

WDC11: Hydro-Meteorological Prediction and Adaptation to Climate Change in Thailand and Asia-Pacific countries

Organized by IMPAC-T

Meeting room # D8 Ku-larb, 18 May 2013 at 9.00-12.00 hrs

SATREPS (Science and Technology Research Partnership for Sustainable Development) is a new program that was established by the Japan Ministry of Foreign Affairs/JICA and MEXT/JST in Japan to address global issues through the promotion of science and technology, international cooperation, and capacity development. With the support from SATREPS program, the "Integrated Study on Hydro-Meteorological Prediction and Adaptation to Climate Change in Thailand (IMPAC-T)" project was established in 2008. The mission of IMPAC-T project is to propose with the vision of providing scientific basis for Thailand's decision-making support system for adaptation strategies that address water-related issues, specifically those caused or exacerbated by climate change in Thailand. IMPAC-T project embraces a transdisciplinary approaches to research that bring academia, operational agencies, and funding agencies in Thailand and Japan, together to enhance earth observations for understanding climate change, and develop natural-anthropogenic integrated water resources models for predicting future hydrological changes associated with social and climate changes.

In the 2nd APWS technical workshop of IMPAC-T project, results from five sub projects were highlighted. The five presentations were: 1) "Towards rainfall prediction of space information," 2) "Development of integrated water resources model," 3) "Seasonal-scale rainfall prediction: the case for 2011 huge flooding," 4) "Water-related information and early disaster warning integrated system" and 5) "Integrated study project on hydro-meteorological prediction and adaptation to climate change in Thailand and Asia pacific".

In our panel discussion that followed, our session attendees discussed how the government agencies and researchers concerned could handle the uncertainties related to: the projection of climate change, an early disaster warning system and societal response. We discussed how we can share responsibility in decision making and ensure the reliability of the decision-making process related to the management of water resources under the changing climate as well as providing early warning to mitigate disasters. Best decision-making is usually based on past experience. However, it is our (human) nature to forget the fear and damage caused by extreme event. The government needs to analyze the logic behind experience-based decision-making and researchers need to support this process through improved documental and physical understanding of the extreme events.

The importance of considering climate change and its impacts to national strategic planning was also discussed. Researchers should support and share the vision of the climate change impact projections with the government and the society. Researchers also need to describe the uncertainties in these projections with transparency to the politicians and government. IMPAC-T stresses the importance of transdisciplinary study to facilitate better understanding among

stakeholders, government and researchers.

IMPAC-T project will hold a flood seminar for the public on 3rd September 2013 at Thailand Royal Irrigation Department in Bangkok and a final symposium on 27th - 28th January 2014 in Bangkok.