

ACECC ECM 2024, Manila, the Philippines  
TC21 Session 2024.3.1

# Need of Researchers in Academia to get involved in Transdisciplinary Approach

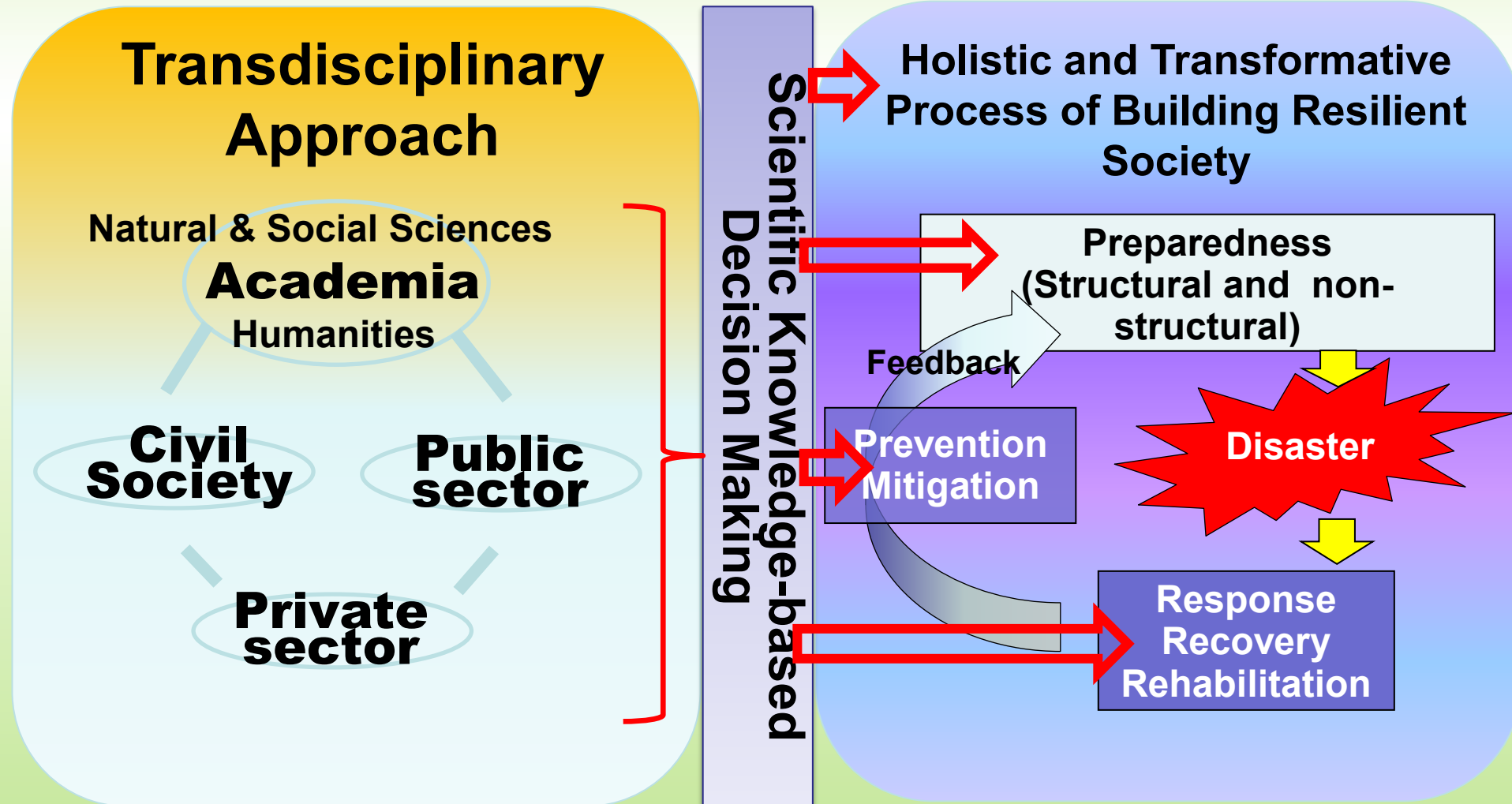
Kuniyoshi Takeuchi

Professor Emeritus

University of Yamanashi, Kofu, Japan

# TC21 Transdisciplinary Approach for Building Societal Resilience to Disasters

Our focus is DM process ...



Co-Design, Co-Produce, Co-Deliver, and Co-Implement





Post-audit tours to Tacloban and Ormoc in Nov 2016 and Feb 2023  
for TDA in recovery process of Tacloban (2013) and Ormoc (1991)





# Issues and barriers in implementing TDA in disaster recovery

- *Coordination challenges*
- *Poor residential/beneficiary participation*
- *Snags in governmental DRR personnel continuity*
- *Difficulty in information flow/sharing*
- *Poor Intra-governmental Collaboration at emergency*
- *Lack of meaningful participation of researchers in implementation*

Communication, Time,  
Hegemony, Trust

# Realities of Researchers in academia

- Little opportunity to get involved in practical experiences.
  - Little opportunity  $\leftrightarrow$  Little experience: a vicious cycle
- Little interest in real societal problems in front of us.
- But looking at **Curiosity, Originality & Anything New.**
  - aiming at publishing in SCI journals. Glorious targets are Science & Nature.
- With such experiences, eventually they become research leaders such as univ. professors

## As a result,

- “Primitive but Practical” are to be passed through.
- “Innovative but Expensive” or “Fundamental but Useful in the far future” are to be sought.
  - Not necessarily useful in majority of practical cases
- Such impacts are large especially to foreign students from developing countries where people need basic developments, e.g., “DRR”, “poverty eradication” etc.

In fact,

# Professors teach and guide foreign students in

- Frontline sciences.
- Not what foreign students need & most appropriate at home.



- Brilliant, disciplined & well-educated graduates are not necessarily appreciated by their mother nations,
- They often migrate to advanced countries & contribute to increase science divide & economic divide.

# Remedies for researchers

- Give every opportunities to get involved in practice.
- Give more **credits** in their career assessment for involvement in practical matters in society.
- **Institutionalize** academic people involvement in societal decision-making process.
- More scientific focus on **primitive-yet-practical technology and appropriate technology**.
- **Customization of advanced technology to appr tech.**
  - Observation, data processing, ITs, systems approach, TDA, ...



# Conclusions

- Lack of researchers' participation to practice distorts development as well as education.
- Needs of S&T for societal development are different in different development stages.
- More efforts to customize advanced technologies for appropriate technologies.
- Researchers' involvement should be promoted institutionally in DM process and credited in carrier assessment.

Modified from K Takeya

# Rome wasn't built in a day

Ontogeny repeats phylogeny (Ernst Haeckel)

