Capacity Building for Flood and Drought Management in China

Qian Mingkai, Wei Xinping, Yang Dawen

Huaihe River Commission, Ministry of Water Resources Bureau of Hydrology, Ministry of Water Resources Tsinghua University

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Introduction

•Flood, drought and water pollution are the three major water-related issues in china, which are the main constrains to social-economic development and eco-environmental protection.





Drying-up of the Yellow River during the 1990s



Desertification in the Tarim basin





Data Collection and Transmission

- Non-sufficient hydro-meteorological gauges in the medium size catchments (100-1000km²) where have frequent flash floods, seasonal droughts and serious water pollutions, and the social-economic development is relative slower than the national average.
- Data transmission is a major problem in the mountainous regions especially during the flood season.
- The capacity building on the hardware facilities regarding the meteorological, hydrological and water quality measurements in the low-developing rural areas should be urgently enhanced.

Data Management and Sharing

- Databases are not only used for the research purposes, the general public services and different uses are equivalently important.
- Hydro-meteorological databases are required to be well established at both basin and nation levels, and the daily maintenance is required too.
- The data management and sharing should also be the main aspects for the capacity building for efficient uses of data resources for scientific, social and economic purposes.

Decision Supporting System

- Based on the good data bases, a number of prediction/forecast models should be established together with the GEOSS data sources;
- For supporting the decision making, a linkage between the forecast model system and social information system should be established for option analysis;
- There are different requirements for the decision supporting system at different levels (e.g. county level, province level, basin level and national level).

An Example of the Yangtze River Flood Forecasting System



Training

- The institutional capacity to use the new technical inputs should be enhanced in future;
- Individual capacity building can be provided through training courses, on the job training and study tours;
 - There are concerns about the qualifications and competence of some experts sent to provide training courses;
 - Trainees must be given the time to attend courses and see the training as relevant to their work and positively affecting their future standing and prospects;
 - Oversea study tours are generally an expensive form of capacity building and international experience shows that they can be ill-disguised holidays or shopping tours.

Thank you!