



Deltas, vulnerability and Climate Change; Mitigation and Adaptation (DECCMA) Fisheries for food security across climate change vulnerable deltas: Case study of the Volta delta, Ghana

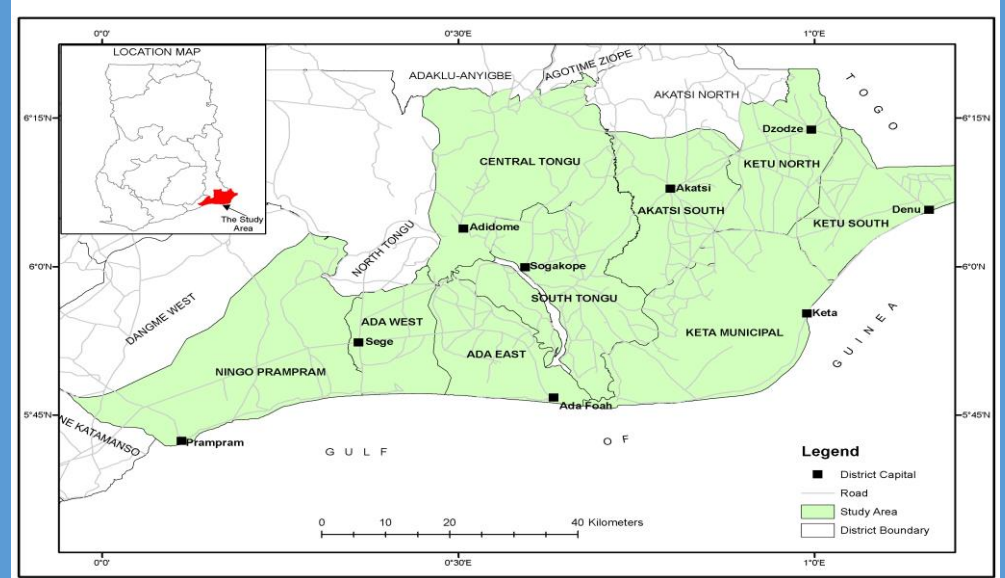
Patrick .K. Ofori-Danson; Prince Osei-Wusu Adjei; Kwasi Appeaning Addo and Samuel Amponsah.

Department of Marine and Fisheries Sciences, University of Ghana, Legon, Ghana

Corresponding author: ofordanson@gmail.com

INTRODUCTION:

- Food security exists when all people meets their dietary needs and food preferences for an active and healthy life.
- The Volta delta for DECCMA covers about 3,301 sq km with total population of 863,810.
- Agriculture and fisheries are the largest economic activities.
- Home to several fish species such as tilapia, mudfish, oysters, shrimps and others.
- Accra, Keta, Aflao and other cities are economic centres for fisheries products.
- The objective of this study is to model economically the impact of climate change on fisheries as input into IO table for prediction under different climate scenarios for 2030, 2060 and 2100 (WP4).



CASE STUDY OF THE VOLTA DELTA, GHANA

OVERVIEW:

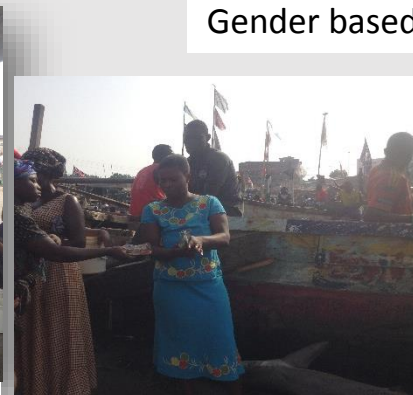
- Fish is the cheapest source of animal protein.
- National per capita consumption is estimated at 24.5kg in 2011.
- Covers 1.4 % of Ghana's GDP
- Provides national revenue through exports.



Employment



Mostly marketed locally



Income generation

Gender based



STRUCTURE OF FISHERIES

Marine :

- Includes artisanal, semi industrial and industrial fisheries.
- Marine catch consists of the lagoon and sea.



- Dominant species in the lagoon is the *Sarotherodon melanotheron* and the small pelagics like anchovy, mackerels and sardines.

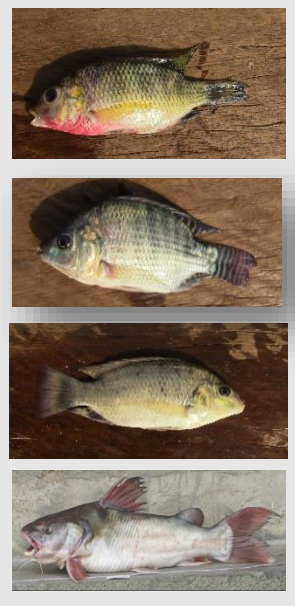
Aquaculture:

- Dominated by small scale operators.
- *Oreochromis niloticus* and *Clarias* sp. are some fish species in this sector.



Inland:

- Lake Volta contributes about 90% of the total production
- Some fish species include the cichlids and *Chrysichthys* sp.



THREATS



Overfishing



Marine pollution



Poor compliance



Mangrove degradation



Declining stocks

CONCLUSION:

- Mitigation of climate change impacts and other threats is crucial to the sustenance of fisheries contribution to food security in Ghana.