

Seminar on Quality Science Education: Securing a Sustainable Future for all

November 12, 2014 Islamabad, Pakistan

Established by UNESCO in 2001, World Science Day for Peace and Development is celebrated worldwide on 10 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 debate on related issues. Every year, intergovernmental and non-governmental organizations, scientific research institutions, professional associations, universities, municipalities, the media, science teachers, schools and others are encouraged to organize their own celebration of World Science Day. Since its institutionalization, World Science Day has also generated concrete projects, programmes and funding for science around the world.

> "Education is the most powerful weapon you can use to change the world." Nelson Mandela.

Nearly a quarter century ago, the Education for All (EFA) movement was born in Jomtien, Thailand. Delegates from around the world signed the Declaration on Education for All, an historic commitment to meet the basic learning needs of all by universalizing primary education and slashing illiteracy rates. Ten years later, in 2000, the six EFA goals, covering all aspects of basic education from early learning and adult literacy to education quality, were formalized at the World Education Forum in Dakar and a deadline to reach those targets of 2015 was set. Since 2000, the year 2015 has emerged as the horizon toward which the world projects its aspirations to achieve the Education for All and Millennium Development Goals. While accelerating efforts to achieve these goals, the United Nations has been mobilizing the world to define the post-2015 development agenda.

Quality Education for Sustainable Development

Quality Education and in particular Science Education is essential to sustainable development. Citizens of the world need to learn their way to sustainability. Our current knowledge base does not contain the solutions to contemporary global environmental, societal and economic problems. Education for Sustainable Development allows every human being to acquire the knowledge, skills, attitudes and values necessary to shape a sustainable future. Education for Sustainable Development means including key sustainable development issues into teaching and learning; for example, climate change, disaster risk reduction, biodiversity, poverty reduction, and sustainable consumption. It also requires participatory teaching and learning methods that motivate and empower learners to change their behaviour and take action for sustainable development. Education for Sustainable Development consequently promotes competencies like critical thinking, imagining future scenarios and making decisions in a collaborative way which is ever more important for scientific thought as well. In order to satisfy the need for quality science, it

is imperative to inculcate education for sustainable development in every programme of our educational system, which will require far-reaching changes in the way education is practiced today.

Background

In 1972, the UN Conference on the Human Environment (Stockholm) highlighted education as a means to address problems of human environment. The Brundtland Report Our Common Future (1987), defined sustainable development as a development that meets the needs of the present without compromising the ability of future generations to meet their own needs. These early debates already discussed the role of education in addressing global social, economic, cultural and environmental challenges. The United Nations Conference on Environment and Development, also known as the Earth Summit, in 1992 in Rio de Janeiro recognized the role of education in achieving sustainable development in Chapter 36 of Agenda 21. Ever since, further major UN Conferences and documents have confirmed the importance of education for achieving sustainable development, including the Rio Conventions on climate change, biodiversity and desertification. Based on a recommendation of the World Summit on Sustainable Development (Johannesburg, 2002), the United Nations General Assembly decided to dedicate a UN Decade to ESD (2005-2014) in December 2002. It designated UNESCO to coordinate global efforts to make education relevant for addressing present and future sustainable development challenges.

Halfway through the Decade, UNESCO and the German Federal Ministry of Education and Research, in cooperation with the German Commission for UNESCO, organized the first UNESCO World Conference on Education for Sustainable Development in 2009 in Bonn, Germany. The conference took stock of achievements of the first years and gave new impetus for the second half of the Decade. Based on the outcome document of the World Conference 2009, the Bonn Declaration, and a newly elaborated strategy for the second half of the Decade, UNESCO has focused its work on three key sustainable development issues: climate change, biodiversity and disaster risk reduction, to be addressed through education. The assessment reports on the Decade of ESD, published by UNESCO in 2009 and 2012, have shown that ESD is more and more present in national and international education policies.

Seminar on World Science Day for Peace and Development

In recognition of the importance of Quality Science Education for a secure future for future generations, the Commission on Science and Technology for Sustainable Development in the South (COMSATS), in collaboration with the ECO Science Foundation (ECOSF) and United Nations Educational, Scientific and Cultural Organization (UNESCO), is celebrating this years World Science Day for Peace and Development with the pledge to support Quality Science Education to affirm the commitment of our organizations towards the progress of human society.

In the current event, speakers will elaborate on the center issue of promoting quality science education: challenges and opportunities in Pakistan. The session will conclude with a poster session where undergraduate/graduate students will present ideas on sustainable livelihoods, in various themes of Agriculture, Health, Education, Environment (Climate Change and Biodiversity), Energy and Economy (Poverty & Disaster Risk Reduction). Winning Posters will be announced at the end of the seminar and a short poster session will follow the seminar.

VENUE

Hill View Hotel, F-7 Markaz, Islamabad, Pakistan

CONTACT PERSONS

1. Mr. Abdul Majid Qureshi Research Scholar COMSATS Headquarters, Islamabad Tel:+92-51-9214515 Email: abdul.majid@comsats.net.pk

2. Mr. Ghulam Abbas

Assistant Director ECO-Science Foundation, Islamabad Tel: +92-51-9215496 Email: abbas.ecosf@eco4science.org 3. Mr. Raza Shah National Professional Officer UNESCO, Islamabad Tel: +92-51-2600242 Email: r.shah@unesco.org