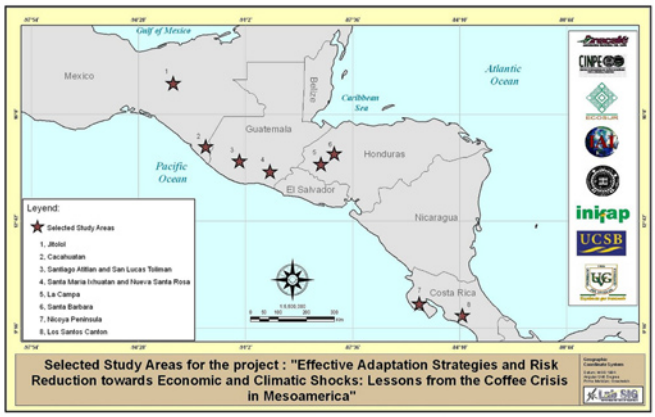
EFFECTIVE ADAPTATION STRATEGIES AND RISK REDUCTION TOWARDS ECONOMIC AND CLIMATIC SHOCKS: LESSONS FROM THE COFFEE CRISIS IN MESOAMERICA

INTRODUCTION

There is a growing concern over climatic variability and price volatility in global markets for cash crops produced in developing countries. One of the cutting edge questions in global change research deals with how to reduce risks and increase adaptation capacity of vulnerable farmers in impoverished areas.

This research focuses on identifying livelihood adaptation strategies of coffee growers as a response to price fluctuation, climate change and increase in pest proliferation. It consists in a comparative case study about coffee growers from selected regions from Mexico, Guatemala, Honduras, and Costa Rica. To achieve the research goals, a multidisciplinary research approach is used, with participation of researchers from various disciplines such as anthropology, ecology, and economy.



Selected Study Areas for the project : "Effective Adaptation Strategies and Risk Reduction towards Economic and Climatic Shocks: Lessons from the Coffee Crisis in Mesoamerica"


Effect of Tropical Storm on coffee plantation
Photo: Eddie García, 2005

PROJECT GOALS

• Identify key impacts of economic and climatic shocks as well as biological stresses on the livelihoods of coffee farmers and their social networking.
• Analyze and evaluate current contexts structuring farmers' decisions.
• Evaluate the outcomes of both individual and group strategies to adapt to economic and climatic crisis situations at the household level.
• Identify strategies that farmers perceive as most effective in reducing risk or enhancing resilience.
• Analyze the role (facilitate and/or limit) that community/based organizations, government institutions, and other organizations play in increasing the resilience and adaptation capacity of coffee growers to economic, climatic, and biological shocks.
• Explore some of the implications of household strategies for the regions in which farmers are operating.
• Communicate results to policy makers and foster communication channels between communities and local and national governments in a participatory process to create or revise programs and policies that address climatic change, economic fluctuations, and crop pest impacts in the coffee sub-sector.

PROJECT ACTIVITIES

During four years, the following data will be collected and analyzed:
• Range of coffee growers' perspectives about key shocks and successful adaptation strategies.
• Global chain commodity analysis on coffee production and commercialization.
• Land cover change analysis on selected coffee regions between the periods of 1996-2001 and 2001-2006 by using satellite image.

• Socioeconomic, cultural, institutional, political, demographic and historical data that influence adaptation strategy selection to stressors such as global changes.

Data will be collected through the use of multiple data generation instruments like semi-structured interviews, household questionnaires, participant and non-participant observation, satellite image analysis, literature review, and focus groups.

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PROJECT STATUS (MAY 2008)

• The team of researchers has held three project meetings to coordinate activities, develop research instruments, and define operational objectives
• Collaborative meetings have been held to explore the inclusion of a new case study through participation of CATIE
• Semi-structured interviews have been conducted with experts on coffee and climate change, staff from local organizations working with coffee, and coffe growers from the selected sites in Mexico, Guatemala, Honduras, and Costa Rica
• Household questionnaire developed and distributed randomly in the selected study areas in Mexico, Guatemala, Honduras, and Costa Rica. Data were encoded in four SPSSS databases.
• Preliminary analysis of satellite images in the study areas has been completed.

Effective Strategy? Direct commercialization with added value in Jitolol, Mexico
Photo: Helda Morales, 2006


Team meeting jointly held with CATIE researchers, ECOSUR, Chiapas, 2008


Training interviewers. Barberena, Guatemala
Photo: Axel Arana, 2007