Panel 23

Household Water Treatment Systems and Safe Water Storage for Sustainable Access to Safe Drinking Water in South Asia

Good quality water is essential for life. Millennium Development Goal 7 (MDG 7), Target 10, calls for reducing by half the proportion of people without sustainable access to safe drinking water by 2015.

For most of South Asia, the main source of drinking water, are rivers. However, due to industrial effluents, urban and agricultural runoff, sewage treatment, saline intrusion and other natural and man induced activities, water quality in rivers has been rapidly worsening all over South Asia. Adequate treatment facilities are generally lacking for cleaning river water prior to its distribution among residents of towns in South Asia.

In South and Southeast Asia access to safe drinking water is worse. Unclean water, contaminated chemically or microbiologically, poses a health hazard. Water-borne diseases such as cholera, typhoid fever, diarrhea, dysentery, hepatitis A and other diarrheal diseases cause many deaths annually. Each year several cases of Diarrhoeal and other waterborne diseases cause over 2 million deaths, mostly among children under the age of five, which represents approximately 15% of all child deaths, under the ages of five, in developing countries.

Besides, control measures to prevent water pollution at source, water pre-treatment prior to distribution, adequate methods for household water treatment/treatment at point of use (POU) and safe storage (HWTS), “combined with hygiene promotion are required to prevent the population (without access to safe drinking water) from illness and death” (http://www.sodis.ch/Files_e-conference/SODIS_BeckgroundPaper.doc). Household water treatment systems include water-boiling, use of bio-filters, disinfections by chlorine, solar water disinfections, UV lamps, chemical flocculation-disinfections formulation etc. Priority attention to household-level interventions can make an immediate contribution to the safety component, which is expected to significantly contribute to meeting the MDGs.

This technical panel at the Twelfth SDC would look at sustainable solutions through appropriate technologies, for ensuring easy, low cost and equitable access to clean drinking water in South Asia. The conference would also enable exchange of views and experiences among the participants, regarding the application of household water treatment systems in their countries.

Panel Organizer: Dr. Mahmood A. Khwaja (Visiting Research Fellow, SDPI, Islamabad)
Email address: khwaja@sdpi.org