



Project Brief

Project Title:

"The Determinants, Impact and Cost Effectiveness of Climate Adaptation in the Indus Ecoregion".

Project Description:

Lahore University of Management Sciences (LUMS) and World Wide Fund for Nature – Pakistan (WWF – P) are jointly implementing a 3-year project (2012-2015) on climate change adaptation and food security in Pakistan, which is funded by the International Development Research Centre (IDRC).

The purpose of the project is to provide field-based research findings and recommendations to guide planners and policy makers in the area of climate change adaptation and food security. The project will assess the impact of adaptation on agricultural production, and food security through a micro-econometric study conducted in selected agri-intensive districts in Sindh and Punjab provinces of Pakistan. It will examine the adaptation strategies employed by farmers, the determinants and constraints of these adaptation strategies, and will also evaluate the costs of adaptation. Furthermore, a macro study will aim to understand the political economy of climate change adaptation, and climate change policy, in the political, historical and economic context of Pakistan.

In order to improve adaptation strategies already adopted by stakeholders in the agricultural sector, the project envisages a number of practical interventions. In this respect, Master Trainers at Farmer Field Schools will be equipped with cost effective adaptation tools through the provision of new curriculum and training manuals. Furthermore, Lahore University of Management Sciences will undertake efforts to strengthen environmental studies through training of university faculty, and introduction of climate change related course work.

WWF-Pakistan will play an instrumental role in mainstreaming project findings in to Union Council level climate change related policies, and into Annual Development Plans of the Government of Sindh for implementing '50 year Vision of the Indus Ecoregion'.

Project Objectives:

The objectives of the project are:

- 1) To enable the government and other stakeholders to take informed decisions with regard to costeffective and politically feasible climate change adaptation interventions in the Indus Ecoregion.
- 2) To disseminate the findings and recommendations of the micro-econometric and political economy studies to relevant government ministries and donors.

Project Deliverables:

- 1) A micro econometric study prepared by Dr. Ben Groom of the London School of Economics. The study will be based on primary collected data through household and village level surveys from 2 districts in Sindh, and 1 in Punjab. The study aims to estimate the impact of climate change adaptation on crop production, food security and poverty by analyzing available adaptation strategies, and the determinants and constraints of adaptation process, and the costs and benefits of adaptation.
- 2) A study entitled "The Political Economy of Climate Change Adaptation in Pakistan: Overview and Analysis of coastal and inland agriculture in the Indus Ecoregion, Sindh and Punjab" by 2014.
- 3) A policy document entitled "Adaptation to Climate Change in Punjab and Sindh: A Synthesis of Political Economy and Micro-econometric Analyses" in 2015.
- 4) Establishment of new, or strengthening of existing, Farmer Field Schools where farmers will be equipped with practicable knowledge on climate change adaptation. This will include trainings at Farmer Field Schools for villagers and Community Based Organizations, and curriculum development, and the preparation of Manuals for Master Trainers.
- 5) Student assisted Faculty Papers on cross-disciplinary themes related to climate change at the Lahore University of Management Sciences.
- 6) A Technical Advisory Group (TAG) is formed consisting of a panel of national academia to facilitate the project, and ensure that its desired objectives are achieved. It will also provide assistance in mainstreaming the key recommendations into relevant government policies.
- 7) A National Consultation workshop was held in June 2012 to develop a sampling strategy for the micro-econometric study, whereas another workshop is planned to review research outcomes, and form a dissemination strategy in 2013.
- 8) A conference on climate change and food security will be hosted by Lahore University of Management Sciences in February 2015.