

Chapter – 4

INITIATIVES IN THE NORTH-EAST REGION

The North Eastern Regional Centre (NERC), Guwahati of the Institute, catering for the seven N-E states, Sikkim and parts of West Bengal (Teesta basin) was established in August, 1988 at Guwahati and was working for various water resources problems of the region. Since its inception, the centre has been actively interacting with the various water resources organizations in the states covered under the region while carrying out its studies and activities within the framework of recommendations of the Regional Coordination Committee in the areas of representative basin studies, remote sensing application, water quality studies, floods, watershed management etc.

Considering flood as the major problem in the region, Ministry of Water Resources, Govt. of India decided to focus the activities of the centre towards the problem of floods in the Brahmaputra and renamed it as NIH Centre for Flood Management Studies for the Brahmaputra Basin (NIH-CFMS). The centre was formally opened/ inaugurated on Sept. 27, 2001 by Hon'ble Minister of State for Water Resources, Govt. of India and Secretary, Govt. of India, Water Resources. As per the action plan the centre works in the following areas:

Flood estimation and routing,
Structural/ non structural measures for flood management,
Integrated watershed management for flood control,
Hydrological data base management system,
Drainage congestion and erosion problems,
Water quality problems,
Socio-economic aspect of flood disaster,
Technology transfer.

During the year, the following studies were undertaken:

- Study of shifting of a typical river using remote sensing and GIS techniques (Gabharu)
- Flood estimation of Jadukata basin with SCS method
- Flood inundation mapping and flood risk zoning for a reach of river Barak (Harrang)
- Assessment of ground water quality in major cities of the North-East India (Agartala and Tezpur)

Water Quality Studies

A new study was proposed for physico-chemical analyses of groundwater for the capital cities of all NE states during 2006-2007. The selected city for the year 2006-07 is Tezpur in Assam. During the year, samples have been collected and the analysis is being performed.

Nuclear Hydrology Studies

On the request of Hydrology & Tracer Section of BARC, Trombay, one rain water sampler was installed at the roof of the office and weekly rain water samples were collected for determination of Oxygen 18, deuterium and tritium analysis. Samples were collected as per guidelines set for the purpose and sent to Nuclear Hydrology Laboratory of the HQs.

Currently, surface water and rain water samples are being collected from the region at regular monthly intervals and sent to headquarters for isotopic analysis as a part of the Indian Network of Isotopes in Precipitation (INIP) program. Guwahati is a key station in the INIP network.

Remote Sensing Studies

The Centre has a well equipped remote sensing and GIS lab. Earlier number of studies have been undertaken that applied RS and GIS technologies to address hydrological problems of this region. Presently two such studies are going on in the Centre, viz., river shifting study for the river Gabharu, a tributary of Brahmaputra and flood risk mapping study for a reach of river Brahmaputra (Bhomoraguri).

Technology Transfer:

The Centre has organized the following technology transfer activities during 2006-07:

Topic of Workshop/ Training Course	Date of the Activity	Place	No. of Participants
Training Workshop on Sustainable Development and Maintenance of Water Bodies	Nov. 20-21, 2006	Agartala	15
Training Course on Hydrology, Hydraulics and Geomorphology	Jan. 2-6, 2007	Guwahati	19

Organization of Water Resources Day:

CFMS, Guwahati, co-organized 21st Water Resources Day on theme 'Water Management' with a Seminar on the theme on 31.05.06 by IEI, Assam State Centre, Guwahati with Head, CFMS as Joint Organizing Secretary & Co-Chairman of panel discussion.

Organization of World Water Day – 2007:

The Centre has organised the World Water Day – 2007 on 22nd March 2007 as per the following programme:

As part of the Mass Awareness Programme, a lecture on the topic 'Water Scarcity' was organised for students and teachers of various schools to create awareness about water related issues. A lecture was delivered by Head, CFMS, Guwahati. In his lecture, Sri. Patwary emphasised that the greatest threat to the world in the near future would be acute water shortage. He mentioned that of the total water available on the earth, only 2.8 percent is suitable for human use, and out of it 2.2 percent is found above the ground, and of it only 0.01 percent is pure water. He further stressed the need for appropriate use of the ground water. Two pamphlets on the topics 'World Water Day – 2007' and 'Protecting Ground Water Quality' prepared by the Centre were distributed to the gathering.

Drawing Competition on the theme 'WATER' was organized in two groups, one for students of Class I to V (Group 1) and second for students of Class VI to VIII (Group 2). Twenty one students from various schools participated in the Drawing Competition. 1st, 2nd and 3rd prizes were awarded to the winners.



Drawing Competition on the Occasion of World Water Day – 2007 at CFMS, Guwahati on 22 March, 2007



4.1: Fifth Regional Coordination Committee Meeting of NIH Centre for Flood Management Studies at Guwahati on 28 July, 2006



4.2: Er. P. K. Deka, Vice-Chairman, Brahmaputra Board releasing the Course Material volume of the Training Course on Hydrology, Hydraulics and Geomorphology 2-6 January, 2007, Guwahati