



**2nd Biennial Africa
Climate-Smart Agriculture Stakeholder Conference**

**Thematic Paper Presentation on
Compatibility assessment of
agroecology and CSA practices**

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Mangrove Forest Restoration Nature-Based Solution to Climate Change: An Agro-ecological Contribution to Climate Sensitive Agriculture in Coastal Communities

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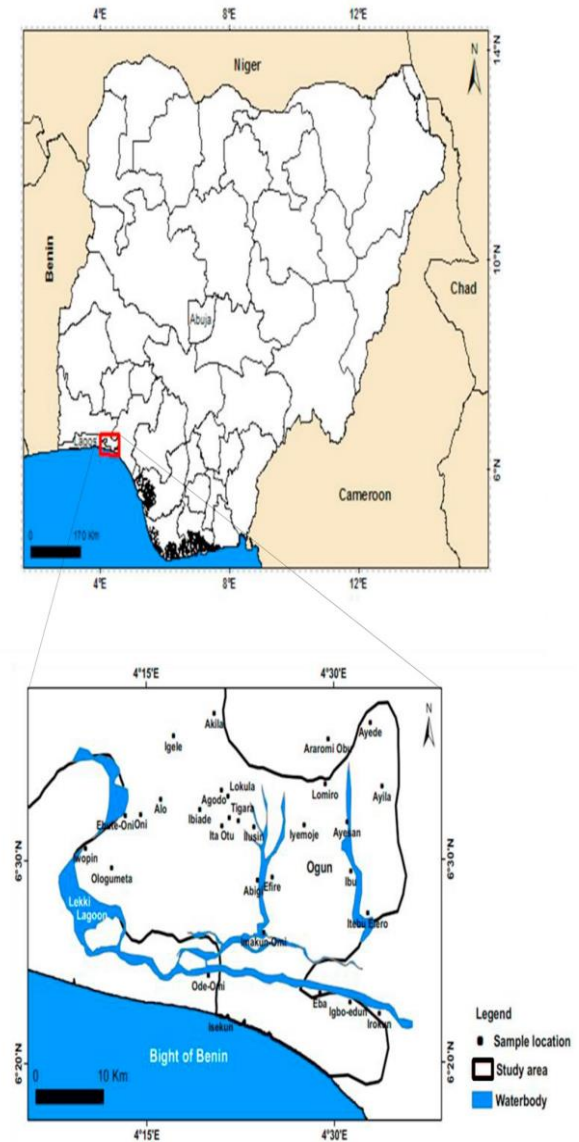
Background

- Climate change is the biggest threat our world faces
- **Mitigation** and **adaptation** are the most pressing actions
- The global climate crisis with **catastrophic consequences** is already affecting many **coastal** communities
- Improved understanding of the **interactions** between humans and ecosystems is essential for designing sustainable management
- **Mangroves** are among the most productive ecosystems yet amongst the **most threatened**
- Thus, the restoration of mangrove forests and other **coastal systems** is emerging as a **nature-based solution**
- Serving both as a **carbon sink** as well as offering **protection** and **food security** for the coastal communities



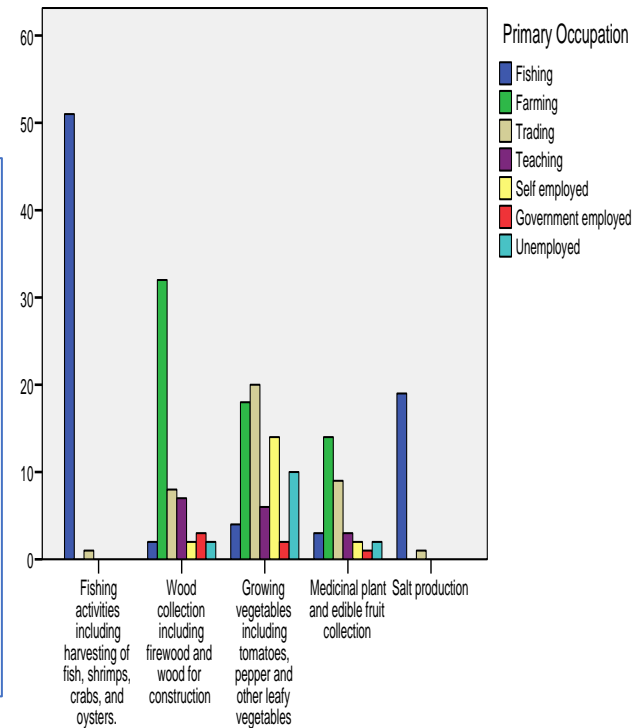
Methodology

- Study was conducted in **20 communities** of the Ogun Waterside Local Government Area in Ogun State, in Nigeria
- An area of 860km² with a total population of 74,222
- With a total sample size of **two hundred and thirty six (236)**
- Respondents were grouped into two age groups: **adults** (between 30 and 50 years) & **old people** (≥ 50 years) so as to characterize their experiences with time
- **Simple descriptive statistics** were employed using SPSS software to derive frequencies and percentages of all responses.
- **Non Parametric Wilcoxon Signed Ranks Test** was conducted to examine the manner of influence demographics weigh on the perception of respondents on:
 - ✓ mangrove forest awareness,
 - ✓ mangrove forest decline,
 - ✓ anthropogenic impact on mangrove degradation,
 - ✓ effect of climatic pattern on mangrove degradation, and
 - ✓ impact of mangrove degradation on agricultural practices.
- Test significant differences in perceptions and experiences by age, gender and other socioeconomic delimitations



Key findings

- People living in the coastal areas are mostly **native and indigenous**, though largely **with little or no education**
- Mangrove forests **naturally dominates** tropical coastlines providing **defense from storms and erosion**
- **Agriculture** has shown substantial capacity for climate adaptation
- Agricultural **extension work** along the coasts will help prepare them to **cope** adequately with the **changing environment**
- The **gender differentials** in the coastal community shows that more male are involved in securing the **livelihood** of their households than the female



- **Mangrove restoration** may therefore be another advantage for **offsetting such gender inequality** beyond proffering a **nature based solution to climate change**
- While **many observed the changing climatic pattern**, appreciation of the attendant impact and the consequences is lacking
- Of importance is the **knowledge gap about climate change and its impacts**
- There is an **intrinsic relationship of socioeconomic indicators** to the issues of **mangrove forests**
- **Age, gender and income** were found to pose significant influences on every aspect of the **mangrove** conversation from **awareness to implementation realities**
- **Human activities** bare untold influences on the **degradation of mangrove forests** and the links to **changing climate patterns** are plausible!

Key Recommendations & Conclusion



- This study has established the **gap in knowledge** of rural **coastal communities** about:
 - the **declining extent of mangrove forest** and
 - the **low level of awareness about climate change** which continues to drive the decline.
- The attendant implications have also been explored with the **demographic imprints** on the coastal community resolve to participate in **mangrove restoration** in the coastal stretch of Ogun Waterside in Ogun State, Nigeria.
- **Mangroves fringing the coastline** bending under the force of the ocean waves, protecting the communities on shore provides the best nature based solution to climate change impacts along the coast.
- **Mangrove reforestation** in places where **degeneration** has been experienced constitutes the most appropriate technique for **climate sensitive agriculture** capable of revamping the livelihood potentials among rural coastal communities.

THANK YOU



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Thank you



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