

The 7th GEOSS Asia-Pacific Symposium

“Benefits for Society from GEOSS Evolution
Toward Addressing Sustainable Development Goals”



Monday, 26 May 2014 - Plenary and Exhibition

- Keynote Speech Dr. Akihiko Tanaka, President (JICA)
- GEOSS Activity Report (GEO Secretariat)
- Country and Regional Reports on GEOSS-related Activities

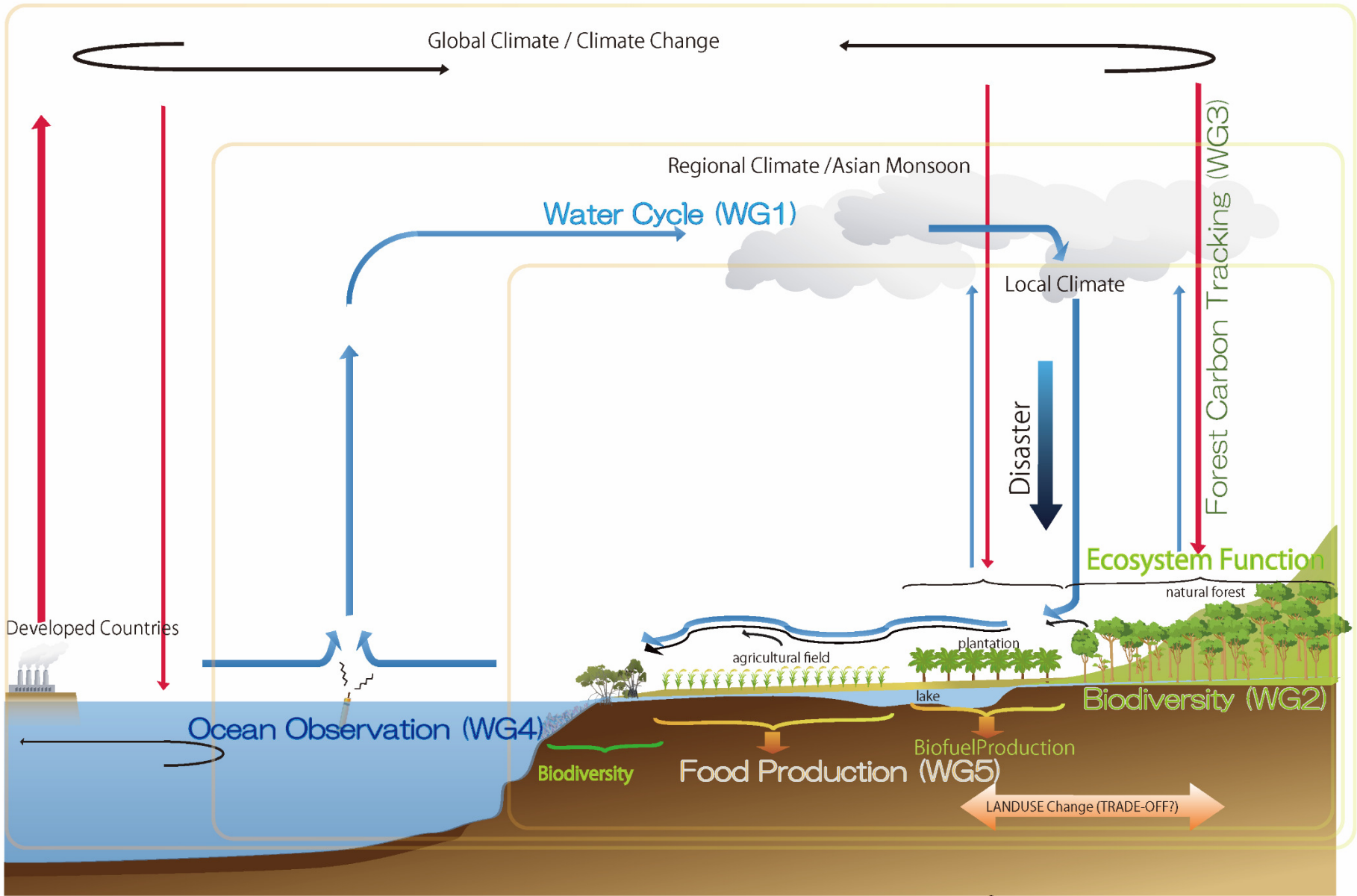
Tuesday, 27 May 2014 - Parallel Sessions and Exhibition

Wednesday, 28 May 2014 - Plenary

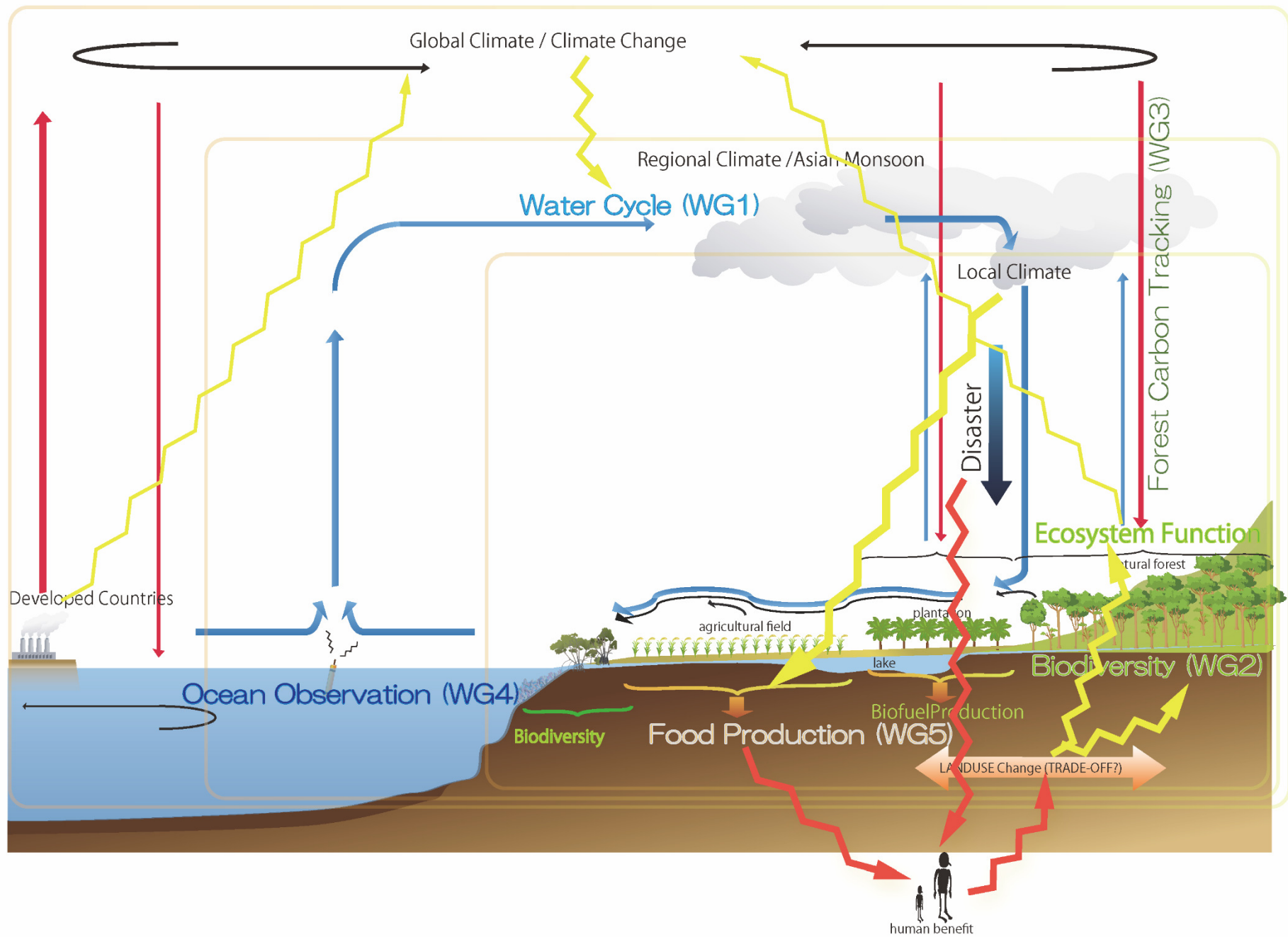
- Reports from Each Session (WG1-5)
- Special Session 2 and Symposium Summary

"Trans-Disciplinary Approach to Solve Environmental Issues ? Case Studies in Cambodia and the Surrounding Coast"

- WG1. Asian Water Cycle Initiative
- WG2. Asia-Pacific Biodiversity Observation Network
- WG3. Global Forest Observation Initiative (GFOI) Towards Long-Term Carbon Management
- WG4. Ocean Observation and Society (toward realization of "Blue Planet" in AP region)
- WG5. Agriculture and Food Security (GEO GLAM)



human benefit



Tokyo Statement

The participants of the 7th Global Earth Observation System of Systems (GEOSS) Asia-Pacific Symposium, hosted by the Group on Earth Observations (GEO), encourage United Nations Organizations to recognize the benefits of the application of Earth observations in the formulation of next generation UN-led initiatives, such as the post-Hyogo Framework for Actions (HFA), within the overall post-Millennium Development Goals (MDGs) agenda, and the United Nations Framework Convention for Climate Change for mitigation and adaptation to climate change. In this context, the participants welcome the emerging initiative, led jointly by World Health Organization (WHO), United Nations Human Settlements Programme (UN-HABITAT), and United Nations Environment Programme (UNEP) to integrate Earth observations with other data and information in tackling the challenges of monitoring the complexities in the post-2015 development of the water sector, as well as activities undertaken by United Nations Economic and Social Commission for

establish the "GEOSS-AP ocean data networking system" to accelerate data sharing, with the view to mitigate possible weather and climate disasters in the Asia Pacific region. Further, these efforts should be conducted in a cohesive and coherent manner such that they produce integrated and actionable information and knowledge on temporal spans ranging from real-time to climate-scale and spatial scales from local to global. In this regard, the participants also noted the significance of facilitating collaborations with international initiatives such as the Third UN World Conference on Disaster Risk Reduction which will be held in Sendai, Japan, March 2015, UNFCCC (COP-21) which will be held in 2015 in Paris, and the ongoing discussions on the Sustainable Development Goals (SDGs) which will be integrated into the post-2015 Development Agenda.

GEO has been promoting regional cooperation, including capacity building, networking of

The participants discussed a case study in Cambodia which exemplifies the cross-cutting and inter-related nature of various Societal Benefit Areas (SBAs), including climate and ocean, water, agriculture, biodiversity and ecosystems, before entering a more in-depth discussion on each individual SBA. The participants therefore recognized that, with respect to disaster risk reduction and environmental conservation, special efforts are needed in the areas of harmonizing research and operational activities. The participants agreed to

of the world population, with countries in varied levels of development, focus in this vast, diverse and complex region is critical for the achievement of next generation global goals and targets.

activities as they design the next development post-2015 framework.

The participants discussed a case study in Cambodia which exemplifies the cross-cutting and inter-related nature of various Societal Benefit Areas (SBAs), including climate and ocean, water, agriculture, biodiversity and ecosystems, before entering a more in-depth discussion on each individual SBA. The participants therefore recognized that, with respect to disaster risk reduction and environmental conservation, special efforts are needed in the areas of harmonizing research and operational activities. The participants agreed to

Indonesia

- agriculture
- water pollution
- disaster
- ecosystem degradation
- health

population increase

→ land use change, nitrogen excess, agriculture management+lifestyle

→ water pollution(sediment, nitrogen), flood and drought, lean & over weight

a. Needs, Issues: **improving rainfall stations, water quality data**

b. Linkage to Regional and Global Coordination Framework: **remote sensing, WHO initiative**

c. Building capacity: **existing resident involvement project (ADB)**

d. Planning Strategy: **integrated research proposal, remote sensing, residents participation survey**

Pakistan

- disaster(flood, drought, GLOF)
- agriculture
- water pollution (ground water)
- snow and glacier (advanced science)
- economic growth and social equality

High natural Variability + Climate Change

→ Flood, drought, heat wave → human & economic loss
→ Economic growth and inequality

a.Needs, Issues: **socio-economic and health data**

b.Linkage to Regional and Global Coordination Framework: **UN, donors, global partnership, model linkage**

c.Building capacity: **APN, educating climate change, drought early warning, adaptation package**

d.Planning Strategy: **Climate Smart, Planning Commission of Pakistan**

Sri Lanka

- Climate change
- Disaster(flood)
- Energy (hydro power)
- Coastal environment

Climate Change + Coast-line Development
→ Flood, sediment transportation, shore erosion

a.Needs, Issues: comprehensive land management, visualizing capability of new risks and their social impacts to prevent

b.Linkage to Regional and Global Coordination Framework: SAFE, satellite remote sensing,

c.Building capacity: sharing research outputs with society

d.Planning Strategy: integrated research plan

Viet Nam

- Disaster(flood)
- Wastewater treatment and Water quality
- Health

Flood Hazard + Climate Change (Heavy rainfall, Sea level rise) + Dam construction + Infrastructure
→ health, urban planning

a. Needs, Issues: good water practice, inadequate sewerage system, upstream works, in-situ event data

b. Linkage to Regional and Global Coordination Framework: UN statistics

c. Building capacity:

d. Planning Strategy: tailor-made field survey, model linkage, holistic view by end-to-end cooperation

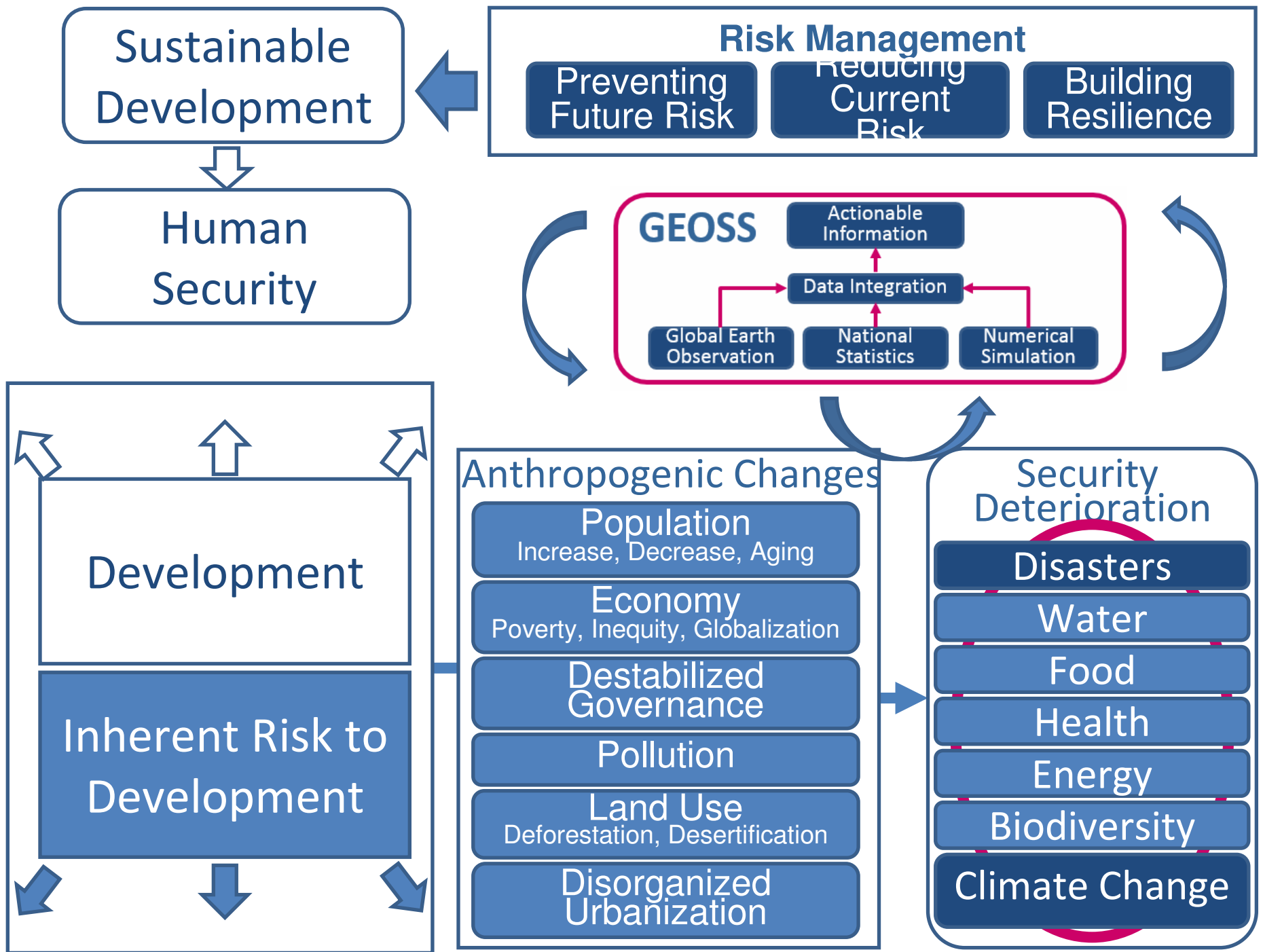
The participants of the 7th Global Earth Observation System of Systems (GEOSS) Asia-Pacific Symposium, hosted by the Group on Earth Observations (GEO), encourage United Nations Organizations to recognize the benefits of the application of Earth observations in the formulation of next generation UN-led initiatives, such as the post-Hyogo Framework for Actions (HFA), within the overall post-Millennium Development Goals (MDGs) agenda, and the United Nations Framework Convention for Climate Change for mitigation and adaptation to climate change. In this context, the participants welcome the emerging initiative, led jointly by World Health Organization (WHO), United Nations Human Settlements Programme (UN-HABITAT), and United Nations Environment Programme (UNEP) to integrate Earth observations with other data and information in tackling the challenges of monitoring the complexities in the post-2015 development of the water sector,

establish the "GEOSS-AP ocean data networking system" to accelerate data sharing, with the view to mitigate possible weather and climate disasters in the Asia Pacific region. Further, these efforts should be conducted in a cohesive and coherent manner such that they produce integrated and actionable information and knowledge on temporal spans ranging from real-time to climate-scale and spatial scales from local to global. In this regard, the participants also noted the significance of facilitating collaborations with international initiatives such as the Third UN World Conference on Disaster Risk Reduction which will be held in Sendai, Japan, March 2015, UNFCCC (COP-21) which will be held in 2015 in Paris, and the ongoing discussions on the Sustainable Development Goals (SDGs) which will be integrated into the post-2015 Development Agenda.

The participants of the 7th Global Earth Observation System of Systems (GEOSS) Asia-Pacific Symposium, hosted by the Group on Earth Observations (GEO), encourage United Nations Organizations to recognize the benefits of the application of Earth observations in the formulation of next generation UN-led initiatives, such as the post-Hyogo Framework for Actions (HFA), within the overall post-Millennium Development Goals (MDGs) agenda, and the United Nations Framework Convention for Climate Change for mitigation and adaptation to climate change. In this context, the participants welcome the

diverse and complex region is critical for the achievement of next generation global goals and targets.

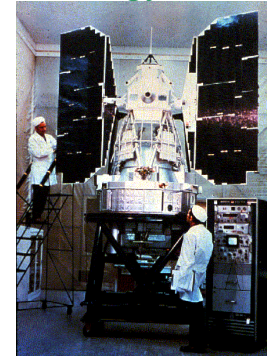
The participants discussed a case study in Cambodia which exemplifies the cross-cutting and inter-related nature of various Societal Benefit Areas (SBAs), including climate and ocean, water, agriculture, biodiversity and ecosystems, before entering a more in-depth discussion on each individual SBA. The participants therefore recognized that, with respect to disaster risk reduction and environmental conservation, special efforts are needed in the areas of harmonizing research and operational activities. The participants agreed to



1972

United Nations Conference on the Human Environment (Stockholm) → *Only One Earth*

Earth Resources Technology Satellite (ERTS-1) → Landsat series



1977 United Nations Conference on Desertification (Nairobi)

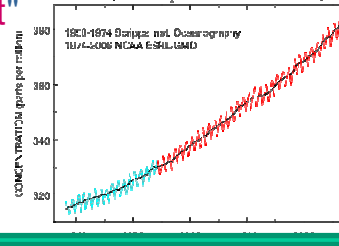
1982

Session of a Special Character' (SSC) of the Governing Council of the United Nations Environment Programme (UNEP) (Nairobi)

Brundtland Commission 1987 *Our Common Future* "Sustainable Development"

1992

United Nations Conference on Environment and Development (Rio de Janeiro)
• Agenda 21
• Framework Convention on Climate Change
• Convention on Biological Diversity



2000

Millennium Development Goals (MDGs)



2002

World Summit on Sustainable Development (Rio+10, Johannesburg)
• Plan of Implementation



2003 G8 Summit



2012

United Nations Conference on Sustainable Development (Rio+20, Rio de Janeiro)
• The future we want.

importance of space-based and in situ observations for sustainable development policymaking, programming and project operations efforts in developing global environmental observing systems through GEOSS



Sep. 2015

Sustainable Development Goals (SDGs)