What is Sustainability?
- Vision & indicators

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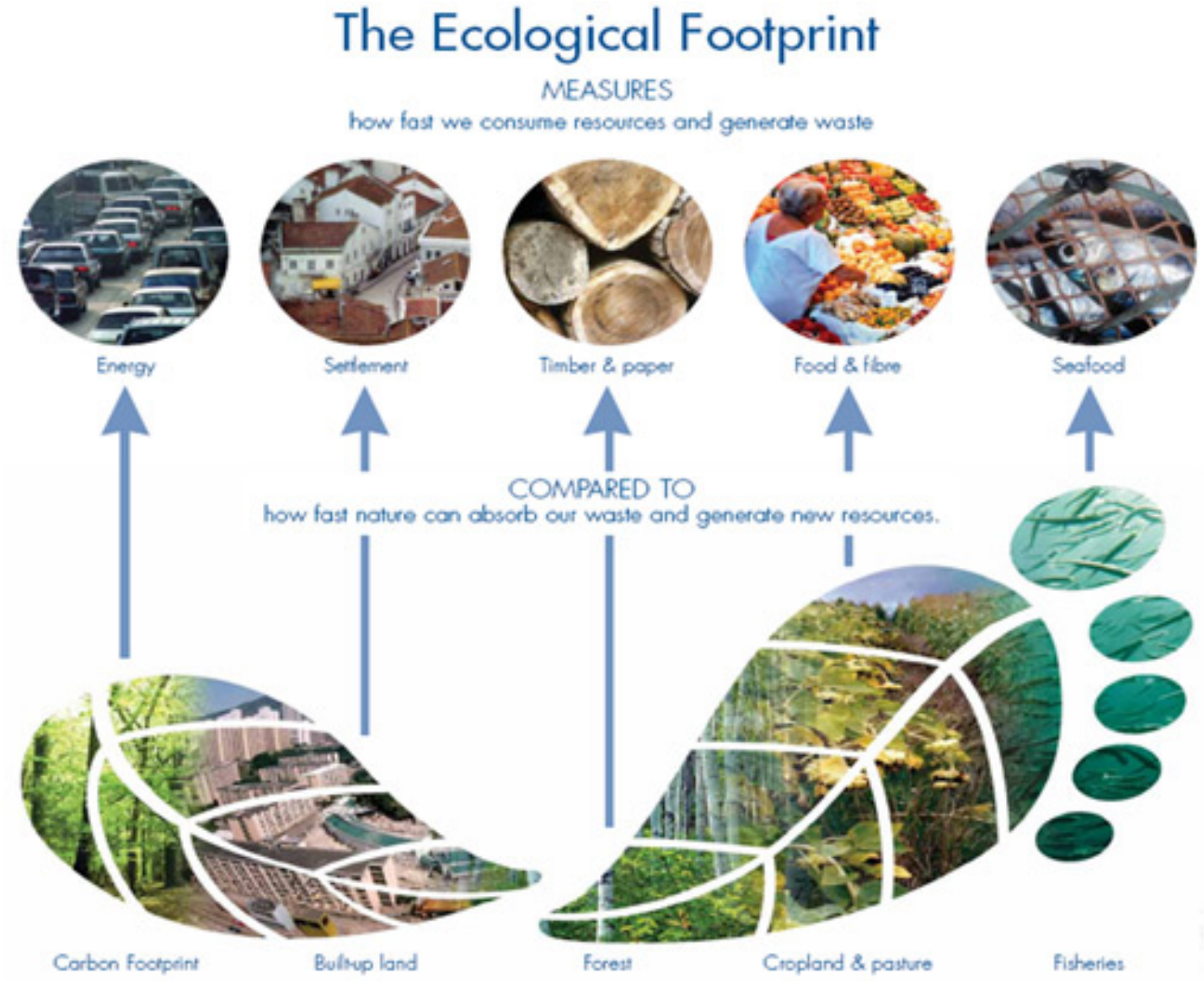


Our current global situation: Since the mid 1980s, humanity has been in ecological overshoot with annual demand on resources exceeding what Earth can regenerate each year.

http://www.footprintnetwork.org/gfn_sub.php?content=footprint_overview

Ecological Footprint - China

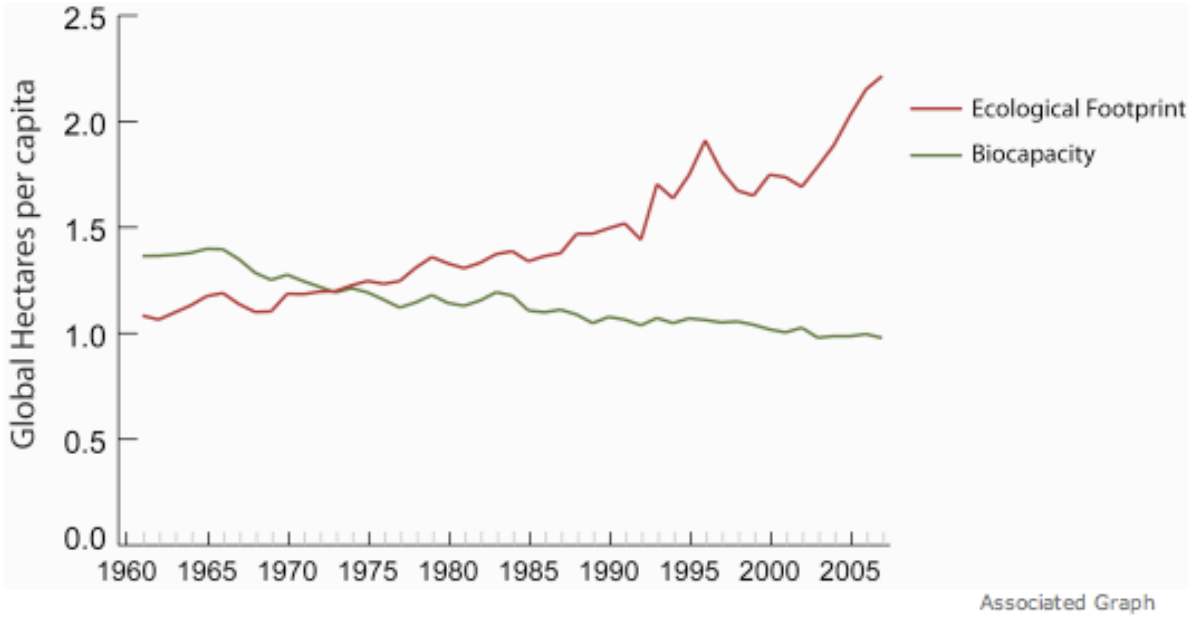
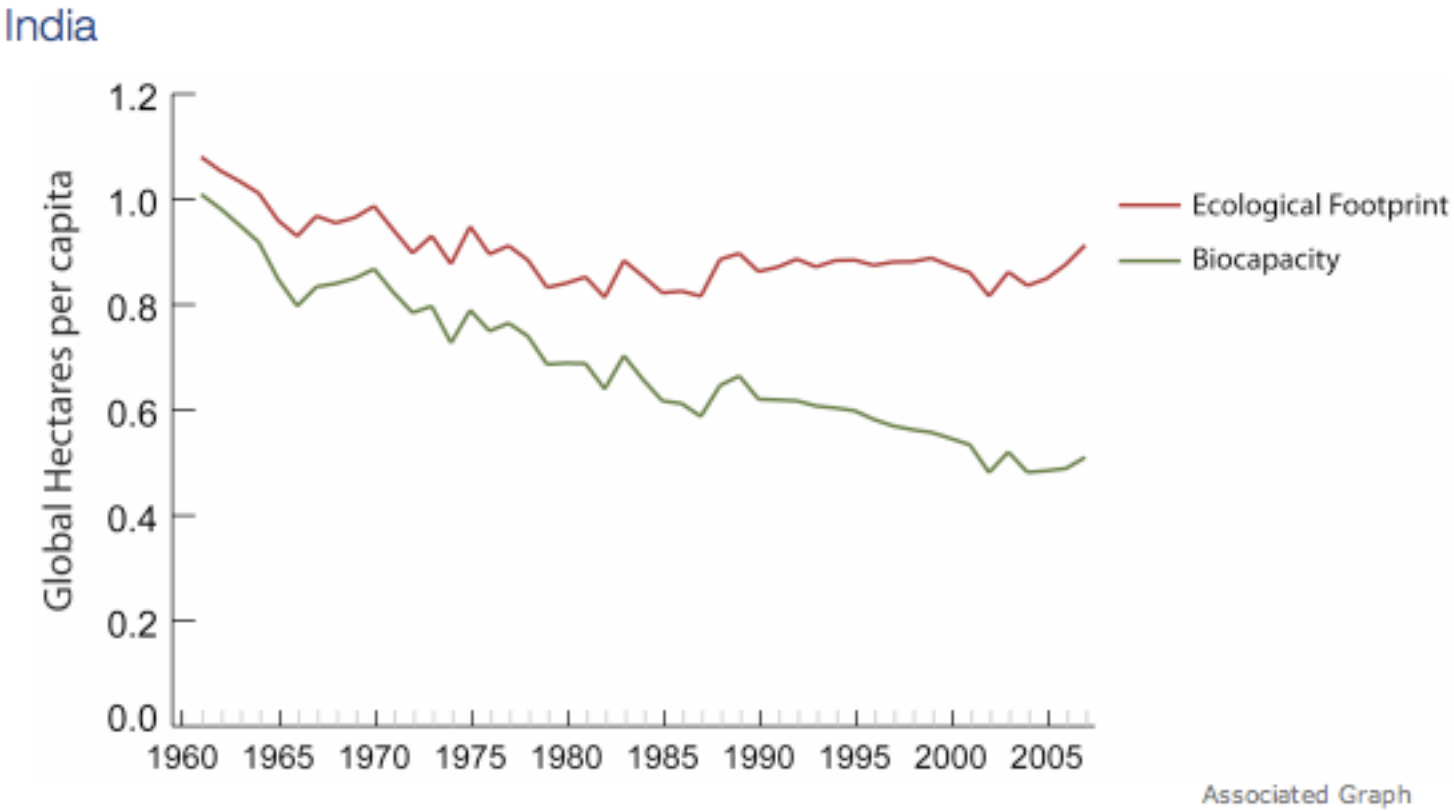


Figure 1 tracks the per-person resource demand (Ecological Footprint) and resource supply (Biocapacity) in China since 1961. Biocapacity varies each year with ecosystem management, agricultural practices (such as fertilizer use and irrigation), ecosystem degradation, and weather.

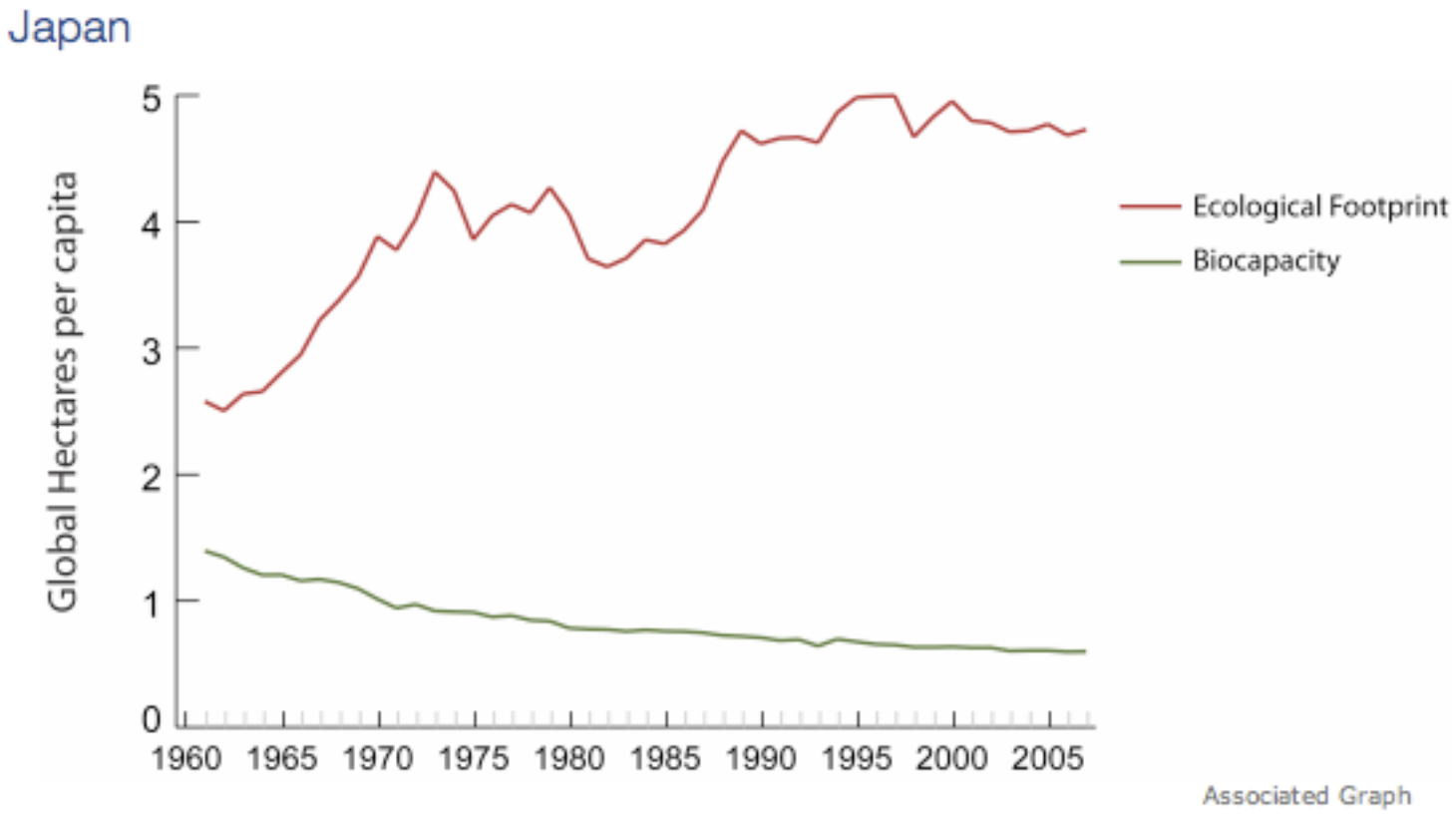
http://www.footprintnetwork.org/gfn_sub.php?content=national_footprints

Ecological Footprint - India



http://www.footprintnetwork.org/gfn_sub.php?content=national_footprints

Ecological Footprint - Japan



http://www.footprintnetwork.org/gfn_sub.php?content=national_footprints

Workshop - Vision & Indicator

<Mission>

Imagine that we are holding “SDGs (Sustainable Development Goals) Dialogue” in this room.

You should be able to present the followings;

- what is sustainability (with your own terms)
- what is 1. your vision and goals, 2. indicators, 3. policies for country/region/global society.

(with your own logic)

<Process>

・Area: Energy & climate change + economy + food, waste, bio-diversity, resource-productivity, equity, satisfaction…

・Individual work

・Presentation & Discussion

Workshop - Vision & Indicators

Presentation example

<Sustainability>

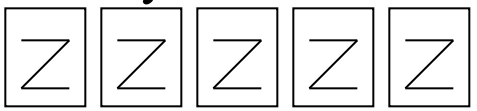
- Our definition is …

<Vision – Goals>

- GHG emissions will be
- Energy mix will be…

<Indicators>

- Energy consumption per capita
- % of nuclear energy for electricity



<Policies>

- Action 1
- Action 2

Workshop - Vision & Indicators

<To start your thinking… >

1. Vision –

In 2050, we want the situations concerning energy will be like this….

When it comes to oil/nuclear energy, …

When it comes to renewable energy, …

The GHG emissions level is where …

One we achieve this vision, we will be able to …

The implication for food is…

2. Indicator –

We recommend YY as a indicator to measure our progress toward this vision.

YY is…

It can tell us ….

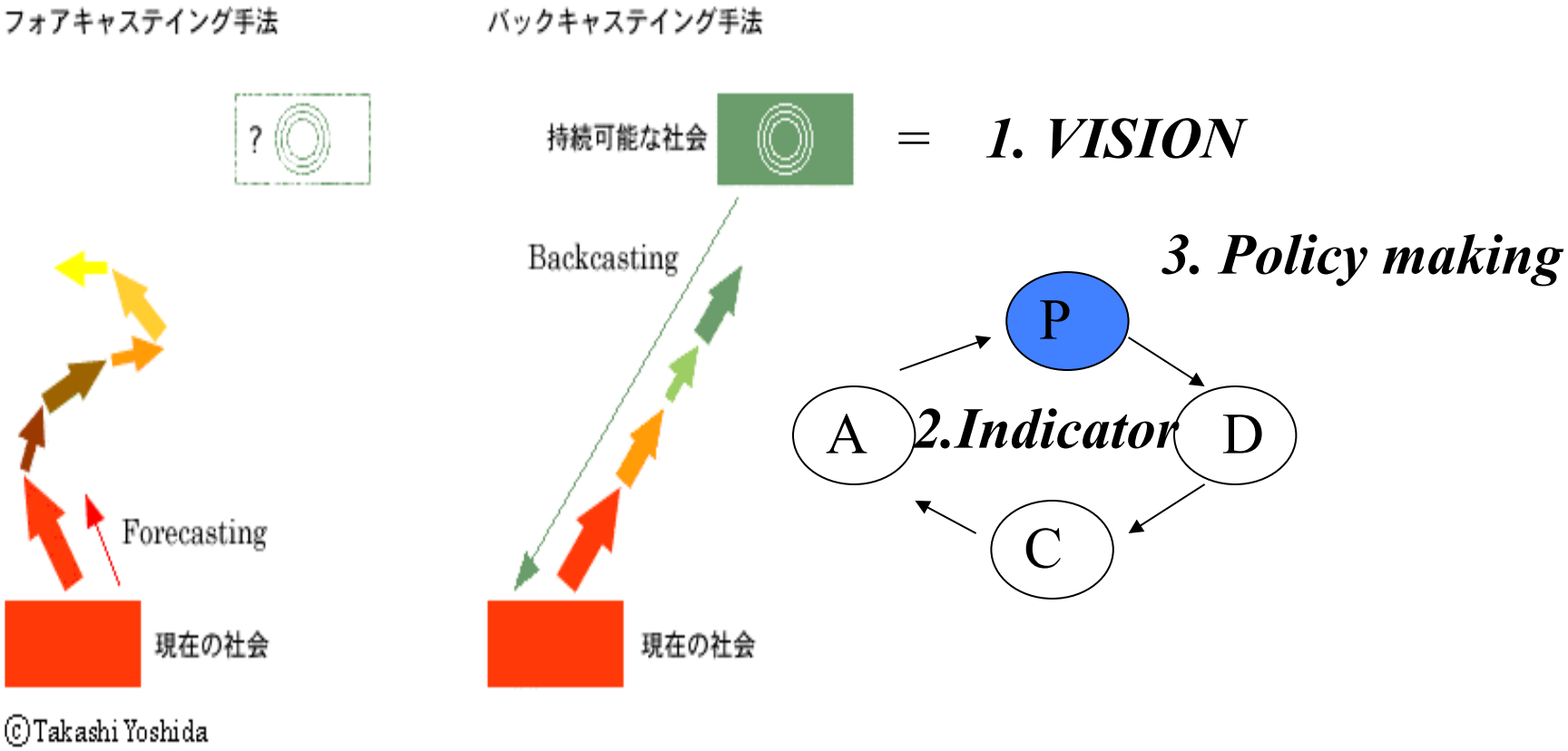
The reason why we think YY is better than ZZ is that….

Other possible indicators are…

What is vision?

- Different from “forecast” / “prediction”
- “The Polestar”
- An ideal state
  - Where you want to go
- Guide us through the journey
- Inspire best brains

Vision, Indicator, and Policy making



Keys for ISD (Indicators for Sustainable Development)

- **Systemic**
  - sources, sinks, change rates, thresholds, feedback …
- **Integrated**
  - environmental, economic, social, individual
- **Long-term**
  - minimum one generation

by Alan Atkisson

ISD: DIFFERENT AT DIFFERENT SCALES

Global: CO2, Population, Food Production

National: GDP, HDI, ESI, Employment

Regional: Baltic Sea Fisheries & Industries

Local: Transit, Energy Use, Health Stats

Neighborhood: # of Abandoned Buildings

by Alan Atkisson

Standards for assessment of progress for sustainable development

http://www.iisd.org/pdf/bellagio.pdf

The "Bellagio Principles"

1. Guiding Vision and Goals
(clarity about sustainability)

2. Holistic Perspective
(systems and subsystems)

3. Essential Elements
(ecology, economics, social equity)

4. Adequate Scope
(temporal and spatial)

5. Practical Focus
(clear standards, manageable tools)

6. Openness
(transparent methods and sources)

7. Effective Communication
(simple, and audience focused)

8. Broad Participation
(diversity, completeness, link to policy)

9. Ongoing Assessment
(iterative, adaptive, learning-focused)

10. Institutional Capacity
(support, maintenance, development)

Good Sustainability Policy? - Change the structure

- Change feedback structure/information links in the system
- Change the content and timeliness of the data that actors in the system have to work with
- Change the ideas, goals, incentives, costs, and feedbacks that motivates or constrain behavior
- In time, system with a new information structure is likely to change its social and physical structures.
- It may develop new laws, organizations, technologies, people with new skills, machines and buildings.
- Such a transformation need not be directed centrally; it can be unplanned, natural, evolutionary, exciting, joyful.