

## UNESCO assisting Pakistan to develop flood warning system

**ISLAMABAD:** United Nations Educational, Scientific and Cultural Organisation (UNESCO) is assisting Pakistan to develop reliable flood warning system.

In this regard, UNESCO, Pakistan Meteorological Department (PMD), Pakistan Council of Research in Water Resources (PCRWR), UNESCO's category-II centre ICHARM, Japan Aerospace Exploration Agency (JAXA) and a number of Pakistani and Japanese organisations jointly organised a two-day international workshop on Meaning and Characterizing River Morphology for Hindcasting and Forecasting River Responses to Major Floods.

The workshop was aimed at setting up a common understanding and direction for river modelling data requirements, from acquisition and measurement methods to effective use in river floods simulations which will be extended from Indus IFAS system to the tributary rivers of the Indus, said a statement of the UNESCO issued on Monday. The two-day international workshop was part of UNESCO's Strategic Strengthening of Flood Early Warning and Management Capacity of Pakistan project, which was launched in March this year. Speaking at the inaugural session of the workshop as the chief guest, Japanese Ambassador Hiroshi Inomata commended the efforts of UNESCO, PCRWR and JICA for their efforts. He said that Pakistan unlike Japan is a natural disaster prone country that are frequently confronting massive flooding, earthquake and Tsunami in the past, and this workshop will accelerate efforts for improving strategic strengthening of flood warning and management capacity project.

Addressing the audience, UNESCO Asian and Pacific Science Bureau Director Dr Shahbaz Khan extended his gratitude to the Japanese government for their support and highlighted the success of strategic strengthening of flood warning system. He informed the participants that based on the successful accomplishments of the phase-1 project, countries like Namibia, South Sudan, and Myanmar also showed their interest in seeking help from UNESCO and ICHARM to strengthen their flood early warning system. He said, though capacity of Pakistan Meteorology Department (PMD) is enhanced, but the PMD needs support to enhance flood forecasting capacity in the Jhelum, Chenab, Ravi and Sutlej rivers.

These rivers have trans-boundary catchments, which can use satellite-based rainfall estimates developed under phase-I of the flood project to improve forecasting ability. Phase-II of this project will focus on the eastern rivers of Pakistan. Representative of JICA Mitsuyoshi Kawasaki said that JICA is contributing to the Grant Aid (GA) project through UNESCO to protect and mitigate flood damages since 2011. He said the phase-II of the project will contribute to develop and extend the coverage of the IFAS, and will play a key coordinator for other disaster management projects in Pakistan.

In his remarks, PMD Director General Dr Ghulam Rasool expressed that till 1991, there was only one weather radar in Pakistan, and during 90's, the Japanese government assisted the PMD to deploy three radars, which are very crucial in predicting the monsoon floods. He said that integrated flood analysis system is on the right track, and with integration of eastern rivers and glacier snow melt component, the flood forecasting model will be completed.

PCRWR Chairman Dr Muhammad Ashraf highlighted that Pakistan has one of the largest irrigation systems in the world and approximately irrigating an area of 17 million hectare, which is relying on the River Indus and its

tributaries. He assured UNESCO and the Japanese government of his full cooperation and support to all partners for strengthening this important initiative. Representatives from National Disaster Management Authority (NDMA), Federal Flood Commission (FFD) and international experts from Australia, France, Indonesia also attended the workshop.