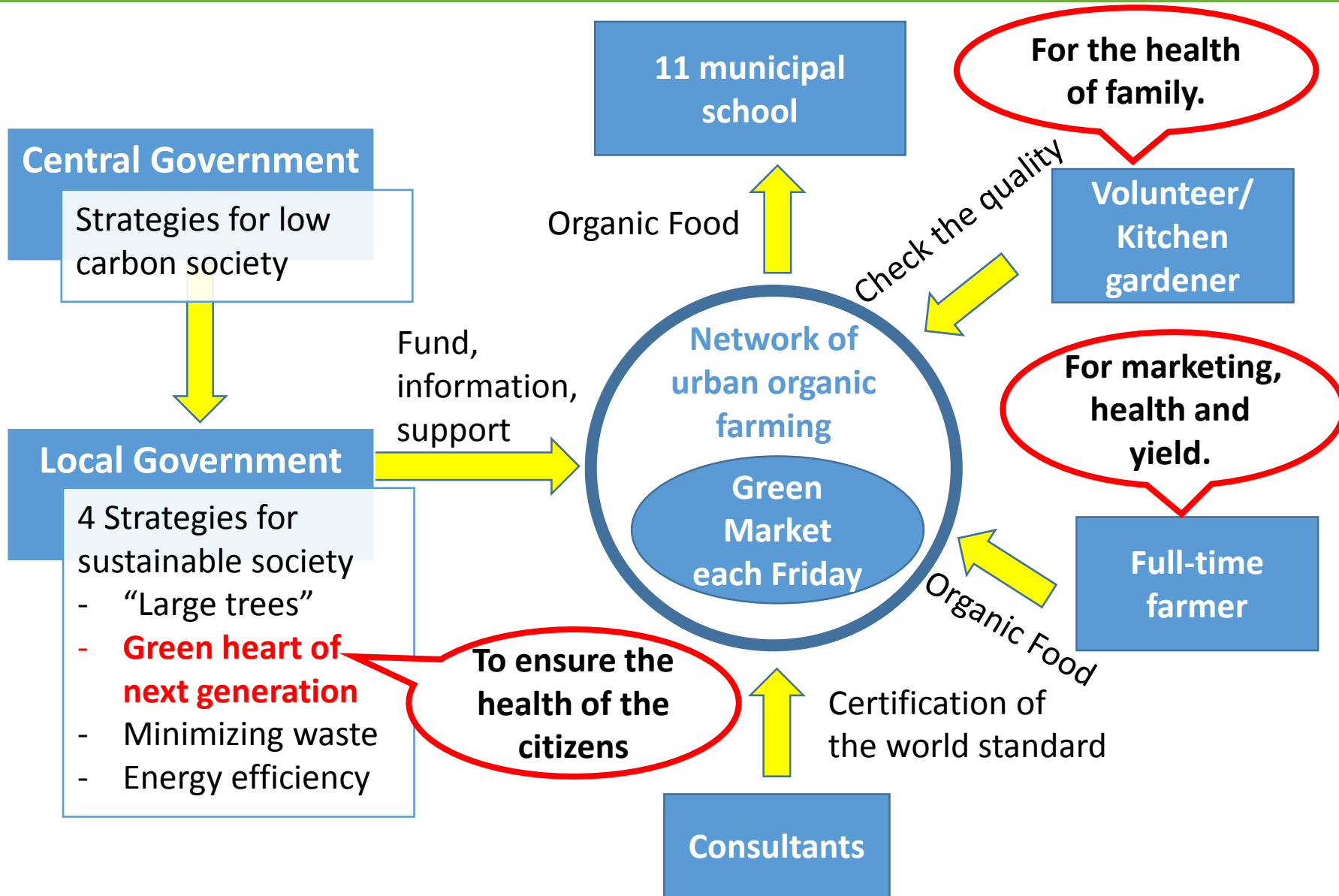
# Higashiomi

## - the historical transition of environmental practices



# Khon Kaen, Thailand

## - network of urban organic farming



- ◆ Initiated by the local government, but driven by the communities.
- ◆ Third trial to success: NGO's attempt -> fail KK city's policy -> fail KKC & NGO -> gradually spreading
- ◆ Under the strong leadership of current mayor for improving environment, various initiatives are working.

## Observation 3:

# Concurrent initiatives for diverse challenges

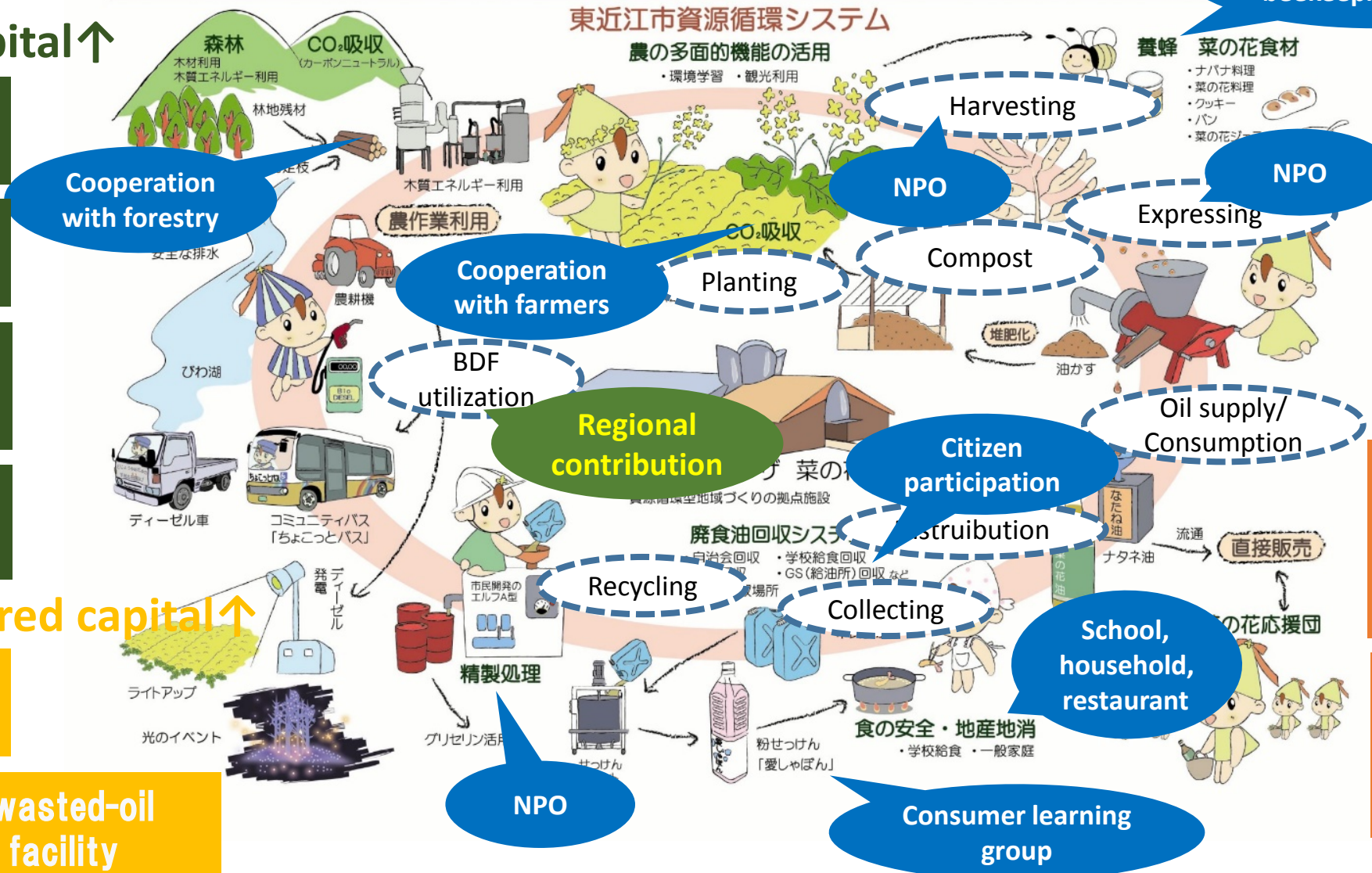
- Higashi-omi: Citizen's movements cheered by the city office
  - Welfare mall: local food / energy production and consumption and employment of handicapped
  - Better utilization of local woods
  - Farm stay
  - Citizen's power plant
  - "Soyori" (town gathering for exchange / collaboration)
- Khon Kaen: City government arouses community actions
  - Street planting;
  - Green market; & other "organic" villages
  - Community-university collaboration for recycling of cooking oil
  - Community based waste treatment and recycling...



# Higashiomi - Canola flower & various initiatives

## Canola Flower Project (Yellow Revolution) ([http://www.nanchana.gr.jp/?page\\_id=39](http://www.nanchana.gr.jp/?page_id=39))

- Natural capital ↑
- Regeneration of mountain
- Regeneration of farmland
- Watershed conservation
- Natural energy
- Manufactured capital ↑
- Eco-plaza
- Oil mill & wasted-oil disposal facility



- Cooperation with beekeeping farmer
- Human/Social capital ↑
- Provide job opportunity
- Partnership network of citizen, organizations, agencies and etc.
- Local revitalization  
- Reconstruction of agriculture  
- Eco-tourism ...
- Creation/exchange of knowledge, wisdom and know-how.

## Observation 4:

# Local “loops” created, but not bounded

- Reconnecting the “loop”
  - Resources – Production – Distribution – Consumption (urban organic farm)
  - Waste – resources (biodiesel etc)
- Reconfiguring “resources”
  - Unused land for energy production
- But “loops” are not locally bounded
  - Seeking for political/financial support
  - Marketing for outside customers;
- Local challenges and actions are:  
dynamic interactions among local concerns, resources, global/national agenda and political & financial support

Reconsidering the question:

## Concurrent sustainability initiatives: keys for local sustainability?

- Can accept various ways of participation;
  - Full-time / part-time
  - Practitioner / business owner / consumer / government officials;
- New ideas/synergies among various initiatives
- Can reframe & reconfigure for changing conditions;
- Accumulating capacities for aspiring to alternatives:
  - Mobilisation of local/outer resources
  - Trust with local governments / among practitioners / citizens

Reconsidering the question:

Concurrent sustainability initiatives:

As a research topic?

- Capturing “concurrent” initiatives and detailed analysis
  - Drawing the perspective of the local concurrent initiatives
  - Detailed analysis of specific initiative(s)
- Comparison between similar initiatives with difference
  - Concerns, available resources, outputs
  - Possible case: Bioenergy in Higashiomi, Khon Kaen and Danang?  
Diverse movements of organic farm(s) in Khon Kaen
- Comparison between cities
  - Ways of communication among different initiatives
  - Available resources (natural, human, financial, technological, political);
  - Possible case: Higashiomi and Khon Kaen (and Surabaya?)

IGES's engagement to SCP  
initiatives and research

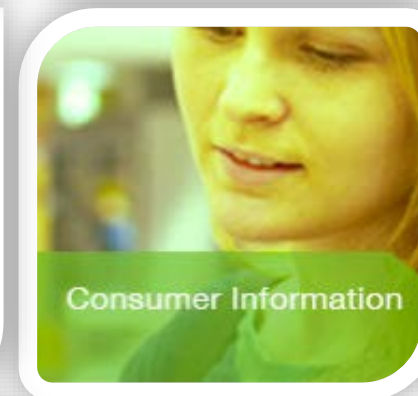
# UNEP 10YFP

Accelerate the shift towards **SCP** in all countries by supporting regional and national policies and initiatives

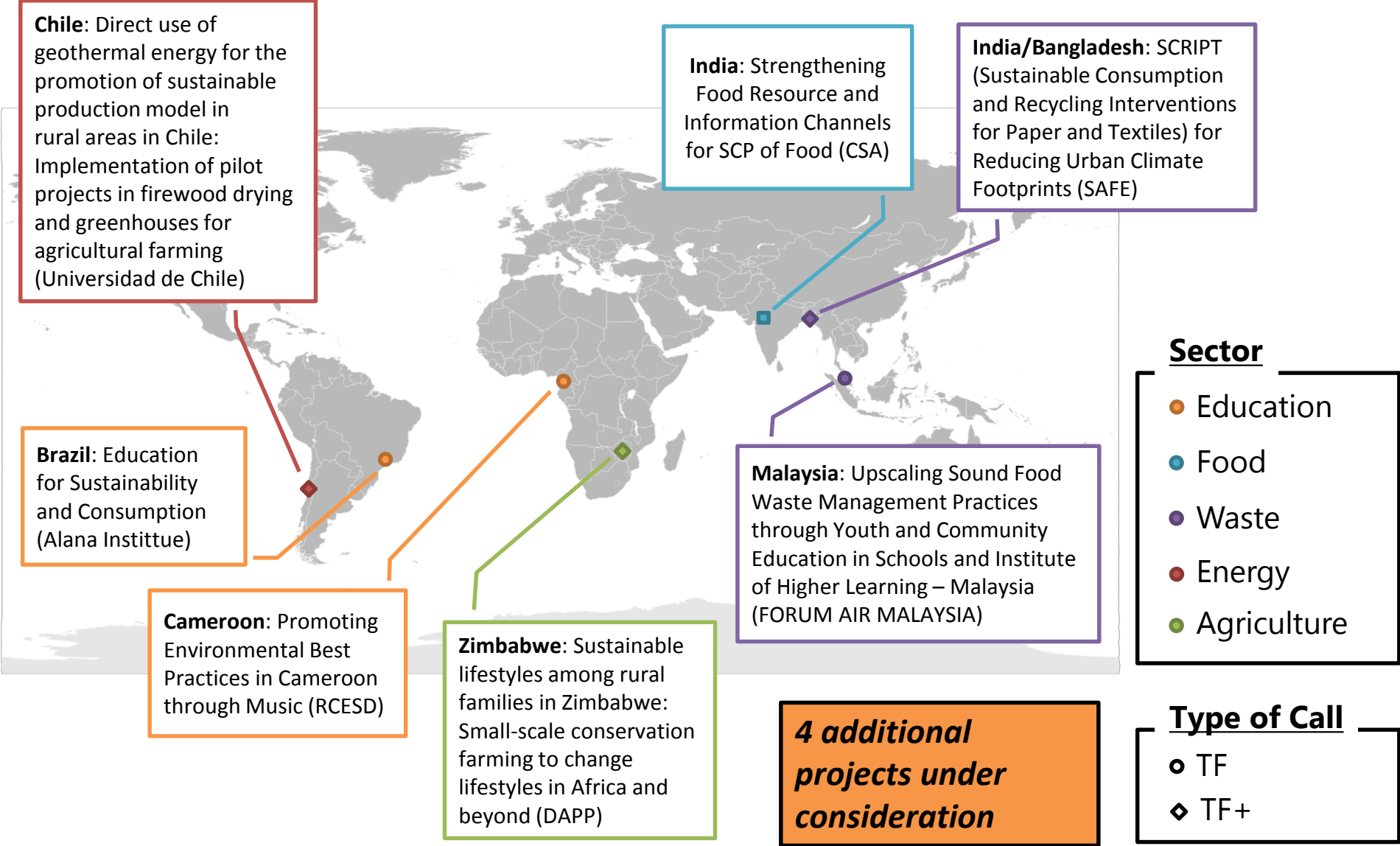
Support **capacity-building** and facilitate access to **financial and technical assistance for developing countries**, to implement sustainable consumption and production (SCP)

Increase resource efficiency and decouple economic growth from environmental degradation, **creating decent jobs** and contributing to **poverty eradication**

Serve as an **information and knowledge sharing platform on SCP** to enable **all stakeholders** to exchange policies, tools, initiatives and best practices on SCP



# 10YFP SLE projects





# S-16 Project

- Focusing on “Policy Design and Evaluation to Ensure Sustainable Consumption and Production Patterns in Asian Region”
- Starting from June 2016 for 3-5 years.
- 4 themes related to SCP in the context of Asia.
- Led by University of Tokyo (Theme 1), NIES (Theme 2), IGES (Theme 3), and Keio University (Theme 4) (with 11 sub-themes)
  - Theme 1 approach: Engineering. Strengthening Relations between Consumption and Production towards Sustainability
  - Theme 2 approach: Sociology. Focusing on lifestyle and stakeholders engagement.
  - Theme 3 approach: Policy and Economics. Focusing on policy evaluation, modeling and sufficiency approach
  - Theme 4 approach: Governance and SDGs. Focusing on SDGs implementation in the context of SCP



東京大学  
THE UNIVERSITY OF TOKYO



**AIST**



**NIES JAPAN**



Institute for Global  
Environmental Strategies



**KYUSHU  
UNIVERSITY**

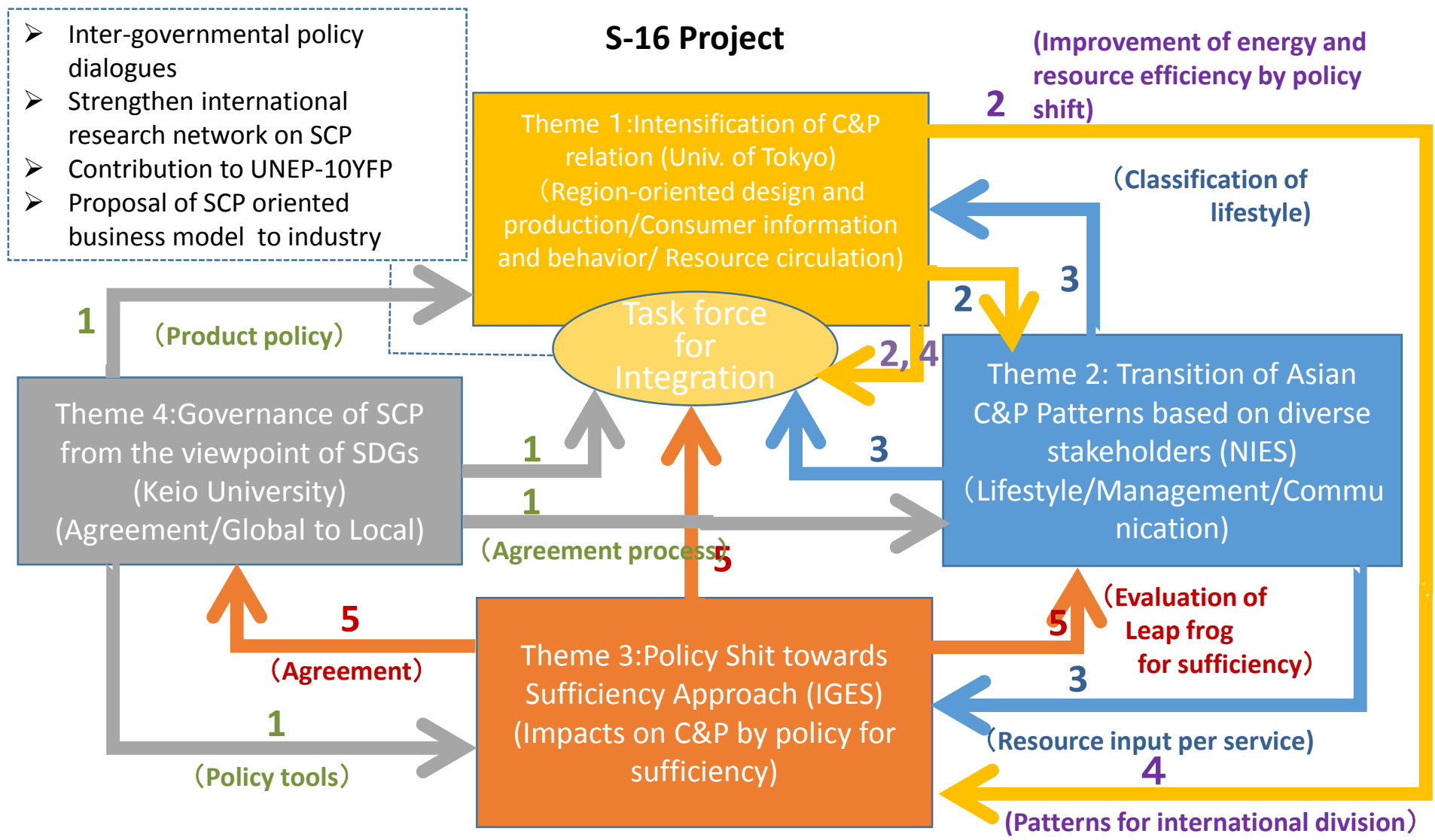


**UNITED NATIONS  
UNIVERSITY**

**UNU-IAS**

Institute for the Advanced Study  
of Sustainability





1. Mid-to-Long term SCP vision from the viewpoint of SDGs in Asia
2. Product design/production systems for improvement of energy and resource efficiency
3. Classification of lifestyles and their leap frog for sufficiency
4. Appropriate and possible international division for Asian region
5. Analysis and evaluation of policy package for Asia

# Acknowledgement

- The case study presented in this presentation is funded through Japan's Environment Research and Technology Development Fund (S-16-3) of the Ministry of the Environment, Japan.