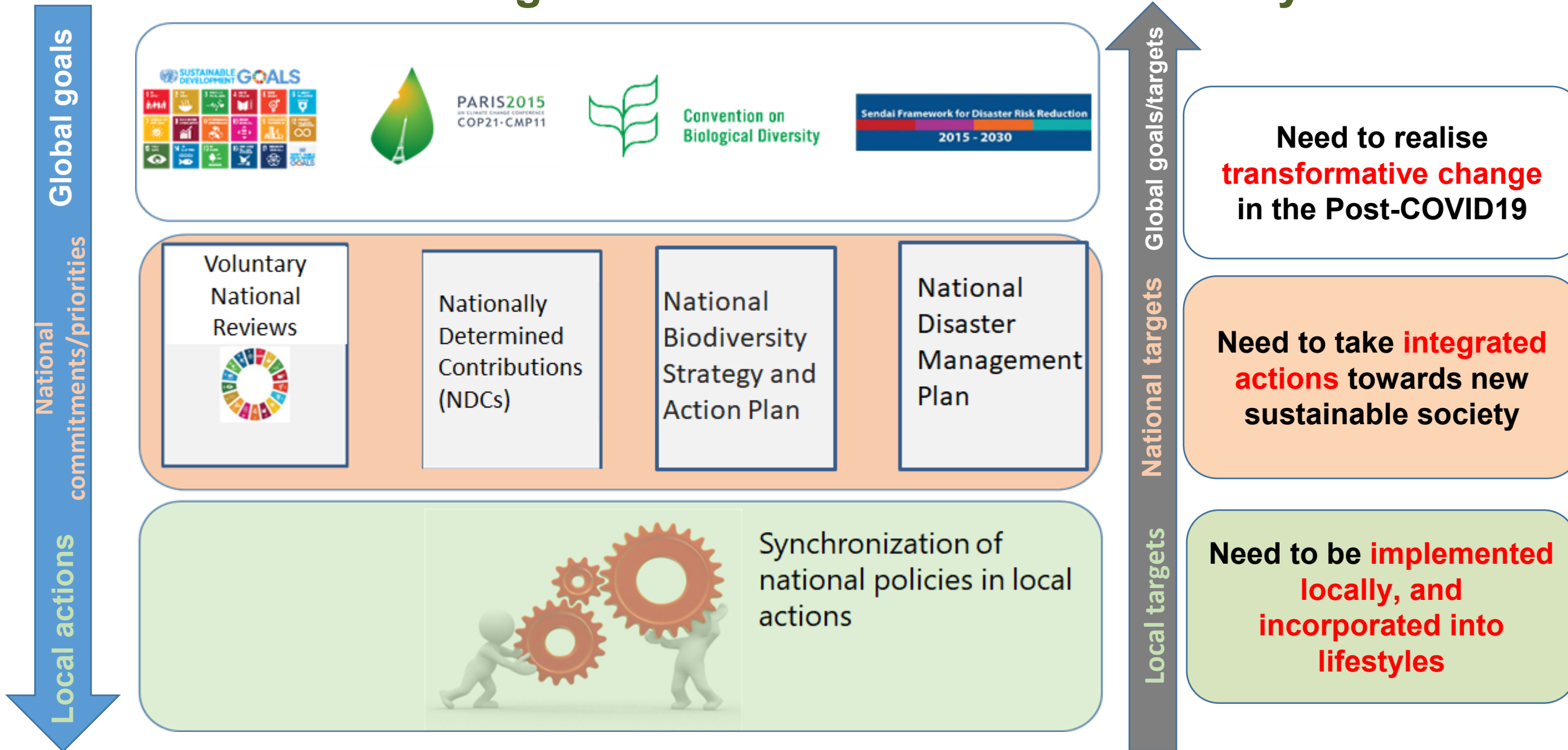


Regional-CES concept: Urban-Rural Integrated Actions on Localization of SDGs and Climate Actions

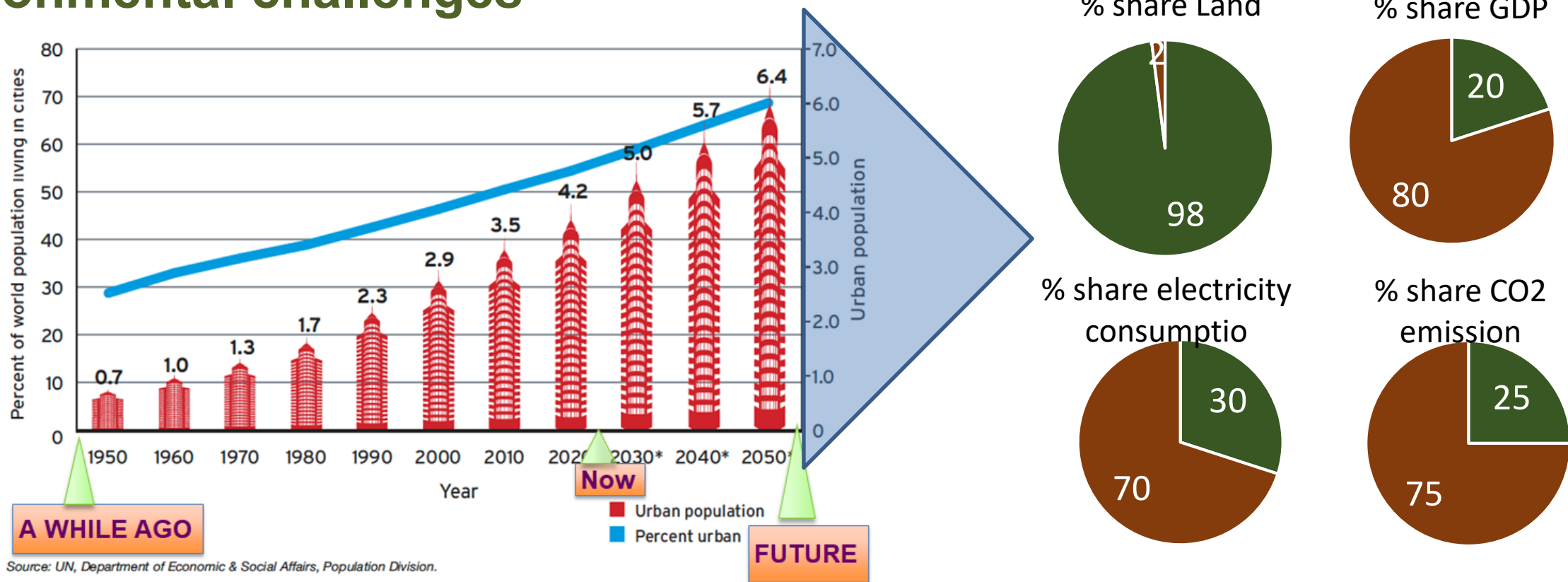
Bijon Kumer Mitra
Deputy-Director
Integrated Sustainability Center, IGES

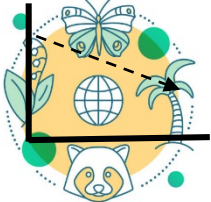


Global Agreements Related to Sustainability

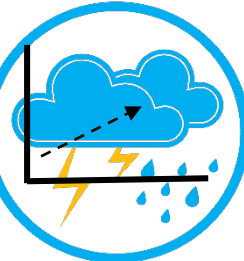


Cities should be on the front line for mitigating social, economic and environmental challenges





Ecosystem and biodiversity loss



Climate change risk

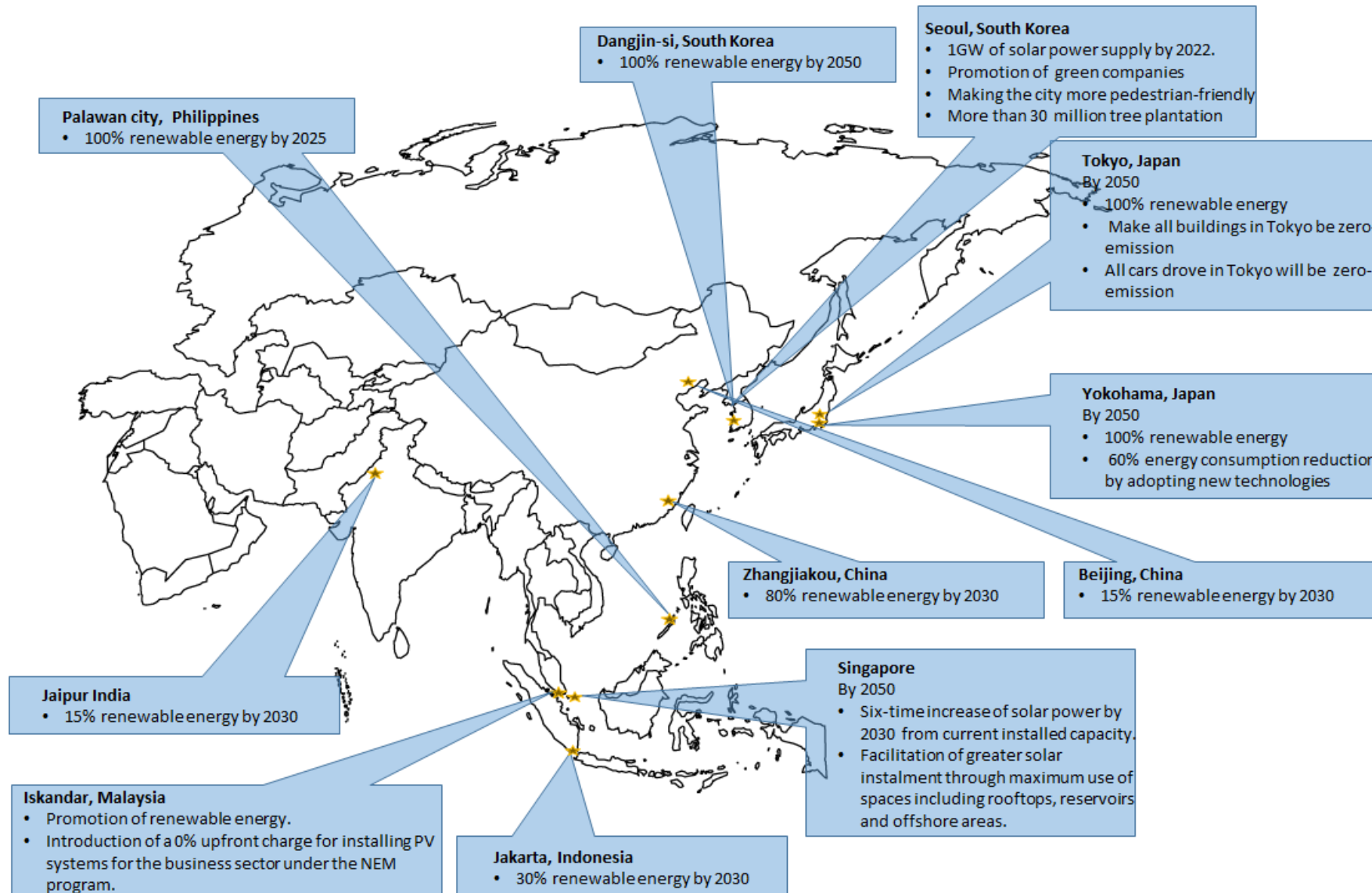


Disaster risk



Pressure on natural resources

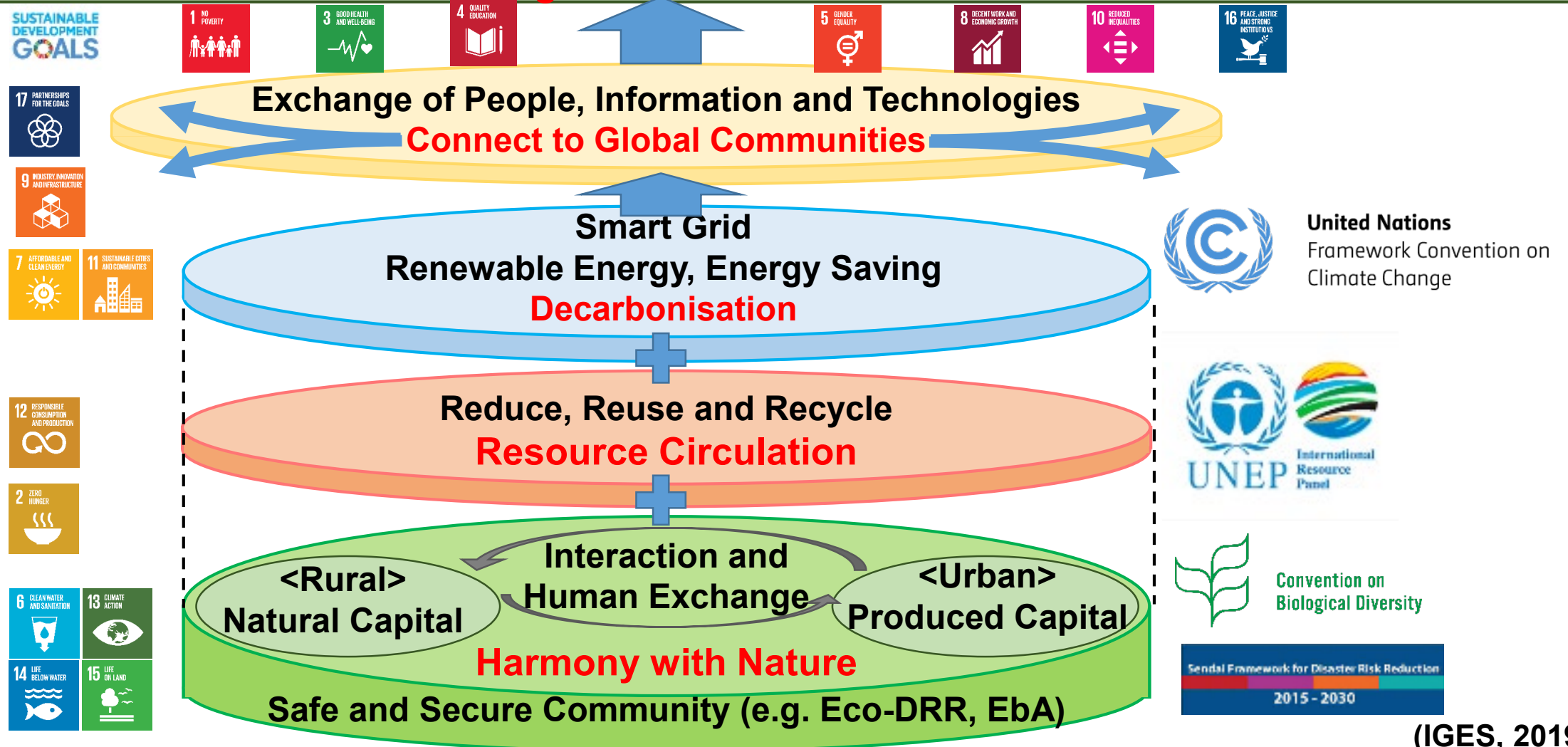
More than 1000 cities have made to the net-zero targets by 2050



However, actions in 2% areas of the world (urban) is not enough to achieved net zero targets, SDGs, disaster risk reductions, biodiversity conservation

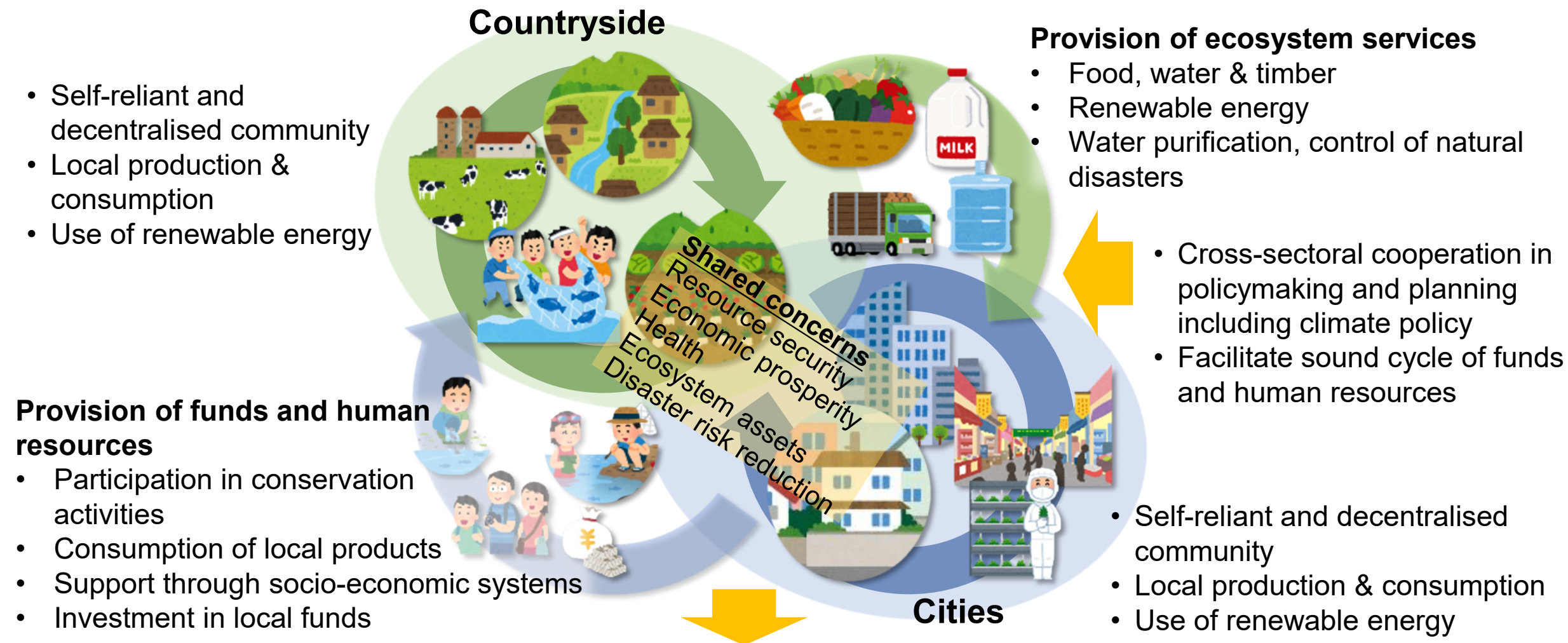
Circulating and Ecological Sphere (CES)

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



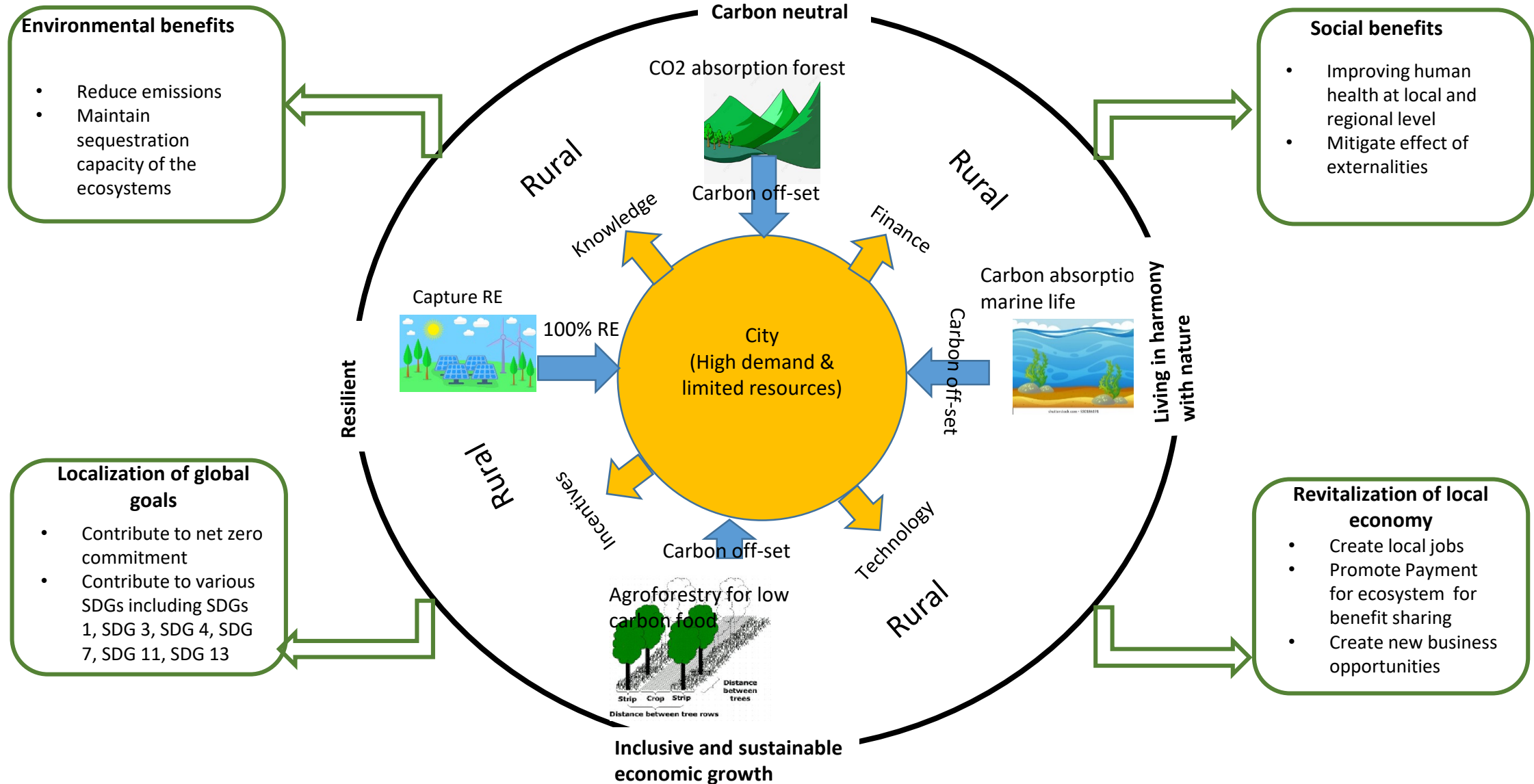
(IGES, 2019)

Local/Regional Circulating and Ecological Sphere (CES)



Revitalisation of Decentralised, yet Connected Local Societies

CES approach for optimum utilization of local mitigation options



CES in Action in Japan for localization of SDGs and climate actions

The Basic Environment Plan

Cabinet decision on April 17, 2018



Sustainable forest management for Regional revitalization

Use of local renewable energy for regional revitalization

Local circulation of recourses and energy

Disaster resilient decentralized energy system

Local resource based community business

Urban rural partnership of managing catchment forest health for quality water sources

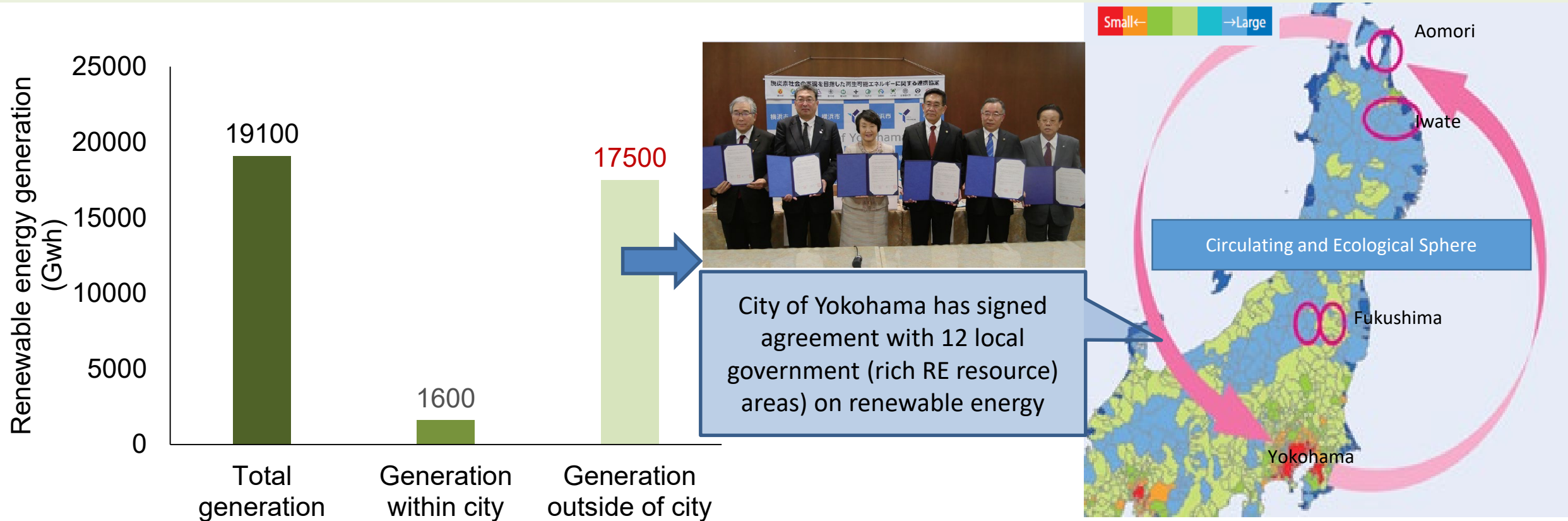
City-rural partnership for net zero

Organic farming based sustainable community

Organic farming based sustainable community

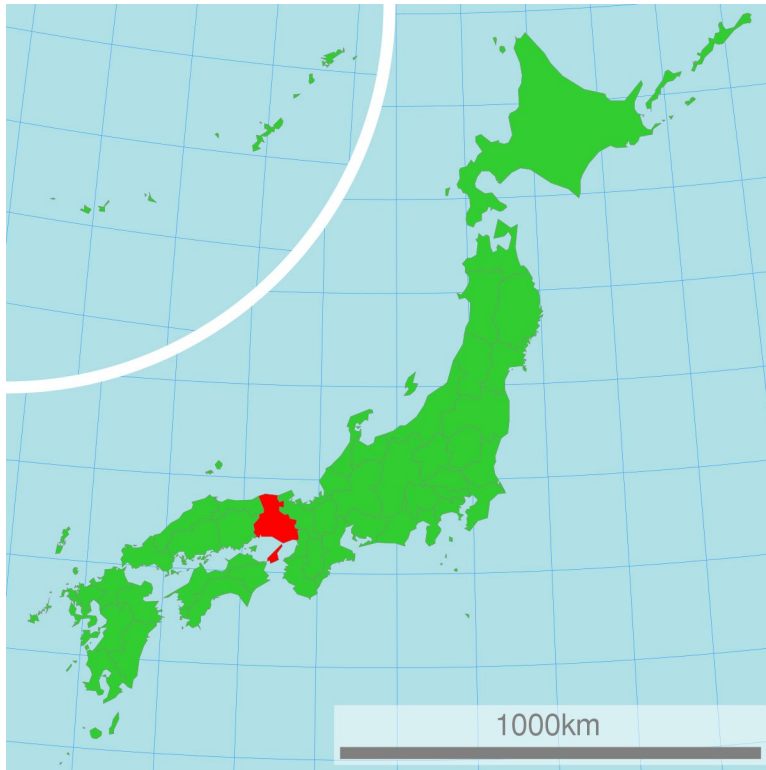
CES Model for achieving 100% RE target (by 2050) of the city of Yokohama

Needs to get 19100 GWh energy supply from renewable sources in order to achieve the city's ambitious carbon neutral target by 2050. However, only 8% RE can be produced within city boundary.

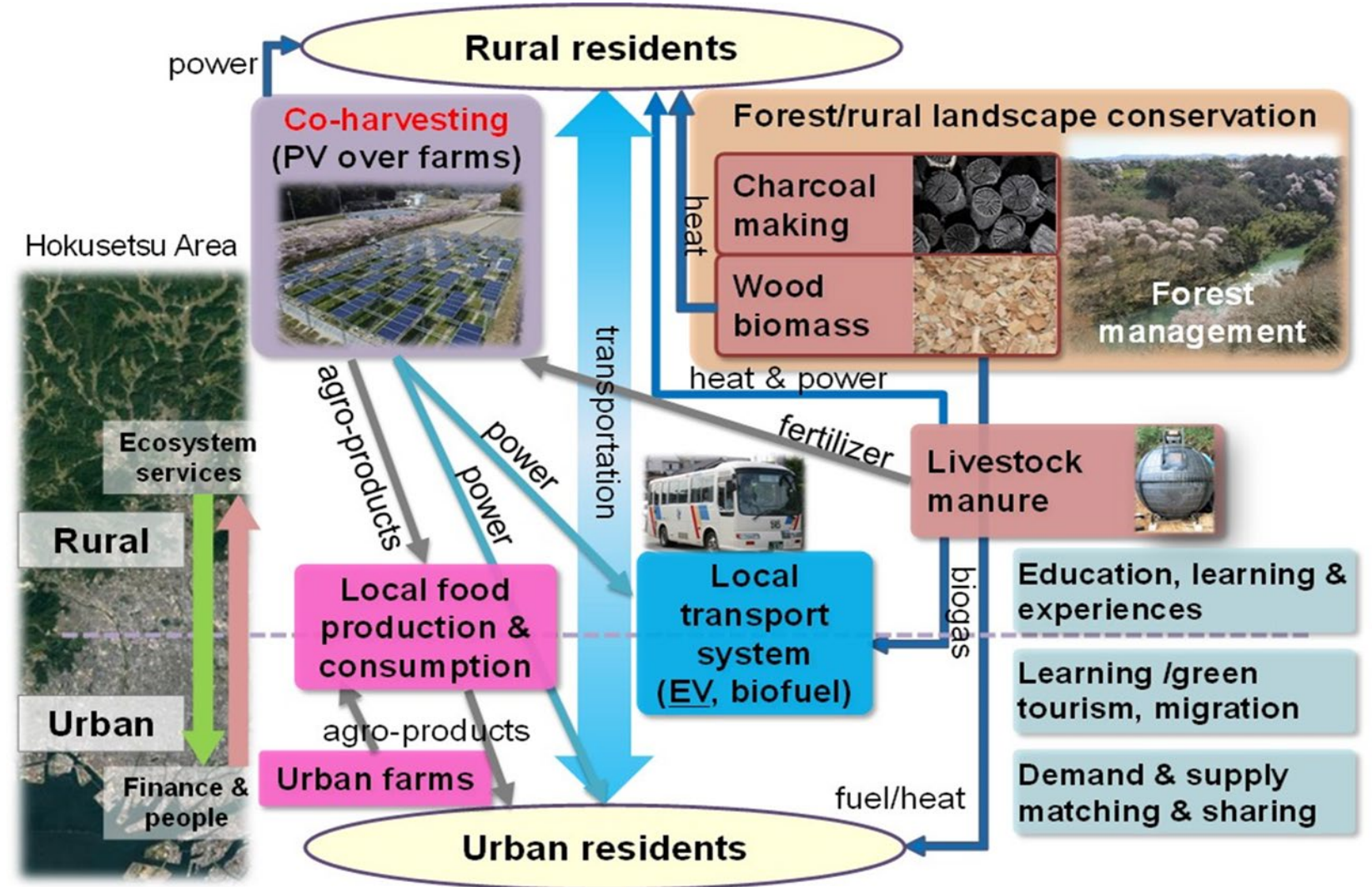


Source: https://www.city.yokohama.lg.jp/lang/overseas/climatechange/news/activities.files/0001_20200731.pdf

Selected CES Model in Japan: Hokusetsu CES Model



Hokusetsu CES Model in Hyogo Prefecture (IGES, 2019)



Issues and Challenges for South Asia and Southeast Asia

Climate risk:

- Floods
- Drought
- Heat wave

Environmental challenge

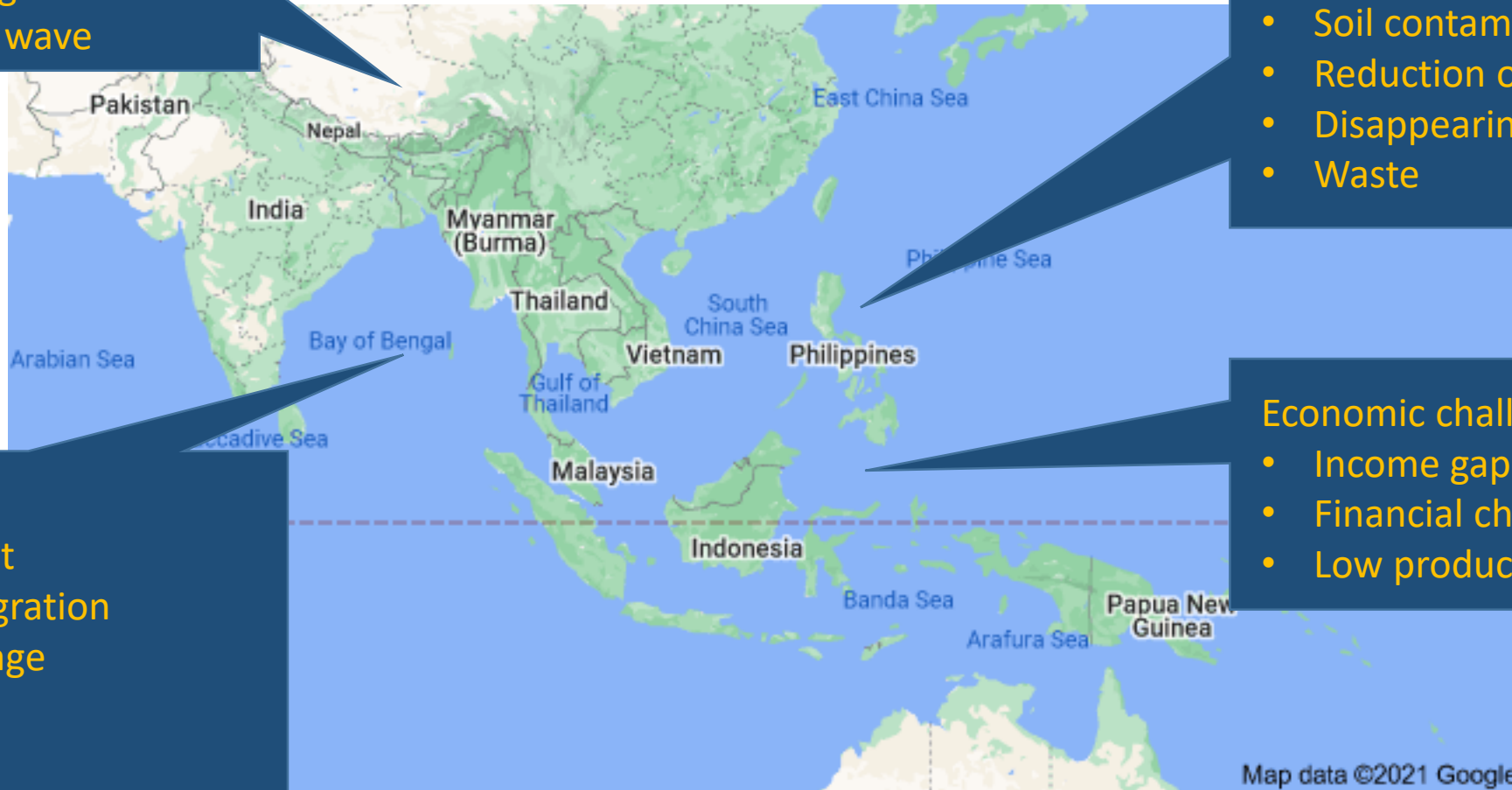
- Water pollution
- Air pollution
- Soil contamination
- Reduction of green cover
- Disappearing wetlands
- Waste

Economic challenge

- Income gap
- Financial challenge
- Low productivity

Social issues

- Unemployment
- Unplanned migration
- Housing shortage
- Inequity



The CES-Asia Consortium was established on 14th October, 2021

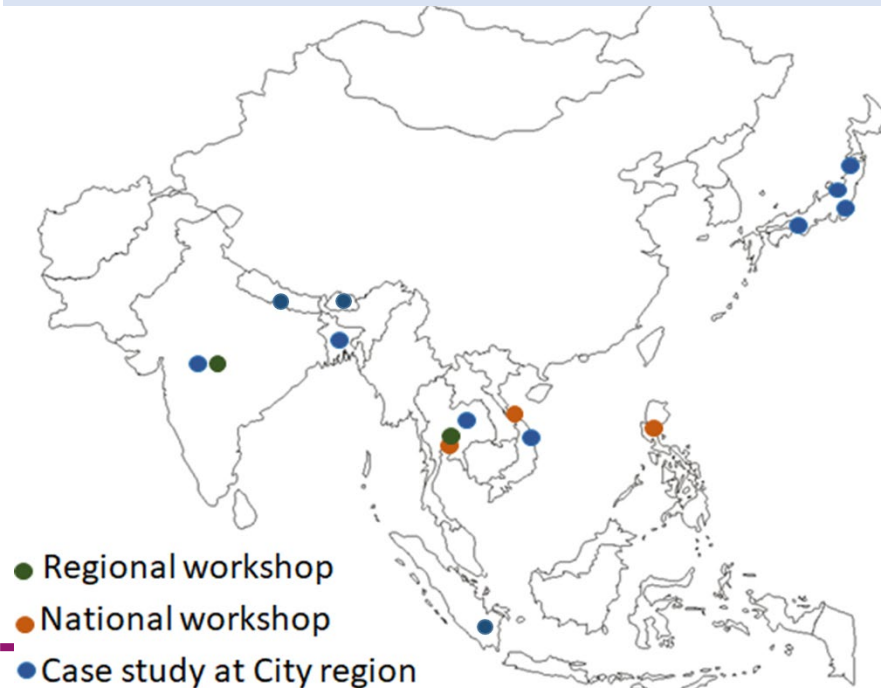
Goal: Mainstreaming the Regional-CES concept to address sustainability challenges through integrated actions in city regions of Asia

Ten (10) consortium members have signed the Partnership Agreement



Footprint of CES-Asia Consortium

Bangladesh | Bhutan | India | Indonesia | Japan | Nepal | Philippines | Thailand | Vietnam



Consortium Agreement for Advancing the Circulating and Ecological Sphere Concept for Enabling Resilience of City Regions in South and Southeast Asia

THIS Consortium Agreement (hereinafter referred to as the "Agreement") is made effective as of the last date of execution below (hereinafter referred to as the "Effective Date") by and between:

Institute for Global Environmental Strategies (hereinafter referred to as "IGES"), an institute organized and existing under the laws of Japan, having its office at 2108-11, Kamiyamaguchi, Hayama, Kanagawa 240-0115, Japan;

START International, Inc. (hereinafter referred to as "START"), an independent, international non-governmental organization, having its office at Colorado, USA;

Vivekananda National Institute of Technology (hereinafter referred to as "VNIT"), one of the Centrally Funded Technical Institutes established by the Government of India, having its office at South Ambazari Road, Nagpur, Maharashtra- 440010, India;

Faculty of Architecture and Planning, Thammasat University which is also known as Thammasat Design School (hereinafter referred to as "TDS") an University of Thailand and having its office at 99, Phahon Yothin Road, Khlong Luang, Pathumthani, 12121, Thailand/University of Dhaka, (hereinafter referred to as "DU") a university of Bangladesh and having its principal office at Dhaka Bangladesh;

The University of Danang – University of Science and Education (hereinafter referred to as "UD-UE") a university of Viet Nam and having its principal office at 459 Ton Duc Thang, Lien Chieu, Da Nang, Viet Nam;

Royal Thimphu College, (hereinafter referred to as "RTC") an academic institute of Bhutan and having its principal office Ngabphu, P.O.Box # 1122, Thimphu, Bhutan;

University of Indonesia, (hereinafter referred to as "UI") a university of Indonesia and having its principal office at Gedung SK52 2nd floor, Kampus UI Salemba, Jalan Salemba Raya No 4 Jakarta Pusat, Indonesia;

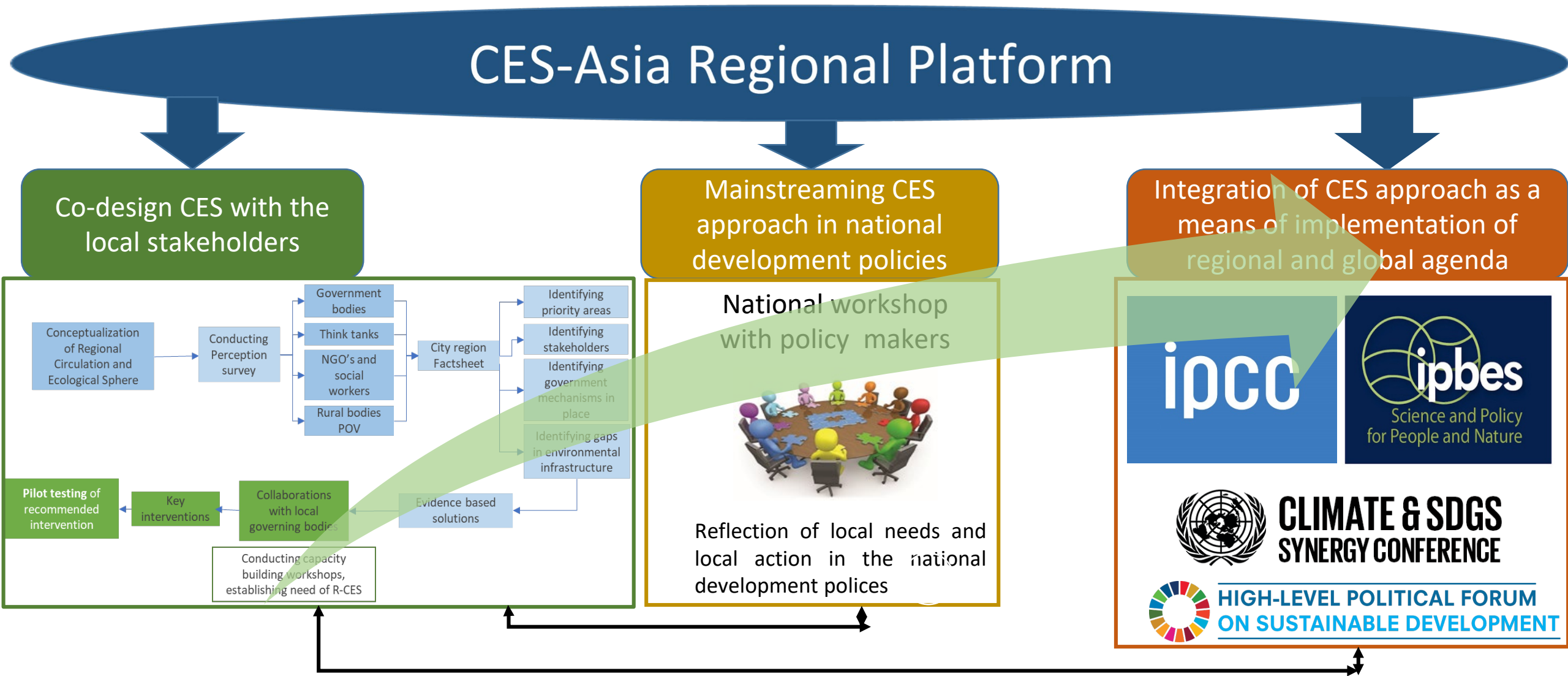
Ateneo de Manila University, (hereinafter referred to as "ADMU") a university of the Philippines and having its principal office Katipunan Ave, Quezon City, 1108 Metro Manila, Philippines; and

Institute of Forestry, Tribhuvan University (hereinafter referred to as "IOF-TU") an academic institute of Nepal and having its principal office at Balkhu, Kirtipur Kathmandu, Nepal.

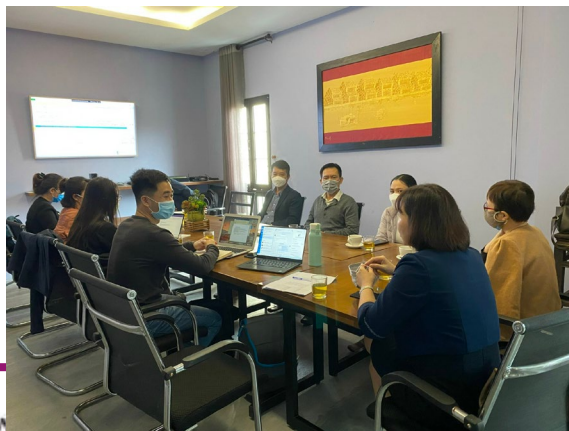
All hereinafter referred to as the "Parties" collectively, or a "Party" individually.



CES-Asia Consortium works for integrating Circulating and Ecological Sphere concept in local, national, regional and global development agenda



Co-exploring entry point for CES approach in the city regions



20.02.2021

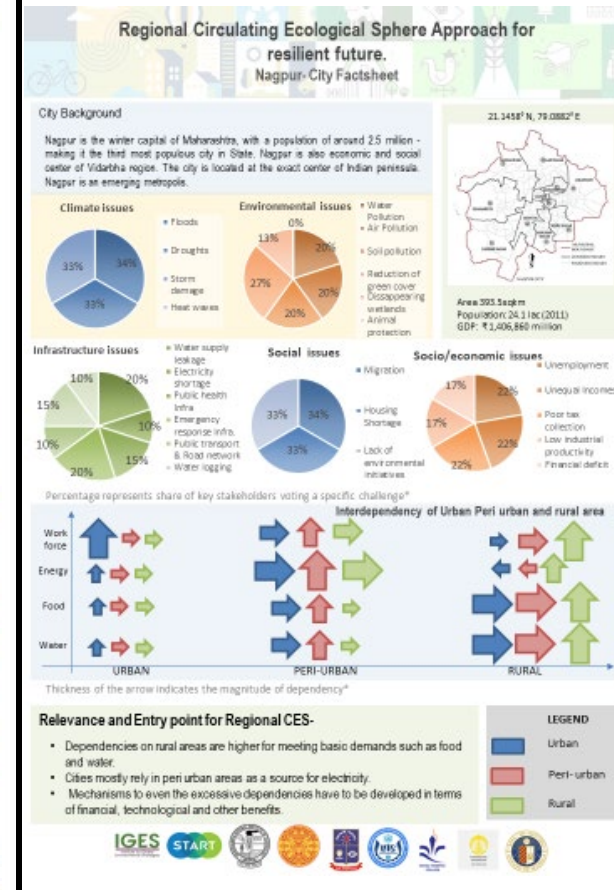
Questionnaire survey- Need of Circulating and Ecological Sphere (CES) concept- Resilience of the city regions in Asia

This survey explores the concept of Circulating and Ecological Sphere (CES). To understand major challenges/issues that Asian cities are facing for achieving a just, sustainable, and resilient society. To map the challenges/issues that would benefit from the CES approach at the city region level (urban/peri-urban region). To identify potential cities that may consider engaging in a CES cities network.

1. Name of your country
Please Select

2. Name of the City
Please Select

3. Level of governing unit



City Fact sheet

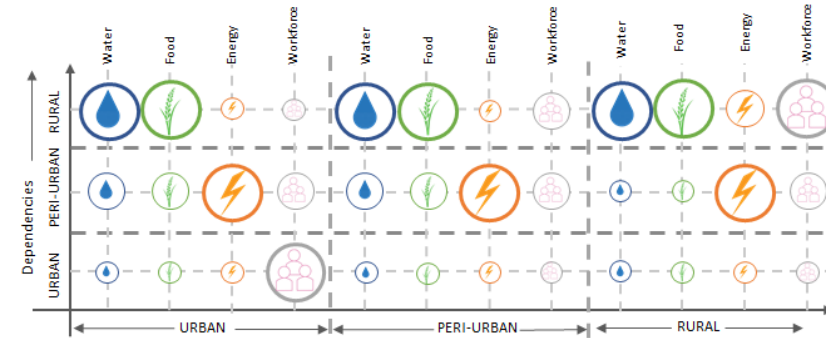
City factsheet Hoi Ann	REGIONAL CIRCULATING ECOLOGICAL SPHERE APPROACH FOR RESILIENT FUTURE
City factsheet Pasig City	REGIONAL CIRCULATING ECOLOGICAL SPHERE APPROACH FOR RESILIENT FUTURE
City factsheet Depok City	REGIONAL CIRCULATING ECOLOGICAL SPHERE APPROACH FOR RESILIENT FUTURE
City factsheet Udon Thani	REGIONAL CIRCULATING ECOLOGICAL SPHERE APPROACH FOR RESILIENT FUTURE
City factsheet Gazipur	REGIONAL CIRCULATING ECOLOGICAL SPHERE APPROACH FOR RESILIENT FUTURE
City factsheet Pokhara	REGIONAL CIRCULATING ECOLOGICAL SPHERE APPROACH FOR RESILIENT FUTURE
City factsheet Thimphu	REGIONAL CIRCULATING ECOLOGICAL SPHERE APPROACH FOR RESILIENT FUTURE
City factsheet Nagpur	REGIONAL CIRCULATING ECOLOGICAL SPHERE APPROACH FOR RESILIENT FUTURE

RURAL URBAN

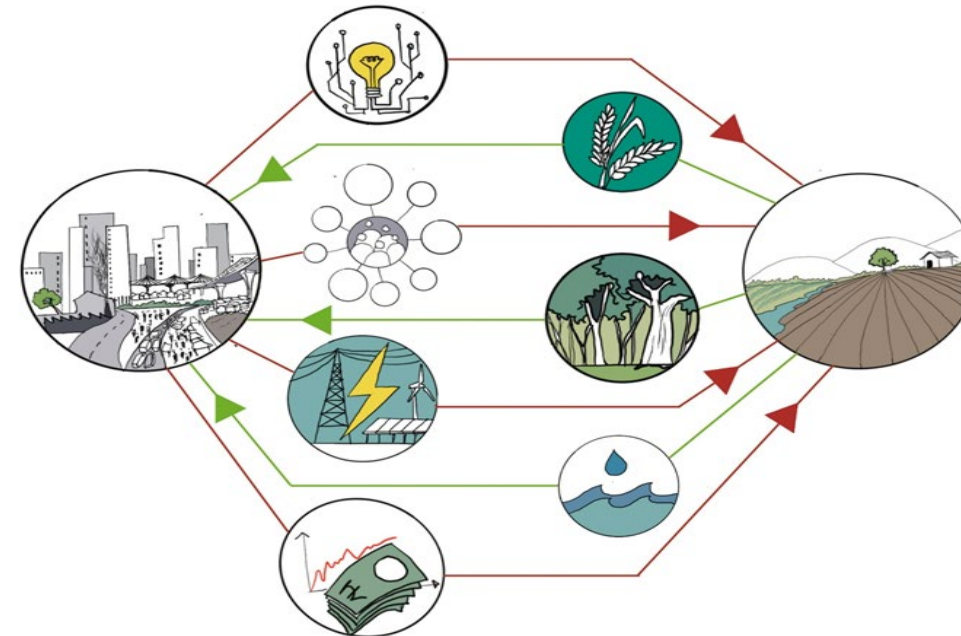
Impact region | South Asia- SouthEast Asia

India | Bangladesh | Bhutan | Nepal | Thailand | Vietnam | Philippines | Indonesia

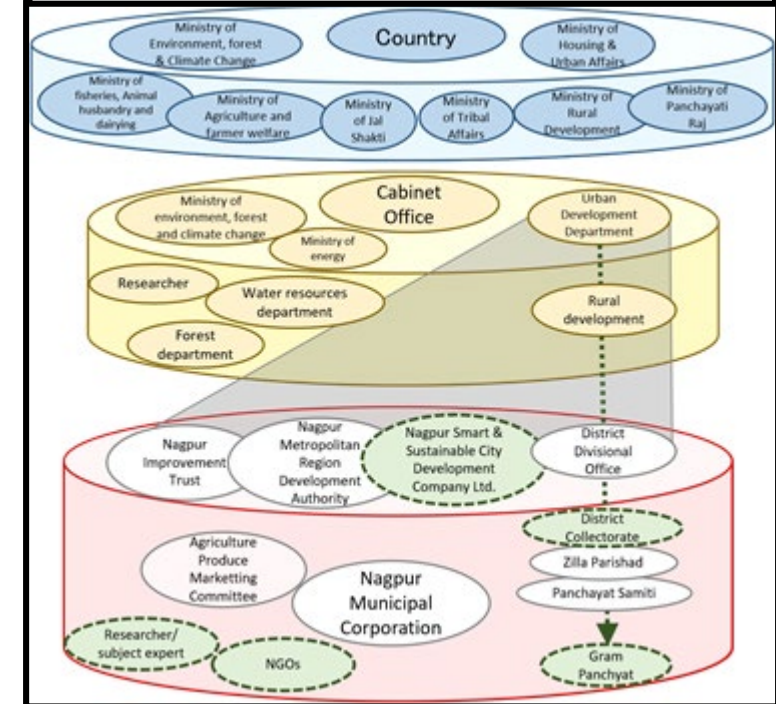
Interdependencies of urban-rural



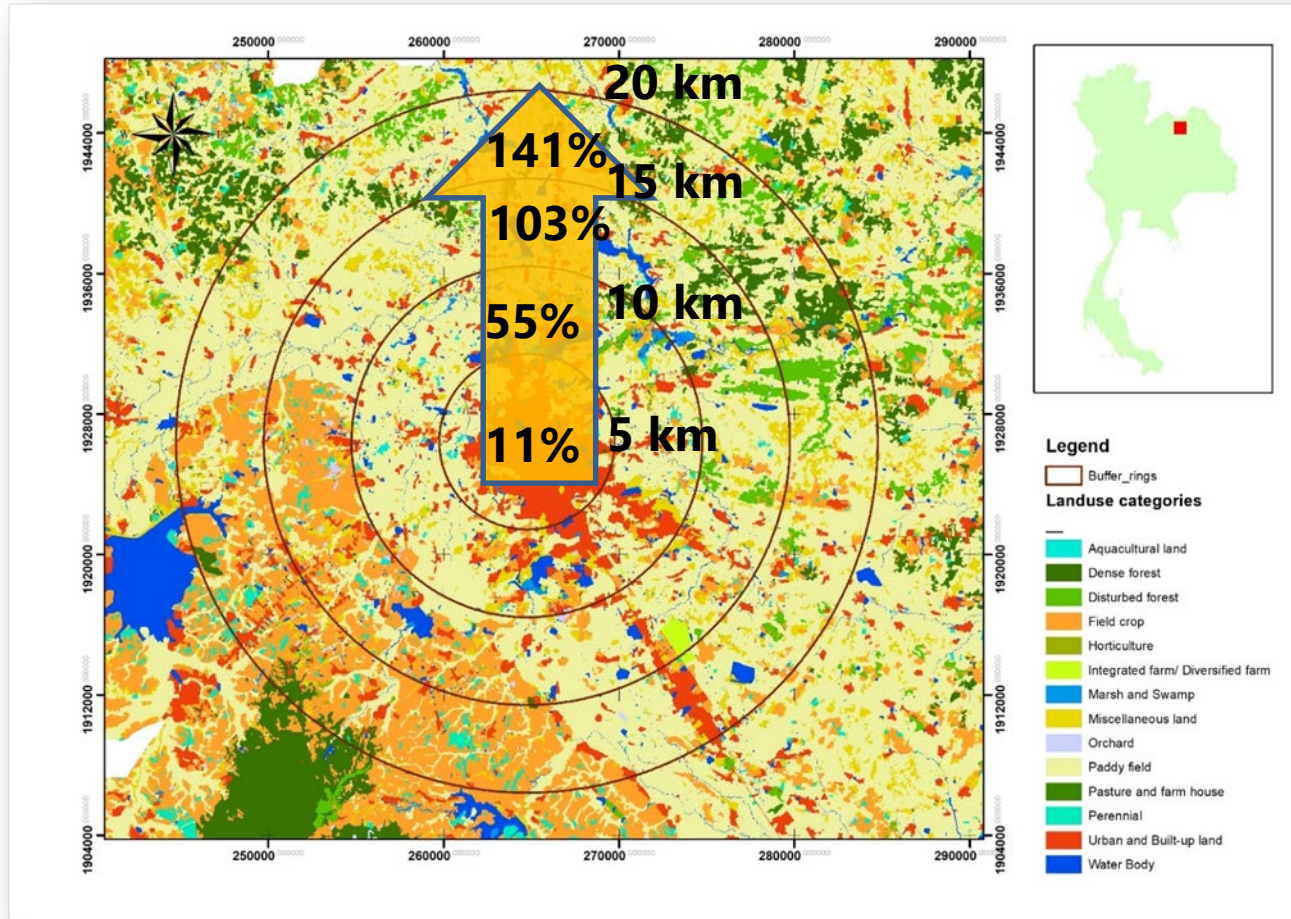
Urban- Rural linkages- Regional-CES Scenario



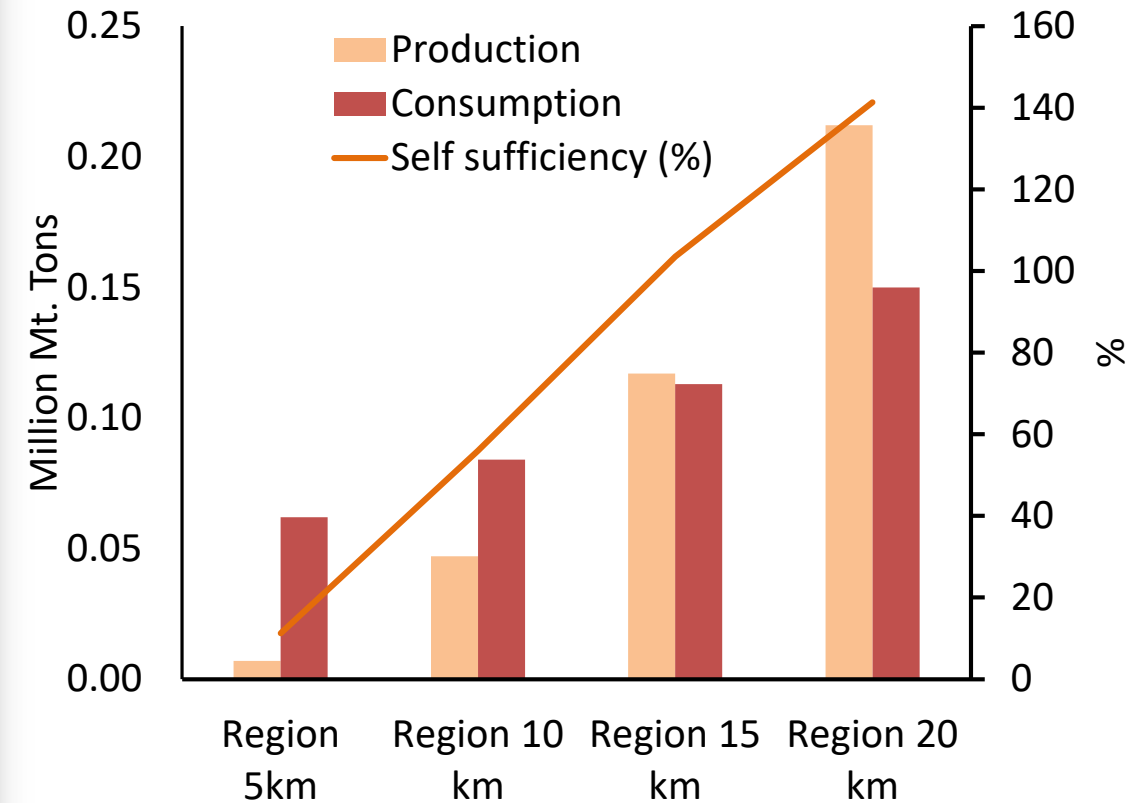
Governance mechanisms



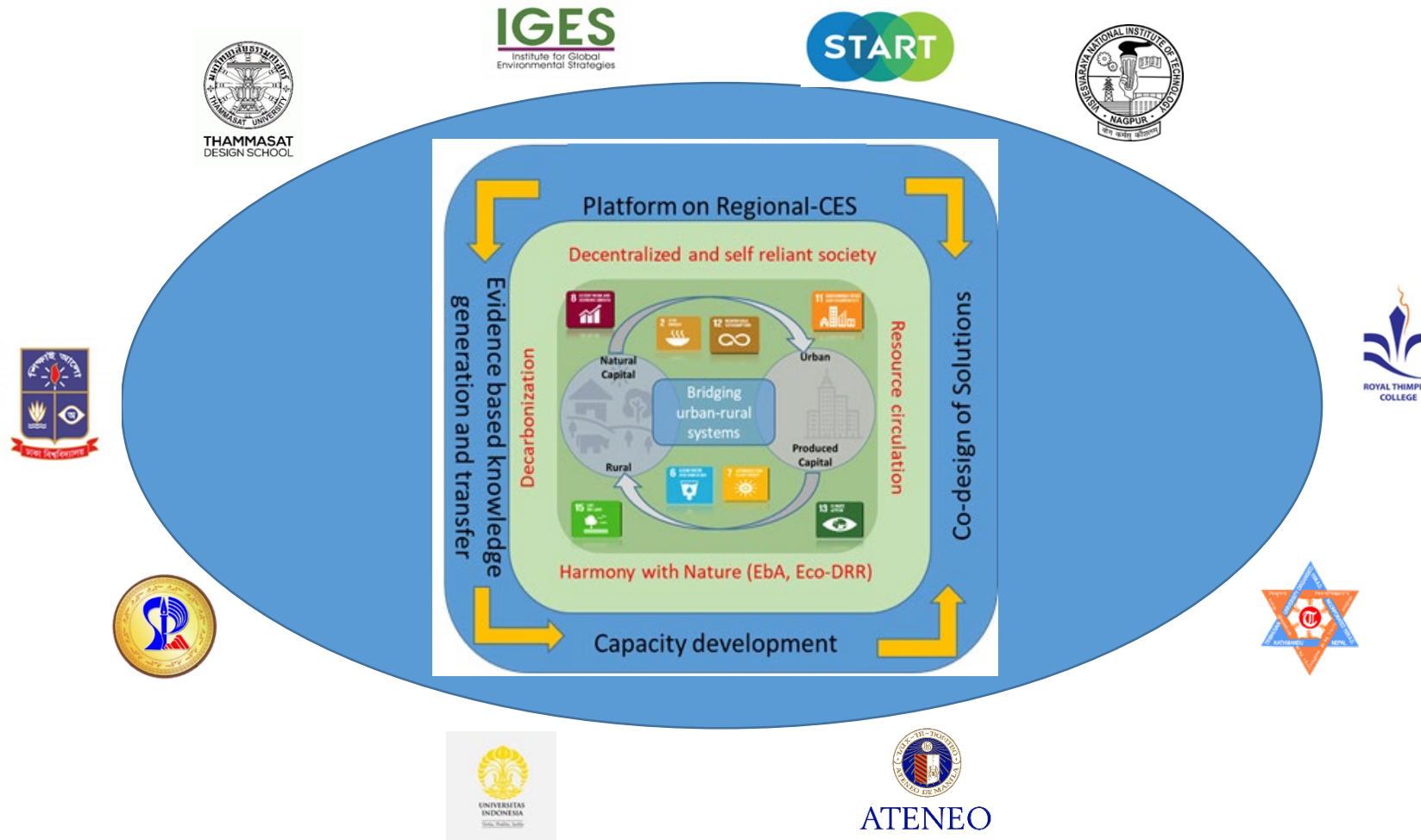
Generating scientific evidence through case study: Need CES approach for resilient food supply in Udon Thani City region Thailand



★ City center of Udon-Thani. Each circle denotes 5 km radius



Please join with us to advance the CES-Asia Initiative for realization of net zero, SDGs and region



A scenic photograph of Mount Fuji, a snow-capped volcano, rising above a dark blue sea. In the foreground, a white lighthouse stands on a rocky island, and a red torii gate is visible. A black bird is in flight in the sky. The text "Thank you very much" is overlaid in yellow.

Thank you very much

For further contact:

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Institute for Global Environmental Strategies,
2108-11 Kamiyamaguchi
Hayama, Japan 240-0115
E-mail: b-mitra@iges.or.jp