

Climate Change Adaptation In Ghana: The case of the Water Resources Commission

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Introduction

- The Water Resources Commission of Ghana with the aim of fulfilling its mission of sustainable water resources management for all by all has undertaken some projects for climate change adaptation.
- The Climate Change Adaptation Project in the White Volta Basin (DANIDA 2010-2012) and the Local Water Committees project in the Black Volta Basin (SIDA/CRS) are two such projects.
- The successful completion of these projects points the WRC towards the achievements of SDG Goal 6.

Some Barriers to Water Security in Ghana that the projects sought to address (1)

- Governance Challenges

Stakeholder characterization and Mobilization of resources (technical and financial)

- Physical Challenges

1. Population growth and urbanization leading to pressure on land (Land tenure conflict)

2. Deforestation of the river banks and Valleys (Tree felling/bush clearing/Chemical pollution from farming activities)

Some Barriers to Water Security in Ghana that the projects sought to address (2)

3. Inadequate planning and funding further exacerbated by;
 - Inadequate coordination of activities or initiatives (Harmonisation/Overlaps);
 - Non-flexible governance and implementation structures;
 - Issues with capacity development

Evidence of problems related to Climate Change in Ghana

Drought; Water shortages; Poverty.



Floods





- As water becomes scarce, more time is spent in search of it to the neglect of economic activities
- Women and children are the most vulnerable group
- The poor may find it more difficult to cope with the changes

SDG Goal 6 (1)

6.1 Achieve universal and equitable access to safe and affordable drinking water for all

6.2 Achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations

6.3 Improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally

6.4 Substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity



SDG Goal 6 (2)

6.5 Implement integrated water resources management at all levels, including through transboundary cooperation as appropriate

6.6 Protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes

6.7 Expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies

6.8 Support and strengthen the participation of local communities in improving water and sanitation management



Some Responses



Community Physical Projects Approach (CPPA)

- The Climate Change Adaptation Project was implemented by the Water Resources Commission in collaboration with technical structures of state institutions, and financed by Danida.
- Anchoring the IWRM plan for the White Volta Basin, the bigger issue was to implement the project in consonance with the adopted framework.

Community Governance Approach (CGA)

- The Regional Partnership on Water and the Environment in West and Central Africa (PREE) project that aims at improving the resilience of natural ecosystems and communities within the Black Volta Basin.
- The project is funded by SIDA and being implemented in the hydrographical basins of Volta, Niger, Senegal, Mono, Lake Chad and the Fouta Djallon Massif. The Catholic Relief Services also supported the Project.

Project Approach - Responding to the problems

- Supporting communities to reduce vulnerability to CC
- Sensitization of communities towards CC adaptation and attitudinal change
- Water harvesting structures (rainwater harvesting-domestic including rooftop and flood water harvesting; runoff-dugouts for livestock watering and irrigation)
- Water conservation
- Catchment protection

Implementation Strategy

Direct support to communities with tools and equipment for work



Clean Water Provision – A hand dug Well fitted with hand pump at Apatanga community



Rainwater harvesting facility at Daboya community



Pollution Control/curbing open defecation - KVIP toilet at Bunyamo community



Community involvement in creation of dugout to store water



Catchment Protection - Nursery attendants raise seedlings – Adaboya community



Community Farms irrigated – Strengthening livelihoods for poverty alleviation- Adaboya community



Land and water resource exploitation on the river banks at Moqnor



Setting up functional Local Water Committees is one of the best approaches to reduce the loss of natural resources and water resources in particular



Identification of Stakeholders (1)

Primary stakeholders/Custodians – in Community

- Water Users
- Traditional Authority (Chief, Queen Mother)
- Private Commercial Entities- (Pito (local drink) brewers, Sachet water producers, Food vendors, Washing Bay operators)
- Community/Farmer Based Organizations (CBOs/ FBOs)
- 'Wanzam /'Undertakers' Group

Secondary stakeholders – Government (2)

- Community Water and Sanitation Agency
- District Coordinating Directorate/District Assembly
- District Department of Agriculture
- Forest Services Division
- National Disaster Management Organization
- Environmental Protection Agency
- Minerals Commission
- Bui Power Authority
- Water Resources Commission (WRC)



Intermediary stakeholders (3)

- Non-Governmental Organizations (NGOs) in the water sector
- Faith Based Organizations

Consultative Process – A section participants during a working group session



Local Water Committees Formed and Inaugurated

- Crop producers' group
- Livestock rearing group (Transhumance)
- Fishermen group
- Educational institutions
- Ghana National Fire Service
- Municipal Hospital
- 'Wanzam' Group (Women in Agriculture, Contractors, butchers, Sand winners Association)
- Non-Governmental
- Organizations/Community-Based Organization
- Local/Traditional Authorities (Paramount Chief/Queen Mother)
- Faith Based Organizations (Christian/Moslem)
- Patron (Ex-officio)



The Executive Committee

- a President
- a Secretary General
- a General Treasurer
- an Information Officer

- WRC carries a Great Ambition, and wants to revolutionize the governance of our water resources.
- This ambition is dependant on managing the dynamic issues relating to water resources in Ghana and the Basin approach format in particular especially in a context of Climate change.
- To do this, the support of technical and financial partners is essential for the achievement of our objectives. Hence the need for the cooperation of all stakeholders.
- Overall – *Simple Approaches and Solutions.*

Lessons learned

- The commitment of communities is somehow directly linked to the livelihood benefits to be derived from the project
- Ownership is enhanced when local people /communities are involved in governance, with the planning process through to the realization of the output.
- Change of attitude of communities to environmental management is not immediate and need accompaniment of technical services to maximize the output.
- Continuous and consistent effort is key to achieve the aims of adaptation and achievement of the SGDs.

Thank You

