



WORLD SCIENCE DAY

FOR PEACE AND DEVELOPMENT

SCIENCE FOR WATER COOPERATION:
sharing data, knowledge and innovations

November 12, 2013
Islamabad, Pakistan

Established by UNESCO in 2001, World Science Day for Peace and Development is celebrated worldwide on 10th November each year. It offers an opportunity to demonstrate to the wider public why science is relevant to their daily lives and to engage them in constructive debates on related issues. Every year, inter-governmental and non-governmental organizations, scientific research institutions, professional associations, universities, municipalities, the media, science teachers, schools and others are encouraged to celebrate World Science Day.

Since its inception, World Science Day has also resulted in generation of concrete projects, programmes and funding for science around the world. For instance, several ministries across the globe have announced increase in spending on science or creation of a university or research body. In cognizance of the importance being given to the issues relating to water management during the recent years, the theme of this year's World Science Day – Science for Water Cooperation: sharing data, knowledge and innovations – coincides with the International Decade of Action on 'Water for Life' (2005-2015) and International Year of Water Cooperation (2013).

WATER COOPERATION FOR SUSTAINABLE DEVELOPMENT

Water is the most indispensable of all the basic necessities to sustain life on Earth. The fulfillment of basic human needs, environment, and socio-economic development are all heavily dependent on water. Resource scarcity could lead towards greater recognition of the need for aggressive efforts to conserve resources, promote the most efficient use employing modern scientific means.

The world's oceans are also becoming more acidic as a result of absorbing 26 per cent of the carbon dioxide emitted into the atmosphere, affecting both marine food chains and coral reef resilience. If ocean acidification continues, disruptions of food chains and direct and indirect impacts on numerous species are considered likely with consequent risk to food security, affecting the marine-based diets of billions of people worldwide.

Rapid urbanization, pollution and climate change threaten the resource while demands for water are increasing in order to satisfy the needs of a growing world population, now at over seven billion people, for food production, energy, industrial and domestic uses. Water is a shared resource and its management needs to take into account a wide variety of conflicting interests. This provides opportunities for cooperation among users.

The Target 7.C of the Millennium Development Goals, calls for halving the proportion of people without sustainable access to safe drinking water and basic sanitation by 2015. The world is on track to achieving and even exceeding the targets of the Millennium Development Goals on drinking water. According to recent figures, nearly 90 per cent of the population in developing regions as opposed to 77 per cent in 1990 will have access to improved sources of drinking water by 2015. The proportion of people using an improved quality of water from better source has raised from 76 per cent in 1990 to 89 per cent in 2010. In spite of that, in 2011, 768 million people still lacked access to potable water from improved sources.

By declaring 2013 as the UN International Year of Water Cooperation, the UN General Assembly recognizes that cooperation is essential to strike a balance between the different needs and priorities and share this precious resource

equitably, using water as an instrument of peace. Promoting water cooperation implies an interdisciplinary approach bringing in cultural, educational and scientific factors, as well as religious, ethical, social, political, legal, institutional and economic dimensions.

Water resources across the world cross political boundaries. This calls for regional and international cooperation for their trans-boundary sharing, transcending the conflicting needs, claims and cultures of the users involved. According to experts, the international community needs to be sensitized about the importance of trans-boundary cooperation for water. During the last 50 years, there have been more treaties and negotiations (200) at the international level than reported cases of violence between states over water, in some cases such cooperation continued even when the signatories were at war.

According to UN-Water, there are 276 international basins, which cover nearly 46% of the Earth's land surface, host about 40% of the world's population in 148 nations and account for approximately 60% of global river flow. Such natural distribution of water needs to be taken in to consideration and cooperative actions should be taken to ensure equitable distribution of water resources across various geographical areas, failing which the critical chain of cooperation would be broken having adverse effects on lives and socio-economic conditions of all involved. The crucial role of water cooperation thus has clear implications on all three pillars of sustainable development-economic growth, social equality and environmental protection.

SEMINAR ON WORLD SCIENCE DAY 2013

The Commission on Science and Technology for Sustainable Development in the South (COMSATS), in collaboration with the COMSATS Institute of Information Technology (CIIT), is observing this year's World Science Day for Peace and Development with the pledge to support Science for Water Cooperation in its various dimensions to affirm their commitment towards the progress of human society in tandem with UN's global agenda of MDGs.

COMMISSION ON SCIENCE AND TECHNOLOGY FOR SUSTAINABLE DEVELOPMENT IN THE SOUTH (COMSATS)

The Commission on Science and Technology for Sustainable Development in the South (COMSATS) is an Inter-governmental Organization (IGO) established in 1994. The organization, comprising 21 Member States, strives to promote South-South cooperation in the fields of Science and Technology that are most relevant to socio-economic development. Its Network of 18 Centres of Excellence provides the necessary pool of human resources and scientific infrastructure for undertaking a variety of capacity-building programmes, bilateral and multilateral cooperative research and consultancy/advocacy for the promotion of S&T as primary ingredient of national development plans.

COMSATS INSTITUTE OF INFORMATION TECHNOLOGY (CIIT)

COMSATS Institute of Information Technology (CIIT) was established as a project of COMSATS in 1998. CIIT received the Charter of a Degree Awarding Institution (DAI) from the Government of Pakistan in the year 2000. The Institute has since grown to become a major public-sector university in Pakistan and a Centre of Excellence of COMSATS. CIIT's seven fully functional campuses in Islamabad, Lahore, Abbottabad, Wah, Attock, Sahiwal and Vehari, are actively engaged in teaching, research and public service.

CIIT, currently, comprises 5 faculties and 18 departments. The Institute offers 86 degree programmes and more than 25,500 students are currently enrolled in various programmes offered by the University. The Institute has, so far, produced 24,852 graduates including 75 PhDs and has 2,295 qualified faculty members, out of which 615 hold Ph.D. qualification. Moreover, 466 faculty and staff members of CIIT are undergoing advanced education (MS and Ph.D.) at leading universities around the world. According to HEC's rankings announced in 2013, CIIT is placed at number 4 in 'General Universities (Large)' category amongst 132 universities of Pakistan, whereas it has been ranked at top most position in the field of Computer Science & IT in 2012.

VENUE

COMSATS Institute of Information Technology (CIIT) Library, Islamabad

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