



ClimDev-Africa

CLIMATE CHANGE AWARENESS AND RESILIENT ADAPTATION: INDIGENOUS DRIVERS OF REGIONAL STI POLICY IN NIGER DELTA

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Introduction

- Niger Delta (ND) region - geopolitical, agro-ecological & economic importance . Inhabitants of ND are mainly farmers- predominance of rain-fed agriculture
- Massive emission of GHGs from 123 flaring sites warm the climate; fragile ecosystem ,human activities, rain-fed agriculture increase propensity for Climate Change (CC) and its impacts in the region
- Low adaptive capacity and projected CC impacts make ND especially vulnerable with serious consequences for agriculture and livelihoods.

To cope with CC impacts:

- Farmers employ indigenous knowledge and various local innovations in adapting to CC impacts
- Effective adaptation is predicated on adequate awareness. Ascertaining farmers' level of CC awareness and indigenous adaptations in the Niger Delta is imperative.



Research Questions

- How much awareness do Niger Delta farmers have about CC and its impacts?
- What are the sources of CC related information and how important are they to farming communities?
- What indigenous adaptive measures for CC are being practiced by Niger Delta farmers?
- How can such indigenous adaptation inform Science, Technology and Innovation (STI) policy in the region?



Methodology

- Primary and secondary data sources using both qualitative and quantitative approaches were used to collect data:
 - -Rapid Rural Appraisal,
 - -community fora,
 - -focus group discussions,
 - -key informant interviews
 - -semi-structured interview schedules
- Multistage (random) sampling technique was be used in selecting respondents for the study.
- 400 rural households were randomly selected from 12 communities in 3 states of the Niger Delta region



Results & Discussion

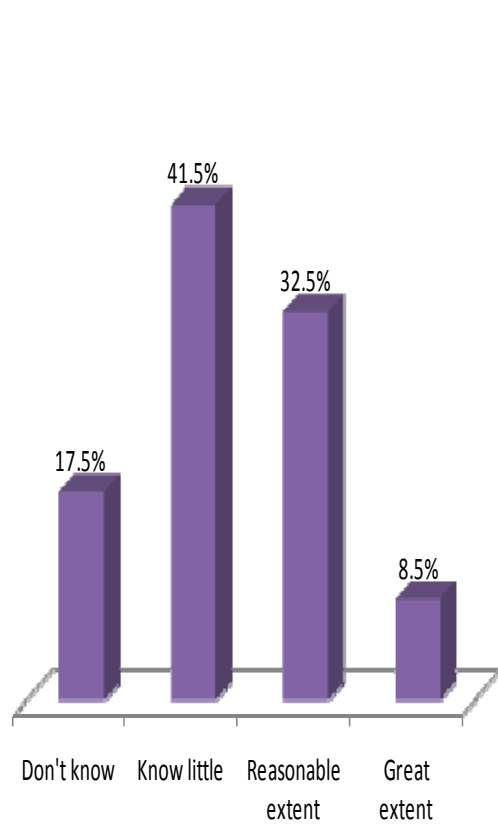


Fig. 2: Extent of Farmers' Awareness of Climate Change in Niger Delta

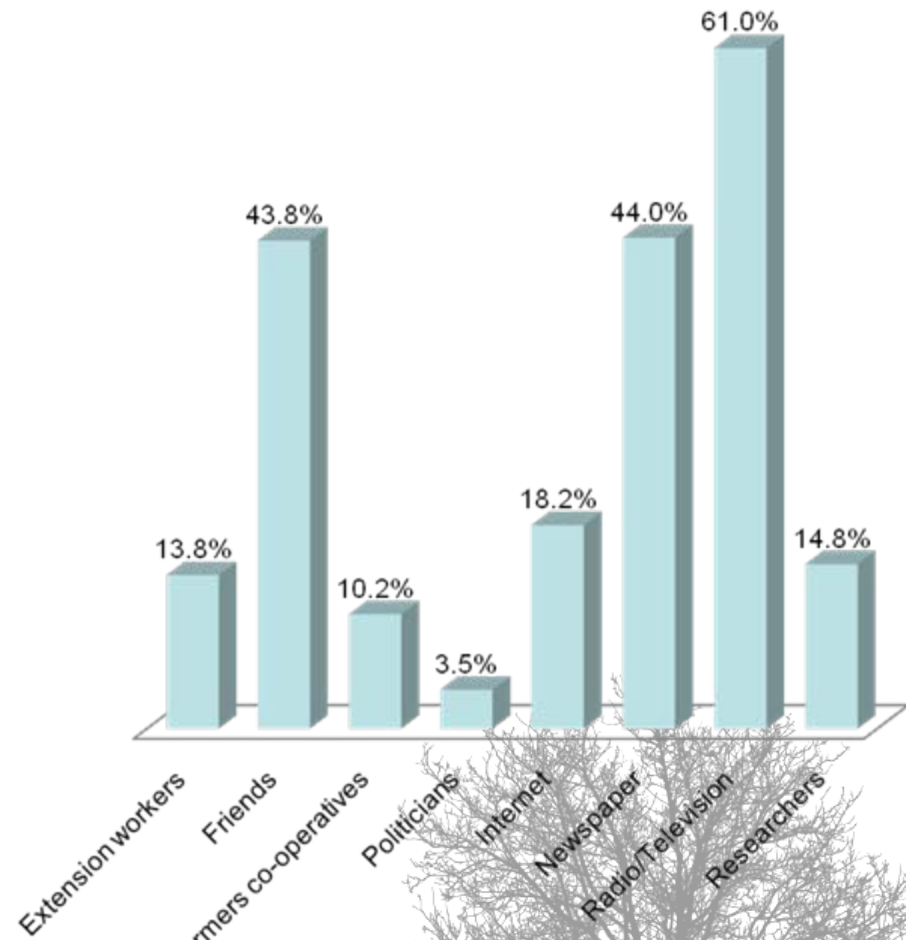


Figure 2: Sources of information on climate change

Table 1: Indigenous Adaptive Strategies

S/N	Adaptive strategies	Yes (%)	No (%)
A	Soil and water management		
1	Conservation of water and soil	50.5	49.5
2	Use of organic manures	72.0	28.0
3	Use of inorganic fertilizer	74.2	25.8
4	Use of minimum tillage system (zero or minimum)	57.4	42.8
5	Use of irrigation system/water storage	37.2	62.8
6	Protection of water sheds and mulching	64.5	35.5
7	Reclamation of wetlands/ river valleys	23.8	76.2
8	Making of contour bund around farmland	40.8	59.2
9	Draining of wetland for crop cultivation	30.8	69.2
B	Use of improved variety/crop protection		
10	Planting pest and disease resistant crop	40.2	59.8
11	Use of crop varieties that are well acclimated	45.0	55.0
12	Cover cropping	71.8	28.2
13	Use of weather-resistant variety	28.5	71.5
14	Use of early maturing crop varieties	57.5	42.5
15	Proper preservation of seeds and plant seedling used for planting	75.8	24.2
16	Use of windbreaks/shelter belts	35.8	64.2
17	Use of chemicals like herbicide, insecticide	53.8	46.2
C	Farm management practices		
18	Reforestation/ Afforestation	56.0	44.0
19	Planting of crop with early rainfall	80.2	19.8
20	Reducing access to eroded and erosion prone area	49.2	50.8
21	Mixed farming practices	77.2	22.8
22	Change of planting date	51.2	48.8
23	Use of recommended planting distance	41.2	58.8
24	Changing the timing of land preparation	43.2	56.8
25	Changing harvesting dates	45.2	54.8
26	Out migration from climate risk areas	31.5	68.8
27	Increase in number of weeding of cropped land	67.5	32.5
28	Listening to information about climate change	59.2	40.8
29	Processing of crops to minimize post-harvest losses	54.0	46.0

Regional STI Policy Implications of Study

- Programs, policies and activities for CC adaptation have not targeted/involved farmers
- Initiatives to build capacity of farmers in Niger Delta for resilient adaptation CC also lacking
- But, observed adaptive measures are indigenous to farmers & have been practiced for a long time
- Indigenous adaptive strategies could inform future Agriculture, Development and CC Policy in Nigeria.
- Investment in research and capacity building imperative for building resilient adaptation



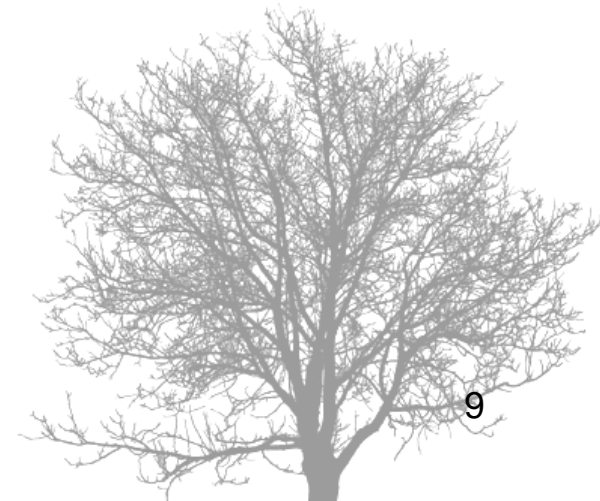
Policy Recommendations

Need to:

- Strengthen existing institutions to undertake research and policy advocacy into challenges of CC and adaptation measures.
- Improve funding for postgraduate training and research in universities already running programmes in CC and related subjects.
- Employ CBOs such as the well-attended Women's August Meetings in Igbo-speaking areas of the Niger Delta and the influential FBOs to spread the news on CC

Policy Recommendations conts.

- Seek to harness the mass media in influencing attitudes and behavior to CC. Programs, jingles and drama on CC to be aired in local languages.
- Note that mobile telephony is accessible to over half of Nigeria's population. Telecoms operators e.g. MTN, Airtel , Glo to be encouraged as part of their CSR to send SMS to subscribers on CC and adaptation measures for CC



Thank you for your attention!

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