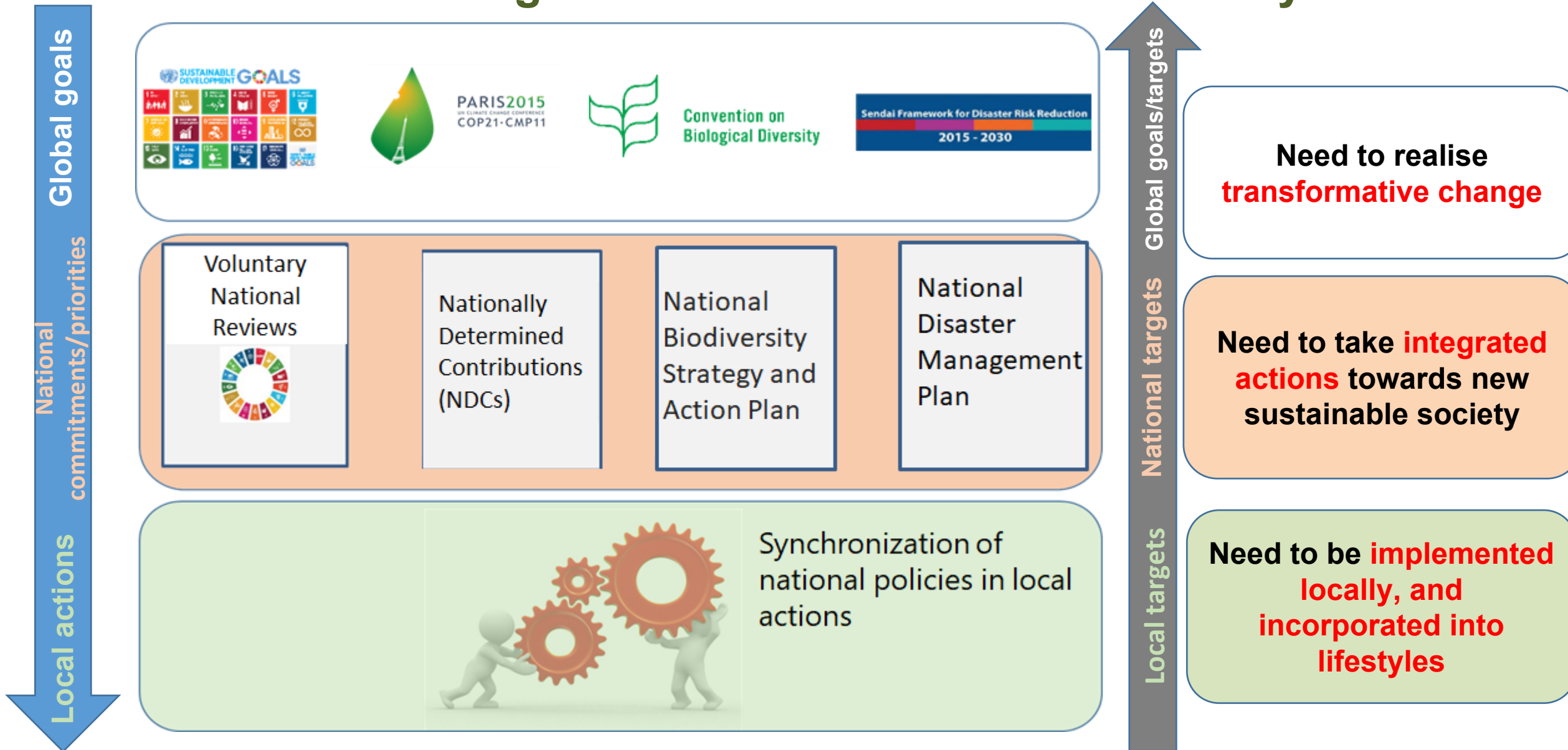


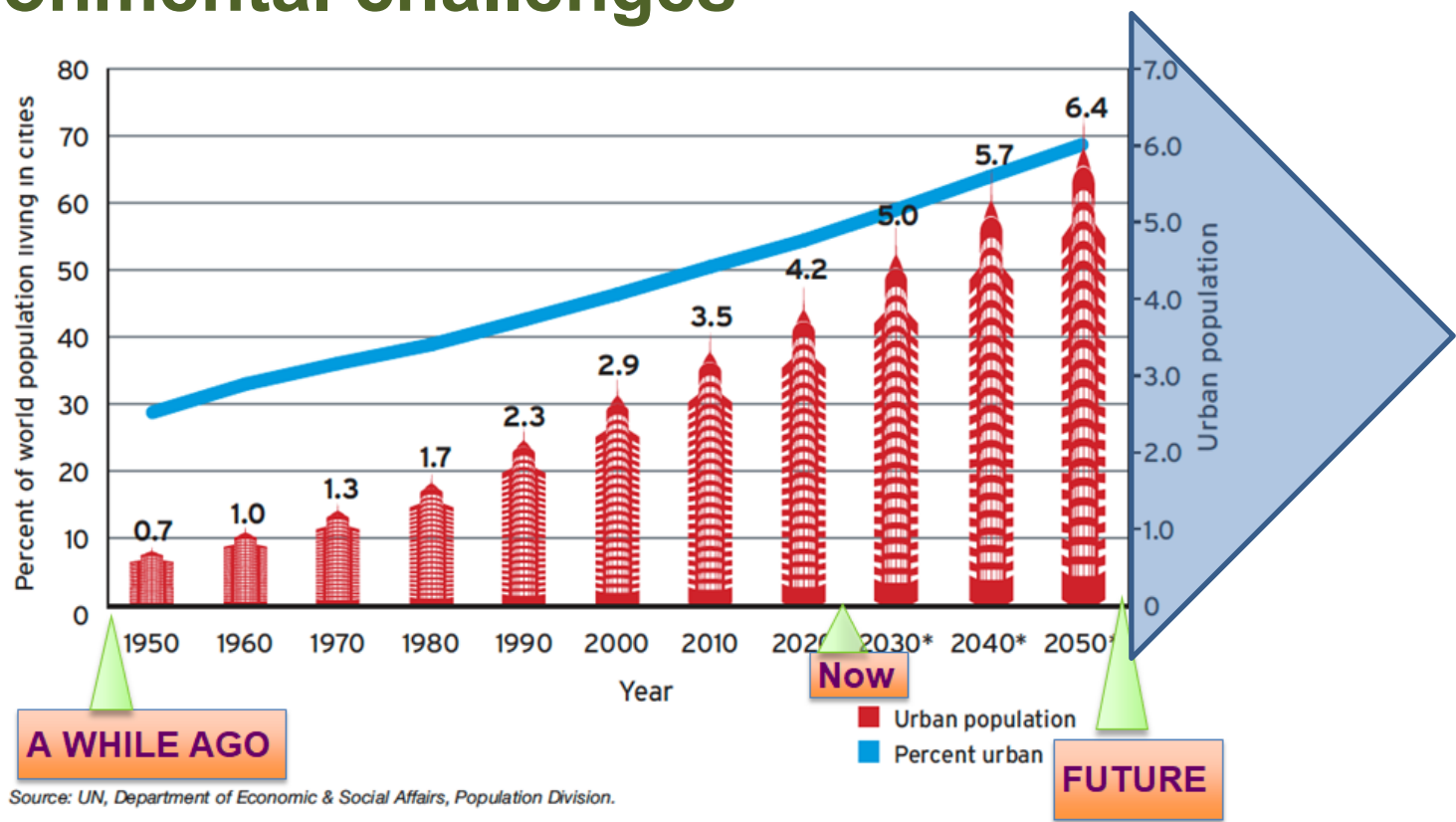
Regional-CES concept: Urban-Rural Integrated Actions on Localization of SDGs and Climate Actions

Bijon Kumer Mitra
Deputy-Director
Integrated Sustainability Center, IGES

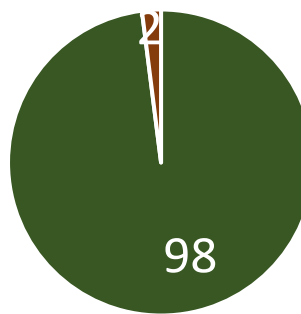
Global Agreements Related to Sustainability



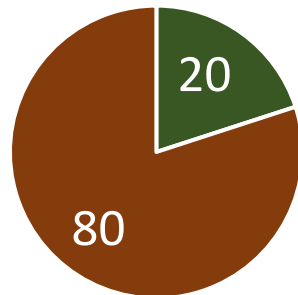
Cities should be on the front line for mitigating social, economic and environmental challenges



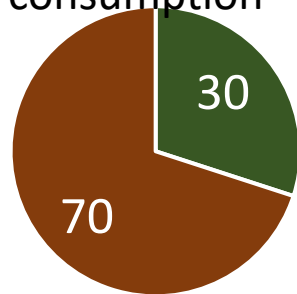
% share Land



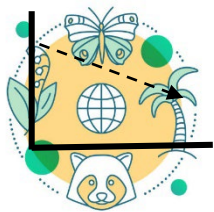
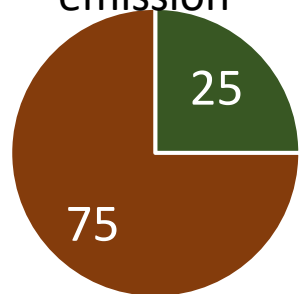
% share GDP



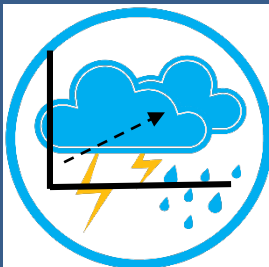
% share electricity consumption



% share CO2 emission



Ecosystem and biodiversity loss



Climate change risk

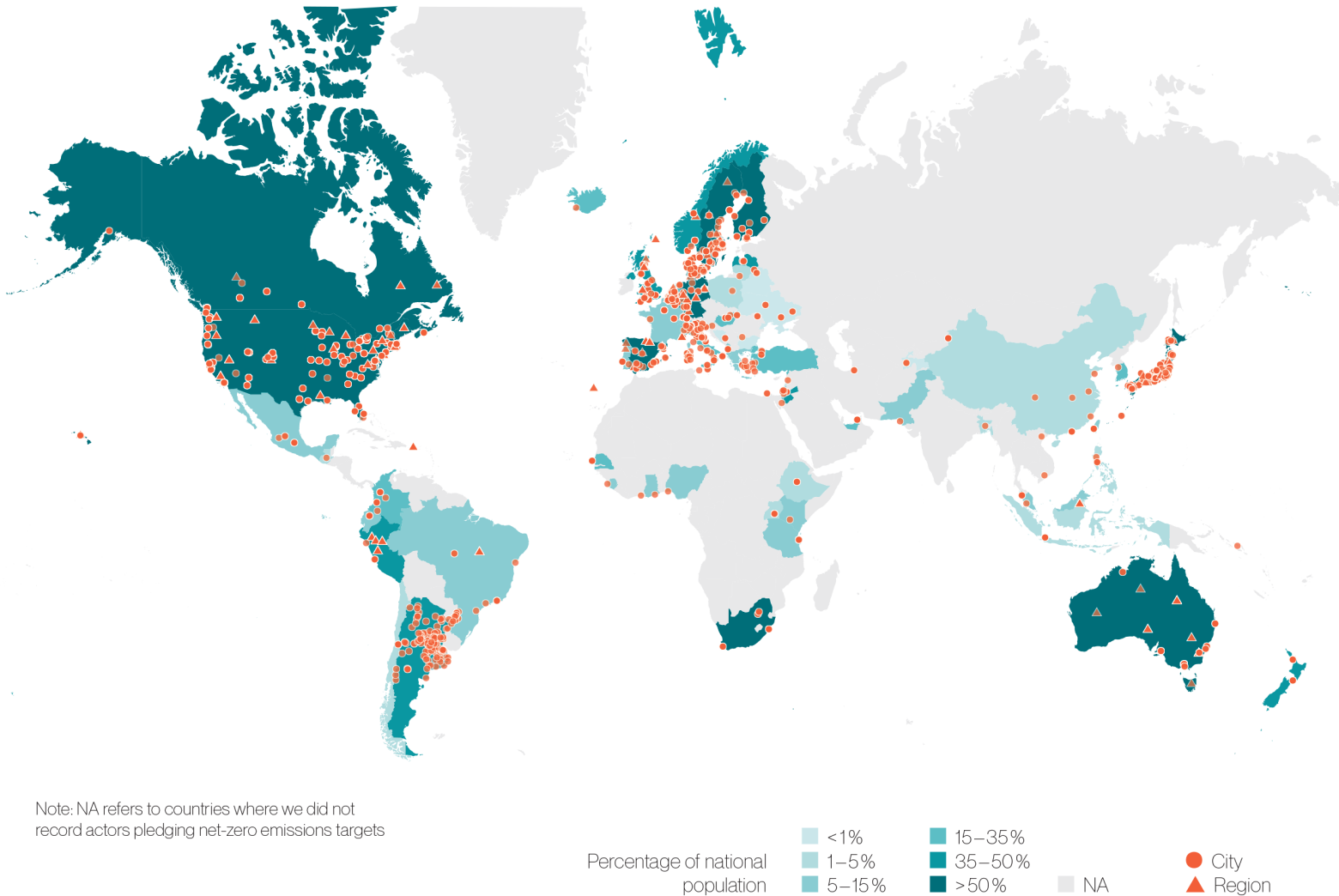


Disaster risk



Pressure on natural resources

More than 1000 cities pledge some form of net-zero targets

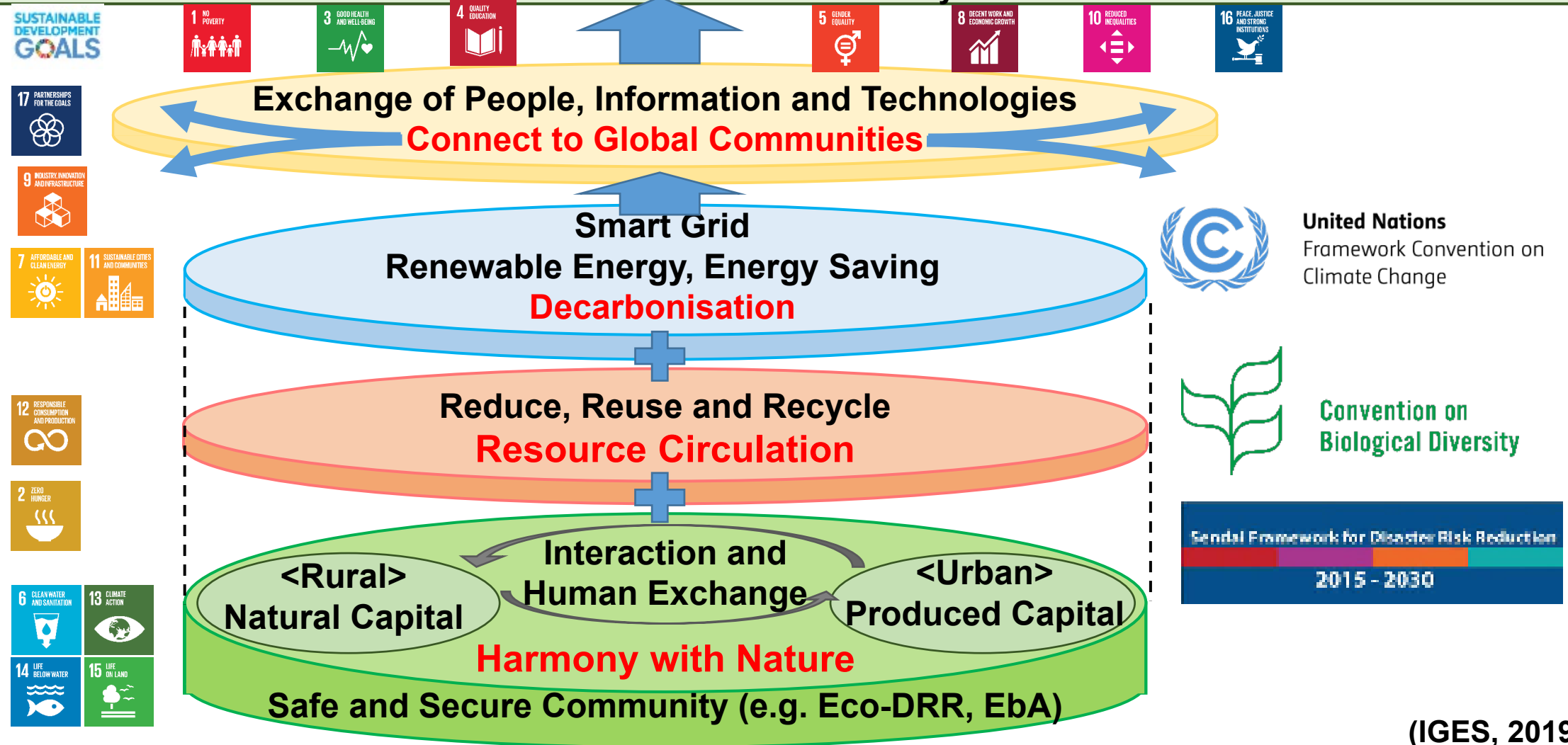


However, actions in 2% areas of the world (urban) is not enough to achieved net zero targets, SDGs, disaster risk reductions, biodiversity conservation.

https://newclimate.org/wp-content/uploads/2020/09/NewClimate_Accelerating_Net_Zero_Sept2020.pdf

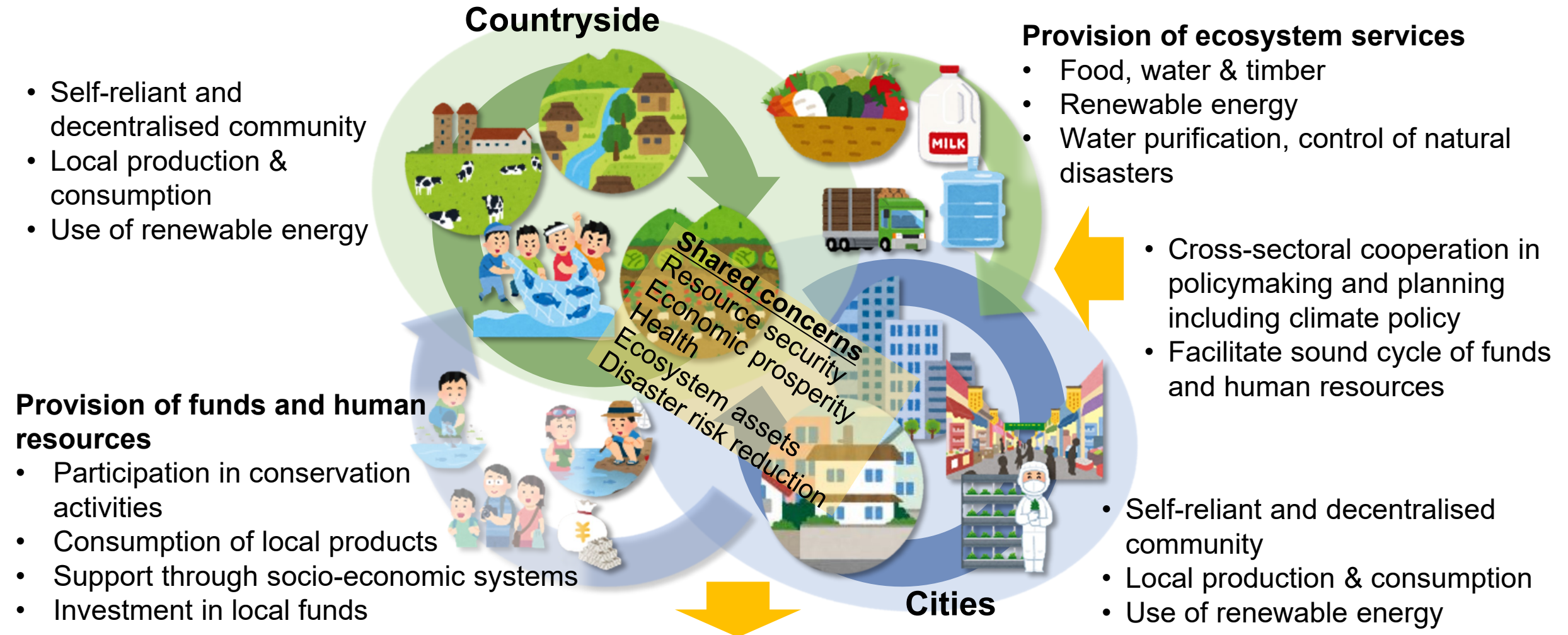
Circulating and Ecological Sphere (CES) for integration of environmental, economic and social dimensions

CES, a decentralised, integrated approach to complex systemic challenges, supports optimisation of urban and rural resources and communities that live in harmony with nature.



(IGES, 2019)

Local/Regional Circulating and Ecological Sphere (CES)



Revitalisation of Decentralised, yet Connected Local Societies

(IGES, 2019)

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

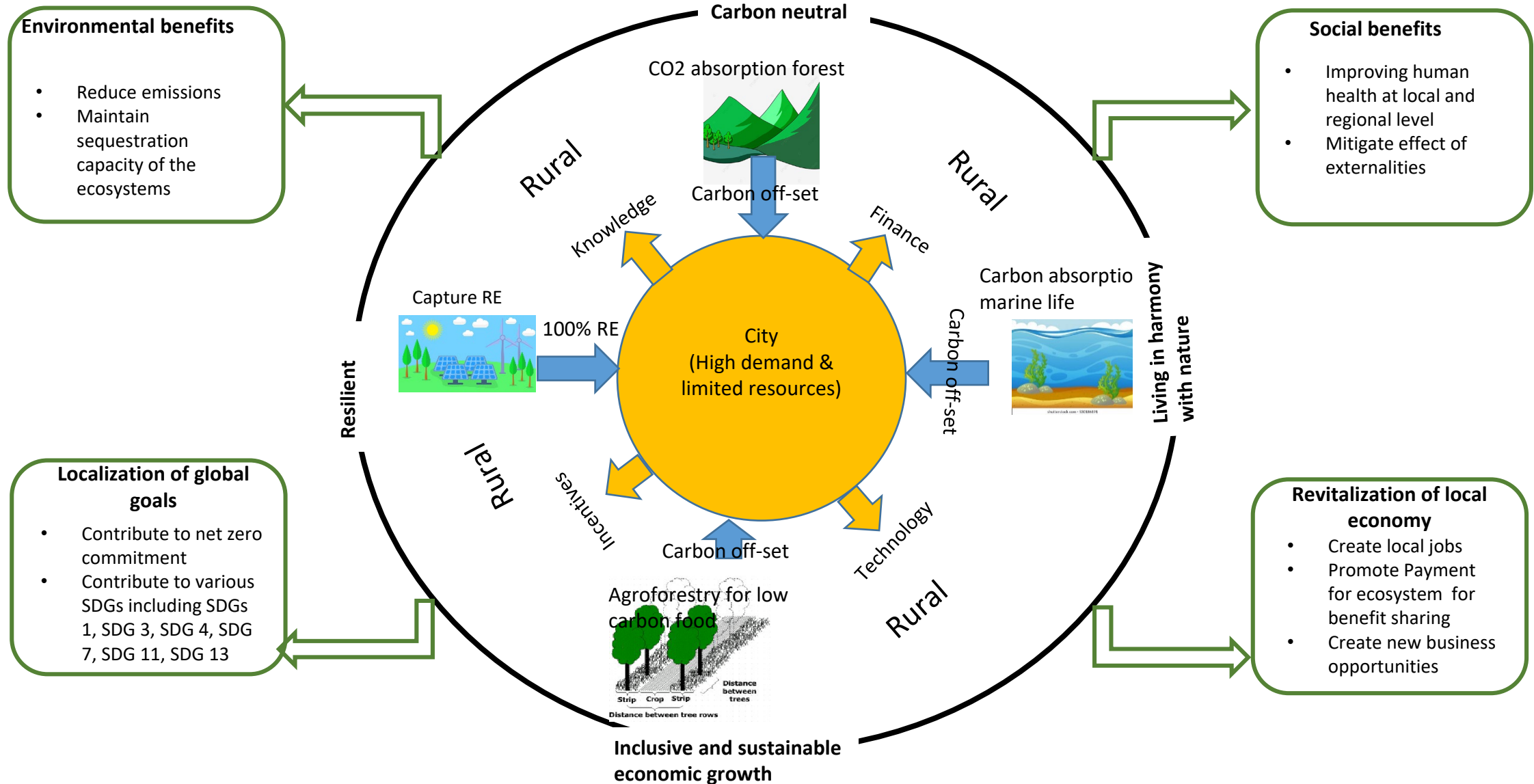
Urban rural partnership of managing catchment forest health for quality water sources

City-rural partnership for net zero

Organic farming based sustainable community

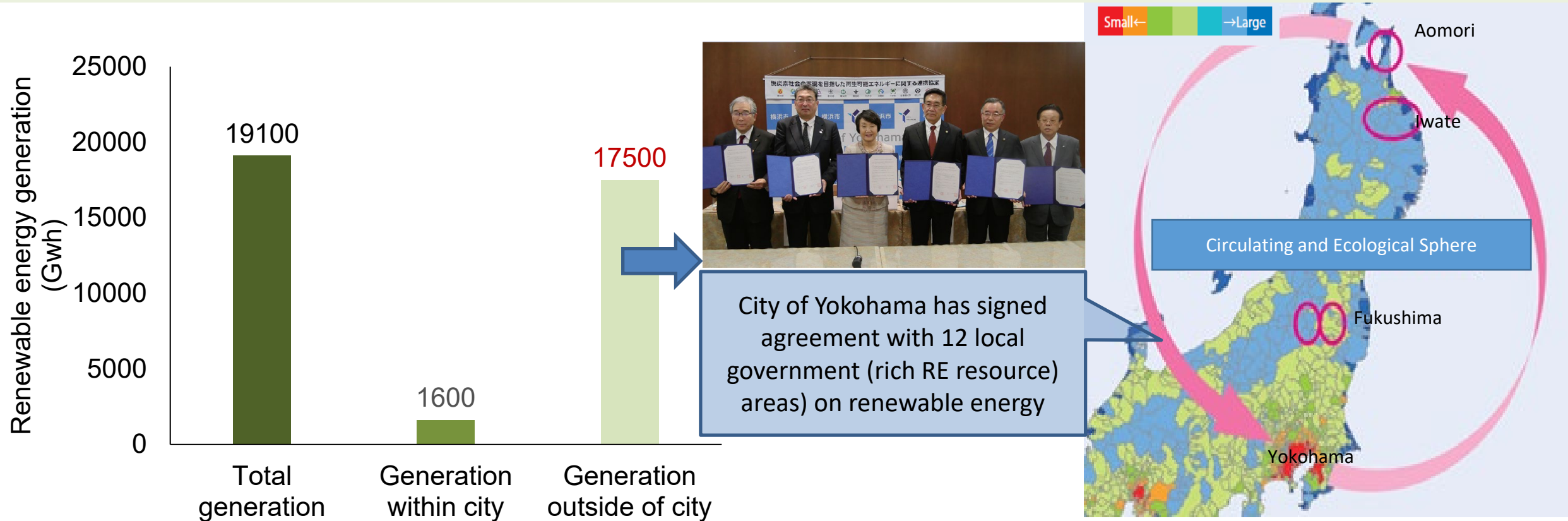
Organic farming based sustainable community

CES approach for optimum utilization of local mitigation options



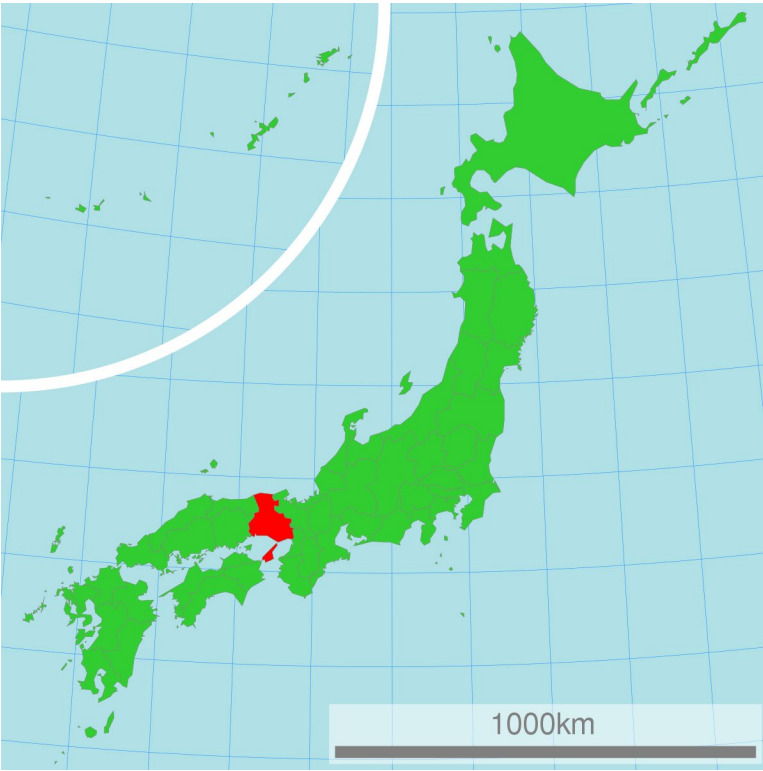
CES Model for achieving 100% RE target (by 2050) of the city of Yokohama

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.

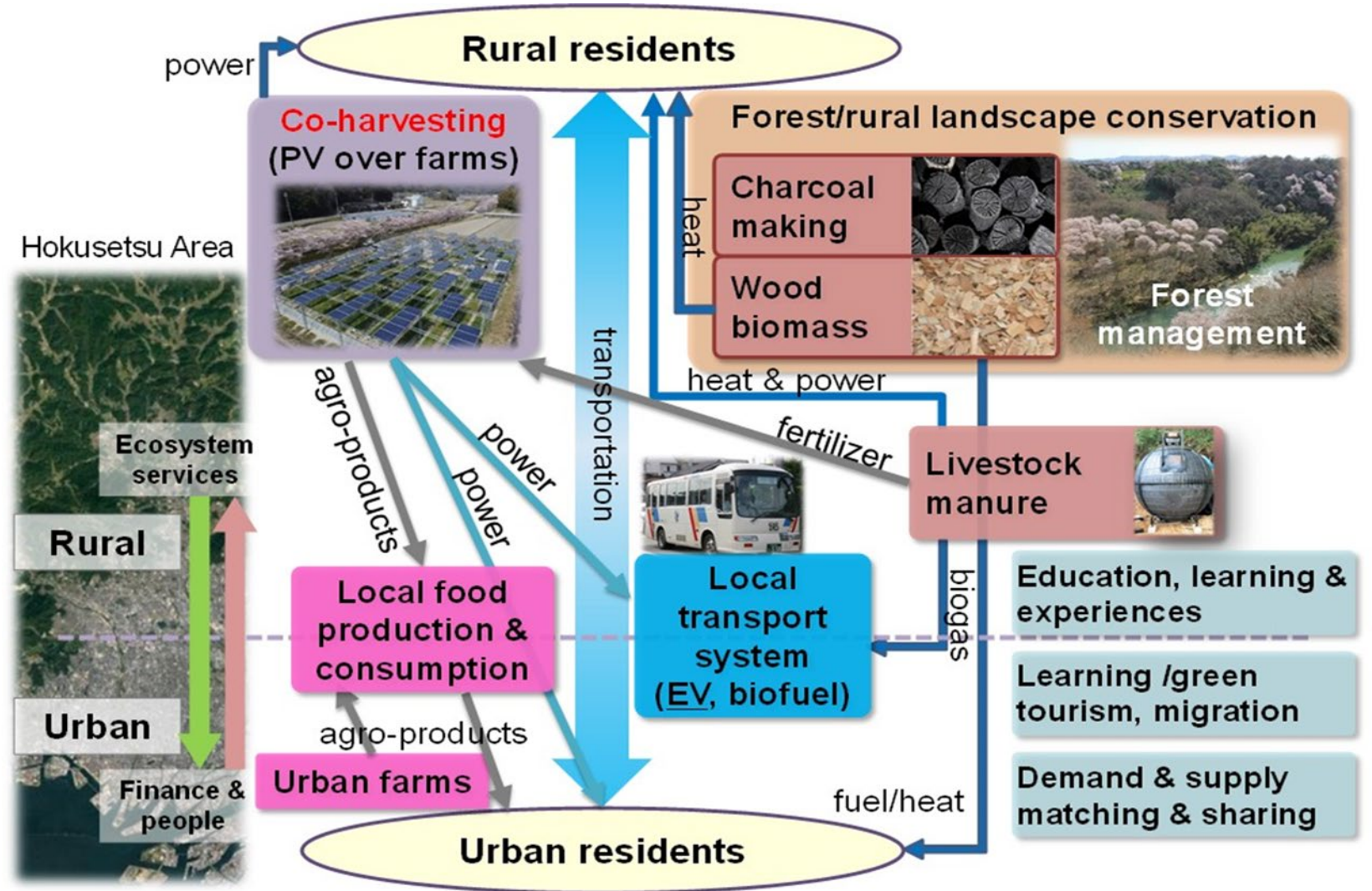


Source: https://www.city.yokohama.lg.jp/lang/overseas/climatechange/news/activities.files/0001_20200731.pdf

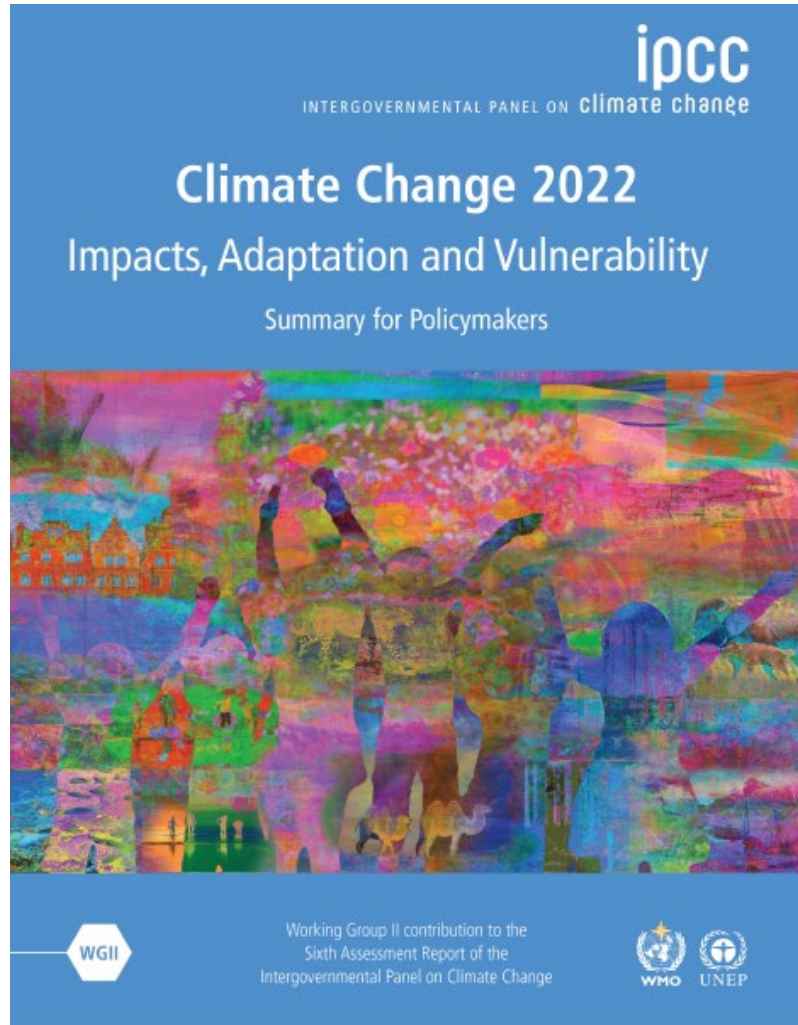
Selected CES Model in Japan: Hokusetsu CES Model



Hokusetsu CES Model in Hyogo Prefecture (IGES, 2019)



CES has been identified as an emerging integrated adaptive governance by the Sixth Assessment Report of IPCC (WG-II)



[START BOX 10.1 HERE]

Box 10.1: What is New on Asia in AR6?

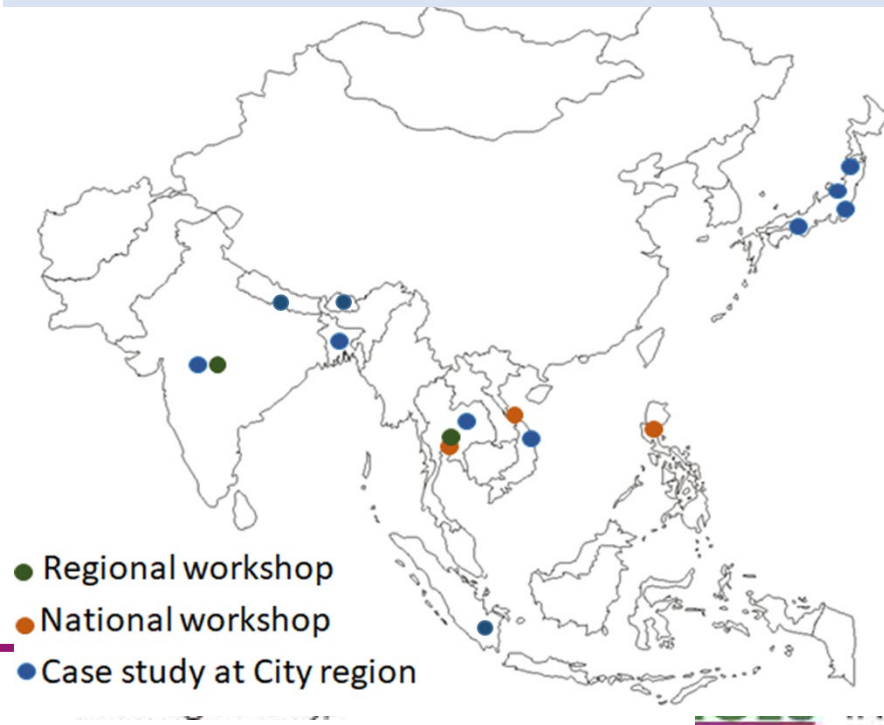
- Adaptation in energy sector is becoming increasingly crucial in the Asian region, which has been assessed in a new sub-section.
- Adaptation technology and innovations are also of high importance for the region. Classification of adaptation technology and its use in different systems are assessed.
- On the governance side, the nexus approach among several systems like food, energy, water is focused, and its importance is assessed.
- New concepts on decentralised and self-reliant society, such as the Circulating and Ecological Sphere (CES) are emerging for integrated adaptive governance.
- As a part of sustainable development pathway, interlinkages of climate change adaptation and disaster risk reduction is highlighted.

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

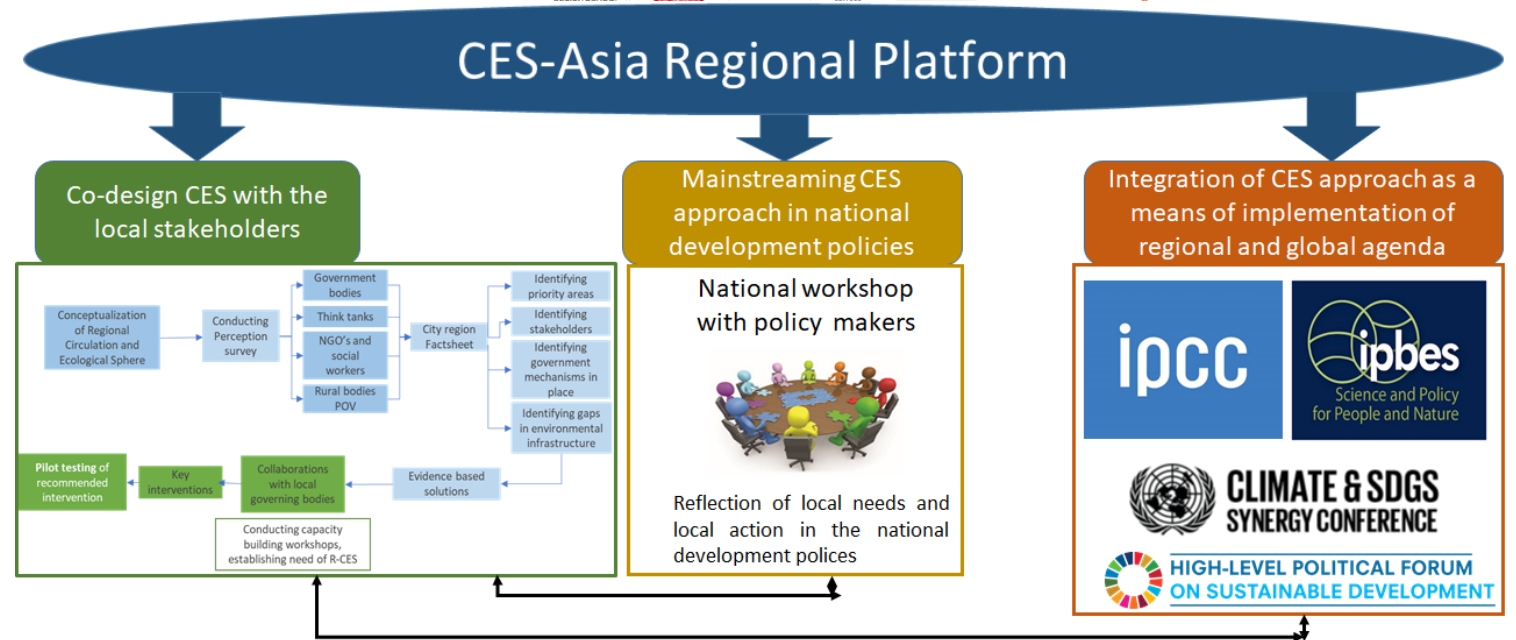
Goal: Mainstreaming the Regional-CES concept to address sustainability challenges through integrated actions in city regions of Asia

Footprint of CES-Asia Consortium

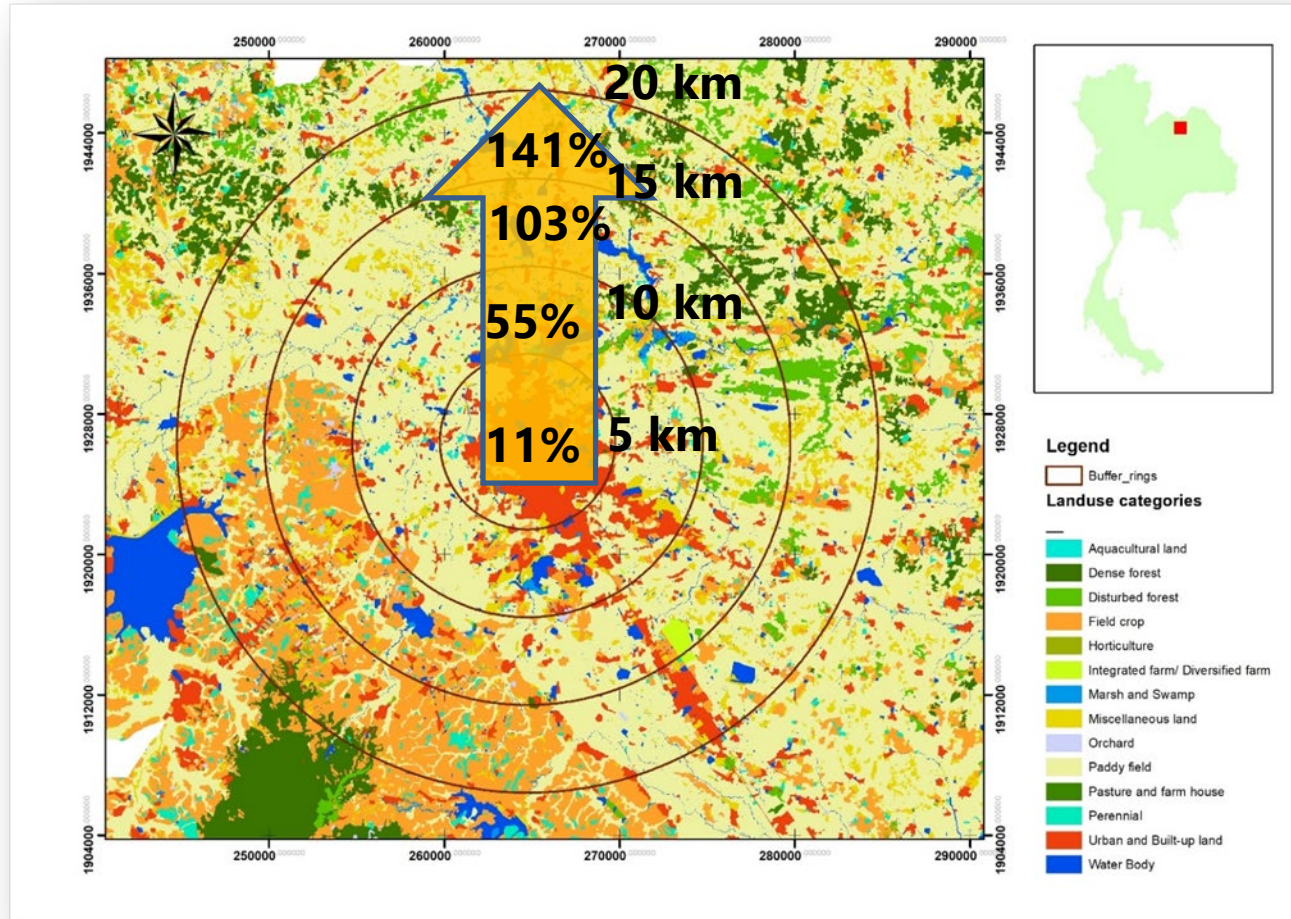
Bangladesh | Bhutan | India | Indonesia | Japan | Nepal | Philippines | Thailand | Vietnam



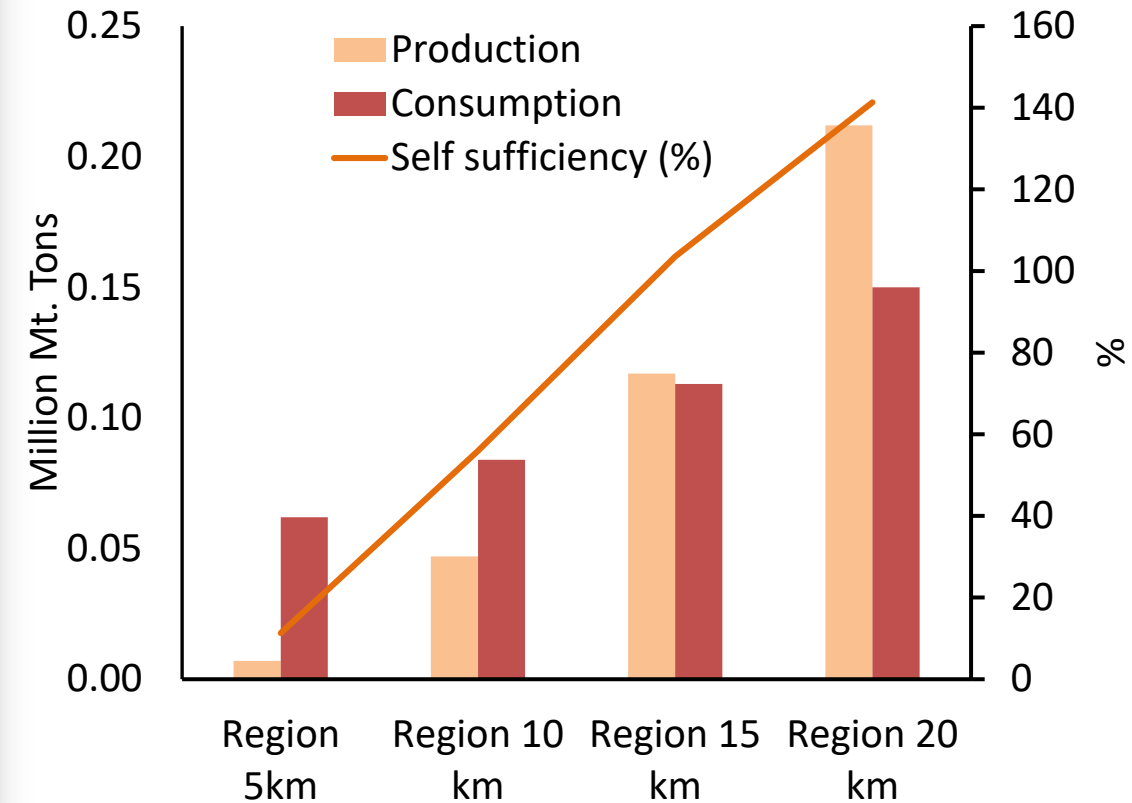
Ten (10) consortium members have signed the Partnership Agreement



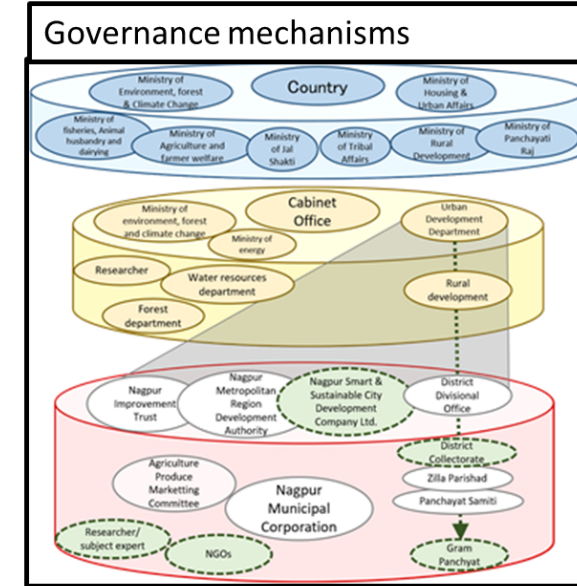
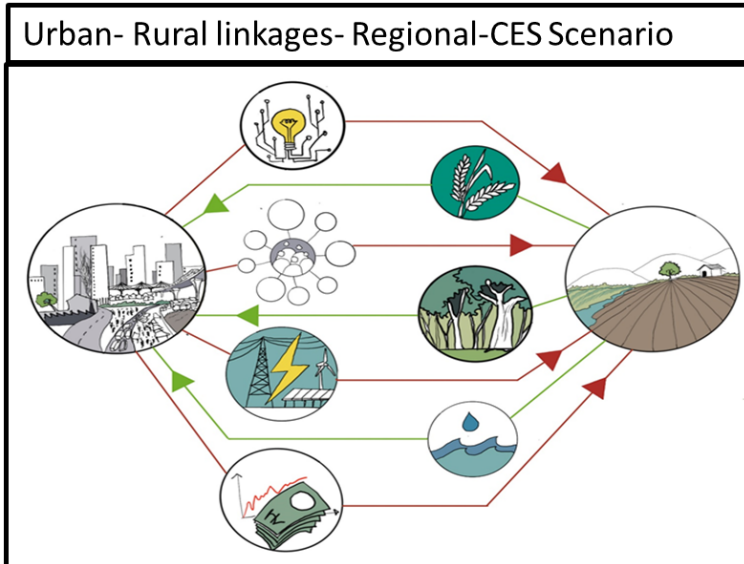
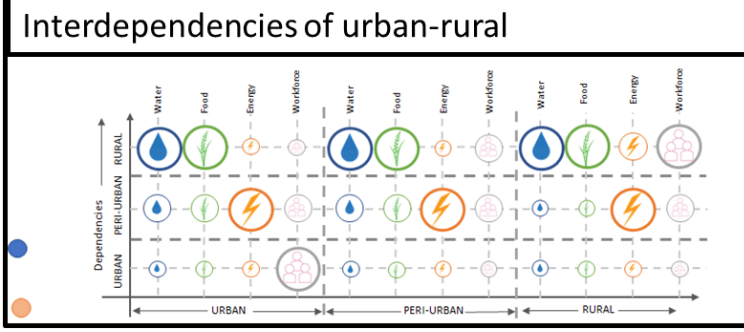
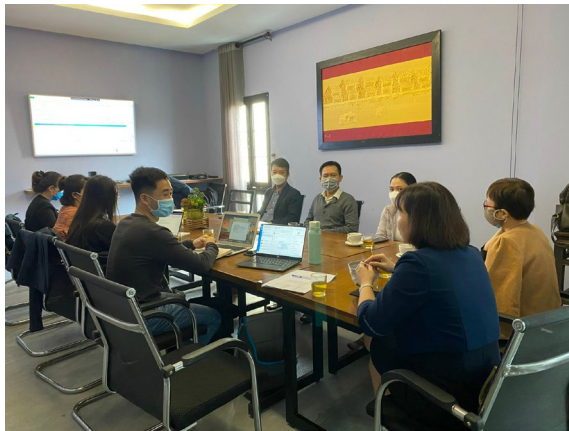
Generating scientific evidence through case study: Need CES approach for resilient food supply in Udon Thani City region Thailand



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



Need a multi-stakeholder platform to advance CES approach in the city region



Thank you very much

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Hayama, Japan 240-0115
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