Climate Change Adaptation from the Bottom Up: Collaboration between Malian Communities and Scientific Organizations to Identify and Implement Responsive Water Management Actions

ACCCA
Advancing Capacity to Support Climate Change Adaptation

Introduction

Rural Malians struggle to rise from poverty. Their efforts are countered by arid climatic conditions that can stifle economic activity in rural areas. Limited water supplies force women to make substantial investments to secure water to meet basic needs and discourage the pursuit of activities that could contribute to improved household circumstances. There is a perception among many rural Malians that action to improve the availability and allocation of water would improve the quality of life in their communities and that the improved management of available water resources is one potential strategy to emerge from poverty.

The purpose of the proposed ACCCA project is to help the members of the three Collaborating communities identify promising water management innovations that could improve household conditions by increasing resiliency to climate change. Decision makers at all levels of Malian society will be supported to establish policies that promote the realization of these innovations.

Fieldwork in Mali

3 communities (sites) have been chosen to carry out studies with ultimate goal to elaborate a national policy on climate change. The chosen sites are: Massabla in Sikasso region, Diouna in Segou region and Kiban in koulikoro region

The ACCCA project will help identify and implement concrete actions to adapt to climate change adverse effects.

Proposed methodology

Insights gained from earlier analytical work done under NCAP (the Netherlands Climate Assistance Programme) must be vetted back to the pilot communities. The WEAP model applications, while having been developed based on information provided by the pilot communities, generate output of a graphical nature that may or may not be accessible to traditional leaders and water users in the pilot communities. In order to make this information accessible to develop, test, and disseminate communication materials that are derived from WEAP applications, information about climate resiliency will be conveyed in a format that allows community members to assess the best method to meet current rural development objectives while also coping with climate change to the greatest extent possible.

The hope is that these local assessments will help meet the decision-making needs of multiple levels of government intervention so that national adaptation strategies can reflect local realities and imperatives.

Adaptive capacity development at the local level, will involve conducting an in-depth vulnerability assessment, focusing on communities whose livelihoods are reliant on certain wetland services using role-playing scenarios developed in WEAP, a water evaluation and planning tool developed by the Stockholm Environment Institute (SEI), using methods of participation in an iterative way.

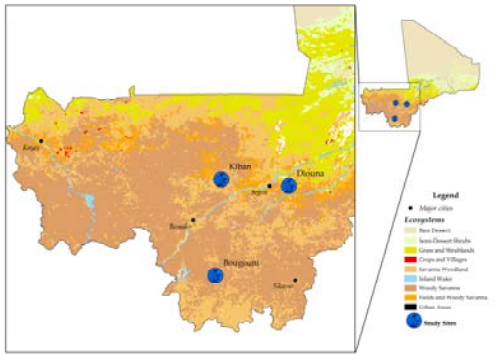
This project will focus on a participatory approach.

Highlighted gaps in data

The fieldwork has highlighted gaps in data on the following:

- Statistics data
- Climate change (impacts on health and livelihoods)
- Hydrological data

The three study sites



Understanding Water-related Vulnerabilities

Preliminary Conclusions

Residents of the three pilot communities were very aware of adverse affects of climate change and were receptive towards project activities.

There is a desire among the residents of the pilot communities to have concrete adaptation actions carried out at the local level.

At the community level, it seems that adaptation actions based on improved groundwater management will be advantageous as opposed to surface water management actions which are very sensitive to reductions in rainfall.

At the current level of development in Mali, it seems that adaptations that improve access to water will be more effective than actions related to enhancing water availability.

Areas of future work

Future Plans

Continue to work with the target communities in order to identify the best available water management adaptation strategies and to develop action plans that can be submitted to interested financial partners

Expand the scale of analysis beyond individual communities to a region scope by developing a similar set of tools to investigate the climate change adaptation potential of infrastructure such as the future Niger River dam at Taoussa.

Based on the results of all NCAP project activity and analysis, develop a national policy on climate change adaptation that can guide national sustainable development planning and that can be included in Mali's 2nd National Communication under the UNFCCC

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