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## Climate change: To understand challenges, Pakistan can look 4,000 years into the past

## ISLAMABAD:

The ruins of Harappa, a vibrant urban centre during the days of the Indus Valley Civilisation, lie in a world that seems to have forgotten lessons from history. Archaeological research shows the city was devastated as a result of climate change — water supply dwindled till the city became unsustainable.



Once a water surplus country, Pakistan is now moving towards water scarcity, said UNESCO Regional Science Bureau for Asia and the Pacific Deputy Director Dr Shahbaz Khan

This was stated by DRR UN RC-Office Senior Adviser Rob Duys, who was speaking at a

seminar on "Safe, Connected Communities against Floods through Remote Sensing and GIS tools" on Wednesday.

Once a water surplus country, Pakistan is now moving towards water scarcity, said UNESCO Regional Science Bureau for Asia and the Pacific Deputy Director Dr Shahbaz Khan. "If no steps are taken, Pakistan will soon be compared to Afghanistan."

Metrological Department DG Arif Mehmood said Pakistan had less than 30 days' water storage capacity, while India had 120 and China had more than 1,000 days. "Increase in demand and lack of dams are cause for concern."

Floods revealed institutional impediments and capacity constraints in flood forecasting and early warning system. For flood mitigation, UNESCO in collaboration with Pakistan Space and Upper Atmosphere Research Commission (SUPARCO) installed satellite remote sensing and GIS technologies across Pakistan.

The system aims to strengthen the role of satellite technologies in flood hazard mapping and warning, rainfall estimations, damage assessment in reaching communities and developing of web-based GIS visualisation tools for information dissemination.

UNESCO Country Director Dr Kozue Kay Nagata said the project consisted of a flood early warning system and hazard mapping of flood plains along the Indus River in 2011. With an improved system they now have timely sharing of data from national, provincial and district levels. "The

web-based platform is now functional and we hope to have established a system of near real-time repository of flood management data."

Federal Minister for Planning and Development Ahsan Iqbal compared the future of Pakistan to the present crisis in Thar. "Water scarcity will become a greater issue than energy crisis in a few years." Pakistan does not have a water policy for which the government was scheduled to conduct a national water summit by the end of March, he added.

Japanese Ambassador Hiroshi Inomata said, "Having suffered from many disasters in the past, Japan has continued to develop indigenous technologies and expertise for disaster risk management and mitigation." We believe we should share our experience with disaster-prone countries such as Pakistan, he added.

During the two-day workshop, national and international experts and panellists will share their expertise and experiences to help strengthen flood early warning system and disaster management capacity of Pakistan.

SUPARCO Chairman Ahmad Bilal said in the past two decades disasters such as unprecedented floods and torrential rains from 2010 to 2013 had a substantial impact on socio-economic development and financial loss that runs in billions of dollars.

Source: http://tribune.com.pk/story/682152/climate-change-to-understand-challenges-pakistan-can-look-4000-years-into-the-past/

## Experts share knowledge on early warning system

## **ISLAMABAD:**

National and international experts at a workshop shared their knowledge and experiences to help strengthen flood early warning system and disaster management capacity of Pakistan.

The two-day workshop titled "safe, connected communities against floods through remote sensing and GIS tools" to improve and strengthen the early warning system and management capacity of Pakistan, was organised by the UNESCO in collaboration with SUPARCO.



Experts said Pakistan has witnessed torrential rains between 2010 and 2013 that caused extensive damage to lives, property and infrastructure.

These floods unfolded the institutional impediments and capacity constraints in the existing flood forecasting and early warning system in the country.

To address this issue, the experts said, the UNESCO with the support of Japan and the Japan International Cooperation Agency initiated a major project for the up-gradation of the flood forecasting, flood early warning system and the hazard mapping of the flood plains along the Indus River in 2011.

The project focused on the capacity building of nation's flood forecasting and early warning infrastructure using state-of-the-art remote sensing and GIS technologies for the flood assessment, management and decision support system.

Application of satellite remote sensing and GIS technologies in flood hazard mapping activities along with the application of Web GIS technologies for flood early warning remained the focus of the workshop.

**Source:** http://tribune.com.pk/story/683032/experts-share-knowledge-on-early-warning-system/