STUDY AREA



Natural ecosystems in Asia are expected to deteriorate in the coming decades due to climate change, and socioeconomic changes. The resultant impact can be resource insecurity, jeopardizing human wellbeing in this region. Accordingly, the research aims to analyze the interlinkage between ecosystem services and human wellbeing to bring local scale, climatesmart, and policy-relevant solutions for resource security with an Ecosystem-based Adaptation (EbA) approach.

The study area focuses on Phewa Lake Basin, Pokhara (Nepal), Sundarbans mangrove ecosystem of Koyra in Khulna (Bangladesh), and Lakhwar watershed in Uttarkhand (India).

PROJECT PARTNERS

Dr. Shamik Chakraborty (Project Leader) Faculty of Sustainability Studies Hosei University, Tokyo, Japan shamik.chakraborty.76@hosei.ac.jp

Dr. Binaya Kumar Mishra School of Engineering Pokhara University, Nepal bkmishra@pu.edu.np

Dr. Rashed Al. Mahmud Titumir Department of Development Studies University of Dhaka, Bangladesh rt@du.ac.bd

Dr. Subir Sen Department of Humanities and Social Sciences Indian Institute of Technology Roorkee, Roorkee, India subir.sen@hs.iitr.ac.in

For more information Email: shamik.chakraborty.76@hosei.ac.jp

Interlinkage of Ecosystem Services and Human Wellbeing to Enhance Climate Smart Landscapes in Small

Watersheds: Analysis for Policy-Relevant Solutions in South Asian Context



NTRODUCTION

Dealing with multidimensional problems of climate change and socio-economic changes is one of the most important challenges the world faces today. Deterioration of natural environment and biological diversity around the world has seen rapid loss of different services available from the ecosystem, leading to the loss of resilience in human societies.

Local societies often extract multiple ES through application of indigenous and local knowledge (ILK). These multiple ES are linked with the wellbeing (WB) of the local societies. ILK present in a landscape provides vital ecosystem-based adaptation (EbA) strategies that can build resilience in the human system in order to cope with socioeconomic and climatic changes.

The study proposes that maintenance of multiple ES through ILK can be a pathway to have an adaptive measure towards coping with climate change yet without losing the vital wellbeing components from the landscapes.



PROJECT DELIVERABLES

1. Produce robust and meaningful data on multiple ES, their changes, and their linkage to WB for improvement in EbA strategies in the study areas

2. Improved understanding and awareness in the local stakeholders of the multiple ES their synergies and tradeoffs

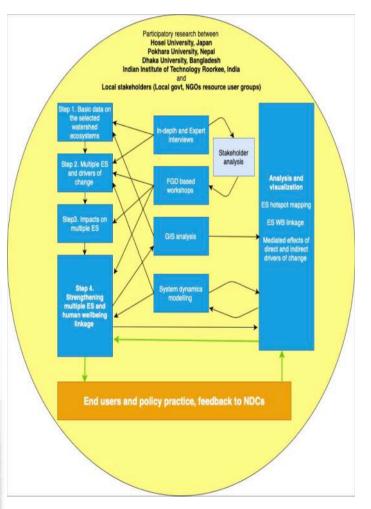
3. Improved understanding among academic communities - including graduate students in higher institutions (active learning) -and policy-makers on application of participatory ES appraisal for enhancing EbA strategies at the watershed level

4. Publication of peer-reviewed journal articles and implementation of EbA in the local land use policy processes for realizing NDCs in the countries involved



APPROACH

The project will foster knowledge partnerships by actively engaging stakeholders. The project outcomes will be useful for engaging academic, policy-maker and local communities that strengthens and enhances EbA strategies in small watershed environments.



Project URL: http://www.apn-gcr.org/resources/items/show/2115