



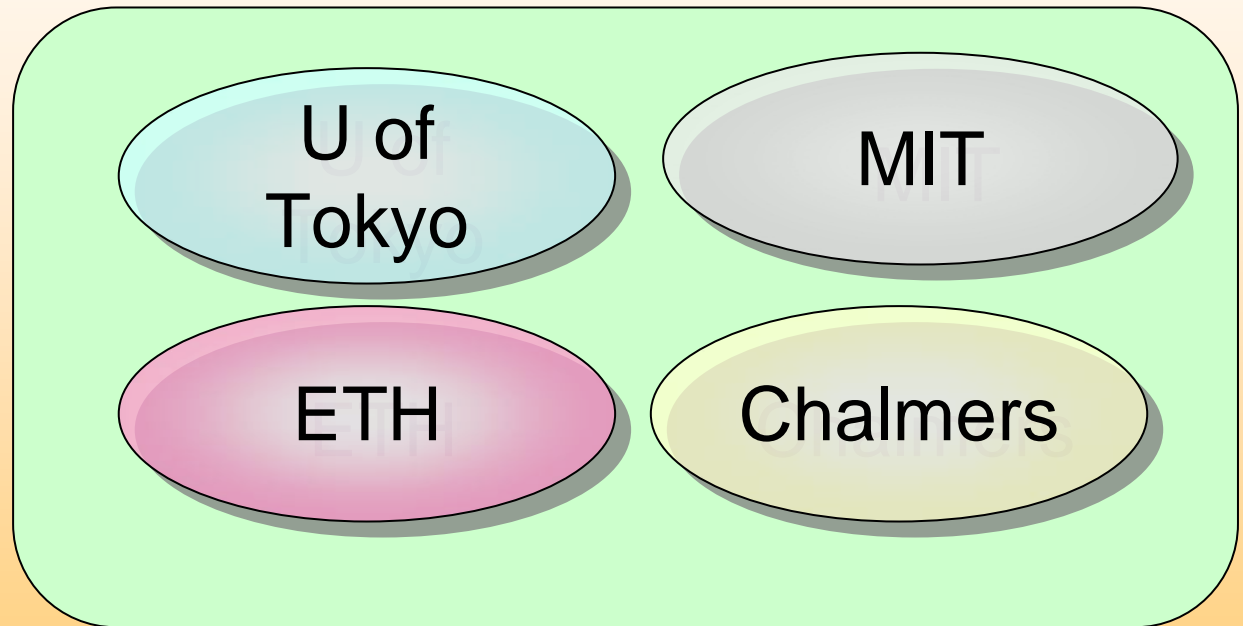
A NEW INITIATIVE AT THE UNIVERSITY OF TOKYO

-INTEGRATED RESEARCH SYSTEM FOR SUSTAINABILITY SCIENCE (IR3S)
&
TRANSDISCIPLINARY INITIATIVE FOR GLOBAL SUSTAINABILITY(TIGS)

Akimasa Sumi
Executive Director
TIGS/IR3S

PRESIDENT KOMIYAMA HAS INITIATED A NEW PROJECT!

- Based on **AGS** (Alliance for Global Sustainability) experiences

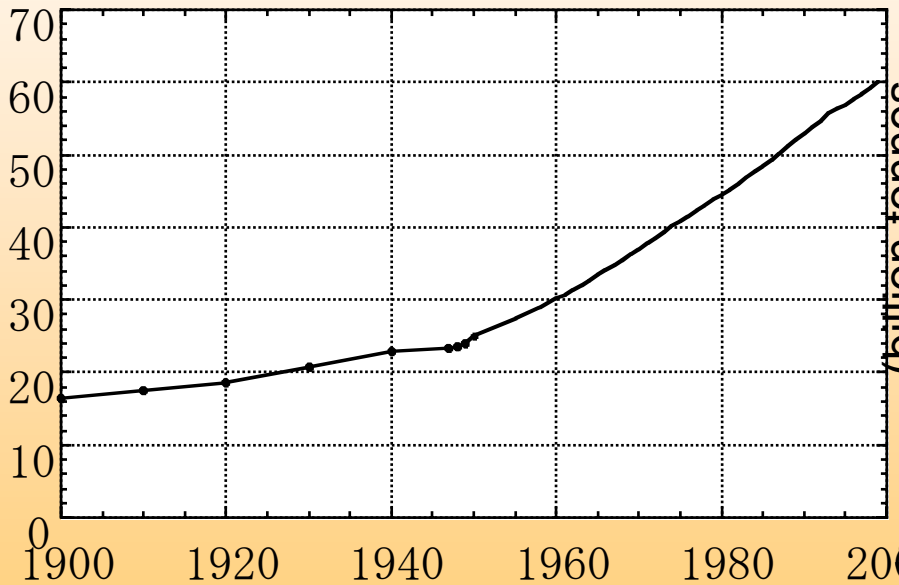


- Based on our perception of the past and the future

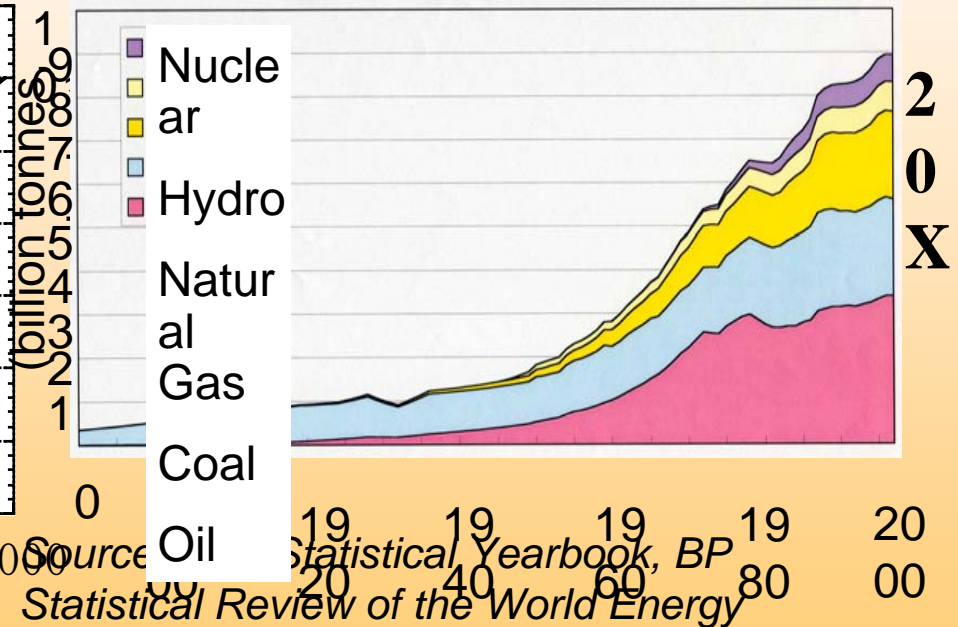
THE 20TH CENTURY WAS AN AGE OF EXPLOSION AND WAR

- The World's Population

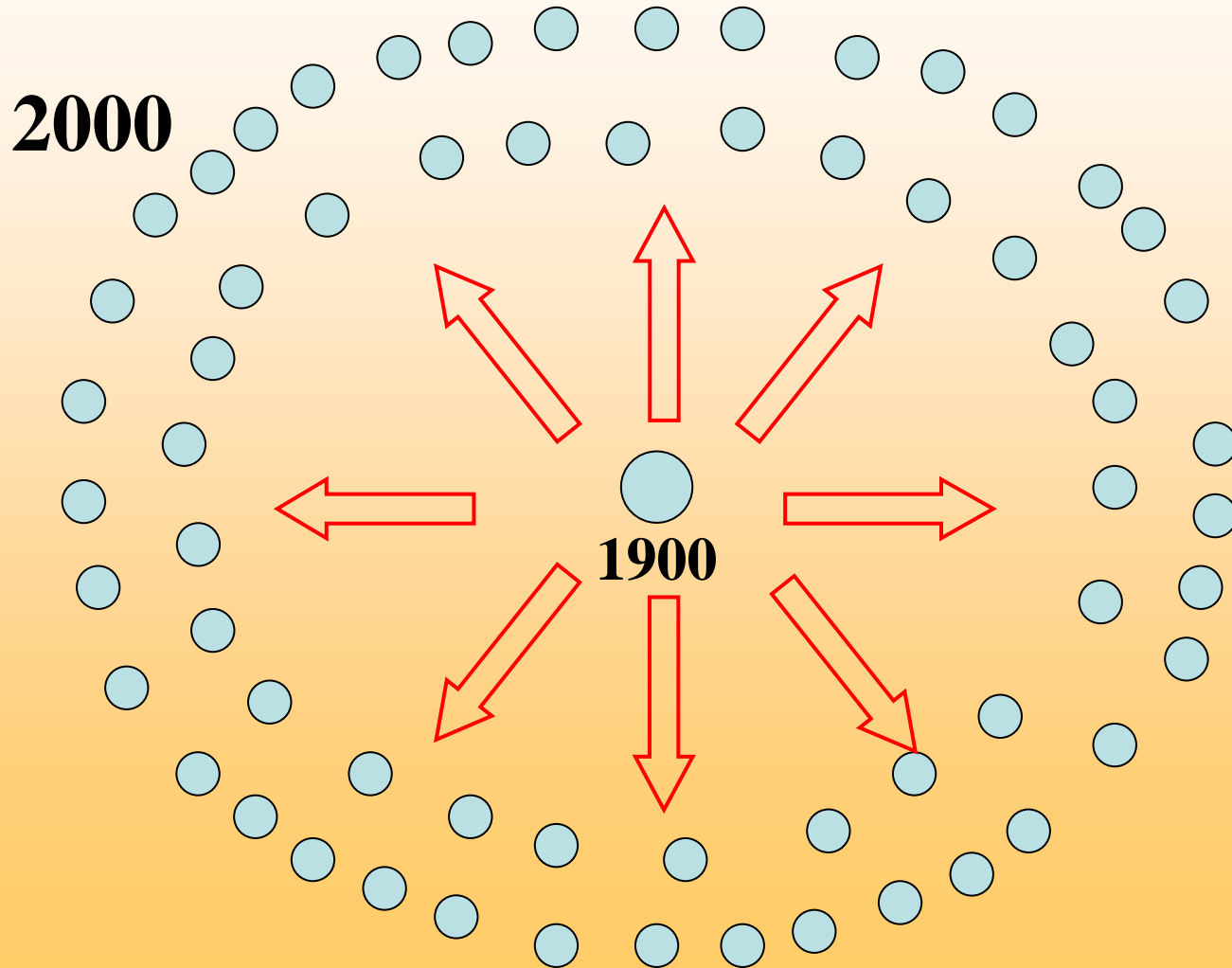
10⁸)



Energy Consumption



Explosive Expansion of Knowledge in the 20th Century

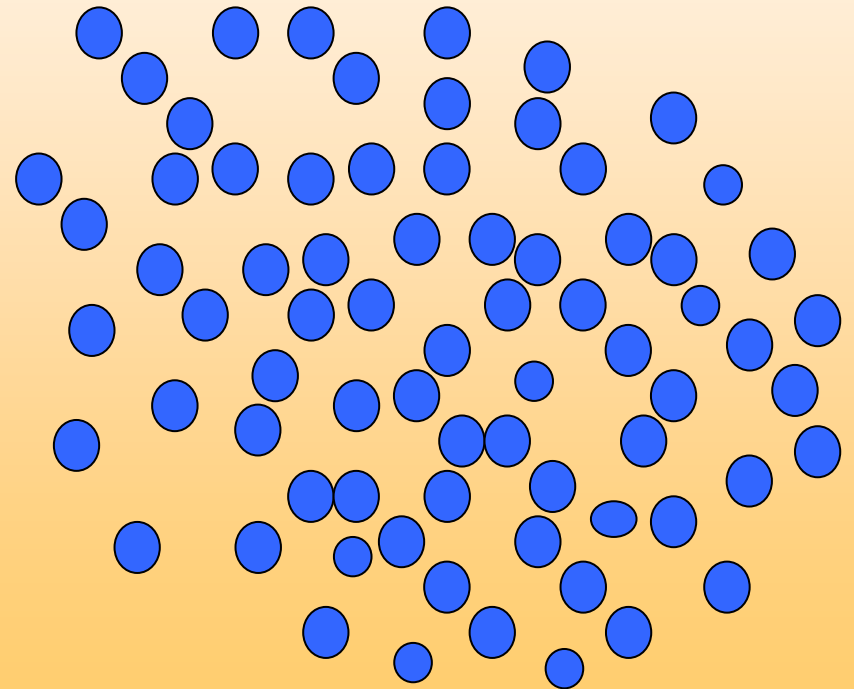


Subdivision and Compartmentalization of Science

1900



2000



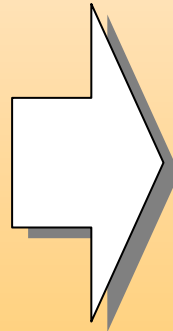
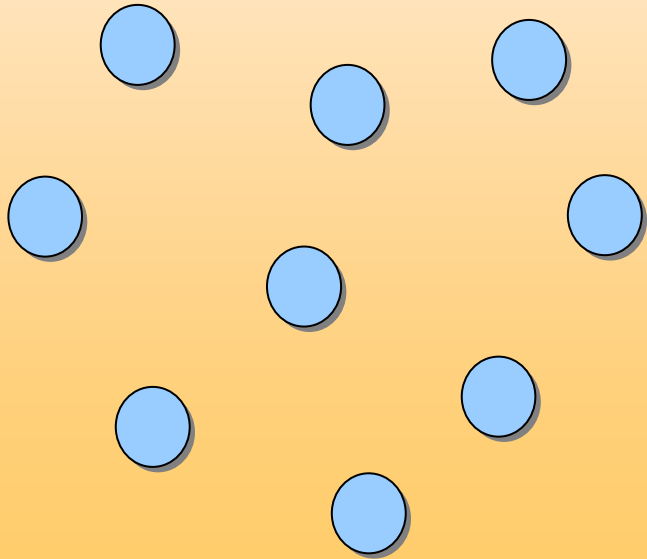
THE 21ST CENTURY SHOULD BE A CENTURY OF SUSTAINABILITY AND PEACE

- How to do?
- Structuring knowledge and issues

STRUCTURING OF KNOWLEDGE NEEDED

Unstructured

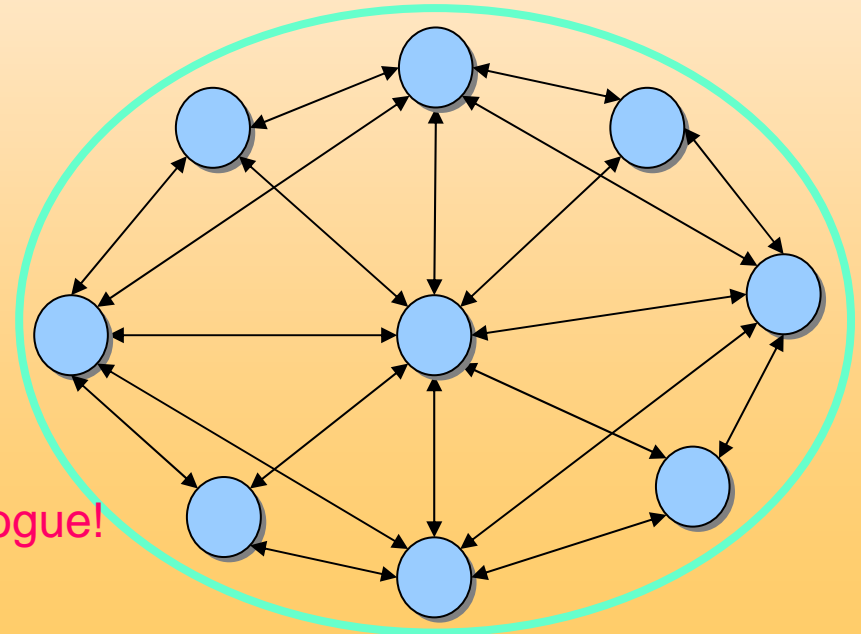
Division of academic study hinders communication



Structured

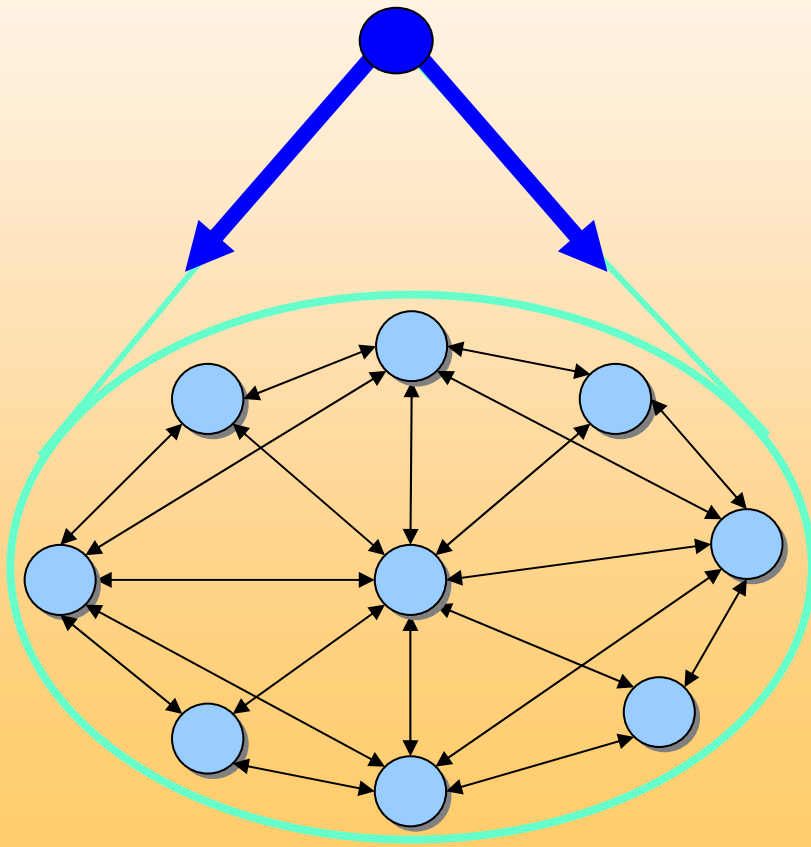
Analysing the interrelationships among various specialised fields

Dialogue!

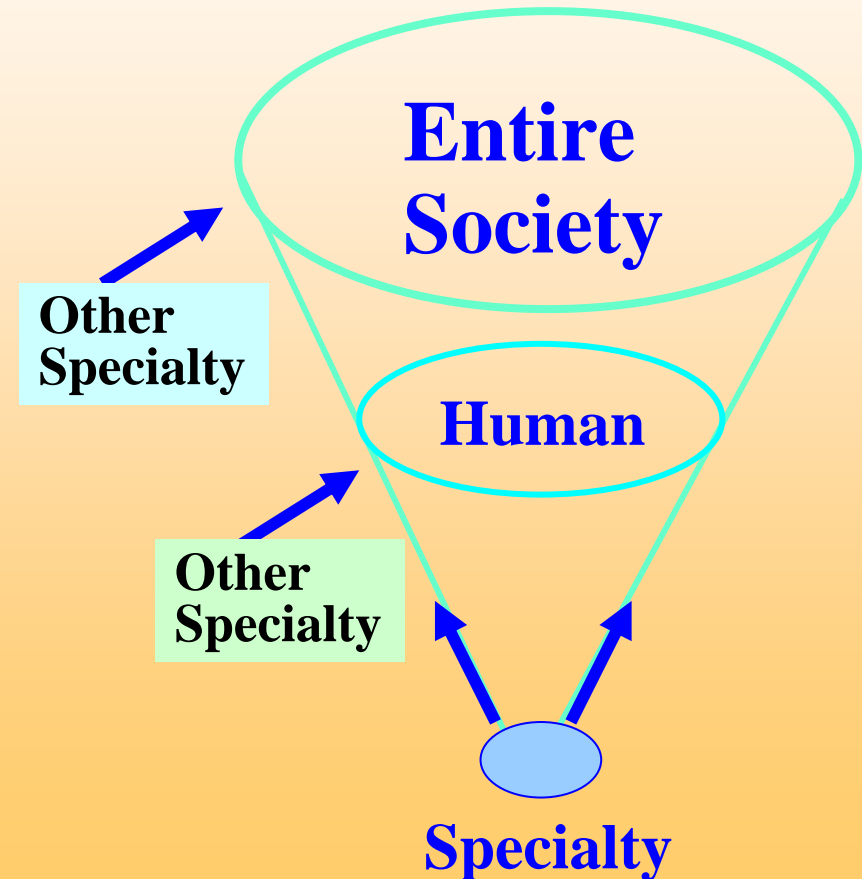


Two Approached to Structuring of Knowledge

Academic Overview Courses



Science Integration Project





IR3S

(Integrated Research System for Sustainability Science)

and Beyond

Roots of "Sustainability"



(http://www.nih.gov/news/NIH-Record/10_20_98/story06.htm)

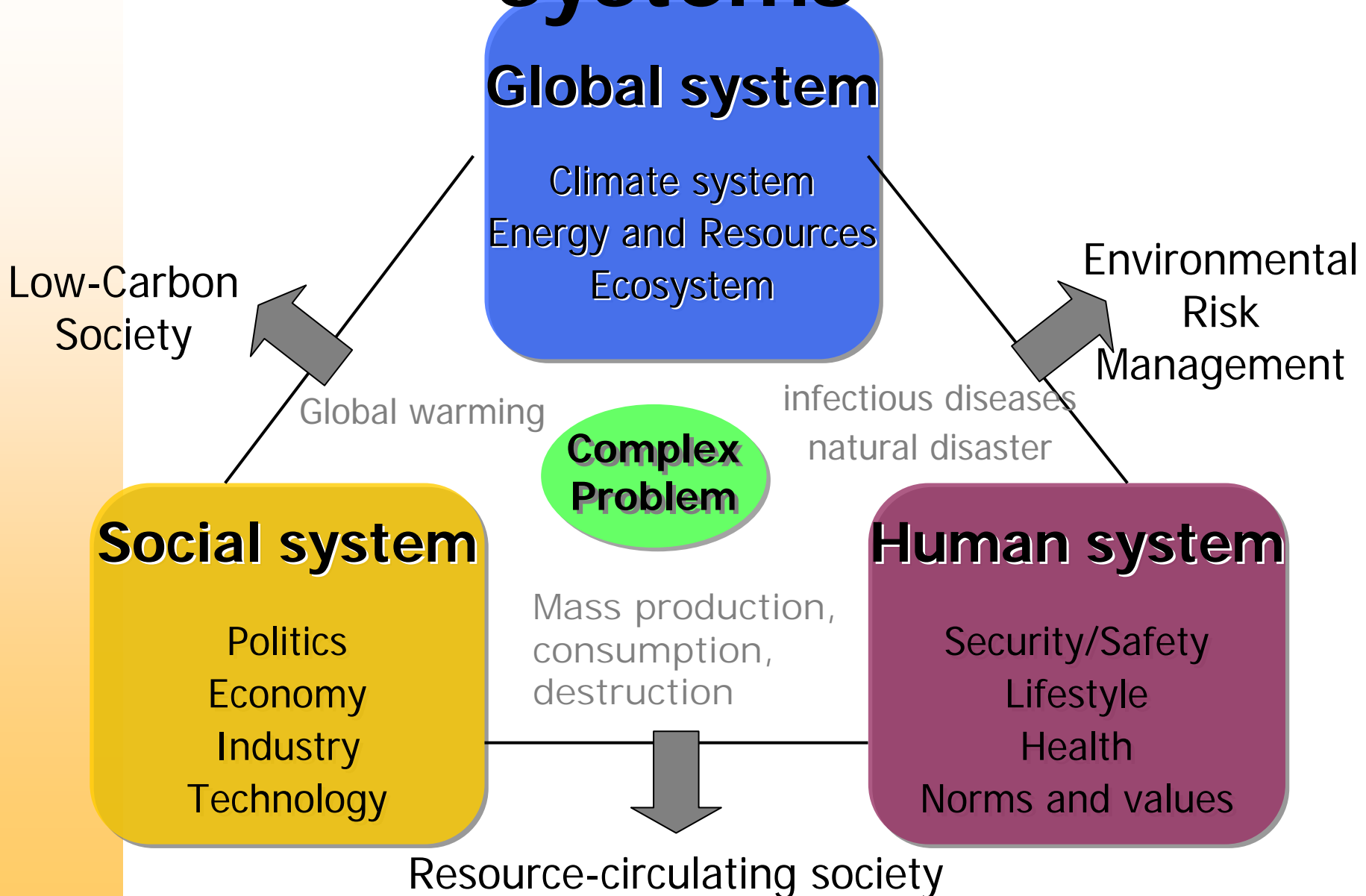
Sustainable Development

● *"development that meets the needs of the present without compromising the ability of future generations to meet their own needs"* (WCED or Brundtland Commission)

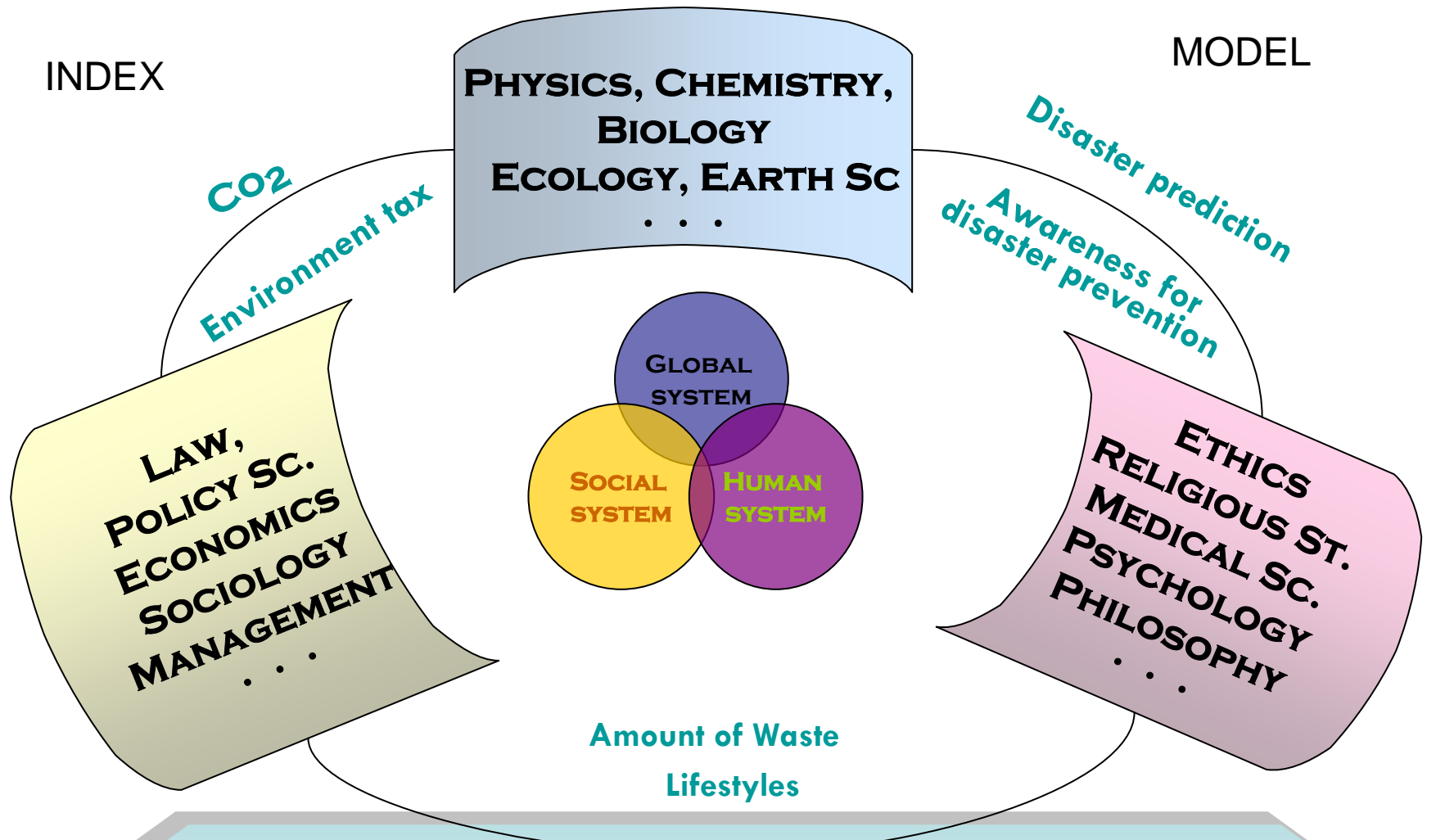


- ambiguous definition
- sometimes twisted for political purposes

Linkages among three systems



Transdisciplinary approach

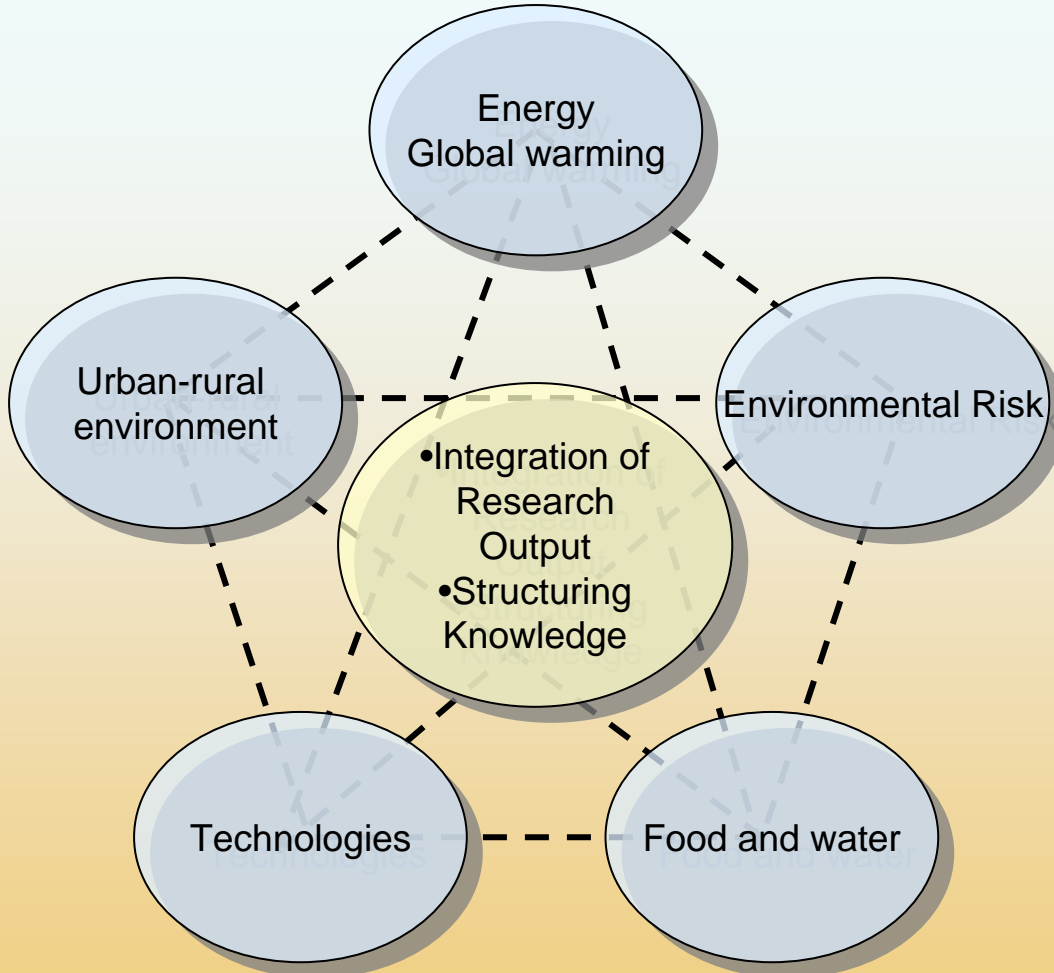


**Sustainability Science fuses
Natural and Social Sciences with indicators**

OBJECTIVES OF TIGS

- **Establish** Sustainable Sciences through structuring of knowledges and issues
- Establish CORE
- CORE can talk to each discipline!
- Issue-driven approach、
- Transdisciplinary Organization
- Academic Staffs
- Intensive Fund Raising and Outreach

Interdisciplinary Initiative for Global Sustainability (TIGS)



Collaboration

Industrial, government, and international organization

Domestic research groups

Overseas research institutes

Alliance for Global Sustainability (AGS)

UT's branches in other countries

Cooperation

Organization

Proposal

Flagship Projects

Sustainability Education Programs

Vision proposal

Knowledge of the University of Tokyo

IR3S Flagship Project - Education

- Joint education program on Sustainability Science
 - ◆ transdisciplinary program
 - ◆ field work (through collaboration with international organizations in Asia)
- Aims to develop curricula and pedagogy for sustainability education

Programs on Sustainability Science

**YES (YOUTH
ENCOUNTER ON
SUSTAINABILITY)**



**IPOS (INTENSIVE
PROGRAM ON
SUSTAINABILITY)**

*On-site learning
for sustainability, environment and
cultural diversity*



OUTREACH ACTIVITIES (SYMPOSIUM AND MEETINGS)



Open symposium at Yasuda Hall (UT)
(1100 people)



Primary school education
(Chibi-Sus: Sustainability for Kids)