Sustainability Science for SDGs and Academic Network in Asia

Ken Fukushi, Ph.D.
Professor, The University of Tokyo, Japan
Visiting Professor, United Nations University
Professor, Vietnam Japan University, VNU, Vietnam
Deputy Director, Future Earth Global Secretariat Japan

- The Agenda 2030 and its SDGs were adopted by the UN member states on September 25 2015

Contributions for Achieving the SDGs in Urban Water Environment

6.3: Improve water quality by reducing pollution, halving the proportion of untreated wastewater

6.a: Expand international cooperation and capacity-building support in water- and sanitation-related activities/programmes

11.3: Enhance inclusive and sustainable urbanization

11.5: Significantly reduce the number of deaths and people affected and direct economic losses caused by water-related disasters

13.1: Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters

13.3 Improve awareness-raising and human and institutional capacity on climate change mitigation, adaptation, and impact reduction

3.9: Substantially reduce the number of deaths and illnesses from water pollution

9.1: Develop quality, reliable, sustainable and resilient infrastructure

HÁBITAT III
QUITO-OCTUBRE DE 2016

THANK YOU!

The New Urban Agenda has been adopted!

Contributions for the New Urban Agenda

A. The transformative commitments

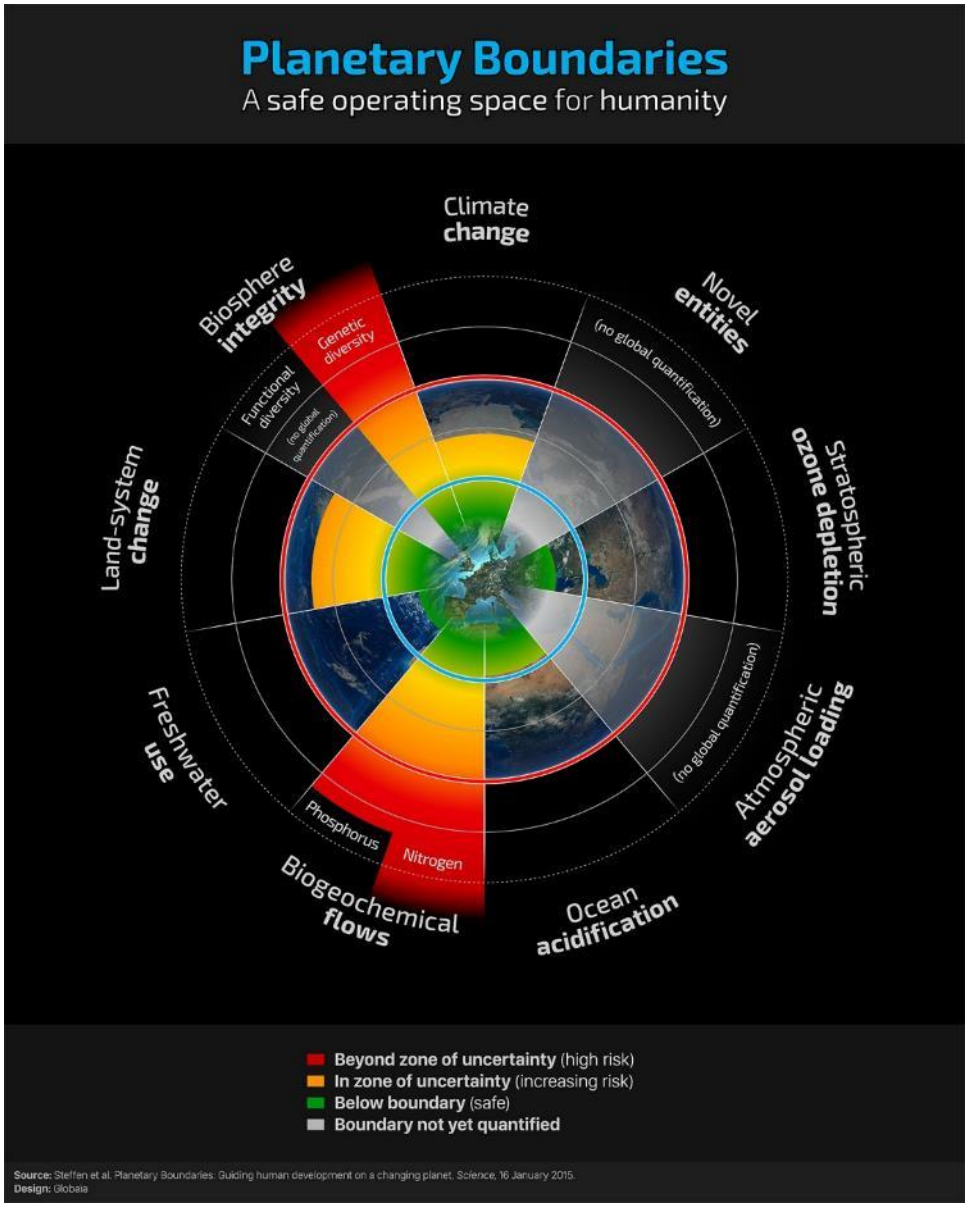
- Promote equitable and affordable access to sustainable basic physical and social infrastructure for all, including safe drinking water and sanitation (34)
- Recognize adverse impacts of climate change and other natural and man-made hazards (64)
- Strengthen the sustainable management of resources (71)
- Promote conservation and sustainable use of water (73)

B: Effective Implementation

- Promote adequate investment in protective, accessible, and sustainable infrastructure and service provision systems (119)
- Equip public water and sanitation utilities with the capacity to implement sustainable water management systems, sustainable maintenance of urban infrastructu

The road to a sustainable urban future for all is yet ahead of us—it is a journey we must take together.
Together beyond Habitat III

Preconditions in the 21st Century
- Planetary Boundaries -



Steffen et al (2015)

⇒ from Environmental Problems to Earth System Transformation c.f. Anthropocene (Crutzen 2002)

Effect of climate change on environment, Case in Hanoi

Current

Future (205

Water pollution (*E. coli*)

+ 25%

Flood area

+ 12%

Direct flood damage

Potential health

+ 140%

This future can be changed by us !!

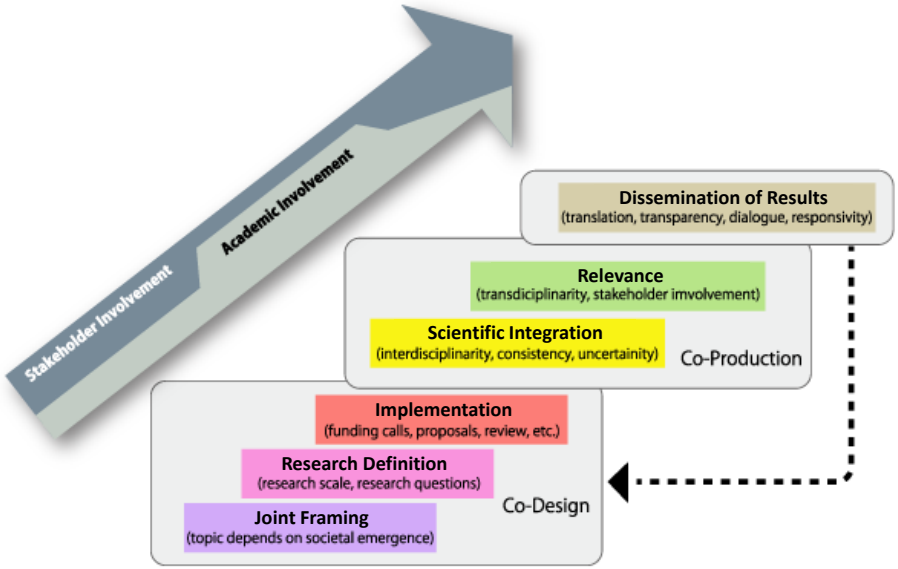
Future Earth
Strategic Research Agenda 2014

futureearth
research for global sustainability

A Dynamic Planet
- a1 Observing and attributing change
- a2 Understanding processes, interactions, risks and thresholds
- a3 Exploring and predicting futures

B Global Sustainable Development
- b1 Meeting basic needs and overcoming inequalities
- b2 Governing sustainable development
- b3 Managing growth, synergies and trade-offs

C Transformations towards Sustainability
- c1 Understanding and evaluating transformations
- c2 Identifying and promoting sustainable behaviours
- c3 Transforming development pathways



Future Earth (2014) Future Earth Strategic Research Agenda 2014. Paris: International Council for Science (ICSU)

Huge gap in knowledge

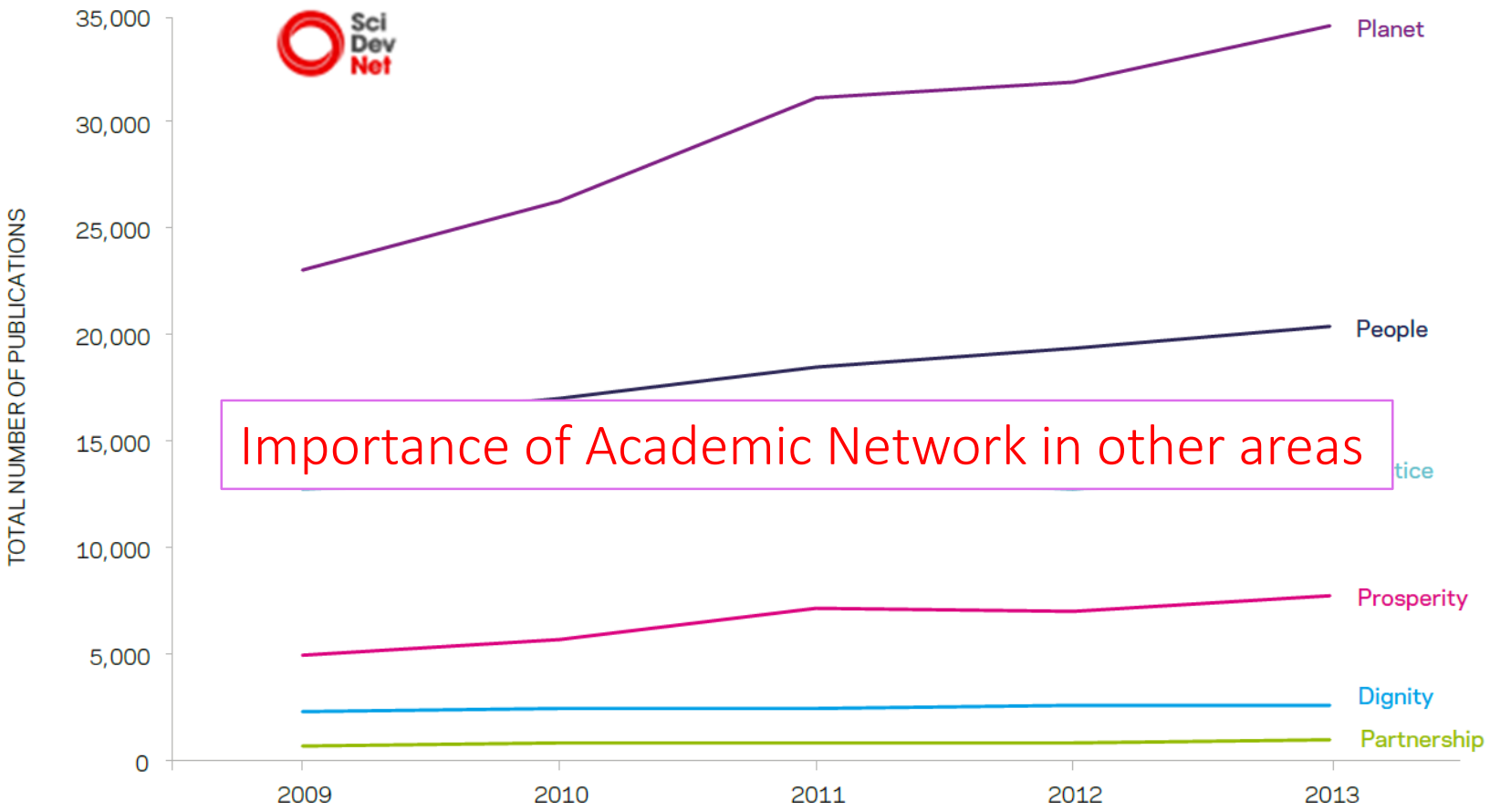


Figure 1.3 *— Total number of publications; for the world; per theme for sustainability science; per year for the period 2009-2013.*

Important aspect of SDGs

Tackle common subjects for developing and developed countries

Have to recognize that we are in Anthropocene

New scheme of networking is necessary to promote sustainable society under above conditions

Asian contribution is large

Huge expectation to JASTIP !!

Vietnam Japan University (VJU) - *School for Sustainability Science*

A Member of Vietnam National University Hanoi

Established in 2016 by the strong Leadership between Vietnamese and Japanese governments

Establishment ceremony
September 2916

Future Collaboration
with JASTIP is requested!