Asian Water Cycle Initiative (AWCI)

Description
There is a rapidly growing concern about the common water issues, including flood and landslide, drought and water scarcity, water pollution and environmental degradation, climate change impacts, in Asia. Based on the regionally common and sharable ideas on the water-related issues in Asia and their natural and socio-economical backgrounds, a well-coordinated regional challenge, “Asian Water Cycle Initiative (AWCI) Contributing to GEOSS”, has been organized in cooperation among the 18 countries in Asia based on the series of discussions since 2005 just after the GEO established.

The AWCI develops Integrated Water Resources Management (IWRM) approaches for addressing the various water-related issues in Asia comprehensively and effectively and for promoting to share timely, quality, long-term information on water quantity and quality and their variation as a basis for sound decision making of national water policies and management strategies.

The objectives for AWCI are defined as follows:
- to develop Integrated Water Resources Management (IWRM) approaches;
- to share timely, quality, long-term information on water quantity and quality, and their variation as a basis for sound national and regional decision making;
- to construct a comprehensive, coordinated and sustained observational system of systems, such as prediction systems and decision support capabilities, under the GEOSS;
- to develop capacity building for making maximum use of globally integrated data and information for local purposes as well as for observation and collecting data.

Common Issues on Water Cycle in Asia

AWCI discussions at the series of meetings
The AWSI is a new type of a scientific challenge. Its uniqueness is described as follows:

- Effective combination of the architecture and data and the capacity building;
- Advanced data infrastructure availability including a river basin meta-data registration system, a data quality control interface, and data-integration and downscaling methods;
- A clearly described data sharing policy agreed among the participating countries;
- Strong linkage among science communities, space agencies, and decision makers;
- Well coordination between the research communities and operational sectors with clear strategy for shifting scientific achievements to operational use;
- Effective cooperation with WCRP/CEOP and IGOS-P/IGWCO.

**Added value**

GEOSS/AWCI can directly contribute to the water issue of the UN MDGs and the paragraph 25 and 27 of the WSSD Plan of Implementation.

**Relevant to GEO**

“Improving water resource management through better understanding of the water cycle” is one of the nine societal benefit areas of GEOSS. AWCI will directly contribute to WA-06-02, WA-06-07, WA-07-01, WA-07-02 and DA-07-06.

**Participants**

- National hydrological and meteorological departments and of services of 18 countries in Asia including GEO Members; Bangladesh, China, India, Indonesia, Japan, Korea, Nepal, Philippines, Thailand.
- Projects and activities of international organizations including GEO Participating Organizations; APN, CEOS, IGOS-P, UNESCO, UNU, WCRP

**Current Status and Next Step**

Bangladesh, Indonesia, Japan, Thailand and Vietnam have already started preliminary studies for implementation. The meeting schedule in 2007 is as follows:

- The International Coordinating Group Meeting, Bali, September 2007
- The 3rd Water Cycle Symposium, Beppu, December 2007 (to be held under the framework of the Asia-Pacific Water Forum)