



The 3rd International Forum
on Water and Food
Tshwane, South Africa
November 14 – 17, 2011



Co-hosted by:



The Ganges Basin Development Challenge and the Role of Change and Coordination Project

NOWSHER ALI SARDER¹, WILLIAM COLLIS¹, MICHAEL PHILLIPS² AND
ELIZABETH HUMPHREYS³

¹Worldfish Center, Bangladesh

²WorldFish Center, Malaysia

³International Rice Research Institute (IRRI), Philippines

N.Sarder@cgiar.org

Session: Basin (Ganges) and Learning to Innovate

Key Message

There is tremendous potential to increase food security and improve livelihoods in the coastal areas of the Ganges Delta, through increasing the productivity and resilience of agriculture and aquaculture systems. Achieving this will require proof of the benefits of improved production systems, identification of agro-ecological zones for targeting of improved technologies, inspiring NARES, NGOs and other outscaling projects to adopt and promote the improved technologies, and influencing policy makers and government at community to national levels to invest in the necessary infrastructure improvements and policy changes.

Summary

The Ganges river system originates in the Himalayas and discharges to the Bay of Bengal through one of the most extensive and highly populated river deltas in the world. The Basin is spread over India (52%), Pakistan (22%), Nepal (17%) and Bangladesh (9%) with an area of 225 million ha and 747 million people. Although the whole region is subject to many pressures, the coastal delta, encompassing south west Bangladesh and eastern India, is of particular concern. The brackish water coastal zone is home to some of the world's poorest and most vulnerable people, who are exposed to tidal surges, increasing

surface water salinity, limited fresh water availability, flooding and lack of drainage during the wet season, and severe cyclonic storms. Therefore the CPWF Phase 2 Ganges Basin Development Challenge seeks to “increase the resilience of agricultural and aquaculture systems in the coastal areas of the Ganges delta”. This is being done through 5 inter-related projects which involve: (i) the development and on-farm validation of improved germplasm (crops and fish), cropping systems, aquaculture systems and rice-aquaculture systems, (ii) characterization of the environments where these technologies will be most applicable, (iii) identification of extrapolation domains for technology targeting using GIS, (iv) identification of water governance improvements needed to enable adoption of improved technologies, (v) assessment of the impacts of climate change and river flow change on water resources, and (vi) influencing stakeholders from farmers to NARES to NGO to policy makers. The paper provides an overview of the Ganges Basin Development Challenge, and our vision on how this Ganges research for development program can contribute to addressing a major development challenge of our time.