

# **Advancing Capacity for Climate Change Adaptation**(ACCCA)

## **Analysis and Evaluation of the Pilot Action**

### **Project Report**

Project Title	Food Security and Adaptation to Climate Change in the
	Afram Plains of Ghana
Country	Ghana
Project site(s)	Afram Plains
Project Leader(s)	Samuel Nii Ardey Codjoe, Petra Tschakert
Other Project	Regina Sagoe, Emmanuel Tachie-Obeng, Awudu Modoc,
Members	Gifty Ofori Darko, Lucy Atidoh, Abu Mumuni
<b>Monitoring Team(s)</b>	Lawrence Flint
<b>Project Objectives</b>	The objective of the project is to create a platform for a
	learning process between rural populations, researchers, and
	policy makers in Ghana to better understand the linkages
	between climate variability and change on the one hand and
	household food security and well-being on the other hand.

#### I. Activities

#### A. Project Activities Planned

**Activity 1**: Research on people's perceptions of climate change and other hazards, impacts on household food security, and their adaptive capacity and actual adaptive responses to deal with associated risks.

**Activity 2:** Interrelated social learning activities to engage stakeholders, including researchers, in climate change risk assessments and communication efforts:

**Activity 3**: Design of a catalogue for resource management and income-generating activities that support adaptation strategies and enhance food security by diversifying access to food sources and stocks:

**Activity 4**: Regular monitoring and documentation of our progress;

**Activity 5**: Active exchange with decision makers to promote integration of project results into policies:



#### B. Status of the activities Planned

Activities 1, 2, 4 and 5 have been completed. The team could not undertake Activity 3

#### C. Self evaluation relative to activities executed

In our opinion Activities 1, 2, 4 and 5 have been well executed. However, Activity 3 could not be undertaken.

#### D. Challenges encountered

- 1. It was difficult to organize community members for some of the activities, especially during the main farming season
- 2. Environmental theatre activity was postponed on three occasions. It was difficult to bring all the key participants together.
- 3. Community members selected to produce the paintings on climate change have not performed as expected
- 4. Meteorological data in the Afram Plains (except for Mem Chemfre) were generally unavailable

#### E. How these challenges were resolved

- 1. The team waited and undertook activities late in the evenings
- 2. The environmental theatre event was eventually undertaken
- 3. This challenge has not been resolved
- 4. The team did not benefit so much from the training organized in Cape Town. We had to rely on Dr. Tschakert and her team in the Pennsylvania State University to provide us with the scientific analysis of climatic data, which we used in social learning activities in the communities.



#### II. Outputs

#### A. Project goals and objectives

The <u>overall goal</u> of this project is to create a platform for a learning process between rural populations, researchers, and policy makers in Ghana to better understand the linkages between climate variability and change on the one hand and household food security and well-being on the other hand. The specific objectives are;

- 1) Comprehend how farmers, fishers, herders, and agricultural extension agents understand climate change and their adaptive capacity/adaptation compared to other stressors that impact their livelihoods.
- 2) Establish empirical linkages between changing climatic patterns and household food (in) security and track individual and collective responses and their efficiency over time.
- 3) Facilitate social learning and risk communication efforts to recognize and monitor climate variability.
- 4) Identify most appropriate and feasible adaptation options.
- 5) Create channels for feedback and monitoring between community groups and research institutions to scale up learning experiences.
- 6) Inform local, regional, and national policies on how to better integrate climate change adaptation, food security, and sustainable development. Important accomplishments of the project

#### B. Key outputs of the projects and how these outputs were used or will be used.

It must be noted that several of the activities mentioned here were undertaken in conjunction with the Climate Change Learning Observatory Network (CCLONG) Project. CCLONG is a three-year project funded by the United States Agency for International Development (USAID) with Petra Tschakert of the Pennsylvania State University as the Principal Investigator.



- Video documentation of theatre on climate change enacted by school pupils in the communities The environmental theatre was an activity that was used to sensitise community members on climate change and its impacts. The video documentation will be made available to other communities for further sensitization.
- Transcripts and recordings of rural radio programmes by the communities on climate change The rural radio programme was used to sensitize surrounding communities on climate change. The Afram Plains Development Organisation (APDO), one of the collaborating partners on the project, led this activity. Representatives from the three project communities discussed what their perceptions of climate change were, including the causes and consequences of climate change. The recorded programme would be aired every now and then to further sensitize other communities.
- Picture documentation of perceptions of communities on climate change This was used for sensitization in the communities.
- Paintings of perceptions of communities on climate change This has been used for sensitization within the project communities and in other communities
- Community concept maps of climate change This was used in social learning activities with community members to fill knowledge gaps on climate change
- Historical matrices This was used to identify past significant climatic events in communities, and establish empirical linkages between changing climatic patterns and household food (in) security, and track individual and collective responses and their efficiency over time.
- Household surveys These were undertaken to elicit assets and capitals of households. In addition, the surveys solicited information on how food systems are impacted by climate change, the differentials of the impacts among communities, and the underlying reasons for some communities adapting better to climate change than others. Other information include, adaptation strategies used by households during food shortages, and food availability in households (i.e., proportion of households that cropped cassava, yam, maize, groundnut, proportion that had no yield, proportion that sold and proportion available to household for consumption). Furthermore, there is information on period of household food shortages, reasons for food shortages, most importance source of food, persons responsible for providing food in the household, number of meals per day, food processing and storage techniques, and cultural taboos that prevents the utilization of certain food crops.



- Livelihood stressors of community members This was used to explore the knowledge lay people have with respect to climate variability and change, and the impact climate has on different livelihood groups
- Interaction with Fulani herdsmen to understand their livelihood stressors, discuss climatic events from the past and possible climatic futures, and conduct a small number of household interviews to understand linkages between climate and food security.
- Draft of a scientific publication on linkages between climate change and food security
  This will eventually be published in a peer-reviewed scientific journal as a way of disseminating the research findings.
- Meeting with climate change focal person in Ghana. This meeting gave us the opportunity to inform relevant policies on how to better integrate climate change adaptation, food security, and sustainable development.
- Adaptation options for droughts and floods available in communities