



Topicsheet

Countries: Latin America - Mexico, Nicaragua, Peru
East Africa - Kenya, Tanzania, Uganda

Duration: 2007 - 2010

Partner: Cafédirect plc.
GTZ (German Technical Cooperation)

Adaptation for Smallholders to Climate Change (AdapCC)

Background

As the ever stronger international research consensus confirms, climate change will impact a number of vital economic sectors across the world. One of the most affected will be agriculture.

Climate change is, for example, already increasing the inland effects of the hurricane season in Mexico with massive rainfalls causing flooding and destructive landslides. Moreover the El Niño effect may delay the start of the rainy season or cause unstable rainfalls that directly affect the flowering and productive capacity for crops like coffee or tea.

In East Africa there have been increasingly prolonged drought periods, which especially affect perennial crops like tea and coffee, resulting in substantially lower outputs for smallholder farmers.

While there are still uncertainties regarding the most likely scenarios of climate change, one thing is absolutely certain: the people most vulnerable to the expected impacts will be smallholder farmers in rural areas. This is mainly due to their lack of information, adaptation capabilities and access to financial and technical support mechanisms.

Objective

Cafédirect (CD) and the German Technical Cooperation (GTZ) are implementing a three-year Public-Private-Partnership (PPP) to strengthen smallholders' capacity to cope with climate related risks, to manage uncertainties and to adapt to changing climate conditions.

The main objective of this pilot initiative is to create transferable examples that illustrate: how pilot producer groups from Cafédirect's supply chain can cope with the impacts of climate change, and how producer groups can improve their access to relevant financial and technical support mechanisms. The projects' expected impacts include:

- + Contributing to the long-term sustainability of coffee and tea production, and thus improving the revenues of the affected smallholders.
- + Positively impacting climatic and environmental conditions by implementing adaptation and mitigation strategies.
- + Developing tools and methodologies to identify/ implement smallholder agricultural adaptation strategies.
- + Reducing the vulnerability of smallholder agricultural production practices to climate change.



Strategy

All decisions and phases of the project are conducted in a participatory manner, by and with the producer partners themselves. To create transferable examples, AdapCC is working with four pilot producer organisations in Mexico, Nicaragua, Peru and Kenya.

Based on the joint research, AdapCC is developing site-specific adaptation strategies to be implemented by the pilot organisations themselves. To be able to strategically plan adaptation to future climate conditions, these strategies are completed with scientific climate scenarios. Throughout the whole process, information and experiences are continuously communicated with other producer groups and all stakeholders in order to achieve transparency and to multiply the lessons learned.

Results

Effective adaptation strategies must reduce present and future vulnerability to climate change. They include coping strategies, or changes in practices and processes, in response to or anticipation of the perceived climatic change.

The capacity to adapt depends largely on the assets (natural resources, human and social, physical and financial capital) that one has, or can access, and how well these assets are utilised. Based on the existing information regarding vulnerability and climate change impacts, and producers' demand and traditional knowledge for risk mitigation, several options for coping strategies were identified.

By developing specific adaptation measures the project will focus on three main areas:

Short-term solutions for adapting coffee/ tea production

- + Improved water irrigation systems
- + More efficient water use
- + Soil management and soil protection
- + Pest management and fertilisation
- + Shade management

Measures to reduce greenhouse gases

- + Forestation/ reforestation
- + Mulching techniques
- + Organic production
- + Utilisation of waste materials/ bio-energy
- + Energy efficiency/ renewable energies

Long-term strategies to improve framework conditions

- + Diversification of income
- + Use of new production opportunities
- + Improvement of access to climate data
- + Early warning systems
- + Preservation of genetic diversity
- + Breeding of appropriate species
- + Strengthening of local institutions
- + Capacity building
- + Sensitization / awareness rising
- + Linking smallholder farmers to carbon markets
- + Developing internal financing mechanisms
- + Linking organisations with external financing

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