

# Communicating Climate Change Knowledge and Livelihood Vulnerabilities to Non-Literate Populations in Bayelsa State, Nigeria

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## Abstract

This study focuses on communicating climate change and livelihood vulnerabilities to non-literate people in Bayelsa State, Nigeria, drawing on Alfred Schutz's social phenomenology to foreground everyday lived experiences and meaning making within their lifeworld. Using an Interpretive Phenomenological Approach (IPA), the study relied on in-depth interviews with 36 participants who are unable to read and write, with data thematically and narratively analysed after transcription, coding, and clustering. The findings show that, despite a near absence of formal knowledge of the terminology of climate change, non-literate people possess a significant depth of understanding of changing weather patterns, crop vulnerability, flooding, declining fish catches, and damage to fishing tools, all of which undermine their traditional livelihood activities and force livelihood shifts. However, there is a significant lag between formal climate change communication and the lived experiences or realities of non-literate populations, as information, and by extension, knowledge is often disseminated using high-level English and through elite-driven platforms like newspapers, radio, and official documents, leaving non-literate populations to lean largely towards their personal lived experiences and informal conversations to frame their own perspective of environmental changes. Additionally, the study reveals that culturally appropriate mediums like town-crying, town-hall meetings, and the use of trusted community elders or leaders, delivered using local dialects and Pidgin English, offer more accessible and meaningful channels for communicating climate change to non-literate populations. Therefore, it recommends the need to embed climate change communication within culturally familiar practices, spaces, and languages as a way of bridging communication gap and enhancing adaptive capacities for effective and inclusive climate change framing in Bayelsa State.

## **Background to the Study**

Climate change has been defined by the Intergovernmental Panel on Climate Change, as statistically significant variations that persist for an extended period, typically decades or longer (IPCC, 2001). The changing nature of the climate and its associated consequences constitute a global concern, particularly because of the multifaceted impact it has on the ability of humans to sustain themselves. This is even more worrisome when we consider the gravity of negative the impacts that this poses for most people in less developed countries, particularly in the rural areas, who depend on the natural environment for their livelihoods. Perhaps, it is the near general consensus on these challenges that has prompted magnitude that has made the discussion of climate change largely attractive to governments, academics, and other related stakeholders across the world.

While climate change and the increasing warming of the earth poses several challenges, the primary effects are an increase of droughts and floods, more seasonal peaks in river flow, and a higher probability of stronger tropical storms. Although the different regions of the world share in this possible climate holocaust, sub-Saharan Africa is disproportionately impacted due to several systemic setbacks that include, but not limited to widespread poverty, weak institutional capacity, and over-reliance on climate sensitive livelihoods. Additionally, countries in the region, including Nigeria, suffer the most because of their geographical location and low incomes amidst an economic scenario that accommodates more natural resources dependent livelihood activities, particularly within agricultural sector. The impacts of climate change on agriculture are projected to manifest through changes in land and water regimes, specifically, changes in the frequency and intensity of droughts, flooding, water shortages, worsening soil conditions, desertification, disease and pest outbreaks on crops and livestock. This gets even more scarier when we consider available projections that do not just present gory statistics but also a grim global outlook. Reports by the IPCC and the Food and Agricultural Organization (FAO) bring some of these scary statistics much closer to us by noting that global warming resulting from climate change is expected to intensify, with agriculture bearing the major brunt of associated impacts (IPCC, 2001; FAO, 2014). On a more precise note, the FAO (2014) expressed the concern that climate change has the potential of pushing over 122 million more people, particularly farmers into extreme poverty come 2030.

Closely related to the above is the threat that climate change poses to fishing communities across the world, exposing a trend of escalating vulnerability due to ocean warming and sea level rise. Duru et al. (2020) contend that small-scale fishing communities across the world directly supports over 200 million people and several millions indirectly, but this livelihood support system is more than ever before confronted with unprecedented climate-induced disruptions. Bell et al.'s study shows that in the Pacific Island, fishing communities continue to encounter some of the most lethal climate change impacts with a projected decline of 20% by 2050 and an annual economic loss of \$180 million. This vulnerability extends to places such as the Caribbean and Mediterranean fishing communities where hurricane damages and ocean warming present continue to push

back fish yields leading to an estimated loss of \$890 million annually (Hidalgo et al., 2022). This is also the case in South America, where countries like Peru and Chile face between 20% and 50% drop in maximum fish catch as reduced coastal upwelling and ocean warming combine to undermine productivity (FAO, 2022). In Africa and particularly in Nigeria's Niger Delta region, fishing communities suffer similar fate and this is even worse in Bayelsa State where the vulnerability is further upscaled due to perennial flooding that is believed to cause over 40% decline in fish catches (Chukwu-Okeah, Wekpe, & Ikebude, 2018).

In Bayelsa State, climate change has been identified as a major threat to the livelihoods of indigenous people. For instance, Ikehi, Onu, Ifeanyieze, and Paradang (2014) note that the main impacts of climate change in the area are coastal erosion, floods, and loss of coastal vegetation which adversely affects the mangroves. This clearly presents some associated difficulties for local people in their quest to carryout productive livelihood activities. Taking this further, Odele, Idris, Babalola, and Modibbo (2022) contend that the effects of climate change on the livelihoods of the people of Bayelsa State has further worsened poverty, while imposing a need for traditional adaptations to these changes. The fact that the Niger Delta region and indeed Bayelsa State depend heavily on their natural environment for their livelihoods is no longer a subject of debate. Odele, Nasiru, Medugu, and Babalola (2022) note that most rural residents in Bayelsa State are fisher folks, farmers, local gin distillers, petty hunters, among others. These livelihood activities are largely moderated by the dynamics of the physical environment and climate change seems to be taking a major toll.

Interestingly, despite widespread attention, climate change discourse, especially its impacts on livelihood vulnerability have remained largely marginal for people that we consider non-literate in this study. This limitation in the communication of climate change and its impacts on the local livelihoods of people is by far felt in less developed countries like Nigeria where the level of illiteracy is particularly high. For instance, Nigeria currently suffers an illiteracy rate of 31% (62 million people) (Kareem, 2022) and Bayelsa state is disproportionately affected by this. Communicating climate change to this number of non-literate people (Raimi & Bieh, 2020; Raimi, Umunnah, Lawson-Ikuru, 2025) is considered to be very crucial if we are to promote conditions that could enable them to adapt to the adverse impacts of climate change on their livelihoods. It is this concern that this study addresses. Essentially, the study provides answers to the following questions:

- i. How do non-literate populations in Bayelsa State perceive and engage with the impacts of climate change on their livelihood activities?
- ii. What are the challenges that non-literate people encounter in terms of accessing, engaging with, and understanding existing climate change communication efforts?
- iii. What culturally appropriate communication techniques and indigenous knowledge practices can effectively convey climate change-induced livelihood vulnerabilities to non-literate populations?

## Literature Review

The literature on climate change and livelihood systems in Nigeria can be grouped into four distinct areas. The first group focused more on discussing vulnerabilities to climate change based on poverty dynamics. Scholars who fall under this category have argued that poor people find it more difficult to cope with the impacts of climate change whether in rural or urban communities. This view draws attention to the relationship between socioeconomic status and vulnerability to climate change, focusing on how poor households grappled with the harsh realities of climate risks and the implications of this for their adaptive capacity. For instance, Oluwafemi and Oluwaseun's (2013) study on environmental and livelihood vulnerabilities of low-income coastal settlements in Lagos, Nigeria, revealed that low-income households tend to have difficulties adapting to the impact of climate change on their livelihood systems. Adelekan, Oyebisi, and Oyinlola (2022) in another study on the effects of climate change on the livelihood strategies of poor and vulnerable urban dwellers in Ibadan, Nigeria.

The second set of studies are mostly those who appeal to the gender dimension of climate change impact on livelihood. Duru, Aro, and Oladipo (2022) in their study on the gendered effects of climate change on the livelihood in Ilorin South, Nigeria, found that women are more vulnerable to the negative impacts of climate change when it comes to livelihood since in most cases, they tend to have close socioeconomic link with nature. Here, the findings of Duru et al. (2022) support a previous work by Raimi, Alfred, and Seibarugu (2015) who in a study of women's firewood consumption and deforestation found that women are disproportionately impacted by the effects of climate change in Bayelsa State.

Thirdly, we have another group of literature or studies that have linked climate change to adaptive capabilities. Although this category of studies can be conveniently woven into any of the two discussed above, it is safe to see it as a stand-alone since the views of the scholars on adaptation covers knowledge, culture, personal skills etc. (Adger, Arnell, & Tompkins, 2015). Studies that fall under this category have tended to focus their interest on how local people adapt to climate change, especially using traditional knowledge of environmentally friendly skills to navigate the adverse effects of climate change (Elum & Snijder, 2023).

The fourth group of scholars are those who fall within the context of our proposed study even though their works have tended to marginalize a group of persons with a sensitive form of vulnerability. In this group are studies that focus on how climate change communication is done especially the unique challenges faced by vulnerable populations in accessing and adapting to climate information (Nzeh, Okeke, & Nwankwoala, 2012; Johnston, 2020; Raimi & Bieh, 2020; Sill, Ayala, Rolf, Smith & Dye, 2023). This set of literature emphasizes the importance of climate change literacy and effective communication strategies in empowering vulnerable populations to respond to the challenges of climate change.

### **Theoretical Framework**

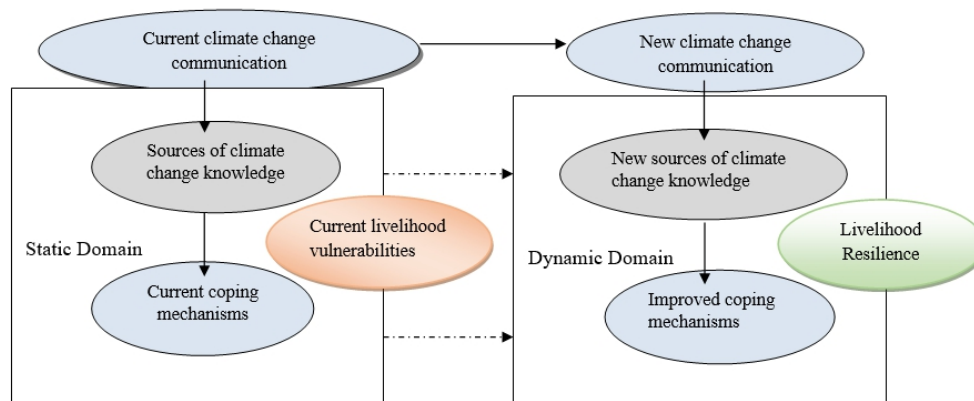
This study is guided by Alfred Schutz's social phenomenology perspective, which he developed in the mid-twentieth century, particularly in his seminal work titled '*The Phenomenology of the Social World*.' Building on the works of Edmund Husserl, Schutz focused on explaining the entirety of the human lifeworld (Lebenswelt) as embodied in their lived experiences and how this influences their everyday social interaction. Within the context of this, Schutz sought to explain how humans make meaning (Schutz, 1967) of their daily routines as a function of the various realms of experiences within their broader lifeworld. This clearly drew Schutz closer to understanding the subjective nature of human experiences and how these can be interpreted in the context of interpersonal lifeworlds instead of relying on abstract external variables associated with sociological grand theories such as functionalism, Marxism, and political economy. Beyond the centrality of human experience, Schutz views the construction of meaning, the interpretation of actions, and orientation towards social realities as critical to understanding human behaviour.

The phenomenological approach of Alfred Schutz is particularly suited for our study given that it is oriented towards understanding the everyday lived experiences and meaning making that community members share about climate change. This is because, the theory allows us to move away from abstract scientific approaches towards understanding how non-literate community folks make sense of their environment in real time, particularly within their cultural realities and daily routines. One recent study applied phenomenological approaches to understand how climate change is experienced as an existential distortion of normality revealing how emotional and cognitive tensions relate to everyday entanglements with environmental alterations at the community level (Ojala & Lakew, 2017). However, while this foregrounds the relevance of phenomenological depth in climate change research, there is little recourse to how non-literate people come to know what they know about the changes in their environment.

Our strong conviction is that Schutz's social phenomenology is quite suitable for our study given its fundamental premise that social reality is constructed intersubjectively through everyday lived realities or experiences and knowledge. Now, this is particularly important for non-literate people who are mostly marginalised from climate change knowledge dissemination, especially as we attempt to understand how they make meaning of environmental changes based on direct experience with their land and waters outside formal communication channels. Some scholars have stressed the importance of vernacular knowledge, local meaning systems, and everyday discursive practices in shaping people's perception rather than relying on formal scientific communication alone. In this sense, we avail ourselves of what Nerlich, Koteyko, and Brown (2010) referred to as the cultural construct of climate change, which comes from local narratives and practices. Beyond its theoretical grounding, Schutz's social phenomenology presents some level of methodological relevance for this study, particularly its significance for interpreting qualitative data. This effortlessly leads us to adopting the Interpretive Phenomenological Approach (IPA) as a broader research strategy to understand climate change communication to non-literate people in Bayelsa State, Nigeria.

## Methodology

Since the emphasis of this study is on communicating climate change and livelihood vulnerabilities to non-literate people, it calls for an understanding of the lived experiences of the affected population. As a result, the Interpretive Phenomenological Approach (IPA) was adopted here. Hence, we focused on documenting the lived experiences of non-literate people with regards to climate change communication and livelihood vulnerabilities in the study area. This necessitated the need for inclusion criteria in the selection of participants. In this regard, only those that are unable to read and write were included in the sample. The data saturation technique was applied to determine the sample size for the study, which eventually amounted to 36 non-literate persons. Data collection was based on the use of in-depth interviews which were fully recorded on the permission of the interviewees. The thematic and narrative techniques were adopted for the data analysis after the interviews were transcribed, coded, and clustered. The overall framework for the data analysis is schematized in Figure 1 below:



**Figure 1:** Analytical framework

The analytical framework depicted in Figure 1 above, presented an opportunity to have a synthetic IPA analysis that allowed us to capture the not just participants' sense-making of their experiences with climate change knowledge dissemination as it is but also the researchers' interpretive understanding of these existing realities in the context of available data. This clearly helped with transiting from a relatively static view of vulnerabilities to a more dynamic and inclusive framework for climate change knowledge and livelihood communication to local non-literate people in the study area. This goes beyond the conceptualization of vulnerabilities as merely levels of exposure and sensitivity (Smit & Wandel, 2006) to an interactive scenario that captures the dynamism of active learning, adaptive capacities, and strategy development as a function of the role of effective communication (FAO, 2014).

## Results

### Theme 1: Perceptions of Climate Impacts on Livelihoods and Adaptation

Following deep communication with the interviewees, a good understanding of their

lived experiences with regard to their perceptions of climate change impacts on livelihoods emerged. For instance, it was revealed that despite the near absence of knowledge on the formal terminology or concept of climate change (Raimi, et al., 2025), participants showed a significant depth of understanding of changes in their local environment and this is basically linked to their direct experiences with changing livelihood conditions. Smit and Wandel (2006) talked of how local people eventually make sense of changes in their environment due to their daily encounter with the harsh realities of environmental degradation and went on to express the need to focus on assessing embedded vulnerabilities rather than depending on external conditions for assessments. This clearly shows that climate change impacts go beyond simple understanding of knowledge in itself to questioning the sources and context through which this knowledge is arrived at. Hanson (2001), while discussing the phenomenological case for the family farmer as an environmental steward, highlighted the gravity that the local that the local environment has for human agency, and in this case, for the farmers. In this context of environment-human agency interconnection and the phenomenological understanding of lived experiences on the livelihood impacts of climate in our research contexts, some of the sub-themes discussed below are instructive.

The massive impact of climate change on agriculture, particularly crop vulnerability emerged as the most prominent sub-theme under lived experiences and perceptions on climate change impacts on local livelihoods. Based on their lived experiences, participants demonstrated a vast understanding the patterns of crop vulnerability, disruptions to seasons, and failures in the overall agricultural productivity levels. This clearly reflects the current livelihood vulnerabilities, where traditional agricultural knowledge systems encounter shocks due to alterations in the local environment of the people (FAO, 2014; Smit & Wandel, 2006) as highlighted in the analytical framework presented in Figure 1 above. In line with this, one of the interview participants noted:

*Dis change wey dey happen for weather don really show us shege for our community, especially wey be farmers. For example, this season people dey rush harvest before time because dem dey fear say flood go scatter everything and the serious heat don dey spoil cassava and other crops. Even the ground don dry and strong, e dey make am hard to till and plant. If we even manage till and plant, na heat and flood matter dey worry farmer pass. Before for this our community, we dey always get better harvest, but now because of weather wahala, harvest don dey poor well well and e don dey affect our living, both for fishermen and farmers.<sup>1</sup> (M. Ebimieboemi, personal communication, 23 February, 2025).*

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<sup>1</sup> **Translation:** [The change in weather conditions has severely dealt with us in our community, particularly we that are farmers. For instance, this season, people are waiting to harvest prematurely given the threat of massive flooding ahead and also the serious heat that affects our cassavas and other crops. Even the dry and hard soil has made it increasingly difficult for tilling and planting. If we manage to till and plant, the fear of heat and flood is the beginning of wisdom for farmers. Here in my community, we used to have very good harvest, but now, due to weather changes, we have continued to witness serious low harvest and this has negative impacts on our living impacting fishermen and farmers.]

The words of the interlocutor above resonated with that of other participants in terms of how climate change now affects the livelihoods of people in Bayelsa State. The excerpt above aligns with the findings of Frimpong et al (2020), who revealed how their research participants expressed a good knowledge of how escalating heat stress from climate change has undermined farming activities among the Bawku people in Eastern Ghana. This shows a significant sense of local people's sensitivity to the changes in the environment and how these affect the traditional livelihood activities of the people reflecting what Berkes (2012) termed valuable local or indigenous livelihood knowledge systems in his 'Sacred Ecology'. Still expressing localized understanding of the impact of climate change on livelihoods, one of the participants who is a fisherfolk expressed the following views in Pidgin English:

*Me I dey face serious problem as a fisherman because this weather wey dey change like this dey make am hard for us to go fish. Sometimes, we no dey catch better fish because the water don plenty well well and sometimes when flood come like dis, we no dey fit go river. The weather dey really affect our fishing.<sup>2</sup> (F. Ekarde, personal communication, 27 June, 2025).*

The excerpt above draws attention to how changes in weather conditions or patterns such as high rainfall, flooding, and rise in sea levels affect the timing of fishing. In this regard, the opinion of the interviewee reveals a deep understanding of the fact that flooding periods affect fishing activities reflecting how changes in environmental conditions and the associated lived realities shape the timing of fishing in the communities. Beyond the issue of timing, this clearly exposes a scenario of livelihood disruptions as sea levels and flooding limit fishing activities for community fisherfolks. Daudu, Oladipo, and Kareem (2020) drew attention to how climate change undermines fishing activities in coastal areas of Lagos State, Nigeria, revealing that fishers are increasingly vulnerable to shocks associated with climate variations, particularly as their livelihood depends solely on sea going economic activities. Some of the fisherfolks interviewed expressed concern over the damage that climate change does to their fishing tools like the canoes, fishing nets, and fish processing platforms. One of the participants noted “Dis bad weather dey still affect the things wey we dey use fish. For example, our nets and canoes dey spoil from time to time because of heat and strong wind.<sup>3</sup>” (S. Ebitimi, personal communication, 24 May, 2025). This strongly aligns with one previous study by Elum and Snijder (2022) who also found that increasing wind speed and high temperatures impact negatively on fishing infrastructure such as canoes, nets, and platforms for fish processing. Also, climate change is believed to have serious adverse effect that alters fish availability and distribution imposing additional livelihood challenges for local fisherfolks. A climate change vulnerability analysis by Allison et al (2009) revealed that communities that rely

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<sup>2</sup> **Translation:** [“I am facing serious problems as a fisherman because the changing weather is making it difficult for us to go fishing. Sometimes, we don't catch good fish because the water level is too high, and other times, when flooding comes, we cannot go to the river. The weather is really affecting our fishing.”]

<sup>3</sup> **Translation:** [The bad weather also affects the things that we use to fish. For instance, our nets and canoes get damaged from time to time due to heat and serious winds.]

on fishing for their livelihood, particularly in coastal regions tend to be disproportionately vulnerable given that fish stocks are more likely to be sensitive to even the smallest of ecological shifts. This strongly corroborates the views of the interlocutor presented above, where it is believed that extreme weather conditions create ecological stressors that contribute to fish scarcity.

As a result of these disruptions, several farming and fishing households in Bayelsa State have increasingly moved towards other alternative forms of livelihood activities as a way of managing the associated economic setbacks. The views of most of the interlocutors revealed how the adverse effects of climate change have necessitated the need to also shift their livelihood focus to other economic activities. This clearly fits into the understanding that livelihood shifts occur as a key adaptation measure when primary sources of economic survival such as a fishing and farming become increasingly unreliable due to climate change shocks.

### **Theme 2: Communication Challenges and Access barriers**

The clustering of concepts and patterns under the second theme '*communication gaps and access barriers*' simply highlight the gulf that separates literate and non-literate people when it comes to climate change knowledge on the study area. The interviews revealed that there is a significant gap between formal climate change communication and the lived realities or knowledge of non-literate people in Bayelsa State. Several of the participants continually described a situation where formal information about climate change often communicated in high level English Language (Raimi & Bieh, 2020) making it difficult for them to access related knowledge. Thus, most of their understanding of climate change came from direct lived experiences, informal conversations, and occasionally through interactions with their children or neighbours who are educated. When participants were asked where they first heard of the concept of climate change, many of them could not recall any formal source, instead, their responses showed that they mostly learnt of it through personal experience with current changes in their environment compared to the past. According to one of them:

*I bin hear say our climate dey different, but na only from my pikin dem for community wey dey school dem talk am small. For here, we no get anybody come explain am for we own language. All of dem dey use big grammar we no sabi.<sup>4</sup> (A. Ogbeta, personal communication, 15 July, 2025).*

The above position reveals the distance between formal climate change communication and the knowledge of the concept by non-literate people. This is because, most of them have rarely heard of the concept of climate change before given that formal methods of communicating such information are mostly tied to English Language through radio broadcasts, academic conference materials, government documents, newspapers, and

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<sup>4</sup> **Translation:** [I've heard that our climate is changing, but it was only my children in the community school who mentioned it briefly. Here, no one has come to explain it in our own language. They all use big grammar that we don't understand.]

school learning materials, all of which are out of reach for non-literate populations in rural communities. This aligns with Raimi, Umunnah, and Lawson-Ikuru's (2025) views that climate change communication in Bayelsa State often edge out non-literate population making it increasingly difficult for this category of vulnerable people to have access to associated knowledge. Similarly, Epelle (2023) reports that the urgent need to address climate change has engineered a significant surge in media activities basically targeted at communicating its causes and impacts in predominantly English Language undermining the dominant framing of communication as culture. In fact, she argues that “when the default lingua franca for communicating climate change globally is English language, indigenous people and their knowledge become largely excluded since the latter do not speak English Language” (Epelle, 2023, p. 5). But in reality, the absence of formal climate change communication and the understanding of technical concepts does not necessarily mean total absence of knowledge as most non-literate people rely on their everyday lived realities to interpret changes in their local environment. For instance, one of the participants noted:

When we dey see heavy flood and too much rain suddenly, even for dry season, na that be how we know say weather don change. But nobody don come explain say na something wey dey call climate change. We just dey talk am like say weather wahala big.<sup>5</sup> (E. Imomotimi, personal communication, 22 June, 2025).

Drawing from the interview excerpt above, it is easy to see that in place of formal conceptual knowledge, lived experiences with environmental alteration stands in as a source of understanding of climate change for non-literate people. This strongly aligns with the views of Oramah et al. (2025) that where formal communication of climate change knowledge is low, non-literate populations tend to rely on experiential observations rather than popular scientific framing of the concept. This further deepens the existing gap and challenges in understanding causes and impact, as well as efforts aimed at addressing climate change both locally and globally. Thus, beyond the challenge of information void and formal knowledge deficit already highlighted, the interview outcomes show that even where climate change communication efforts exist, non-literate people largely do not comprehend them. This is due to language barriers and methods through which such information is communicated. Hence, existing formal climate change communication efforts alienate non-literate community people, thereby reducing their effectiveness. Our study participants consistently mentioned that climate change discussions are rarely done in languages that resonates with them, such as the use of Pidgin English or their local dialects. Instead, they note that climate change communication mostly through radios target literate people. According to one participant, *'Sometimes we dey hear people for radio dey talk climate change, but na big big English dem dey use.'*<sup>6</sup>

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<sup>5</sup> **Translation:** [When we experience heavy flooding and excessive rain suddenly, even during the dry season, that's how we know the weather has changed. But no one has come to explain that it's something called climate change. We just refer to it as major weather problems.]

<sup>6</sup> **Translation:** [Sometimes we hear people on the radio talking about climate change, but they use big English.]

### **Theme 3: Culturally appropriate climate change communication pathways**

While the interviews exposed the gaps in climate change communication, it also took note of the culturally appropriate ways that associated knowledge can be disseminated to non-literate people in Bayelsa State in order to aid meaningful understanding of not just the concept of climate change, but also its impacts and adaptation pathways. Participants in the study consistently stressed that the key challenge does not just lie with the near absence of climate change information, but also the mismatch between how such information is communicated and how this is processed, particularly by non-literate people in rural communities. There was a strong consensus amongst interviewees that climate change information dissemination is often done through high-level, formal, and elite-driven channels that edge out the cultural and everyday realities of community folks. This largely translates to participants expressing a preference for community-rooted and familiar communication approaches that reflect their social, cultural, and linguistic contexts. One recurring theme during the interviews was the gross neglect of traditional and culturally entrenched systems of information dissemination like town-crying (Raimi & Bieh, 2020). Many of the study participants mentioned how town-criers have not just culturally but historically played relevant roles in communicating community-based activities around conflicts and dispute settlement or environmental concerns. Notwithstanding its historical relevance, there is a widespread understanding among participants that such culturally-rooted approaches are rarely explored or used in contemporary climate change knowledge communication efforts in Bayelsa State, despite their relative usefulness. As one of the participants noted:

For this our place, before before, if something important dey, town crier go waka round evening time, ring bell and shout am make everybody hear. Even people wey no sabi read go hear and understand. But for climate change matter, nobody don ever send town crier come tell us anything. Na radio dem dey talk am, and na big grammar dem dey use wey old people no dey understand.<sup>7</sup> (P. Angalabiri, personal communication, 14 May, 2025).

The above statement shows that existing communication gap is not a function of unwillingness to learn by the community folks that are none literate but mostly about the (un)conscious exclusion of cultural models of communication. Perhaps, this is why Servaes (2008) notes that development communication can be most ineffective when it alienates endogenous communication models and adopts top-down or external-driven methods. In the context of our study, the exclusion of town-crying technique shortens the outreach of climate change information dissemination, especially for non-literate populations who depend more on oral communication. Also, many of the study participants stressed the importance of exploring town-hall meetings as trusted avenues

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<sup>7</sup> **Translation:** In our community, in the past, if there was something important, the town crier would walk around in the evening, ring a bell, and shout it out so everyone could hear. Even people who couldn't read would hear and understand. But for climate change issues, no one has ever sent a town crier to tell us anything. They talk about it on the radio, using big grammar that old people don't understand.

for effective stakeholders' engagement at the community level believing that it is a useful space for trusted discussions, dialogues, and collective sense-making on serious issues such as climate change. It is believed that unlike radio broadcast or written materials, town-hall sessions or meetings provide a good opportunity for robust interaction, explanation, and questioning using familiar languages. Sadly, a good number of the participants noted that climate change is rarely talked about during their town-hall gatherings, despite the fact that it is commonly used to address critical development issues in the various communities. One of the participants lamented:

*We dey do town hall meeting for many things like oil company wahala, community project, youth matter. But the change for our weather no dey enter the discussion. If dem fit come explain am for town hall in pidgin or our dialect, people go ask question and understand better. The way dem dey talk am for outside no dey reach us.*<sup>8</sup> (G. Torusagha, personal communication, 3 June, 2025).

The above observation shows that effective communication thrives within spaces that allow for collective discussions and interpretation rather than one-way knowledge or information transfer. Raimi and Bieh (2020) note that community forums help to enhance a collective conscience of understanding by ensuring that information is situated within a shared space of lived experiences and social interaction. Within the cultural realities of our study communities, town-hall meeting is considered a powerful platform for participatory engagements that encourage democratic processes, yet they are rarely used in climate change communication. In addition to town-hall meetings, participants also shared the view that community leaders, such as women leaders, clan heads, and youth leaders, can be used as trusted intermediaries when it comes to climate change communication to non-literate people. Participants believe that when this is combined with the town-hall approach, communicating climate change will carry some kind of traditional legitimacy given that these traditional authorities understand local realities. According to one participant:

*If government or NGO really wan make we understand this climate change, make dem call our chiefs and women leaders first. If dem explain am to dem well well, na dem go break am down for us in the way we go understand am for town-hall. When message come from outsider, people no dey take am serious, but when e come from our leaders, e dey enter.*<sup>9</sup> (S. Ebiwari, personal communication, 26 June, 2025).

In this context, community leaders are believed to serve as cultural translators who possess the traditional authority to contextualise external knowledge within local

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<sup>8</sup> **Translation:** [We hold town hall meetings for many things like oil company issues, community projects, and youth matters. But climate change don't come up in the discussions. If they could come explain it at the town hall in Pidgin or our dialect, people would ask questions and understand better. The way they talk about it outside doesn't reach us.]

<sup>9</sup> **Translation:** [If the government or NGOs really want us to understand this climate change, they should first call our chiefs and women leaders. If they explain it well to them, they will break it down for us in a way we'll understand at the town hall. When the message comes from outsiders, people don't take it seriously, but when it comes from our leaders, it sinks in.]

systems of belief and lived experiences. This aligns with the views of Berkes (2012) that the transmission of knowledge in local or community contexts is relational rather than just being purely informational. It is in the realisation of this fact that participants also argued that language and linguistic accessibility are critical factors to consider when trying to communicate development issues such as climate change to non-literate people. Participants consistently mentioned that climate change communication is often passed using English language and through mediums such as radio, newspapers, and televisions, all of which exclude non-literate populations. Interviewees noted that even when radio communications are done, the use of abstract scientific terms tend to limit meaningful comprehension. In the words of one of the participants:

*Anytime dem dey talk climate change for radio, na English and big big grammar. Dem go talk carbon, greenhouse, global warming. We wey no go school no know wetin dem mean. If dem fit talk am for pidgin or our dialect, people go understand say na this same flood and heat wey dey worry us.<sup>10</sup>*  
(M. Okieimen, personal communication, 18 April, 2025).

The interview excerpt above is further reinforced by the view of Johnston (2020) who notes that technical language marginalises or alienates non-expert audiences and goes further to limit public engagement. In our context, the lack of or even failure to integrate Pidgin English or local dialects into climate change communication programmes has led to the exclusion of non-literate populations from climate change messaging, despite the understanding that Pidgin is a widely spoken and understood language in Bayelsa State.

## **Conclusion**

Drawing from the findings of this study, it is clear that the challenge is not just the absence of climate change information or communication, but the serious disconnect between how associated knowledge is produced, framed, and disseminated, and more importantly, how non-literate populations make sense of such information in the context of their everyday socio-ecological realities. Although climate change is already known through the lived experiences that non-literate people gather from the disruption of their local livelihood activities such as fishing and farming, the failure to align formal climate change communication to these lived realities limits broader meaning making. In this regard, non-literate people are short of the widely accepted terminologies, causes, and impacts creating a knowledge blind-spot that limits their understanding and adaptive capacity, while exposing them to greater vulnerabilities. The study submits therefore, that the abstract nature of climate change discourse makes popular knowledge on the subject inaccessible to non-literate populations and this affects how they make meaning of the phenomenon and how they take action against it at the community level.

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<sup>10</sup> Anytime they talk about climate change on the radio, it's in English and big grammar. They talk about carbon, greenhouse, global warming. We who didn't go to school don't know what they mean. If they could talk about it in Pidgin or our dialect, people would understand that it's the same floods and heat that's worrying us

Importantly, the study directs us towards a transformative path of culturally appropriate was of communicating climate change to non-literate people as a way of not just bridging the information dissemination gap but also scaling up resilience. The combination of town-crying, town-hall meetings, reliable or trusted community leaders, and inclusive language such as Pidgin English and local dialects is believed to be an effective pathway to embed climate change communication within the lifeworlds of non-literate populations in the study area. This pathway is clearly indispensable if an inclusive climate change governance is to be achieved.

### **Recommendations**

- i. The first real thing to do is to ensure that climate change communication programmes for rural and non-literate populations in Bayelsa State shift from elite-driven, formal models to community-embedded approaches, integrating culturally familiar platforms such as town-criers, town-hall meetings, and community forums as trusted spaces of meaning-making, enhancing comprehension, ownership, trust, and collective responsibility.
- ii. Secondly, states and local governments in Bayelsa State should emphasise linguistic accessibility by reducing reliance on English Language with technical scientific concepts and instead include Pidgin English or relevant local dialects, using everyday expressions that link climate change to lived realities such as flooding, declining fish stocks, crop failure, and heat stress, through linguistic translations that connect formal knowledge with experiential understanding.
- iii. Finally, community leaders should be used as intermediaries for climate change communication activities or programmes. This should involve the use of traditional rulers, women leaders, and youth groups to actively serve as co-producers and transmitters of climate change information. This can go a long way to facilitate climate change knowledge embedding within local realities traditional belief systems, and bridge the gap between formal knowledge systems and everyday lifeworlds.

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