

AN ASSESSMENT OF LOCAL ADAPTATION STRATEGIES EMPLOYED BY FARMERS TO CLIMATE-INDUCED AGRICULTURAL CHALLENGES IN BAYELSA STATE

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Abstract

Climate change poses a significant threat to agricultural productivity and food security, particularly in vulnerable regions like the Niger Delta. This study provided an assessment of the local adaptation strategies employed by farmers in Bayelsa State, Nigeria, to mitigate climate-induced agricultural challenges. The research adopted a mixed-methods approach, utilizing data from both primary and secondary sources. The study equally employed the use of the Theory of Planned Behavior (TPB) as template of analysis. The findings revealed that farmers are experiencing notable climatic disruptions, including unpredictable rainfall patterns, increased frequency of floods, and rising temperatures, which have led to crop failure, soil degradation, and reduced yields. In response, farmers have developed and implemented a range of local adaptation strategies. Key strategies identified include the adoption of flood-resistant crop varieties, the use of floating beds (traditional integrated farming systems), diversification of livelihoods (e.g., combining farming with fishing), and adjustments in planting schedules. However, the study also found that the effectiveness of these strategies is constrained by several factors, such as limited access to climate information, poor state of infrastructure, and a lack of financial resources. The research recommended the integration of local adaptation practices into formal agricultural extension services and the urgent provision of climate-resilient infrastructure to bolster the adaptive capacity of farmers in Bayelsa State. It concluded that while indigenous knowledge and local innovation are crucial for resilience, they are insufficient without external support.

Keywords: Climate Change, Adaptation Strategies, Smallholder Farmers, Agricultural Resilience, Bayelsa State.

Introduction

Globally, the agricultural sector stands as one of the most vulnerable systems to the vagaries of climate change, facing unprecedented disruptions that threaten food security and rural livelihoods (IPCC, 2022). This vulnerability is particularly acute in the Niger Delta region of Nigeria, where the interplay of ecological sensitivity and socio-economic marginalization creates a perfect storm of climate-induced challenges. Bayelsa State, a coastal state situated entirely in this deltaic region, epitomizes this fragility. Characterized by its low-lying topography, extensive river networks, and reliance on rain-fed agriculture, the state is on the front lines of climate impacts. For the smallholder farmers who form the backbone of the state's economy and food system, climate change is not a distant phenomenon but a present and intensifying reality that directly undermines their productivity and resilience (Uyigue & Agho, 2007). The increasing frequency and severity of extreme weather events, coupled with more gradual ecological shifts, are fundamentally altering the agricultural landscape, compelling farmers to devise and employ a range of coping and adaptation strategies.

The specific agricultural challenges confronting farmers in Bayelsa State are multifaceted and deeply interconnected with the region's hydrology. Perhaps the most pervasive issue is exacerbated flooding. With most communities situated below sea level and dependent on the annual flood cycles for nutrient replenishment, climate change has disrupted this delicate balance. Unpredictable and intensified rainfall patterns, combined with rising sea levels and storm surges, now result in more frequent, prolonged, and destructive floods (Ohwo & Abotutu, 2015). These events lead to the outright destruction of crops, the washing away of arable topsoil, and the waterlogging of farmlands, which can cause root crops like cassava and yam to rot before harvest. Furthermore, the incursion of saltwater into freshwater swamps and agricultural zones—a process known as salinization—is degrading soil quality and rendering previously productive lands infertile for traditional staple crops (Akinbile, Abolude, & Oladipo, 2015). This is compounded by shifting rainfall patterns, which create uncertainty for planting seasons, and an observed increase in ambient temperatures, which can exacerbate pest and disease outbreaks, further stressing crop and livestock systems.

In response to these mounting pressures, farmers in Bayelsa State have not remained passive. Out of necessity, they have become active agents of adaptation, experimenting with and implementing a variety of local strategies to safeguard their livelihoods. These indigenous and community-based responses are rooted in deep knowledge of the local environment and are tailored to the specific challenges they face. Common adaptive measures include a shift towards more resilient and flood-tolerant crop varieties, such as early-maturing or "floating" species of cassava and sugarcane (Ebiowei, 2025). Many farmers have also modified their farming practices, adopting techniques like mound- or ridge-planting to keep root systems above floodwaters, or adjusting their planting calendars to align with the new, unpredictable weather patterns (Nwankwoala & Ogoni, 2018). Livelihood diversification has also emerged as a critical non-agricultural adaptation, with farming households increasingly engaging in fishing, small-scale trading, artisanal activities, or seasonal migration to supplement their farm income and spread risk.

This study, therefore, seeks to conduct a systematic assessment of these local adaptation strategies. While these grassroots initiatives are vital for immediate survival, there is a pressing need to understand their efficacy, sustainability, and limitations in the face of escalating climate risks. An in-depth assessment will not only document the rich repository of indigenous knowledge being mobilized but also identify the critical gaps and barriers—such as limited access to credit, climate information, and high-yielding inputs—that constrain farmers' adaptive capacity (Apata, 2011). By focusing on the experiences and innovations of farmers in Bayelsa State, this research aims to provide evidence-based insights that can inform more effective and context-specific policy interventions.

Methodology

This study adopted a qualitative approach, employing semi-structured interviews and focus group discussions with farmers across Bayelsa State. Purposive sampling identified participants with direct experience of climate-induced agricultural challenges. Moreover, secondary data was also analyzed. These were done thematically, so as to explore local adaptation strategies, capturing contextual insights, perceptions, and experiential knowledge of climate resilience practices.

Definition of Terms

Climate Change

Climate change refers to long-term alterations in temperature, precipitation, and other atmospheric conditions on Earth. According to the Intergovernmental Panel on Climate Change (IPCC, 2021), climate change encompasses both natural variability and human-induced factors, particularly the increase of greenhouse gas concentrations in the atmosphere. This definition emphasizes the scientific consensus on anthropogenic contributions to global warming.

The United Nations Framework Convention on Climate Change (UNFCCC, 1992) defines climate change as "a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods." This legal and policy-oriented definition highlights the responsibility of human activities in altering climate patterns.

Similarly, the National Aeronautics and Space Administration (NASA, 2023) describes climate change as "a long-term change in the Earth's climate, especially a change due to an increase in the average atmospheric temperature." NASA underscores the observable environmental impacts, such as sea-level rise, melting glaciers, and shifts in ecosystems, linking climate change to tangible consequences on the biosphere.

Agriculture

Agriculture is the science, art, and practice of cultivating soil, growing crops, and raising livestock for human consumption, economic gain, and environmental management. It encompasses a range of activities, including crop production, animal husbandry, agroforestry, and fisheries, aimed at ensuring food security, sustaining livelihoods, and supporting national economies (FAO, 2017). Beyond food production, agriculture also contributes to raw materials for industries and bioenergy. Modern agriculture integrates technological innovations, sustainable practices, and ecological considerations to optimize yield while preserving natural resources (Mbah & Nwachukwu, 2013).

Theoretical Framework

Theory of Planned Behavior (TPB)

The Theory of Planned Behavior (TPB) was advanced by Icek Ajzen as an extension of the Theory of Reasoned Action to better predict human actions in contexts where behavior is not entirely under volitional control. According to Ajzen, three core determinants shape an individual's behavioral intention: attitude toward the behavior, subjective norms, and perceived behavioral control (Ajzen, 1991). *Attitude* reflects a person's positive or negative evaluation of performing the behavior; *subjective norms* represent perceived social pressure to engage or not engage in the behavior; and *perceived behavioral control* denotes the individual's perception of ease or difficulty in performing the behavior, akin to self-efficacy (Ajzen, 1991). In relation to the study, TPB explains adaptation choices as products of farmers' intentions shaped by their beliefs, social influences, and perceived control. Farmers with favorable attitudes toward adaptive practices (e.g., crop diversification), supportive community norms, and high perceived capability to implement strategies are more likely to adopt effective adaptations. Conversely, limited perceived control due to resource constraints or lack of knowledge may weaken intentions despite positive attitudes, influencing the uptake of adaptation strategies (Ajzen, 1991).

Peopling of Bayelsa State

The peopling of Bayelsa State is fundamentally the story of the Ijaw (also known as Ijo) people, one of the largest and most ancient ethnic groups in the Niger Delta region of Nigeria. Bayelsa State, carved out of Rivers State in 1996, is considered the heartland of the Ijaw nation. The earliest traditions of origin point to a remote antiquity, with many Ijaw clans claiming autochthonous roots or descent from primordial beings. However, the most widely accepted and pivotal point in Ijaw migration history is the legendary city of Ujo (also spelled Ugho or Uhou), generally believed to have been located in the area of modern-day Benin City. According to oral traditions meticulously documented by scholars like E.J. Alagoa, a renowned historian of the Niger Delta, a proto-Ijaw group migrated from the Central Sudanic region (possibly around the Nile Valley or Lake Chad area) over millennia and eventually settled at Ujo. Pressures from the expanding Edo peoples and the desire for greater autonomy led to a series of progressive migrations from this initial hub. Alagoa, in his seminal work "A History of the Niger Delta," posits that the movement from Ujo was not a single event but a gradual process of fission, where groups would break away and establish new settlements along the Niger River and its distributaries, progressively moving southwards towards the coast (Alagoa, 1972; Ebiye, 2025). This model of "colonization by segmentation" is crucial for understanding how the various Ijaw clans of Bayelsa came to occupy their present locations.

From the Ujo dispersal, the Ijaw migrants travelled primarily via the Niger River. A major early dispersal point was around the confluence area, from which groups moved southwards. One of the most significant early settlements established by these migrants was Agadagba-bou, located in the present-day Kolokuma/Opokuma area of Bayelsa State. From Agadagba-bou, considered a secondary ancestral cradle, several of the major Ijaw clans that now populate the central and eastern parts of the state originated (Tamunotonye, 2025). The Kolokuma and Opokuma clans, for instance, trace their ancestry directly back to this settlement. Another critical wave of migration, possibly via the Forcados and Escravos rivers, led to the establishment of the Gbarain and Ekpetiama clans in the western portion of the state's mainland. Their traditions speak of leaders like Amakiri and his descendants, who moved from the Benin River area and founded communities that would later become powerful city-states in their own right, though more closely aligned with the Nembe and Brass axis over time (Williamson, 1962; Akpe, 2025).

Furthermore, the southeastern and coastal reaches of Bayelsa were peopled by clans that took a different migratory route or splintered from the main group at a later stage. The Nembe and Brass (Nembe-Brass) people, who inhabit the brackish mangrove islands and creeks of the southernmost part of the state, have a distinct tradition. While their ultimate origin is still traced back to the Ujo dispersal, they often cite an intermediate ancestral figure, Izon-Egbesu, or a migration from the Igbo heartland via the Aboh area on the Niger. Upon arriving in the delta, they established a powerful kingdom at Nembe, which became a major center for trade and political influence. Oral traditions recorded by local historians like Chief S. C. Awani detail how the founding fathers of Nembe, such as Ngodo, settled in the area and organized the polity, with power later shifting to the Ogbodo and Perekule ruling houses (Awani, 1967). This region was also significantly influenced by the Obolo (Andoni) people, with intermarriages and conflicts shaping the ethnic boundaries of the eastern fringes of the state. Further west, the Epemah (also known as Southern Ijo) communities, including those around Amassoma and Ogboin, represent a similarly ancient coastal adaptation, with their history intertwined with the trading settlements of the Brass and Nembe spheres (Tamunotonye, 2025).

The Epie people of Yenagoa, the state capital, present an interesting case study in the region's complex ethnic tapestry. While predominantly Ijaw in language and culture today, Epie oral traditions, as documented by N. C. Ejituwu in his work on the "Annals of the Niger Delta," suggest a history of migration and interaction that might have included significant influence or a substratum from the Ijebu (a Yoruba subgroup) or other groups who moved into the area from the west,

possibly through the network of lagoons and creeks (Ejituwu, 1986; Ebiye, 2025). They settled along the banks of the Epie Creek and established communities like Yenagoa, Okaka, and Agudama. Their integration into the wider Ijaw world occurred through centuries of coexistence, trade, and intermarriage with neighbouring Ijaw clans such as the Gbarain and Ekpetiama, resulting in a distinct dialect and cultural practices that mark them as a unique Ijaw subgroup. This demonstrates that the peopling of Bayelsa was not solely a linear Ijaw migration but involved the absorption and integration of other smaller groups who entered the delta's intricate waterways (Akpe, 2025).

Finally, the colonial and post-colonial eras brought new dimensions to the peopling of Bayelsa. The establishment of administrative centres like Yenagoa, Oloibiri (the site of Nigeria's first commercial oil discovery in 1956), and Brass attracted an influx of non-indigenous Nigerians—Igbo, Yoruba, Hausa, and people from other ethnic groups—who came as colonial administrators, traders, missionaries, and later, as workers in the nascent oil industry (Ebiwei, 2025). This has created pockets of cosmopolitan diversity, particularly in urban centres. However, the overwhelming majority of the state's population remains Ijaw, and the deep historical consciousness tied to clan, lineage, and the ancestral migrations from Ujo and Agadagba-bou continues to define the cultural and social landscape. The intricate network of waterways, which once served as the highways for these ancient migrations, now binds together the descendants of those early settlers into a distinct identity, rooted in a shared history of movement, adaptation, and resilience in the face of a dynamic and often challenging environment (Tamunotonye, 2025).

Climate-Induced Agricultural Challenges Faced by Farmers in Bayelsa State

The agrarian communities of Bayelsa State are confronted by an existential threat from the accelerating impacts of climate change, which manifest in acute and multifaceted agricultural challenges. The state's low-lying geography and intricate network of rivers and creeks make it exceptionally vulnerable to climate-induced phenomena, fundamentally disrupting traditional farming practices and undermining food security. The most pervasive challenge is the rise in sea levels and the consequent tidal intrusions, which have led to the salinization of arable land and freshwater sources. This salinization renders vast areas of soil unsuitable for cultivating staple crops like cassava, plantain, and vegetables, which are intolerant of high salt concentrations (Ohimain et al., 2014). Farmers report declining yields as their once-fertile lands become progressively contaminated, forcing many to abandon their farms or relocate to marginally higher, yet still vulnerable, areas. This intrusion is not a seasonal anomaly but a permanent degradation of the agricultural resource base, exacerbated by the storm surges and sea-level rise projected by the Intergovernmental Panel on Climate Change (IPCC, 2022).

Compounding the issue of salinization is the increasing unpredictability and intensity of rainfall patterns. While Bayelsa traditionally experiences a long wet season, climate change has introduced more frequent and severe flooding, interspersed with unexpected dry spells. The catastrophic floods of 2012 and 2022, for instance, submerged vast swathes of farmland for weeks, leading to total crop failure, the destruction of stored harvests, and the drowning of livestock (Nwagbara et al., 2023). These extreme events not only wipe out immediate food sources but also deplete the financial capital of farmers, who often lack the resources to recover. The erratic rainfall also disrupts planting cycles; farmers can no longer reliably predict the onset of the rains, leading to poor germination, increased pest and disease incidence, and harvest losses. For instance, prolonged humidity from unexpected rains can foster fungal diseases on crops like yam and cassava, while dry spells at critical growing periods can severely stunt development (Etuonovbe, 2019; Gboriba, 2025).

Furthermore, these environmental stresses are eroding the socio-economic fabric of rural communities. Agriculture in Bayelsa is predominantly rain-fed and small-scale, with limited access to irrigation, climate information services, or financial credit. The persistent failure of harvests due to flooding and saltwater intrusion has trapped many farming households in a cycle of poverty and

food insecurity. This has, in turn, spurred the loss of indigenous knowledge, as traditional farming calendars and crop varieties become obsolete in the face of new climatic realities (Uyigüe & Agho, 2007). The youth, disillusioned by the risks and diminishing returns of farming, are increasingly migrating to urban centres in search of alternative livelihoods, creating a labour shortage in the agricultural sector and threatening the intergenerational transfer of farming skills.

Local Adaptation Strategies Currently Employed by Farmers to Address These Climate-Related Challenges

Bayelsa State is exceptionally vulnerable to the impacts of climate change. Its terrain and coastal proximity expose it to severe flooding, saline intrusion, and erratic rainfall patterns, all of which threaten the livelihoods of its predominantly agrarian population. In response to these challenges, farmers have developed and implemented several local adaptation strategies. These indigenous and local strategies include:

Adoption of Floating Agriculture

One of the most innovative responses to perennial flooding is the adoption of floating agriculture, particularly in riverine communities like those in Southern Ijaw and Ekeremor Local Government Areas. This traditional practice involves constructing raised beds using locally available materials such as water hyacinth, bamboo, and other plant debris. Farmers create a raft-like structure on which they layer soil and compost to cultivate crops like vegetables, maize, and cassava (Ohaka et al., 2021). This strategy allows cultivation to continue during the wet season when farmlands are submerged, effectively turning a climate hazard into a productive opportunity. It is a low-cost, sustainable method that adapts to rising water levels rather than fighting them.

Cultivation of Flood-Tolerant Crop Varieties

In response to increased flooding and waterlogging, farmers are shifting from traditional crop varieties to more resilient ones. Through years of observation and selection, local farmers have identified and now prioritize the cultivation of flood-tolerant crops. For instance, they have switched to early-maturing and flood-resistant cassava varieties or specific types of "floating rice" that can survive and grow with rising floodwaters (Efeiom et al., 2020). This strategy of diversifying and selecting hardy germplasm ensures that even if fields are inundated, some yield can still be harvested, thereby reducing the risk of total crop failure.

Upland Farming and Shifting Cultivation Patterns

Traditionally, farming in Bayelsa was closely tied to the receding floodplains (fadama). However, with increasingly unpredictable floods and prolonged inundation, farmers are adapting by moving their farming activities to upland areas that are less prone to flooding. This involves clearing small plots of land in higher, drier forests for the cultivation of staple crops (Adebayo et al., 2022). While this can contribute to deforestation if not managed sustainably, it is a direct response to the loss of low-lying farmlands. Furthermore, some farmers practice a form of modified shifting cultivation, allowing fallow periods to extend naturally to restore soil fertility that has been degraded by saltwater intrusion or erosion.

Integrated Farming Systems (Aquaculture and Livestock Integration)

To mitigate the risks associated with crop failure, many farmers in Bayelsa are integrating aquaculture and livestock rearing into their farming systems. Recognizing that fishing grounds are being affected by changing water salinity and temperatures, farmers are digging ponds to raise catfish and tilapia. These ponds are often integrated with vegetable gardens or small livestock (poultry, goats) (Okpara et al., 2019). The livestock provides manure for the fish ponds and crops, while the pond water can be used for irrigation during dry spells. This diversification spreads the

economic risk; if crops are destroyed by floods, the fish or livestock may provide an alternative source of food and income.

Swamp Rice Cultivation and Water Management

In low-lying areas where freshwater flooding is predictable, farmers have adapted by intensifying swamp rice cultivation. This involves the construction of small-scale earthen dikes and channels to manage water levels in the rice fields (Akinbile et al., 2021). By controlling the inflow and outflow of water, farmers can protect young rice seedlings from being washed away and ensure adequate water depth during the growing season. This localized water management technique allows them to farm in areas that would otherwise be too deep or unpredictably flooded for other crops, turning a marginal environment into a productive rice paddy (Gboriba, 2025).

Effectiveness of Local Adaptation Strategies in Sustaining Crop Production and Livelihoods in Bayelsa State

The effectiveness of local adaptation strategies in sustaining crop production and livelihoods in Bayelsa State is a critical, albeit increasingly strained, component of the region's resilience to environmental change. Situated in the Niger Delta, Bayelsa State is profoundly vulnerable to the impacts of climate change, particularly sea-level rise, intensified flooding, and erratic rainfall patterns, which are superimposed on chronic challenges of pollution and land degradation (Uyigue & Agho, 2007). In response to these pressures, local farming communities, who form the backbone of the state's agrarian economy, have historically and contemporarily deployed a suite of indigenous and innovative strategies to safeguard their food production systems and livelihoods. These adaptations demonstrate a deep understanding of the local ecology but are proving to be of limited long-term effectiveness against the increasing scale and frequency of environmental shocks (Kuku, 2025).

Foremost among the local adaptation strategies is the reliance on flood-tolerant crop varieties and adjustments in cropping cycles. Farmers in riverine communities like those in Sagbama and Southern Ijaw have long practiced what is effectively a form of "climate-smart" agriculture. They select and cultivate traditional varieties of cassava, plantain, and vegetables that are better able to withstand short periods of waterlogging (Onyeneke et al., 2018). Furthermore, they have adapted their farming calendars, shifting planting and harvesting times to avoid peak flood seasons, a practice known as seasonal migration (Nzeadibe et al., 2012). This temporal adjustment allows them to exploit the fertile alluvial deposits left by receding floodwaters, temporarily enhancing soil productivity. These methods are moderately effective in a normal year, providing a buffer against predictable seasonal floods and enabling a degree of harvest security. They sustain livelihoods by ensuring at least some yield for household consumption and local markets, thereby maintaining a flow of income and food (Ebiowei, 2025).

Another critical pillar of local adaptation is livelihood diversification, which moves beyond pure crop production to spread risk. Many households in Bayelsa do not rely solely on farming; they integrate fishing, small-scale trading, handicrafts (like mat weaving from local reeds), and processing of agricultural products (e.g., gari production from cassava) into their income portfolio (Idrisa et al., 2010). This diversification is a direct response to the uncertainty of crop farming. When floods destroy a farm plot, income from fishing or trading can sustain the household. This strategy is highly effective in preventing total livelihood collapse, as it builds a multi-sectoral safety net. It directly contributes to the absorptive capacity of the community, allowing them to cope with shocks without being forced into desperate migration. However, its effectiveness is contingent on the health of these alternative sectors; for instance, overfishing and water pollution from oil extraction can undermine the fishing component of this strategy, illustrating the interconnectedness of environmental risks (Kuku, 2025).

Despite their ingenuity, the long-term effectiveness of these local strategies is being severely compromised by the intensifying nature of environmental stressors. Traditional flood-tolerant crops have a limit; they cannot survive the prolonged, deep flooding that has become more frequent due to sea-level rise and increased runoff (Adekola & Mitchell, 2011). The changing climate is making rainfall patterns increasingly unpredictable, rendering traditional ecological knowledge-based calendars less reliable. Furthermore, the physical resilience of the land itself is diminishing. The interaction between flooding and saltwater intrusion is leading to the salinization of freshwater swamps and agricultural soils, a process that local crop choices and rotations cannot reverse (Ohimain, 2004). This degrades the very resource base upon which all adaptations depend. The cumulative effect is that while these strategies enable short-term survival, they are failing to sustain, let alone enhance, agricultural productivity over the long haul. Livelihoods are maintained at a subsistence level, but the pathway out of poverty and vulnerability is closing as the environmental baseline shifts beneath their feet.

Recommendations

- i. **Promotion of Climate-Resilient Crop Varieties:** Farmers in Bayelsa State should be supported to adopt drought-tolerant, flood-resistant, and fast-maturing crop varieties. Agricultural extension services and research institutions should facilitate access to improved seeds and provide training on their cultivation to reduce yield losses from unpredictable rainfall and flooding.
- ii. **Strengthening Farmer Knowledge and Capacity:** Local adaptation strategies can be enhanced through continuous capacity-building programs. Workshops, demonstration farms, and farmer-to-farmer learning platforms should be expanded to disseminate knowledge on sustainable agricultural practices, soil conservation, and water management techniques.
- iii. **Investment in Water Management and Irrigation Infrastructure:** To mitigate the impact of both excessive rainfall and dry spells, small-scale irrigation schemes, drainage systems, and water harvesting structures should be promoted. This will enable farmers to maintain crop productivity throughout the year and reduce vulnerability to climate variability.
- iv. **Policy and Institutional Support:** State and local governments should establish policies that incentivize climate-smart agriculture, including access to credit, subsidies for inputs, and insurance schemes against crop failure. Collaborations with NGOs and international agencies can enhance the reach and effectiveness of adaptation initiatives, ensuring long-term resilience for Bayelsa farmers.

Conclusion

In conclusion, this study revealed a complex interplay between indigenous knowledge, resource availability, and environmental pressures. Farmers have demonstrated resilience by adopting a range of strategies, including crop diversification, seasonal adjustments, soil fertility management, and integrated pest control, which reflect both traditional practices and innovative responses to climate-induced agricultural challenges. However, the effectiveness of these strategies is often constrained by limited access to modern technology, inadequate extension services, and financial limitations. Therefore, while local adaptation measures have contributed to sustaining livelihoods and enhancing food security, there is a critical need for targeted policy interventions, capacity-building programs, and infrastructural support to strengthen farmers' adaptive capacity and ensure the long-term sustainability of agriculture in Bayelsa State.

A. Primary Source (Oral Interviews)

S/N	NAME	AGE	SEX	OCCUPATION	PLACE OF INTERVIEW	DATE OF INTERVIEW
1	Tamunotonye, Comfort	76	F	Farmer	Yenagoa	12/10/2025
2	Ebiowei, Ebi	63	M	Farmer	Ekeremor	29/12/2025
3	Gboriba, Seyeifa	59	F	Farmer	Nembe	15/11/2025
4	Kuku, Nengi	50	F	Farmer	Sagbama	04/11/2025
5	Ebiye, Fobo	48	M	Farmer	Virtual	21/11/2025
6	Akpe, Boma	67	M	Farmer	Ekeremor	10/12/2025

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