REPORT

WORLD WATER DAY 2012

SEMINAR

WATER CONSERVATION AND FOOD SECURITY

March 22, 2012

Jointly organized by

COMSATS Institute of Information Technology

&

UNESCO – Islamabad
Objective

The objective of the seminar was to raise awareness among the academics and student community about the scarcity of potable water and the issue of food security that is intricately tied to the availability of water.

Participants

The seminar was hosted by Dean of Research, Innovation and Commercialization (RIC) and attended by Director UNESCO Islamabad, UNESCO Water and Food Security Expert, representatives of UNDP Islamabad, Advisors, Chairpersons, Professors and students of Islamabad campus.

CIIT-Abbottabad Campus attended the event through live video conferencing.

Director UNESCO Islamabad Office was the Chief Guest.

UNESCO Headquarters was represented by Dr. Shahbaz Khan.

Venue

Video Conference Room, Central Library, Main Campus COMSATS Institute of Information Technology, Islamabad campus.

Inauguration

The seminar was inaugurated by Dean of Research, Innovation and Commercialization on behalf of Rector CIIT. Dean RIC also chaired the seminar.

Main Presentations and Issues Discussed

The issues related to water scarcity and judicious use of water was raised in the opening remarks on which the subsequent presentations were made by highly experienced faculty members of CIIT and the UNESCO Water and Food Security Expert.

On behalf of UNESCO, Dr. Shahbaz Khan’s presentation focused on the water issue with reference to energy needs of the growing world population. The speaker also showed the correlation between irrigation management, crop growth, social benefits related to water and Eco-services. The water scarcity in the near future, according to UNESCO, is closely related to Geo-political changes, technological changes, population growth & life cycle and the climate changes.
Dr. Mobushir Riaz Khan, Assistant Professor of Meteorology at CIIT, showed the time scale and related changes in the potable water supply available to the world. Dr. Mobushir highlighted the effect of world’s higher temperature changes and its effect on agricultural output of Pakistan, the near term floods and the long term droughts that may take place in Pakistan and the world in the future. According to data compiled and analyzed in his research group, land use with respect to availability of potable water changes with time and this phenomenon has been observed and recorded using Remote Sensing and Geographic Information Systems now available.

Professor Ismat Shah, a physicist from the University of Delaware, whose interest is in Water Conservation and free use of this resource by all, spoke at length about how food, water and energy are intricately tied together, all with a focus on environment. Prof. Shah raised awareness about the history of available water in different areas of the World, including Pakistan, from the 1950s to the past decade. Prof. Shah also gave an overview of current water use by sector, including agriculture, industry, and municipal supply and water reservoirs. The speaker further gave insights to the water situation in Pakistan with special reference to high risk water facing Pakistan, the large scale degradation of resource base, the lack of adding additional water in the storage systems, climate changes and its effect on Pakistan and finally the poor water infrastructure base in Pakistan. Prof. Shah concluded his presentation by highlighting the use of nano-technology for purification of water in the remote areas where no water filtration system exists.

Prof. Khalid Riaz, an Economist and also the Head of the Dept. of Management Sciences at CIIT, gave an economic and social perspective of the issue of Water and Food Security by correlating the rising per capita income with population growth, which increases the demand for water, food and energy. Prof. Riaz also brought to the audience’s attention the fact that whichever country builds dam energy cannot be generated if the water is not allowed to flow! Thus, the inter-relation between energy needs and the inter-dependence of food amongst countries of south Asia are dependent upon each other. No one country of the region can block any others goods which include food, water and energy.

**Questions & Answer Session**

Participants were encouraged to ask question regarding the presentations made and any other issues related to food and water security. Topics raised by the participants included:

1. Regional water security and current political situation in the region vis-à-vis Afghanistan, India and Pakistan
2. Population growth and its effect on water use
3. Methods of water purification
4. The TAPI gas pipeline
5. The IPI energy gateway and its proposed changes
6. Renegotiation of energy pipeline parameters between Pakistan and India.
7. The Indus Water Treaty of 1961 between Pakistan and India
Exhibition of Drawings and Paintings on the Water Conservation Theme

The students of architecture and design Department showcased their drawings and painting on the theme of Water Conservation, Director UNESCO awarded prizes to the top three paintings.

Concluding Remarks

In his concluding remarks, Dean RIC thanked the Director UNESCO and UNESCO Water and Food Security expert for their active participation in the seminar. Dean RIC also spoke on need for inter-disciplinary research that must be carried out on the issue of water management, conservation and related food security with an emphasis on the development of scientific research for methods of increasing the agriculture output with less water.

Annexures

1. Presentation of UNESCO Water and Food Security Expert
2. Presentation of Dr. Mobaushir Riaz Khan
3. Presentation of Prof. Ismat Shah
4. Presentation of Prof. Riaz Khan
5. Seminar Pictures
6. UNESCO Contract
7. Designs for backdrop