

THE ACTIVITIES OF HYDROLOGY AND DPP COMPONENTS OF UNESCAP/WMO TYPHOON COMMITTEE

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The Typhoon Committee was constituted with a view to promoting and coordinating efforts for minimizing tropical cyclone damage in the ESCAP region under the auspices of The Economic and Social Commission for Asia and the Pacific (ESCAP) and The World Meteorological Organization (WMO). Since founding of Typhoon Committee in 1968, it has got a lot of satisfying achievements in hydrological and meteorological monitoring, telecommunication network in meteorology, data exchanging, Typhoon and flood forecasting, hydrological experiments and study, disaster control and relief, and etc. For example, the TOPEX and SPECTRUM respectively formed by Typhoon Committee in 1980s and 1990 have improved observing network and telecommunication network, raised the quality of forecasting, and increased ability of disaster control and relief in Members.

In order to improve and coordinate the cooperation in typhoon monitoring, forecasting and research between members, the Typhoon Committee reestablished the Structure of the Regional Cooperative Programme Implementation Plan (RCPIP) in the year of 2000. The broad vision of the RCPIP was developed for each Member of the Committee in cooperation with other Members and the broad goals was developed for the five components of the RCPIP: Meteorology, Hydrology, Disaster Prevention and Preparedness, Training, and Research. Many different objectives were listed to meet the goals of the five components for between 2002 and 2006.

The Typhoon Committee approved the activities for hydrology and DPP components at its 34th Session. For hydrology component, there are 4 activities: (1) Cooperation among the Members on hydrological reporting; (2) Cooperation in hydrological network development; (3) Flood forecasting and warning; (4) Improvement of disaster information gathering system. For DPP Component, there are 3 activities: (1) Development of integrated disaster prevention systems; (2) Education and involvement of community and NGOs. (3) Strengthening technical and financial support to DPP activities and organizations.

Based on the RCPIP premises, the working group on hydrology component proposed 11 projects to be carried out in recent years as follows:

- (1) Assessment of national requirements and capabilities on Hydrological and Disaster Prevention and Preparedness (DPP) components
- (2) Pilot project for data sharing between TC members to enhance flood forecasting accuracy.
- (3) Development of guidelines for the Dam Operation in relation to flood forecasting
- (4) On-The-Job Training on Flood Forecasting between TC members
- (5) Extension of flood forecasting systems to selected river basin.
- (6) Pilot Project on the preparation of Inundation and Water-related Hazard Maps

- (7) Project on the evaluation and improvement of operational flood forecasting system focusing on model performance
- (8) Pilot project on the establishment of a community-based flood forecasting system
- (9) Pilot project on the establishment of flash-flood warning system (including debris flow and landslides)
- (10) Improvement of hydrological products in response to user needs
- (11) Project on the evaluation and improvement of hydrological instruments and telecommunication equipment

The project on assessment of national requirements and capabilities on hydrological and DPP components is finished by review mission in 2001~2002. The pilot project on the preparation of Inundation and Water-related Hazard Maps and pilot project on the establishment on flash-flood warning system (including debris flow and landslides) are spearheaded by Japan in the beginning of 2002 and are now ongoing. The TC members signified their commitment to lead one or two of the remaining 9 activities at the Workshop on Integration of Risk Analysis and Management of Water-related Disasters into Development Process in the Typhoon committee Area held in Manila, Philippines in 2002.

In order to push the progresses of activities and maintain the momentum and interest of TC Members in these cooperative efforts, the Working Group on Hydrology Component requested TC to authorize the use of TC Trust Fund to hold a Workshop on Hydrology and DPP components every year since 2001. The projects has been got a great progresses.

The Activities of hydrology component has been getting strong support from the UNESCAP, WMO, TCS, MLIT of Japan and the Ministry of Construction and Transportation (MOCT) of Republic of Korea. MLIT and MOCT expressed to continuing support for several activities of the hydrology and DPP components of TC RCPIP until 2006/07.

The Working Group on hydrology recognized that the importance of RCPIP as a strategic plan to promote regional cooperation on integrating activities of the hydrology and DPP components towards realization of the TC Vision for effective disaster mitigation and water resource actions towards sustainable development. Such efforts are an important part of the integrated water resources management (IWRM) process. With the increasing socio-economic impacts of disasters, including floods and sediment disasters, management and mitigation of such risks are important components to be integrated into water resources management in order to ensure sustainable socio-economic growth of the country/region. Integrated Floods Management (IFM) including the adoption of strategic plan on disaster management is required as part of IWRM process, and floods should be coped wisely within IWRM.

To enhance visibility of TC and promote the capacity building of TC members in the field of water resources and disaster reduction, the Working Group of hydrology component would like to participate in the activities of other international/region organizations.