

# GEC-Japan/Asia Perspectives on Future Earth and Future Asia

Makoto Taniguchi

GEC-Japan/Asia Platform & RIHN

## **RIHN** (Research Institute for Humanity and Nature)

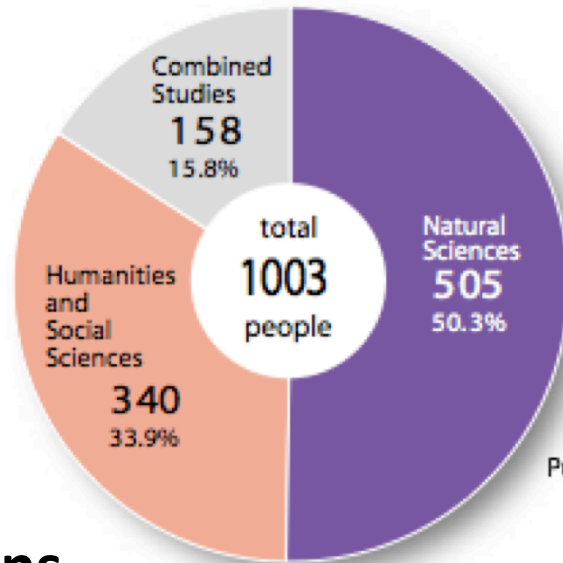
- National research institute **established in 2001** within the Ministry of Education, Culture, Science and Technology (MEXT)
- **Solicit, host, and fund** fixed-term (3-5 year) **research projects** on pressing areas of human-environmental interaction
- Conducts **integrated research** that is empirically rigorous and conceptually bold, and that can offer **solutions to environmental problems**



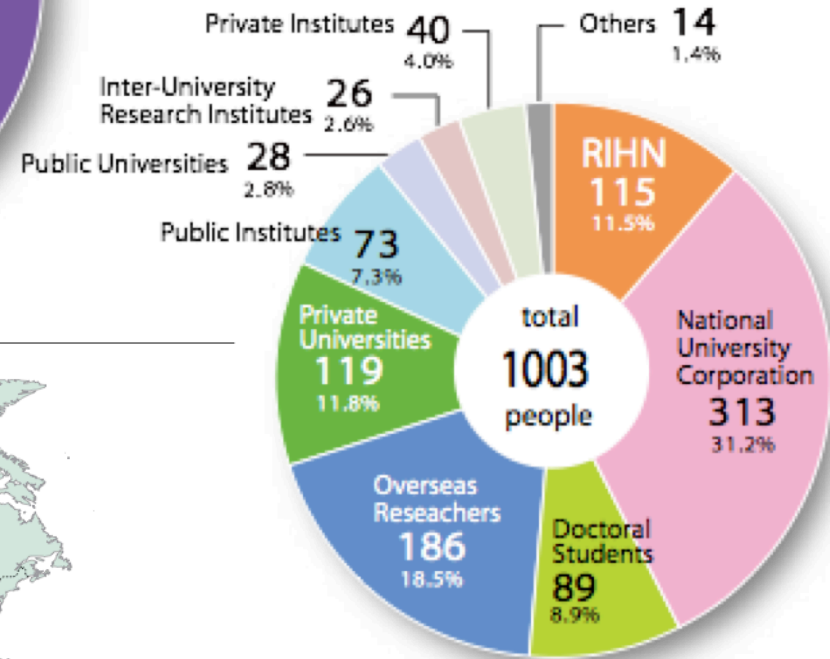
# Research Affiliations

(Ongoing 14 projects, 1003 members)

## Research Areas

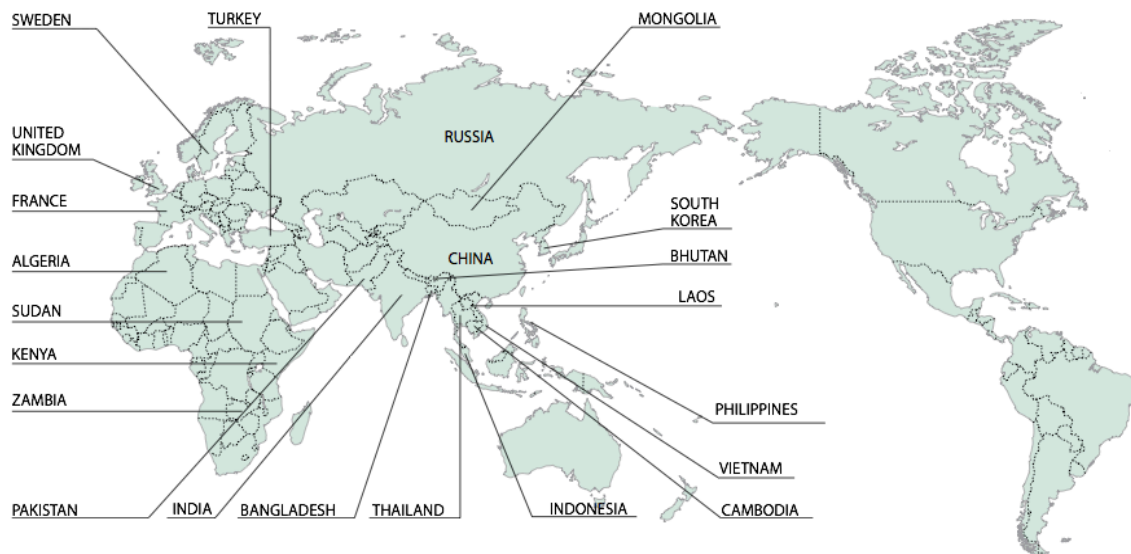


## Affiliate Organizations



**MOU**  
**22 countries**  
**48 Univ./Institutions**

Memoranda of Understanding and Research Cooperation Agreements (As of April 1<sup>st</sup>, 2011)



ALGERIA  
 Centre National de Développement des Ressources

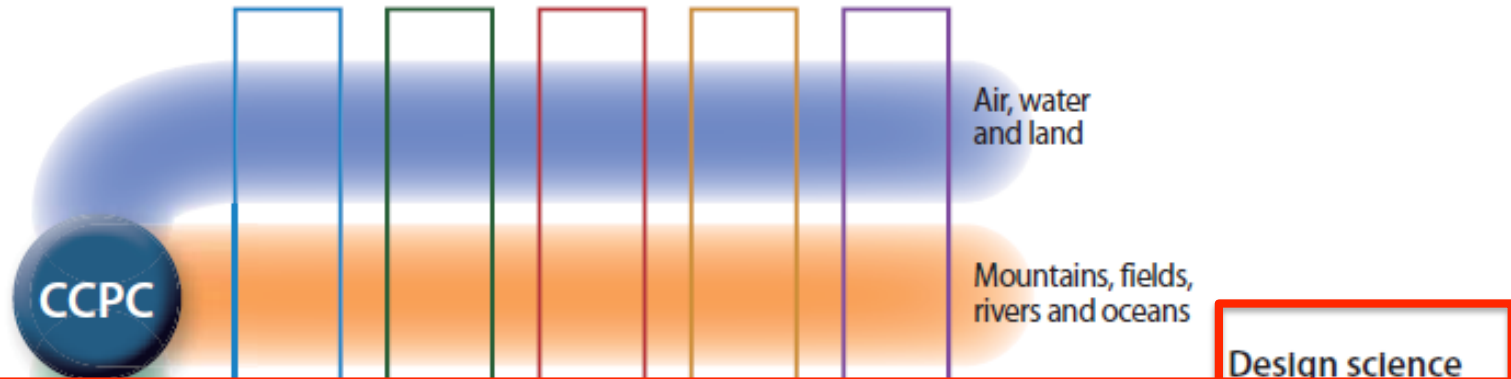
KAZAKHSTAN  
 Institute of Archaeology (R-03)

SOUTH KOREA  
 Institute of Islands Culture (D-02)

\*As of May 1<sup>st</sup>, 2010

# Completed (19) and Ongoing (12) Research Projects of RIHN (as of Apr. 2012)

## Second Phase Initiative Structure

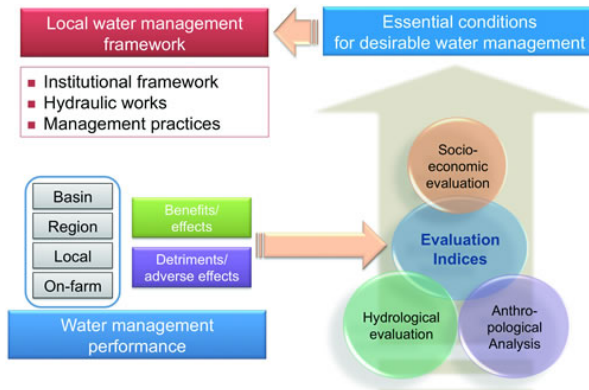


Interdisciplinary ⇒ Interdisciplinary + Transdisciplinarity  
 (2001-2010) (2011~ )

Circulation Diversity Resource Ecohistory Ecosophy

Cognitive science approaches

### Designing Local Frameworks for Integrated Water Resources Management



### Formation of Local Environmental Knowledge Systems for Creation and Sustainable Governance of New Commons

Structure of Local Knowledge for Environment and Sustainability



**2<sup>nd</sup> Phase of RIHN projects (2011-)**

- Transdisciplinarity
- Science in/for Society

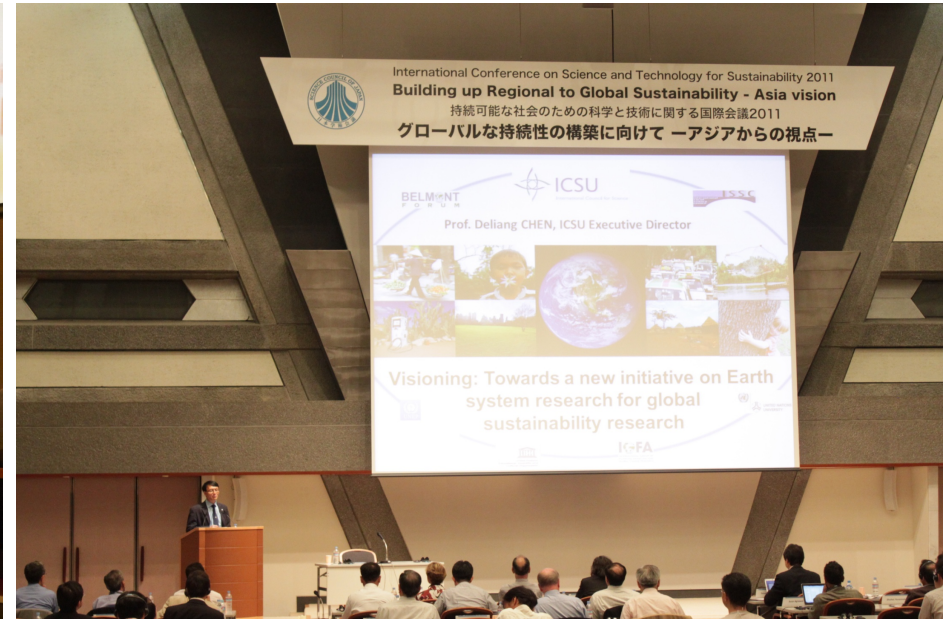
**(Co-designing & co-producing)**



# RIHN 10<sup>th</sup> Anniversary (Apr.2011)

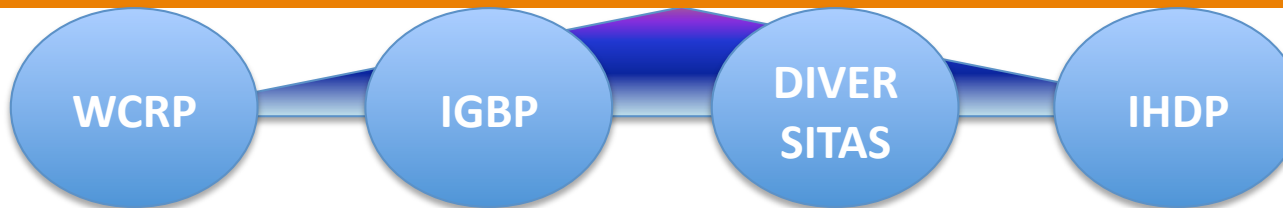


RIHN 10<sup>th</sup> Anniversary Symposium  
(Apr. 20,2011)



International symposium on  
Sustainability (Asia vision)  
Sep. 14-16, 2011, (SCJ, RIHN, Nagoya,  
Tohoku, & Hokkaido Univ.)

Visioning: the Five Grand Challenges,  
ESSI (Earth System Sustainability Initiatives )



# GEC-Japan (1)

## Vision for Future Asia and Future World

- **Issues:** Global change, both environmental and social, and sustainability development within socio-ecological systems
- **Mechanisms:** Already existing platforms like GEC Programs for grand challenges and solutions at national and international levels.
- **Initiative:** Realizing this necessity for regional consciousness and accumulative dialogue for better acknowledgment of common challenges and opportunities shared at national level, the Research Institute for Humanity and Nature (RIHN), together with GEC programs in Japan have initiated **GEC-Japan (Global Environmental Change-Japan)** platform in 2011.

# GEC-Japan

## Vision for Future Asia and Future World

- **Agenda :** GEC-Japan is a networking platform to facilitate and promote institutional and research collaboration among Japan representatives of the Global Environmental Change programs of IHDP, DIVERSITAS, IGBP and WCRP
- **Roadmap:** To promote further collaboration among researchers, service users and policy-initiators by co-designing and co-producing with regional focus to reach to Asia in the mid-term (Asia Vision).
- **Means:**
  - Establishment and promotion of GEC-Japan portal agora for researcher to exchange information on global change and sustainability issues.
  - Nurturing dialogue and collaboration among GEC-Japan programs and researchers through joint publications and seminars as well as public presentations.
  - Promotion of active dialogue among Asia scholars worldwide who have interest in global change issues and interdisciplinary research as well as **transdisciplinary actions in Asia**.

# GEC-Japan Platform



Global Environmental Change-Japan

Japanese

HOME

Organization

Secretariat

Access

Contact



GEC-JAPAN

Asia Vision on GEC

>>

GEC-Japan is a networking platform initiated by the Research Institute for Humanity and Nature in order to facilitate and promote institutional and research collaboration among Japan representatives of the Global Environmental Change programs, IHDP, DIVERSITAS, IGBP and WCRP.

About GEC-Japan

>>

Institutional Collaboration

>>

Research Collaboration

>>

Publications

>>

Newsletter

>>

## News

2011.9.15

Launch of GEC-Japan homepage



2011.9.14

I. Meeting of GEC-JP Program representatives and RIHN Secretariat

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## Events

2011.9.14-16

International Conference on Science and Technology for Sustainability 2011- Building up Regional to Global Sustainability: Asia vision-

2011.10.26-28

RIHN 6th International Symposium "Beyond Collapse: Transformation of human-environmental relationships, past, present and future"

2012.3.26-29

Planet under Pressure - New Knowledge towards Solutions

BackNumber >>



RIHN



GEC Programs



Earth System Sustainability Initiative



ICSU



SCJ

<http://www.chikyu.ac.jp/gec-jp/>



# GEC-Japan Platform (2011~)

## Future Earth, Earth System Science for Global Sustainability (2012-2022)

Joint Projects	Open Science Conferences	IRS(Integrated Regional Study)	Regional Activity and Capacity Building
GCP(Global Carbon Project)	Amsterdam Declaration (2001) "Challenges of a Changing Earth"	MAIRS(Monsoon Asia Integrated Regional Study)	START(System for Analysis, Research and Training by WCRP, IGBP, IHDP)
GECAFS(GEC and Food Systems)	Beijing Conference (2006) "Global Environmental Change: Regional Challenges"		APN(Asia-Pacific Network for Global Change Research)
GWSP(Global Water System Project)	London Conference (2012) "Planet Under Pressure"		IAI(Inter-American Institute for Global Change Research)
GEC&HH(GEC and Human Health)			CCAFS(Climate Change, Agriculture and Food Security)

## Earth System Visioning (2009-2011)

**ESSP**  
(Earth System Science Partnership,  
2001-2012)  
地球システム科学パートナーシップ

**Belmont Challenge**  
ベルモント  
チャレンジ

**WCRP**  
(World Climate Research  
Programme, 1980)  
世界気候研究計画

**IGBP**  
(International  
Geosphere-Biosphere  
Programme, 1986)  
地球圏生物圏  
国際協同研究計画

**IHDP**  
(International Human  
Dimensions Programme on  
Global Environmental Change,  
1996) with ISSC  
地球環境変化と  
人間社会の動向に  
関する国際研究計画

**DIVERSITAS**  
(International Programme of  
Biodiversity Change, 1991)  
with IUBS(International  
Union of Biological Sciences)  
+SCOPE+UNESCO  
生物多様性  
科学国際計画

**CRA**  
(Collaborative  
Research Action)  
共同研究アクション

GEC (Global Environmental Change) Programs グローバル環境変化プログラム

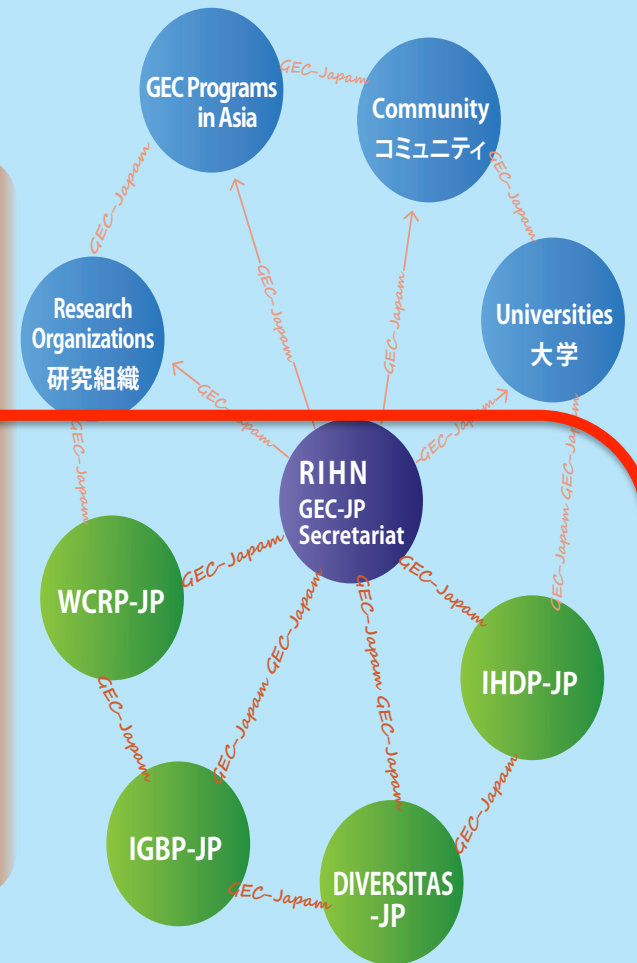
**ISSC**  
(International  
Social Science  
Council, 1952)  
国際社会科学  
協議会

**Belmont  
Forum  
(2009)**  
ベルモント  
フォーラム

**IGF**  
(International  
Group of  
Funding  
Agencies)

ICSU (International Council for Science, 1931) 国際科学会議

GEC-Japan Platform



Science Council of Japan(1949) 日本学術会議

# From RIHN 10<sup>th</sup> Anniversary to Future Asia



RIHN 10<sup>th</sup> Anniversary  
(April 20, 2011)

## RIHN 10th Anniversary Symposium

(April 2011)



## SCJ Int. Symposium on Sustainability

(September 2011)



## Belmont Forum

(January 2012)



## Planet Under Pressure

(March 2012)



## Rio+20

(June 2012)



## ICSU RM Asia-Pacific

(November 2012)

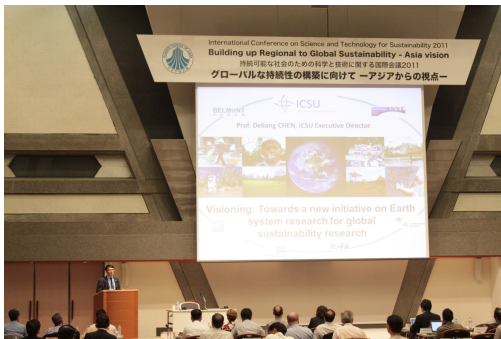


## GEC-Asia symposium "Future Asia"

(December 2012)



GEC-Japan Platform



International Symposium on Sustainability (JSC)  
September 14-16, 2011



Rio+20 Science Forum

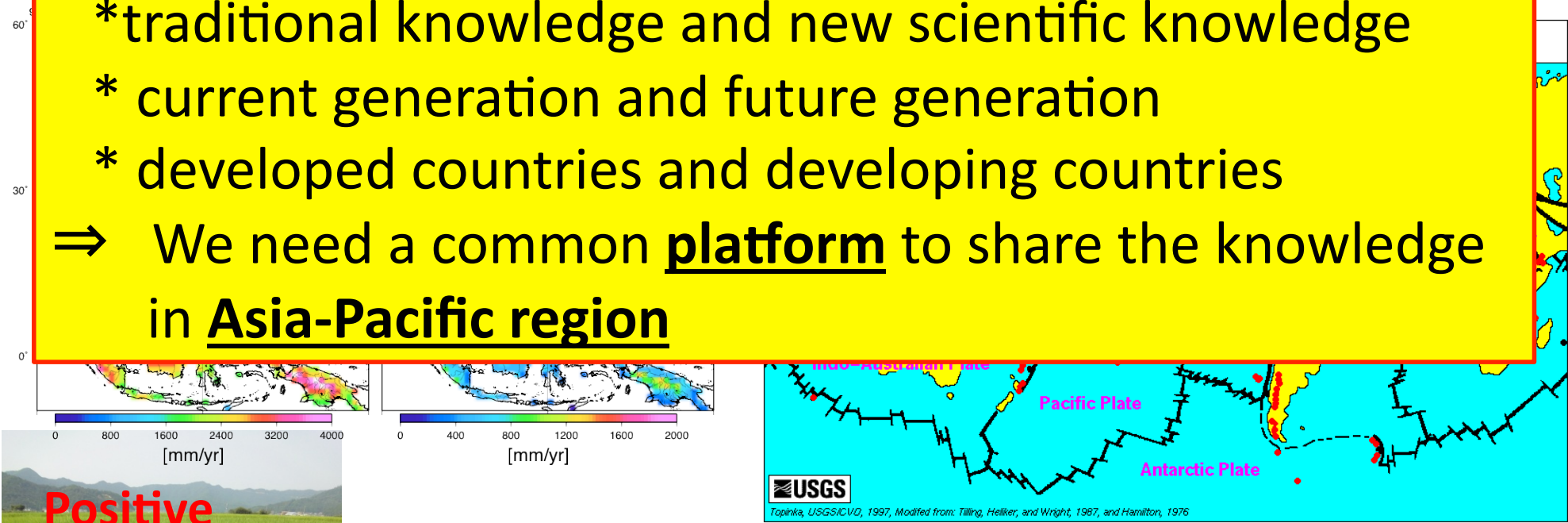






# How to make balances between

- \* negative (disaster/risk) and positive (service/benefit)
  - \* traditional knowledge and new scientific knowledge
  - \* current generation and future generation
  - \* developed countries and developing countries
- ⇒ We need a common **platform** to share the knowledge in **Asia-Pacific region**



# GEC-Japan/Asia (1) *Future Asia Platform*

## Vision for Future Asia and Future World

- **Issues:** Global change, both environmental and social, and sustainability development within socio-ecological systems
- **Direction:** New framework and alliances, not only Future Earth initiative of the “Science and Technology Alliance for Global Sustainability” but other initiatives at regional and global levels.
- **Need:** As indicated in recent Future Earth dialogue and regional workshops, regional nodes and partnerships are critical to link sub-regional and global endeavors.
- **Potential:** GEC-Japan initiative and other regional frameworks already underlining the problems and potentials of diversity and dynamic change within Asia



# GEC-Japan/Asia Platform (2012~)

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Joint Projects	Open Science Conferences	IRS (Integrated Regional Study)	Regional Activity and Capacity Building
<ul style="list-style-type: none"> <li>GCP (Global Carbon Project)</li> <li>GECAFS (GEC and Food Systems)</li> <li>GWSP (Global Water System Project)</li> <li>GEC&amp;HH (GEC and Human Health)</li> </ul>	<ul style="list-style-type: none"> <li>Amsterdam Declaration (2001) "Challenges of a Changing Earth"</li> <li>Beijing Conference (2006) "Global Environmental Change: Regional Challenges"</li> <li>London Conference (2012) "Planet Under Pressure"</li> </ul>	<ul style="list-style-type: none"> <li>MAIRS (Moonsoon Asia Integrated Regional Study)</li> </ul>	<ul style="list-style-type: none"> <li>START (System for Analysis, Research and Training) by WCRP, IGBP, IHDP</li> <li>APN (Asia-Pacific Network for Global Change Research)</li> <li>IAI (Inter-American Institute for Global Change Research)</li> <li>CCAFS (Climate Change, Agriculture and Food Security)</li> </ul>

## Earth System Visioning (2009-2011)

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2001-2012)  
地球システム科学パートナーシップ

**Belmont Challenge**  
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チャレンジ

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+ SCOPED + UNESCO  
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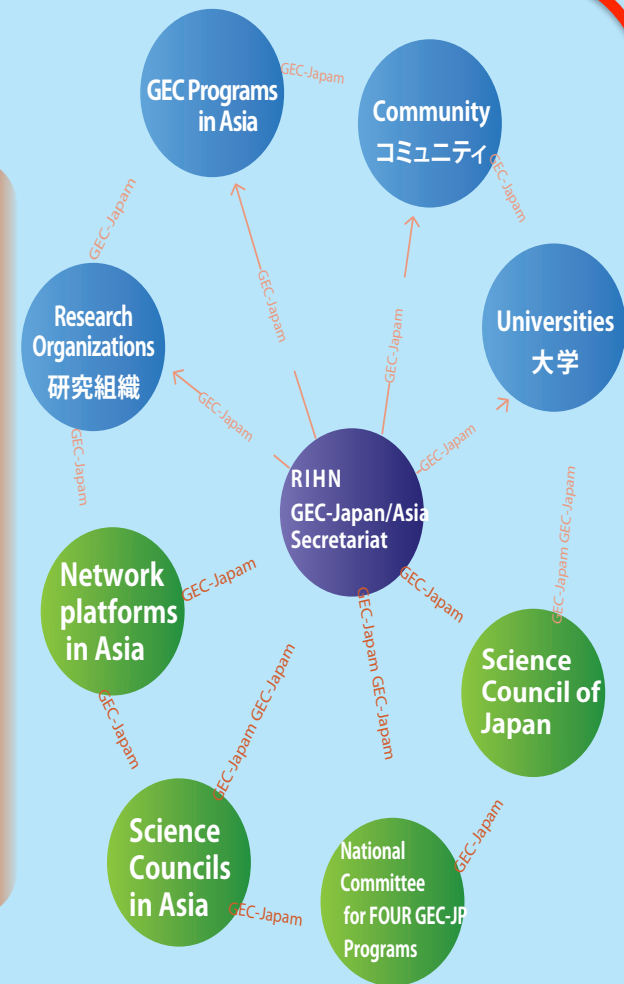
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(International  
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Funding  
Agencies)

GEC-Japan/Asia Platform



Science-society interface

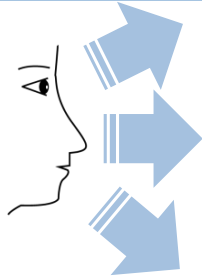
# International-regional-national interface

International  
Future Earth

ICSU/ISSC etc

Future Earth

Regional  
Future Asia



GEC-Japan

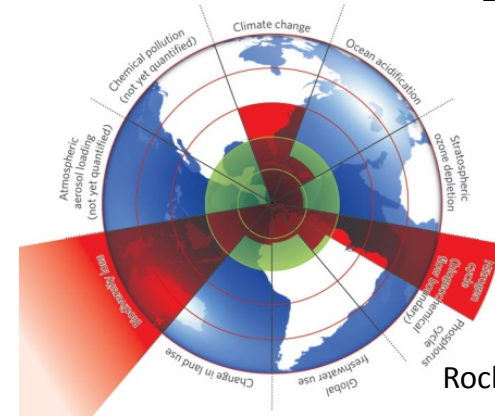
IGBP

RIHN

WCRP  
IHDP

DIVERSITY

National



Rockström et al. (2009)

Global Environmental Change-Japan 総合地球環境学研究所  
Research Institute for Humanity and Nature

## International Symposium on Future Asia

December. 13 [thu] – 14 [fri], 2012  
RIHN Lecture Hall, Kyoto, Japan

**Bridging Science, Technology and Society:**  
Practices of Transdisciplinary Implementation on Sustainability and Environmental Change in Future Asia

GEC-Japan

Global Environmental Change-Japan

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Events:

- 2011.9.14-16 International Conference on Science and Technology for Sustainability 2011: Building up Regional to Global Sustainability: Asia focus
- 2011.10.20-28 RIHN 10th International Symposium "Shared Culture: Translocation of Home-concerns to Globalities, and, Invention and Invention"
- 2012.3.24-29 Panel under President: New Knowledge towards Solutions

# GEC-Japan/Asia (*Future Asia*) Platform

## Vision for Future Asia and Future World

### Communication:

- Research collaboration (Joint projects, bilateral and multilateral research initiatives promoted by the Vision, joint research workshops and symposia organized by the Vision, guidance for further funding opportunities, capacity building for young researchers)
- Research action (Capacity building seminars, symposia, communication workshops with other parties)
- Research interface (interface with policy makers, initiators and business groups as well as media)

### Implementation:

- GEC-Japan/Asia Platform as initiator
- Means of technology as communication tools
- Prompt action by interacting with already existing frameworks in the region
- Engaging with global process from the very beginning

# GEC-Japan/Asia

## Building this Future Asia Vision together with Future Asia Platform

- What would be key questions to ask for Future Asia?
  - How this initiative would be better connected to other regional and global (e.g., Future Earth) initiatives?
  - How this vision would be utilized within the recent Future Earth process?
- ➔ Future for everyone, working all together