Sangana PPP



Climate Change & Coffee

Carbon & Water management in horticultural exports from East africa workshop - Naivasha















Coffee + Climate Change

ICO says:

While climate change is just one of numerous factors that may affect global coffee production, it is nonetheless likely to be one of the most important ones.

Producers say:

Rains are changing affecting flowering and therefore distorting our whole production cycle.

Research institutions (CATIE / CIAT) say:

Due to changing weather patterns coffee zones are already affected. Adaptation is key to securing production systems.

Traders say:

Coffee is a vulnerable crop to changes in climate. We are having trouble finding the right quantities and qualities for our markets.







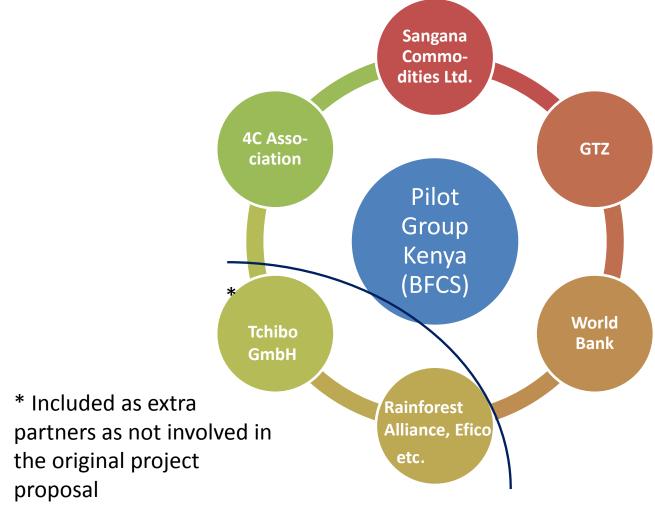








PPP Partners



















Goals

Mitigation

- Create a link for coffee smallholders to the carbon markets
 - ✓ Develop a baseline
 - ✓ Develop a methodology

World Bank + Sangana

Adaptation

- Create a verifiable additional standard module on climate change
 - ✓ Focus on adaptation
 - ✓ Synergies to mitigation where possible

Sangana + GIZ + 4C















Climate vulnerabilities of Kenyan coffee farmers

Baragwi Farmers Cooperative Society Ltd:

- Deforestation
- ➤ Pests & Disease
- > Erosion
- ➤ Poor farming practices

KOMOTHAI Coffee

Growers:

- Deforestation
- Expansion of agricultural boundaries
- Cultivation in water catchment areas
- Water pollution

















the Module Structure of Climate Module Verification Climate data **Trainings Climate Code** base instruments Agricultural practices for adaptation and Scientific **Trainings for** mitigation; information producers and **Necessary tools** Aspects for and climate verifiers data enhancing framework conditions













Results

Climate Module

- Climate Code developed and successfully tested with Baragwi
- Several trainings to support the implementation of the Climate Code developed
- Verification tools according to 4C verification process developed
- Collection of relevant scientific texts, climate data (maps) and web links to further information
- **➢** Guide book

All results: www.4c-coffeeassociation.org/en/events.php

















Results



<u>Trainings</u>

Manual by Sustainable Management Services Ltd on Good Agricultural Practices



1-day introductory training (digital manual + presentations)



Manual incl. overview on coffee and CC in Kenya, guidance for working on CC with farmers in the field, the methodology for participatory analysis of climate vulnerabilities + risks, an introduction to mitigation



- 3-day on-farm carbon monitoring training (digital manual + presentations in English and Spanish)
- Training for certification bodies (presentation)













Results

Mitigation

- Draft methodology (soil carbon)
- > Draft carbon and socio-economic baseline
- On-farm emissions of Baragwi farmers assessed via a greenhouse gas calculator – the Cool Farm Tool (Sustainable Food Lab, University of Aberdeen & Unilever)

























Lessons learnt on the Code

Easy for producers:

- Defining climatic changes over past years
- Defining negative impacts of these changes
- Understanding the link btw human activities and CC

Challenges:

- Terminology: adaptation, mitigation, GHG...
- Convince farmers not to plant directly along rivers
- > Tree data collection

Solutions:

> Examples and illustrations

- Awareness raising and trainings
- Simplified data sets

















Lessons learnt - general

- Producers have their own coping mechanisms and have to be involved in finding the solutions
- Adaptation has to be a mix of scientific and participatory approaches
- Local, regional and national networks are necessary for successful adaptation
- > Funding for adaptation is one of the biggest challenges
- > Adaptation can have mitigation effects
- > In agriculture adaptation is more important than mitigation
- Data collection for mitigation is cumbersome and not (always) precise

















First perceived impacts at Baragwi

- Increase in awareness on climate change and environmental issues
- Rising water levels in local river streams due to improved conservation of riparian land
- Due to increased quality coffee prices paid to farmers have improved
- > Some producers have increased their production
- Farmers who had abandoned their coffee farms have started to take it up again
- > Job creation: youth is contracted to do the spraying
- > The youth is gaining interest in farming again

















CC is happening now! The winners will be those, who are best prepared!



GIZ

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Thank you













