CGIAR RESEARCH PROGRAM ON Water, Land and Ecosystems

LED BY: IWMI International Water Management Institute

CGIAR RESEARCH PROGRAM ON WATER, LAND AND ECOSYSTEMS

Working to improve the food security, nutrition and livelihoods of farmers in the Ganges River basin in Nepal, India and Bangladesh to achieve sustainable intensification.

IN PARTNERSHIP WITH:

Bioversity International · CGIAR Challenge Program on WATER & FOOD · CIAT · CIP · FAO · ICARDA · ICRISAT · IITA · IFPRI · ILRI · World Agroforestry Centre · WorldFish

What is WLE

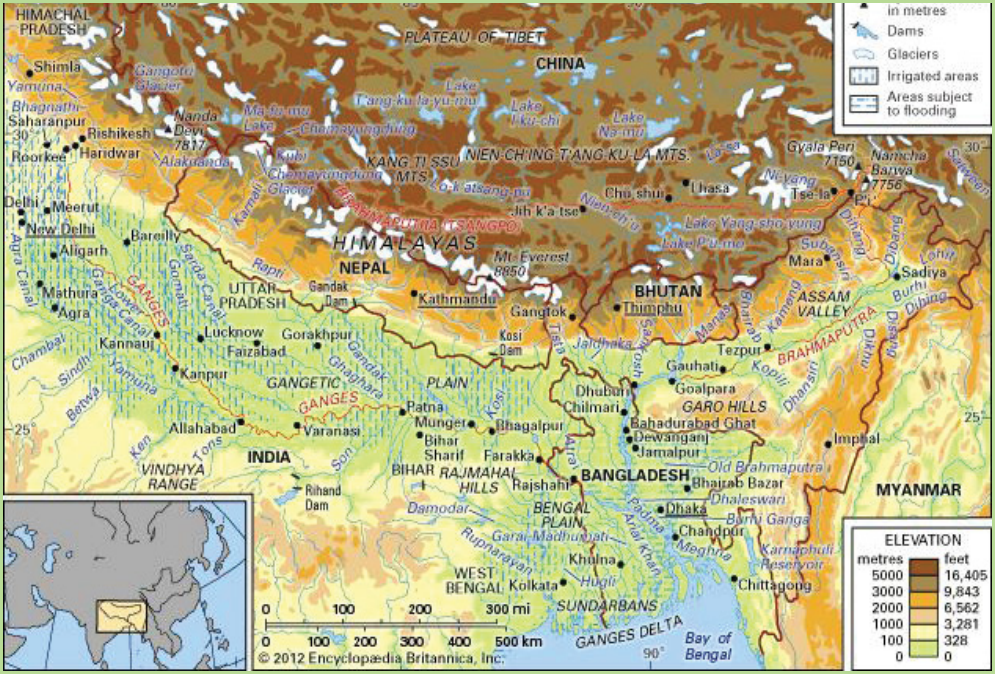
The CGIAR Research Program on Water, Land and Ecosystems (WLE) promotes a new approach to sustainable intensification in which a healthy, functioning ecosystem is seen as a prerequisite to agricultural development, resilience of food systems and human well-being.
WLE aims to tackle key global challenges related to water scarcity, climate variability and environmental degradation and work from farm to landscape scale.

WLE recognizes six Ecosystem Services and Resilience principles:

- Meeting the needs of poor people and marginalized groups is fundamental.
- Equity and gender are vital building blocks for enhancing and maintaining ecosystem services; therefore empowering women and men including youth to meet their needs is critical.
- People and nature are intrinsically linked; enhanced ecosystem services to and from agriculture can improve livelihoods.
- Cross-scale interactions in agricultural landscapes can be managed to positively impact development actions and outcomes.
- Governance mechanisms are vital tools for achieving equitable access to and provision of ecosystem services.
- Building resilience is about enhancing the capacity of communities to sustainably adapt and develop in an uncertain world.

Why

Ganges is one of the largest basins covering 1.2 million kilometres area. This basin consists of 1/3 of Bangladesh, a majority of India and whole of Nepal. The area is populated by about 655 million people in which 30 % live below poverty level. Agriculture still remains the main livelihood for the majority of the Ganges basin for the foreseeable future. Yet, the productivity in the basin is extremely low relative to global averages.



How

Keeping this situation in mind, WLE is introducing a new cluster of projects in South Asia to improve the condition of the river Ganges, and the people at its coastal zones. The aim is to revitalize the river by establishing a healthy ecosystem and utilizing it for the utmost benefit of the relevant population through five different projects addressing five vital issues.

This two-year long program started on January 01, 2015 and will end on December 31, 2016.

G6: The irrigation-hydropower nexus in the Ganges headwaters

The goal is to strengthen synergies and minimize trade-offs between small hydropower and irrigation systems in order to improve gendered livelihoods and enhance ecosystem services in Uttarakhand.

We propose a science-policy dialogue project in multiple Ganges sub-basins, which will lead to improved livelihoods of women, youth, and men; safeguard and enhance critical ecosystem services; and offer irrigation-hydel nexus lessons for headwater regions across the Himalayas and globally.

Lead Institute: University of Arizona.

Project leader: Christopher Scott (cascott@email.arizona.edu)

Partners: Kumaun University, Nainital, People's Science Institute, International Centre for Integrated Mountain Development, Delhi University.

G7: Poverty squares and gender circles: unravelling agriculture gaps, challenges and opportunities in the Eastern Gangetic Plains (Bangladesh, India, Nepal)

Gender crises in South Asia's poverty square are a persistent issue. Poverty in the land corridor connecting Nepal Terai, Eastern India and Bangladesh is accentuated by inequalities based on class, caste, ethnicity and gender.

The project objective is to bridge the gender "know-do" gap through partnerships. Building on existing research findings by reviewing 6 ongoing case studies programmes in Nepal Terai, North Bengal and Northern Bangladesh, the research will analyse how these projects and interventions address the dynamics of poverty and gender inequality.

The research will generate new knowledge applicable for use in development and capacity building initiatives and programmes unravelling agriculture gaps, challenges and opportunities in the Eastern Gangetic Plains.

Lead Institute: Wageningen University.

Project leader: Deepa Joshi (deepa.joshi@wur.nl)

Partners: International Water Management Institute, Nepal Madhesh Foundation, Bangladesh Agricultural University, North Bengal University, South Asia Consortium for Interdisciplinary Water Resources Studies, Katalyst.

G8: Reviving springs and providing access to solar powered irrigation pumps (SPIP) through community based water use planning: Multiple approaches to solving agricultural water problems in mid hills and Terai in Nepal and India


Photo courtesy: IWMI

The goal of this project is to ensure affordable and sustainable access to drinking and agricultural water to women and men in mid hills of Nepal and Uttarakhand and Terai in Nepal. To achieve this aim, the project will focus on reviving springs and providing access to solar powered irrigation pumps (SPIP) through community based water use planning.

Lead Institute: International Centre for Integrated Mountain Development (ICIMOD)

Project leader: Aditi Mukherji (Aditi.mukherji@icimod.org)

Partners: Helvetas, Nepal, Sunfarmer, ACWADAM, Atom Solar, Advanced Center for Water Resources Development and Management, George Washington University, Harvard University.

G9: Community water management for improved food security, nutrition and livelihoods in the polders of coastal zone of Bangladesh

This project aims to implement community water management for improved food security, nutrition and livelihoods in the polders of the coastal zone of Bangladesh. Installation of an efficient drainage system at the communitiy level and initiation of an efficient agricultural cycle can bring an end to all these problems ensuring high productivity in the area.

Lead Institute: International Rice Research Institute

Project leader: Manoranjan Kumar Mondal (m.mondal@irri.org)

Partners: International Water Management Institute, Institute of Water Modelling, Bangladesh Rice Research Institute, BRAC, Shushilan, World Fish, Blue Gold Program.

Photo courtesy: IWMI

G10: Healthy Ganga – Cleaner Waters and More Productive Ecosystems

This project will contribute to cleaning and restoring the Ganga's riverine ecosystems. In collaboration with key organizations, the project will address challenges like reduced flows and the discharge of untreated toilet waste and waste water along the Ganga and its tributaries.

Lead Institute: International Water Management Institute (IWMI)

Project leader: Javier Mateo-Sagasta (j.mateo-sagasta@cgiar.org)

Partners: World Wild Fund for Nature (WWF) – India, the Indian Institute of Technology Kanpur (IITK), Institute of Rural Management Anand (IRMA), the Water and Sanitation Program (WSP) and National Mission for Clean Ganga (NMCG).

Published by

WLE Ganges Research program coordination office
WorldFish Bangladesh and South Asia Office
Address: House# 22B, Road# 07, Block-F Banani, Dhaka, Bangladesh
Phone: T: (+8802)8813250, 8814624

Craig A Meisner
Regional Research Coordinator- Ganges, WLE Program and
Country Director- Bangladesh, WorldFish
C.Meisner@cgiar.org