

## Conference Outline

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More than 60% of the population is concentrated in Asia, and the GDP has reached about one third of the global GDP. However, various types of serious environmental issues are threatening sustainable development in many regions and countries. On the other hand, people in Asia have been keeping environmental-friendly life style and traditional agriculture under the diverse nature and eco-climate systems, which have enabled to maintain the huge population there. To develop sustainable human-nature system is an urgent and essential task not only for the people and countries in Asia, but also for developing the global-scale sustainable human-nature system.

In 2010 ICSU issued a report on "Grand Challenge on Global Sustainability Research", in which urgent need for global sustainability study is emphasized. The report strongly suggests the action items as follows:

1. Improve the usefulness of forecasts of future environmental conditions and their consequences for people.
2. Develop, enhance and integrate the observation systems needed to manage global and regional environmental change.
3. Determine how to anticipate, recognize, avoid and manage disruptive global environmental change.
4. Determine what institutional, economic and behavioural changes can enable effective steps toward global sustainability.
5. Encourage innovation (coupled with sound mechanisms for evaluation) in developing technological, policy, and social responses to achieve global sustainability.

At nearly the same time, the Belmont Challenge report produced by an ICSU panel was issued in 2010, in concert with the ICSU Grand Challenge report, which recognized the urgent need for the following actions:

• **Coordinate efforts and enhance the support** required to address the needs of a sustainable environment and the needs of society. The challenge is to integrate

environmental and developmental issues that have often been addressed independently in past decades.

- **Facilitate the dialogue between scientists, decision makers and the general public** to support decisions and actions at the forefront of society' s needs.
- **Encourage natural and social scientists to work together** to ensure that environmental observations, analyses, predictions and services most effectively meet the needs of society.
- **Maintain and expand access to, and use of, the current global observing and monitoring systems** through coordinated databases and develop assimilation procedures to achieve the maximum benefit.
- **Respond to society's increasing demand for detailed information** at the regional and local scales. This requires sector-relevant information that includes observations, analyses, high-resolution projections/ predictions at timescales from days to decades.

In this conference, we will focus on how to adopt those action items that are particularly relevant to Asia, to find solutions for sustainable state of the human-nature system in Asia. We would like to focus on the following five issues in the conference, 1) Reports on Asian Environmental Issues, 2) Water Resources and Management, 3) Land Use, Ecosystem Services and Biodiversity, 4) Urbanization and Vulnerability and 5) International Initiatives for Global Sustainability.