

Water Cycle Observations and Integrated Water Resources Management from MLIT's perspective



Shigeo OCHI

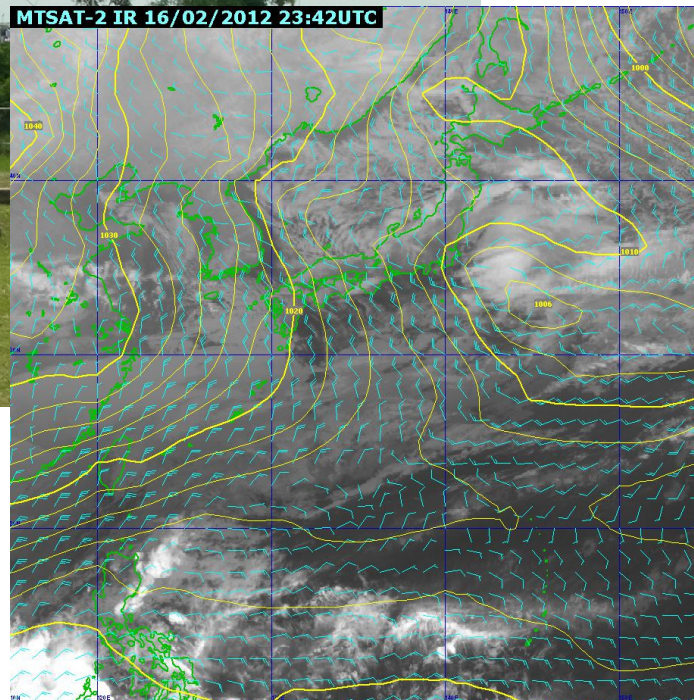
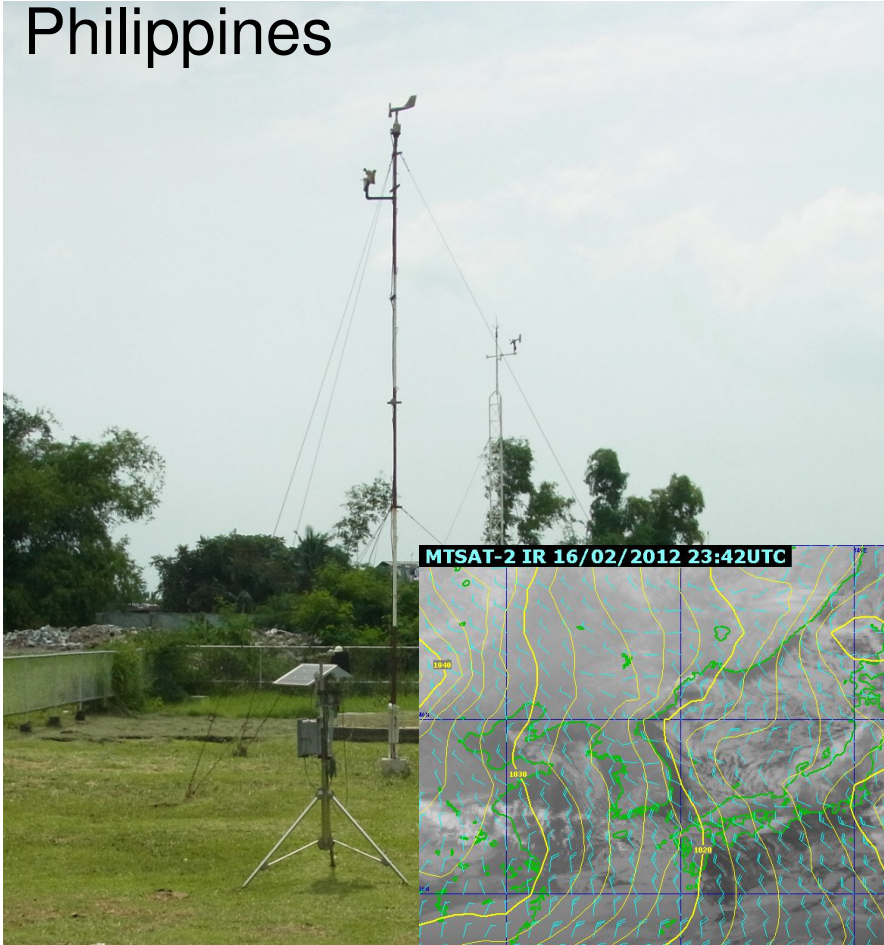
Director-General

Water Resources Department,

Water and Disaster Management Bureau,

Ministry of Land, Infrastructure, Transport and Tourism, JAPAN

Philippines

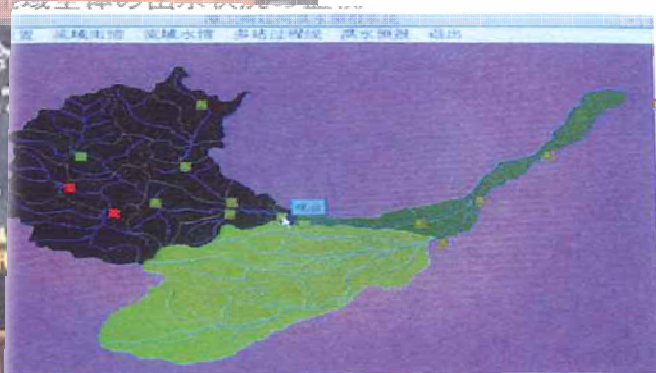


Analysis of Synoptic scale

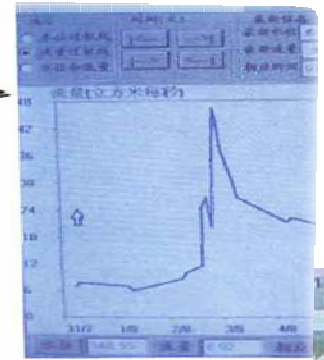
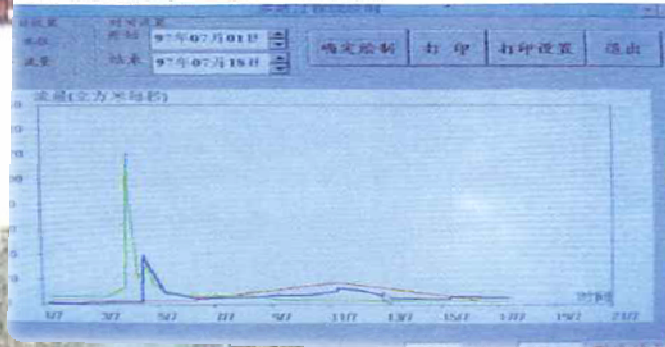
Mongolia



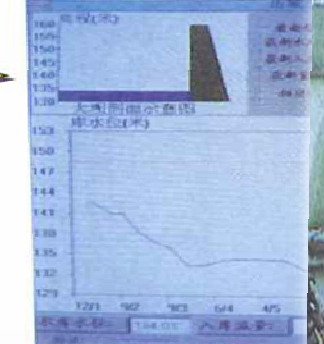
Flood Forecasting and Warning System Project in China in the 90s



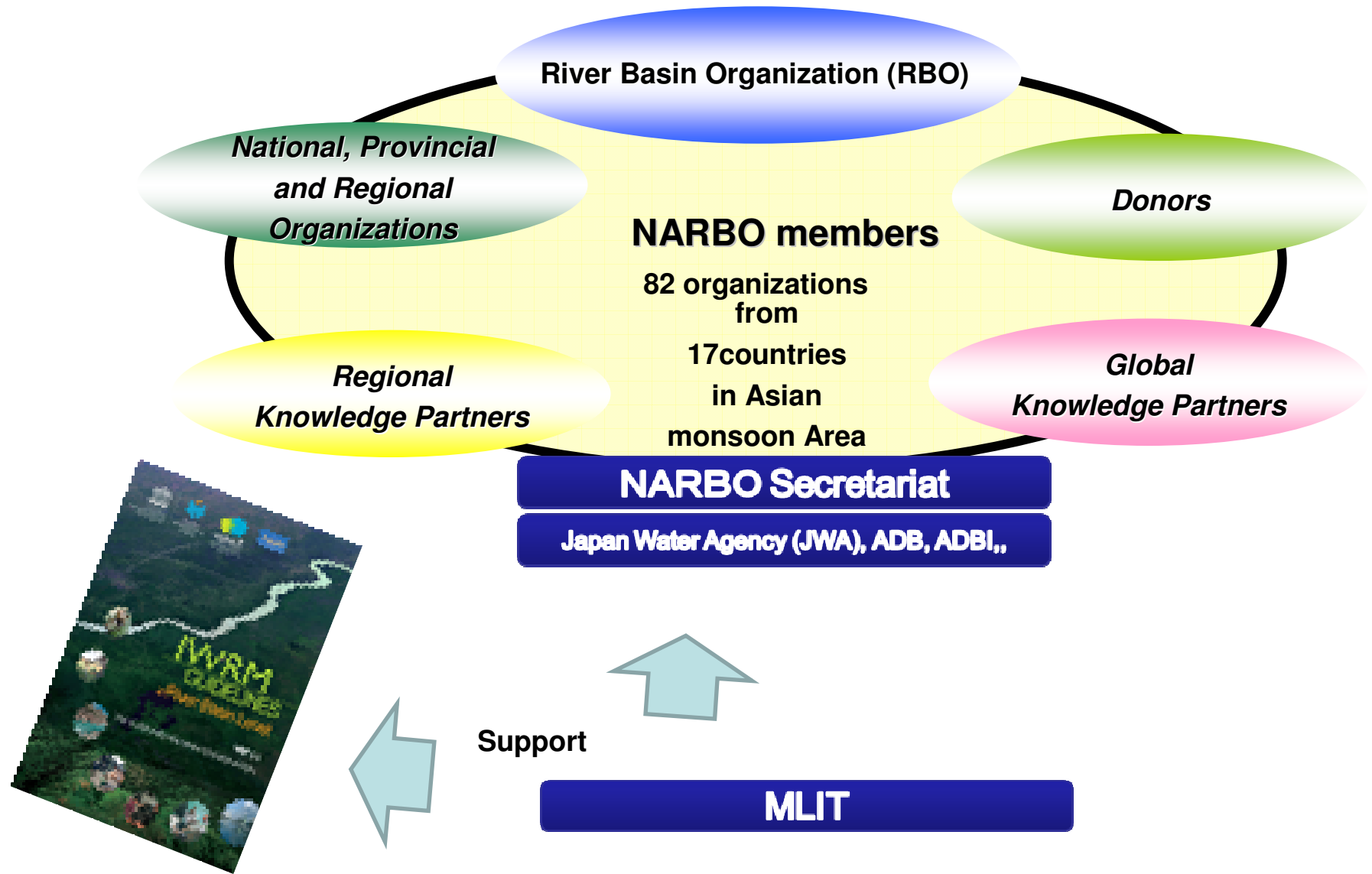
上下流の水位・流量の比較



□ダム別の流入・放



IWRM guideline and NARBO (Network of Asian River Basin Organization)



IWRM guideline at River Basin Level

Rio +20 Outcome Document “ The Future We Want” (June 2012)

Water and sanitation

120. We reaffirm the commitments made in the Johannesburg Plan of Implementation and Millennium Declaration regarding halving by 2015 the proportion of people without access to safe drinking water and basic sanitation and the development of integrated water resources management and water efficiency plans, ensuring sustainable water use. We commit to the progressive realization of access to safe and affordable drinking water and basic sanitation for all, as necessary for poverty eradication, women’s empowerment, and to protect human health, and to significantly improve the implementation of integrated water resource management at all levels as appropriate. In this regard, we reiterate our commitments to support these efforts in particular in developing countries through the mobilization of resources from all sources, capacity building and technology transfer.

<http://www.un.org/en/sustainablefuture/>



“Global Map and IWRM for Sustainable Development” Seminar by MLIT, Japan at Rio +20 Japan Pavilion



“Flood Management in Japan” Short Lecture by MLIT, Japan at Rio +20 GEO booth

HMNDP (High Level Meeting on National Drought Policy) Final Declaration (March 2013)

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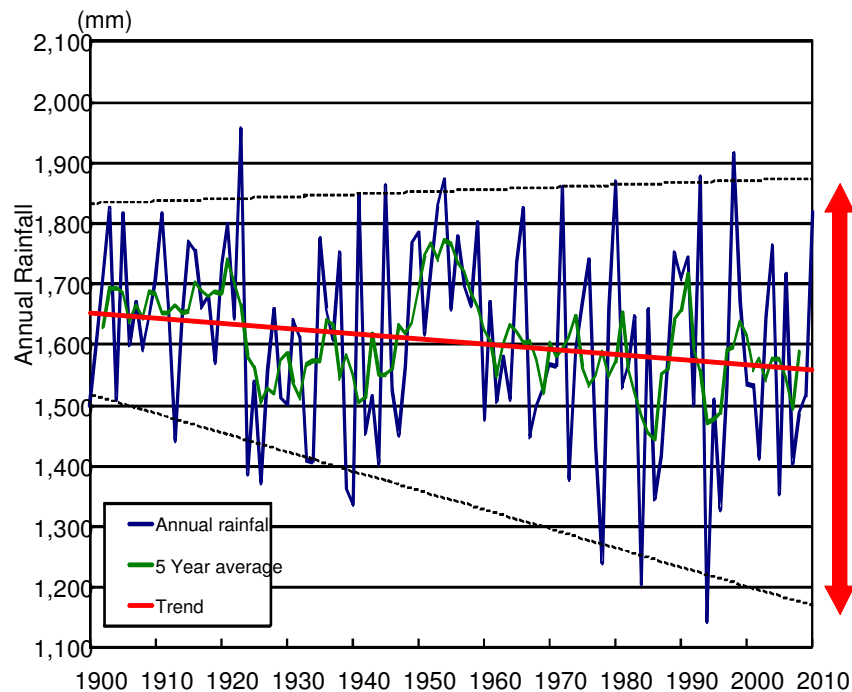
Need for effective drought policies

PP 16: Recalling the commitment in the outcome document of the UN Conference on Sustainable Development (Rio +20) to significantly improve the implementation of **Integrated Water Resources Management** at all levels, as appropriate.

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<http://www.hmndp.org/>

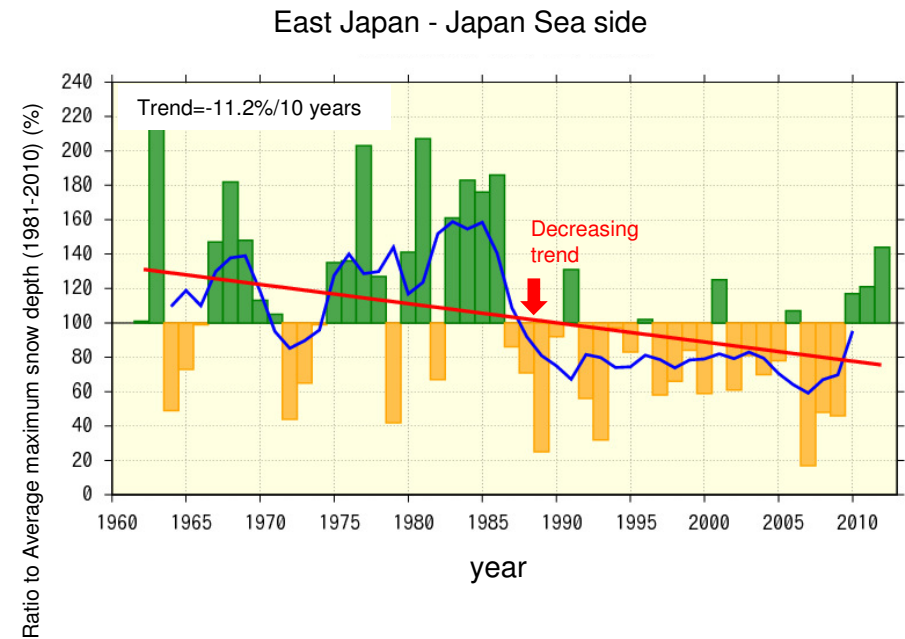
Changes in Annual Rainfall



(Note)

1. Prepared by the Water Resources Department of the Ministry of Land, Infrastructure, Transport and Tourism based on the Japan Meteorological Agency database.
 2. Calculated average of 51 locations of Japan nationwide.
 3. The trend is per regression curve.
 4. The number of observation points varies due to lack of data
- (Source) Water Resources in Japan 2011.

Changes in Annual Maximum Snow Depth



(Note)

1. Prepared by the Water Resources Department of the Ministry of Land, Infrastructure, Transport and Tourism based on the Japan Meteorological Agency report 2012.
2. Bar graph: Average maximum snow depth (1981-2010) Ratio (%)
3. Blue line: 5 year moving average of deflection

- We expect that AWCI and AfWCCI will achieve their goals.
- We, MLIT, would like to collaborate with specialists of global earth observation at international conferences related to water resources.



Thank you!