NEED ASSESSMENT FOR CB PROGRAM, AWCI, NEPAL

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CAPACITY BUILDING IS ONE OF THE MAJOR CONSTRAINTS FOR UNDERDEVELOPED COUNTRIES LIKE NEPAL FOR ADOPTING MODERN TECHNOLOGY

This symposium is very timely and relevant.

Thanks to AWCI and all the partners on my behalf as well as from Nepal

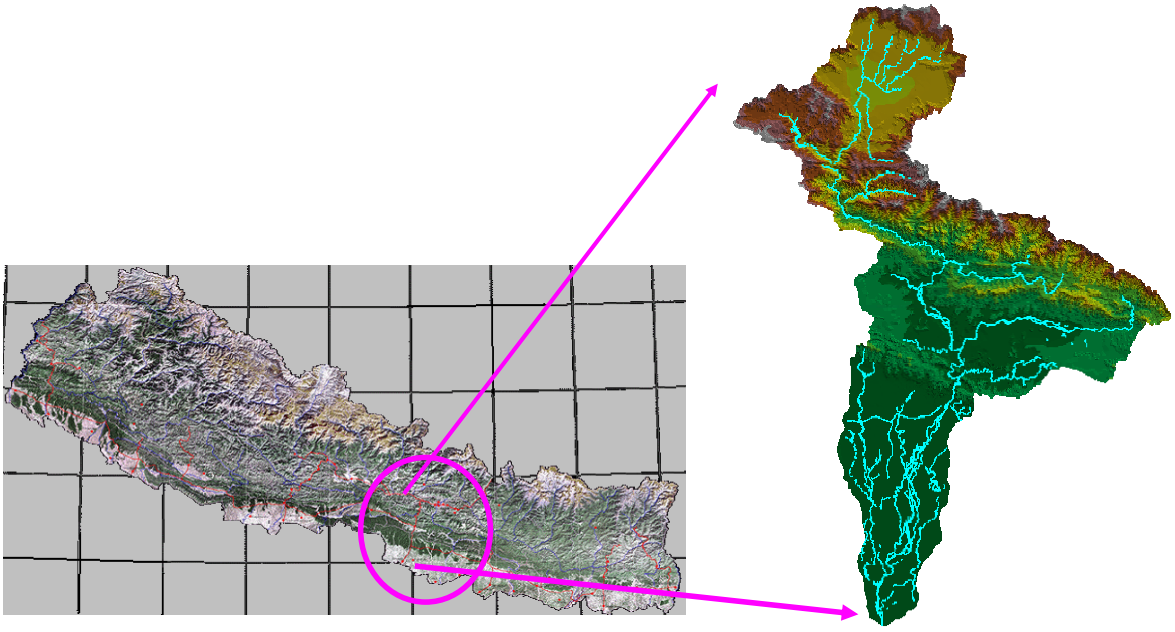
The list of Available Capacity Building Programs circulated through the questionnaire are very useful covering a wide range of subjects.

- All the topics are relevant
- It is asked to choose any two topics of the list
- It was very hard to make such a choice
- Nevertheless, I came up with three of them
- **Basis for such a choice is primarily to fill the human resources gap to accomplish the actions needed to complete the demonstration basin project.**

BAGMATI BASIN

- Area : 3,700 sq.km
- Agriculture Area : 639 sq. km
- Population : 2 Million
- One of the middle sized rivers in Nepal
- Originates from lower mountain and passes through the two lower physiographic regions
- Important from the view point of water resources development, controlling pollution and flood damage mitigation
- Creates two of the most flood affected districts of Nepal- Sarlahi & Rautahat

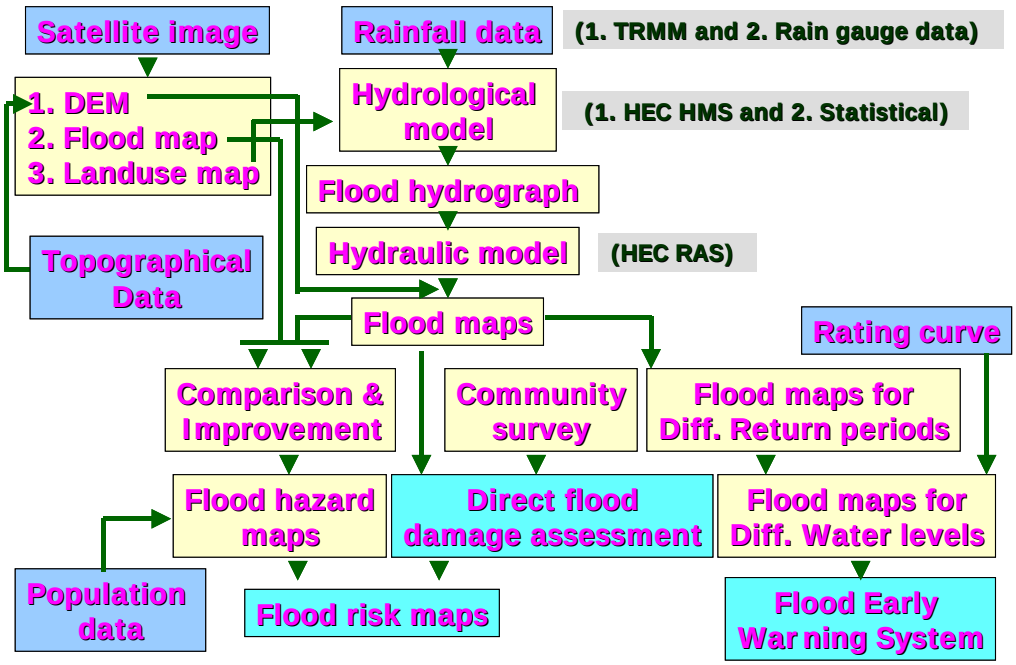
Location Map : Bagmati Basin



Some works are already done in line with AWCI objectives:

- Integration of GIS data
- Inventory of Water uses
- Flood hazard maps for various return periods
- Land slide hazard maps
- With support from JAXA's Miniproject
  - Rainfall runoff modeling
  - Direct flood damage assessment /loss estimation
  - Prelimanary Flood forecasting and early warning system based on Historical data

Methodology of Flood Forecasting



Need for Further Actions:

- Establish a network of real-time data transmission using CDMA commercially available;
- Integrate this network to the central processing system;
- Develop tools to automate processing
- Integrate Techniques of downscaling global met info to the rainfall runoff model
- Constantly validate the flood warning to the observed data
- Extend this system Appropriate for IWRMP

Need of Capacity Building Program

- Three Programs are identified most appropriate:
  - (13) Rainfall downscaling and Forecast (UNU)
  - (3) Flood Simulation (CEOP)
  - (8) Mini Project (AIT)
- The first Program (13) is expected to help us integrating global met info into the model.
- The second Program (3) will help us refining the existing rainfall run-off model.
- Through the third Program (8) we want to get some of our professionals a practical knowledge on Data Integration Service as envisaged in Program (1) of CEOP

Type of CBP

- We propose the following types for different CB Programs
  - Roving Seminar for Flood Simulation
  - Case Study Modules for Rainfall Downscaling and Forecast, and Mini Project
  - Web based learning can be integrated to both of Roving as well as Case Study Modules types.

Time Details of CBP

- Roving Seminar can be of about 10 days.
- Case Study Modules for Rainfall Downscaling and Forecast can be of about 15 days
- Mini Project will typically take about 30 days in two installments.

Location Details of CBP

- Roving Seminar can be organise in Kathmandu for which we can provide necessary logistics
- Case Study Modules for Rainfall Downscaling and Forecast should be in Japan (UNU)
- Mini Project will be in AIT

Participation Details of CBP

- Roving Seminar (7 persons)
- Case Study Modules for Rainfall Downscaling and Forecast (2 persons)
- Mini Project in AIT (3 persons)

The basic principle will be to train the trainers.

Thank you for the patience