

Current adaptation and planning priorities at the district level: Volta Delta case study

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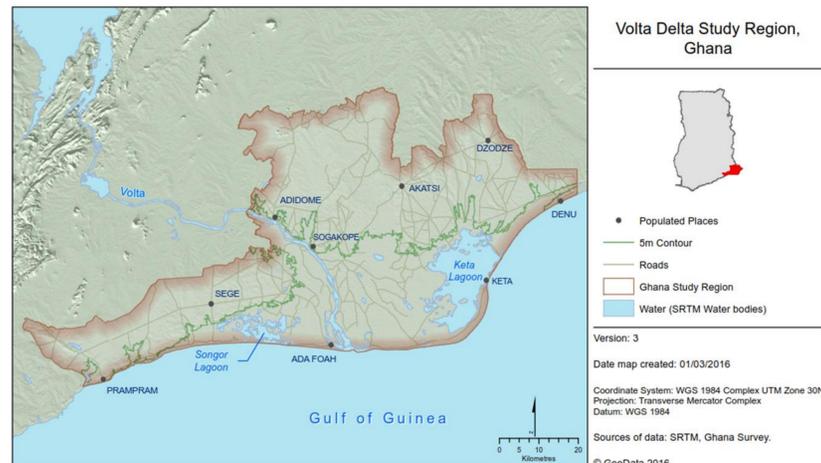
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Introduction

The low-lying Volta delta in Ghana is densely populated and home to predominantly farming and fishing communities, who have had to develop strategies to manage impacts from a combination of factors, such as:

- Increasing incidences of floods and droughts due to changing rainfall patterns
- Coastal erosion and floods from increasing sea level rise.
- Increasing degradation of natural resources due to an expanding population and poor management practices
- Ecological changes resulting from the construction of the upstream Akosombo and Kpong dams

To support the communities, governmental and non-governmental institutions have provided community-based strategies and infrastructural interventions to minimize these impacts. For **ten districts that lie within a 5 meter contour of the deltaic region**, the study assesses key non-climatic and climatic factors affecting communities and significant formal and informal processes that have supported communities to adapt.



Methodology

In addition to a literature based review, a participatory process with a wide range of stakeholders from each of the ten districts, including traditional leaders, governmental and non-governmental organizations and community leaders, was used to determine key driving climatic and non-climatic factors and responses at the district level, with various supporting formal and informal processes explored and prioritized.



Key Findings

1. Stakeholders consider ecological and developmental factors as key drivers of the adaptation process at all scales, but do not link these with climate change and variability.
2. Adaptation planning is significantly defined by the district's developmental level (including contribution to national economy) and ecological characteristics, such that there are differential pathways at both community and district scales for adapting to the different types of impacts.
3. There are different actors and informal processes that significantly influence adaptation responses, and must be taken into consideration when planning within the districts.
4. Stakeholders are generally unaware of the national climate change policy and action plans, although mainstreaming processes have been ongoing at the district level.



Tube well farming in Keta



Sea defense wall at Akplowotorkor

	Challenges	Responses
Environmental	<ul style="list-style-type: none"> • Flooding • Coastal erosion • Drought • Siltation • Bush fires • Invasive water hyacinth and water weed 	<ul style="list-style-type: none"> • Tree planting programmes, Construction of footbridges, Channels for floodwater diversion • Sea defence/earth walls, Emergency Preparedness Plans, Early warning systems • Dry season irrigation • Dredging • Fire-belts • Cleanup and harvesting of weeds (manually, equipment) by community or Volta River Authority
Developmental/Social	<ul style="list-style-type: none"> • Unemployment/loss of jobs • Out- and in-migration • Youth delinquencies (high levels of school drop out and teenage pregnancies) • Conflicts with nomadic Fulani herdsmen, Destruction of farmland and crops 	<ul style="list-style-type: none"> • Capacity building for alternative livelihoods • Provision and expansion of social amenities, re-settlement programmes • Sensitization and educational programmes • Enforcement of regulations and security • Relief measures and financial support

Significance of Study

The Ghana National Climate Change Policy (2014) and its Policy Action Programme for Implementation (2015-2020) have prioritized national adaptation programmes. The findings from this study contribute towards:

- 1. Policy mainstreaming:** Results define the specific challenges and priorities of vulnerable communities living in low-lying coastal areas and outlines significant national planning processes that the districts can align with to obtain support for mainstreaming adaptation processes.
- 2. Research into use:** The participatory process of the study provided the districts an opportunity to network with each other and share information as well as enhance their knowledge of climate change.

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