



- Name of Project** : **The Efficiency Improvement of the Water Operation Center, Department of Water Resources**
- Location** : Bangkok
- Client** : Department of Water Resources
- Duration** : May 2009 – May 2010
- Narrative Description** : Project on setting up operations 1-1 center for managing water resources was established by aiming at tracking and forecasting water situation for decision making on water management includes flood, drought and water pollution, both in preparation for disasters, prevention and impact mitigation, emergency management and management after disasters.
- The increasing efficiency of forecasting and warning operation center for managing water resources project has objectives as follow
1. To be the center for collecting information on water resources from various agencies owned data or notified disasters caused by water from various organization, agency or networks and then distributing analyzed data to the agencies-owned data and various users.
  2. To provide water situation monitoring and forecasting system to support decision making on water management on flood, drought and water pollution both in preparing for disasters, prevention and impact mitigation, emergency management and management after the warning.

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- Services Description** : The scope of services by SEATEC included :
- Improving Mekhala center or prevention and mitigation water crisis operation center, by providing and installing additional equipments.
  - Setting up additional databases, Geographic Information Systems (GIS) and Management Information System (MIS) is to develop existing geographic information system and management information system in the Mekhala center by setting up additional database from the existing database of the Mekhala Center. The additional information will be integrated within the Department of Water Resources and other involved agencies.
  - Setting up mathematical models of flood, drought, water quality and forecasting rainfall to predict water situation and the results of mitigation of water impact measures in the four major river basins include Tapi, Phetchaburi, East Coast Basins (Chanthaburi tributary and Wang Ta Nod), Northeast Mekong (tributary of Loei, NamSongkrarm, NamKam and Huai Luang).
  - Development of application program on Geograohic Information System (GIS) and Managing Information System (MIS) for presenting and analyzing the water situation predicted by using the geographic information system database (GIS), water resources database and additional databases.
  - Development of decision support systems that will operate in four major basins include Tapi, Phetchaburi, East Coast Basins (Chanthaburi tributary and Wang Ta Nod), Northeast Mekong (tributary of Loei, NamSongkrarm, NamKam and Huai Luang).
  - Development and implement linkage for transmission of the water crisis video signal in setting up on operations and data center for managing water resources with the previous system.
  - Provide server to mange the system, computer operation system with Anti-Virus programmers.