Dhaka Symposium Recommendations

The international symposium on Climate Change and Food Security in South Asia was convened at the University of Dhaka from 25 to 30 August, 2008. It identified the following recommendations based on keynote presentations, poster papers and working group deliberations.

1. Create a Climate Change and Food Security in South Asia Network (CCFSSANet) and establish a South Asia Climate Outlook Forum (SACOF), both to be maintained by WMO. They will:

    - Share information on management of climate change and related science, data, tools and methodologies in South Asia.

    - Generate data on solar heating as it relates to the effects of soot, aerosols and particulate material emissions on radiation balance, rainfall patterns, and regional climate change.

    - Develop seasonal climate predictions to assist farmers to optimally adjust their planting dates, crop varieties, and management practices to reduce agricultural vulnerability to hydro-meteorological hazards.

    - Promote adoption of proven sustainable technologies related to better soil, crop, livestock and fishery and water management in order to increase food productivity by enhancing use efficiency of inputs such as fertilizer, water, energy and labor. Examples of such win-win options include conservation agriculture, integrated nutrient and pest management, aerobic rice, sustainable fishery, crop and livestock production, biodiversity conservation and agricultural diversification, composting, integrated river basin water resources management and irrigation modernization, sustainable forest management, and plant/crop management to improve soil quality.

    - Create mechanisms to pay farmers for ecosystem services such as carbon sequestration in soils and reductions of gaseous emissions related to deforestation, degradation of agricultural soils, grasslands, and water quality improvement, and reduced emissions of methane and nitrous oxide from agricultural and forestry land uses.

    - Improve collection and dissemination of weather-related information by improving weather station networks to strengthen monitoring of extreme events and their impacts on food production and availability.

    - Establish a regional early warning system of climatic risks.

    - Promote insurance for climatic risk management.

2. Stimulate multidisciplinary research on topics related to climate change and food security in South Asia including the following:

    - Bio-fuel alternatives that encourage use of crop residues and dung as soil amendments while producing energy for household consumption in rural communities. These include algae farms, energy plantations and bio-digesters.

    - Hydrologic cycles of major river systems and their deltas, emphasizing sediment transport, fate of carbon transported by fluvial processes, subsidence and inundation of deltas and changes in mangrove swamps and riparian ecosystems.
    - Infectious diseases and water quality as they relate to human health with a specific focus on arsenic poisoning, and nitrate and pesticide loadings resulting from conventional agricultural practices.

    - Improved germplasm for tolerance to biotic and abiotic stresses exacerbated by climate change, such as increasing risks of salinization, temperature extremes, flooding, drought, pests and diseases.

- Carbon sequestration and greenhouse gas emissions in agricultural, industrial and urban ecosystems and promotion of carbon credits through Clean Development Mechanisms (CDM) of the Kyoto Treaty and other national and international organizations.

3. Initiate and strengthen cooperation among academic, research and policy institutions, international organizations, and NGOs to provide opportunities for human resource development and relevant training needs by:

    - Designing academic curricula and courses to provide target-specific training on climate issues.

    - Involving youth in issues related to migration and adaptation of climate change.

    - Creating public awareness of the need for stewardship of soil, water and other environmental resources and influence related policies.

    - Improving national agricultural extension services in order to secure farmers' self- reliance by providing better information about effective weather and climate risk management and the sustainable use of natural resources for agricultural production.

    - Enhancing research and collaboration on climate related issues, including assessment of carbon and water foot prints of agricultural, urban and industrial ecosystems in efforts to mitigate climate change.

4. Develop innovative financial mechanisms to scale up technical and financial support for adaptation efforts in developing countries and identify mainstream perspectives about current development policies to enhance integrative and cost-effective responses to adaptation and development needs.

5. Strengthen regional institutional and policy mechanisms to promote and facilitate implementation of location specific adaptation and mitigation practices by:

    - Promoting food policy deliberation in the context of climate change implications.

    - Encouraging mainstream perspectives in current development policies in order to enhance integrative and cost-effective responses to adaptation, mitigation and development needs.

    - Facilitating regional early warning mechanisms, information sharing, and communication to local stakeholders in order to improve the adaptive capacity of communities.