



Exploring Socio-Cultural Hindrances to Climate Change Mitigation in Badagry Local Government Area, Lagos State, Nigeria

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Abstract

Climate change continues to pose complex challenges across global, regional, and local scales, with its impacts disproportionately affecting communities in developing countries. In rural and semi-urban settings like Badagry, where tradition, belief systems, and communal structures remain deeply embedded, these socio-cultural factors can either facilitate or hinder mitigation strategies. This study investigated how local beliefs, values, and community norms influence climate change mitigation efforts in Badagry Local Government Area (LGA), Lagos State. A multistage sampling approach from a quantitative research design was adopted, with three purposively selected communities (Ibereko, Apa, and Ilogbo) representing varying socio-cultural and urbanization contexts. A sample size of 165 respondents was determined using the Raosoft calculator and selected through stratified sampling to ensure demographic representation and convenient sampling based on availability and willingness to participate. Data were collected through face-to-face questionnaire administration and analyzed using descriptive statistics. The study revealed that while a substantial majority of respondents recognize human-caused climate change and the urgent need for mitigation measures, traditional beliefs, lack of awareness, and economic constraints serve as significant barriers to effective climate action. Political ideology, cultural norms, and socio-economic limitations profoundly impact the perception and response to climate change within these communities. Conclusively, local knowledge, when effectively integrated into climate policies, can enhance community resilience and foster sustainable development at the Badagry LGA in Lagos State. Recommendations include implementing targeted awareness programs, developing inclusive

policy-making processes that respect cultural values, and leveraging community leadership to foster climate action.

Keywords Climate change adaptation, mitigation, community engagement, cultural identities, socio-cultural barriers.

Introduction

Despite international commitments like the Paris Agreement, national adaptation and mitigation responses often overlook the nuanced realities of climate change within local communities. Even as scientific discourse has advanced technical pathways to mitigate climate change such as reducing greenhouse gas (GHG) emissions and transitioning to renewable energy amongst others, less attention has been given to the cultural frameworks that shape how communities perceive and respond to climate risks. The continuous research on Climate Change in Africa consistently emphasizes the continent's heightened vulnerability due to its exposure to environmental hazards and limited adaptive capacity (IPCC, 2014; Anyanwu & Nwajiuba, 2021).

The African continent has been noted as one of the most vulnerable continents due to its high exposure and low adaptive capacity (IPCC, 2014; Okafor et al., 2022) in spite of various National commitments under several treaties to achieve stabilisation of atmospheric GHG concentrations to a level that would prevent dangerous anthropogenic interference with the climate system (Above et al., 2021). Global discourses often pay more attention to economic and technological solutions such as energy transitions and emission reductions, yet these frameworks do not always translate effectively into local contexts. Some have argued that culture mediates how climate risks

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are understood and addressed, Hulme (2008) and Ford et al.; (2016). This is particularly relevant in traditional societies where belief systems, social hierarchies, and communal practices shape environmental attitudes.

In Nigeria, cultural resistance to climate change interventions is well-documented. Studies by Musa & Umar (2017) and Nzeadibe et al. (2011) highlight that deeply embedded traditions, such as ancestral land use practices and spiritual interpretations of weather changes, may either obstruct or facilitate adaptation. Similarly, Chanza et al. (2024) underscore the untapped potential of indigenous knowledge systems, which if aligned with policy can support locally grounded mitigation strategies.

In Nigeria, coastal communities like Badagry are particularly susceptible to climate-induced risks such as flooding, sea-level rise, and coastal erosion (Okafor et al., 2026). They have observed shifts in rainfall patterns over the past decade, echoing broader concerns about climate change impacts, risks which are particularly acute in coastal regions such as theirs, where environmental vulnerability intersects with socio-cultural complexity. However, vulnerability is not merely environmental but also shaped by socio-political and cultural factors that determine how communities perceive and respond to climate change (Viana et al., 2022; Ayoade, 2004).

The complex relationship between people and the environment may impact the accurate estimation of human consequences and eco-systemic outcomes of the changing environment and ecology. With climate change modifying ecosystems and having a variety of impacts on health, environment, psychology and socio-cultural behaviours, this is often in association with other factors such as food, health, water security, agriculture and crop changes (Food and Agriculture Organization of the United Nations [FAO, (2009); European Environmental Agency [EEA, (2024); Viana et al, (2022); Anyanwu & Nwajiuba (2021)]. The impact on ecosystems and society is likely to become more drastic in the coming years (EEA, 2024) since humans are the victims of the negative impacts of climate change as well the drivers of climate change. Rural communities are beginning to link local events to climate change, but changes in perceptions and beliefs have been very slow to develop. While climate change awareness is gradually growing, the acceptance that it is a natural and/or human caused phenomenon, as well as the behavioural changes needed still requires a significant amount of time (Marshall et al., 2019). The impacts of climate change will increasingly affect the daily livelihood and activities of people, their environment and culture (UNEP, 2015; FAO, 2009;

IPCC, 2014; Anyanwu & Nwajiuba, 2021). These impacts are expected to be more on rural community dwellers due to their heavy reliance on natural and inland waters affected by climate change because they have less capacity to protect themselves or adapt to the changes (Viana et al., 2022).

Mitigating climate change means reducing the concentration and flow of heat-trapping GHGs into the atmosphere. This involves cutting GHGs from main sources such as transportation, industrial processes and agriculture. Forests, oceans, and soil also absorb and store these gases, and are an important part of the solution (EEA, 2024). These strategies can be implemented at various levels, from individual actions to international agreements. At the international level, the Paris Agreement represents a landmark effort to combat climate change. This agreement, signed by nearly all nations, sets ambitious goals for reducing GHG emissions and transitioning towards a low-carbon future (United Nations Framework Convention on Climate Change [UNFCCC], 2015; Ahoje et al., 2021). Response to climate change is all about adjusting to risks, either in reaction to or in anticipation of changes arising from changing weather and climate. Culture is important to understand both mitigation and adaptation strategies to climate change and plays its part in framing climate change as a matter of concern to society. Culture is rooted in the dominant ways of production, consumption, lifestyles and social organization that give rise to emissions of GHGs. The consequences of these emissions or climate change impacts are given meaning through cultural interpretations of science and risk (Hulme, 2008). Culture is also important to understanding and implementing adaptation through the identification of risks, decision taking about responses, and implementation channels to adaptation strategies. Since culture is dynamic and reflexive and in turn shaped by the idea of climate change, hence its analysis is central to understanding the causes and meaning of, and human responses to climate change.

The urgency to address climate change has led to increased focus on effective mitigation strategies. However, to successfully implement these strategies, it is essential to consider the socio-cultural factors that may hinder their effectiveness. These factors include cultural beliefs, values, and practices that may be resistant to change, social norms that prioritise short-term gains over long-term sustainability, and limited access to education and information about climate change. To overcome these barriers, it is important to emphasize local engagement and participation. Badagry presents a unique case study

due to its specific socio-cultural context and pronounced vulnerability to climate change. The region has a rich cultural heritage with strong traditions and beliefs that may influence attitudes towards climate change mitigation (Musa and Umar, 2017). Despite growing scholarly interest in climate governance, few studies have examined the intersection of socio-cultural belief systems and climate action at the community level. This research contributes to that gap by exploring how traditional norms and institutional trust or lack thereof impact climate change mitigation in Badagry Division. It also builds on Mistry & Berardi's (2016) call for integrating indigenous and scientific knowledge, while also emphasizing the need for culturally nuanced policy frameworks. This study investigated the socio-cultural hindrances to climate change mitigation in Badagry by answering the following questions:

- i. What are the climate change mitigation knowledge and strategies prevalent in the community?
- ii. What are the prevalent cultural beliefs, values, and practices that influence perceptions of climate change and mitigation efforts among community members?
- iii. How do socio-cultural factors shape community attitudes towards climate change?
- iv. What are the key socio-cultural barriers that hinder the adoption and effectiveness of climate change mitigation strategies among residents?
- v. How can insights from local knowledge, traditions, and cultural practices be integrated into climate change mitigation policies and programs to enhance their acceptance and effectiveness?

Understanding these barriers is crucial for developing effective and culturally sensitive mitigation strategies.

Study Area

Badagry Division, situated in 6°25'N 2°53'E Lagos State, Nigeria, serves as the central focus of this research examining socio-cultural hindrances to climate change mitigation. Located along the Gulf of Guinea's coastal region, Badagry Division presents a distinct socio-cultural and environmental milieu warranting detailed investigation. Its geographical positioning is notable, bordered by the Atlantic Ocean to the south (Figure 1) and characterized by interconnected

lagoons, estuaries, and wetlands (Akanmu & Onyema 2020), making it particularly susceptible to climate change impacts such as sea-level rise, coastal erosion, and altered precipitation patterns. The region's environmental challenges are multifaceted, with sea-level rise posing threats to low-lying settlements, coastal ecosystems facing degradation, and critical infrastructure at risk due to coastal erosion. Badagry, Lagos, experiences a tropical wet and dry climate characterized by high temperatures year-round, high humidity, and distinct wet and dry seasons. Over the course of the year, the temperature typically varies from 75°F to 90°F and is rarely below 71°F or above 92°F. The hot season lasts for about six months between November and May with an average daily high temperature above 88°F. The hottest month of the year in Badagry is usually in March, with an average high of 90°F and low of 80°F. The cool season lasts for about three months, between June and September, with an average daily high temperature below 83°F. Beyond its environmental context, Badagry Division boasts a rich cultural heritage deeply intertwined with its history, traditions, and customs. Notably known for its role in the transatlantic slave trade, the region houses significant heritage sites like the Slave Route, Seriki Abass slave museum, and historical artifacts that underscore its cultural legacy and global historical importance. The communities within Badagry Division exhibit diverse socio-cultural dynamics shaped by traditional practices, religious beliefs, and communal structures. Indigenous knowledge systems related to environmental stewardship, agricultural practices, and water conservation play pivotal roles in community resilience and adaptation strategies amidst environmental changes. Badagry Division was selected due to its unique exposure to climate-related risks, such as coastal erosion and flooding, alongside a strong cultural identity rooted in traditional institutions and practices.

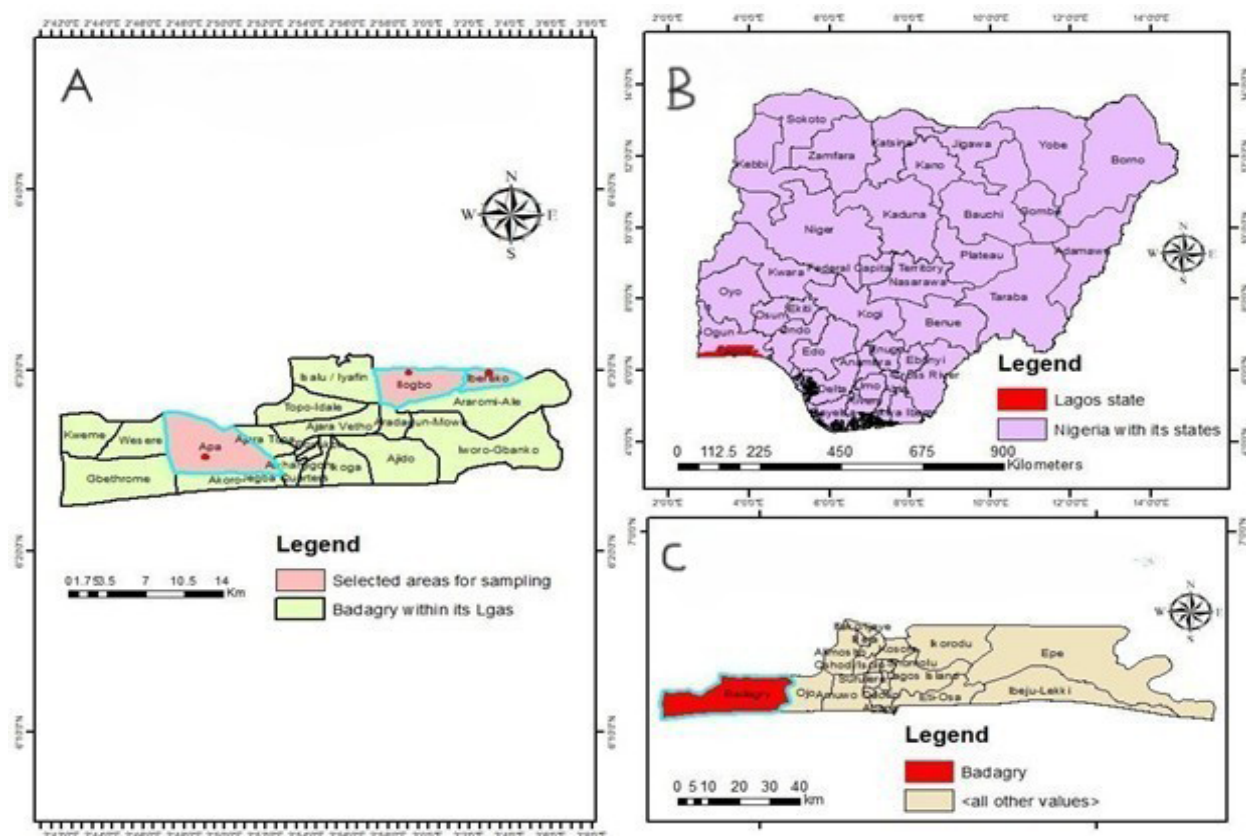


Figure 1: Map of the study area: A- study area showing selected communities; B- Nigeria; C- Badagry Division of Lagos State

Methodology

This study adopted a comprehensive quantitative research design to investigate socio-cultural barriers to climate change mitigation in the study areas in for an actionable insight into socio-cultural dynamics affecting climate change responses, facilitating informed policy interventions and fostering sustainable mitigation strategies.

A structured research instrument was designed to collect quantitative data on socio-cultural influences, attitudes, perceptions, and barriers as well as community practices related to climate change mitigation. Beginning with a demographic section to capture essential participant information such as age, gender, education, and residency details, the instrument delved into sections assessing climate change knowledge, awareness of mitigation strategies, and sources of climate-related information. Likert-scale questions were used to gauge perceptions of climate change severity, beliefs about human contributions, and attitudes towards environmental conservation and mitigation efforts. The instrument also explored socio-cultural influences, including traditional practices related to environmental stewardship and community perceptions of climate resilience. Specific

community perceptions of climate resilience. Specific questions probed the perceived barriers hindering mitigation measure adoption, such as economic constraints, cultural resistance, and trust issues in interventions and institutions. The section on the likelihood of action assessed respondents' willingness to adopt sustainable practices, support policies, and integrate local knowledge into mitigation strategies. Pilot testing and expert reviews ensured the instrument's validity, reliability, and relevance to the study context.

Additionally, the research employed a multistage sampling technique to secure a representative sample of the study area. The three communities, Iberekò, Apa, and Ilogbo were purposively selected to reflect variations in urbanization, religious affiliations, and historical significance. Iberekò represents a rapidly urbanizing hub, Apa retains deep-rooted traditional institutions, and Ilogbo bridges both contexts as a transitional settlement. The sample size was determined using the Raosoft online sample size calculator, resulting in a sample size of 165 from a population size of 425,027 as seen in Table 1. Stratified sampling ensured

representation across different demographic strata, such as age groups, gender, education levels, and residential zones. Convenience sampling was further used to administer questionnaires to individuals who were available and willing to participate. The total questionnaire distributed was 165. The data collection approach was a preliminary visit to the study area followed by face-to-face administration of a structured questionnaire prioritizing ethical considerations like informed consent, confidentiality, and ensuring participant rights throughout the process. Descriptive statistics such as frequencies, percentages, means, and standard deviations were used to summarize key variables related to socio-cultural beliefs, attitudes, perceptions, and barriers toward climate change mitigation.

Table 1: Study Area Division and Sample Selection for Badagry Division

Study Area	Description	Total Population	Proportion	Sample Size
	Badagry Division	425,027	1.000	165
Community A	Ibereko Community	175,027	0.353	68
Community B	Apa Community	100,000	0.412	39
Community C	Ilogbo Community	150,000	0.235	58

Source: City Population (2024)

Results/Findings/Discussion

1.1. Socio-Economic Characteristics of Respondents

Figure 2 presents the demographic characteristics of the respondents. Gender distribution reveals that most respondents are male (59.4%), while females constitute 40.6%. This disparity may reflect the patriarchal structure dominant in many parts of Nigeria, including Badagry. Research suggests that gender plays a crucial role in environmental decision-making and resource management (Wahyuni et al., 2024). Given that men often hold greater financial and social influence within households, their perspectives on climate change could have implications for mitigation strategies. The age distribution indicates that 77.5% of respondents fall within the 18–40 age group, suggesting a predominantly youthful population. Younger individuals tend to have greater access to formal education and media, which could enhance their awareness of climate change issues. However, awareness alone does not necessarily translate into action, particularly in the absence of socio-cultural support for climate initiatives (Olatunji & Olagoke, 2019). In contrast, older respondents, particularly those above 60 (8.5%), may be more resistant to adopting modern climate mitigation strategies due to entrenched traditional beliefs.

Figure 2: Socio-Economic Characteristics of Respondents

Source: Author's Field Survey 2024

Education plays a pivotal role in climate change awareness. Majority (80.6%) of respondents possess tertiary education, highlighting a well-educated demographic. Higher education levels are often linked to greater knowledge of climate change and its impacts (Nwankwo & Achike, 2021). However, the presence of individuals with limited formal education (8.5% with no formal education and 10.9% with primary or secondary education) underscores the need for targeted awareness campaigns. These individuals may struggle to grasp the importance of climate mitigation efforts, particularly when cultural beliefs influence their perspectives.

Regarding marital status, 69.7% of respondents are single, while 26.1% are married. This trend toward a younger, unmarried population may reflect broader societal changes in the area. However, married individuals often play key roles in household decision-making, particularly in rural settings, where family structures shape community attitudes toward environmental practices. Studies suggest that married individuals may exhibit greater concern for long-term environmental risks due to considerations for their family's future (Saha & Atiqul Haq, 2025).

Occupational analysis indicates that 38.2% of respondents are civil servants, while 19.4% are students. Civil servants, due to their stable incomes and access to information, may be more inclined to participate in climate-related initiatives (Ogunbode & Aderinto, 2026). Students, meanwhile, may be more receptive to new climate change ideas. Traders (7.9%), artisans (1.8%), and the unemployed (4.2%) form smaller segments of the population and may have less engagement in climate discussions, particularly in informal economies where immediate financial survival is prioritized over long-term environmental concerns.

Income distribution shows that 61.8% of respondents earn above ₦100,000 monthly, suggesting a relatively middle-class income demographic. Higher income levels are generally associated with increased access to resources and a greater capacity to invest in mitigation measures, such as adopting renewable energy or engaging in sustainable agricultural practices (Du et al., 2022). However, 9.7% of respondents earn below ₦50,000, indicating economic disparities that may hinder widespread participation in climate mitigation strategies. Lower-income groups often prioritize basic needs over environmental considerations.

The duration of residence provides insight into respondents' attachment to the community. A reasonable proportion (31.5%) of the respondents have lived in the area for over 10 years, while 29.7% are relatively new residents, having lived there for less than a year. Long-term residents may have a deeper awareness of local environmental changes, such as rising sea levels or shifting weather patterns linked to climate change. However, they may also be more resistant to change due to deeply ingrained traditional practices (Agundu et al., 2025). Conversely, newer residents may bring fresh perspectives but might lack the cultural integration needed for effective participation in local climate initiatives. The socio-economic characteristics of respondents illustrate a diverse population in terms of gender, age, education, and economic standing, all which shape attitudes toward climate change mitigation. The predominantly male, youthful, and educated demographic suggests a potential for climate awareness and action. However, cultural beliefs, economic disparities, and traditional perspectives pose significant barriers.

1.2 Climate Change Mitigation Knowledge and Strategies

Awareness of Climate change

A remarkable 90.3% of respondents reported

awareness of climate change, attributed to heightened global discourse and local environmental changes. This high level of awareness can be attributed to the increasing attention given to climate change in global and national discourse, as well as the local experiences of environmental changes. The findings align with other studies that report high awareness levels in areas vulnerable to climate impacts (Ozor & Nnaji, 2011).

Table 2: Climate Change Mitigation Knowledge and Strategies

Variables	Options	Percentage (%)
Climate change awareness	No	9.7%
	Yes	90.3%
Perceived impact on the Community	Neutral	2.4%
	No	9.7%
	Yes	87.9%
Perceived cause of climate change	Over population	23.6%
	Human activities such as deforestation	34.5%
	Technological Advancement	31.5%
	Act of God	10.3%
Familiar Mitigation Strategies	Energy conservation practices	18.2%
	Tree planting and recycling	59.4%
	Use of renewable energy	22.4%
Perceived Effectiveness of Strategies	Moderately effective	41.2%
	Not effective	10.3%
	Unsure	13.3%
	Very effective	35.2%
Initiators of Mitigation Projects	Community leaders	8.5%
	Government	35.2%
	Individual households	26.6%
	Non-Governmental Organizations (NGOs)	29.7%
Involvement in mitigation activities	Very involved	29.7%
	Moderately involved	58.2%
	Not involved	12.1%

Source: Author's Field survey 2024

Effects on the Community

Among those aware, 87.9% indicated that climate change impacts their community, while 9.7% said it does not, and 2.4% were neutral. The majority's acknowledgment of climate change effects is consistent with observed patterns of rising sea levels and coastal erosion in Badagry (Fashae et al., 2022). This underscores the immediate concerns that the community faces as a coastal region prone to flooding (reflecting concerns over rising sea levels and coastal erosion) and environmental degradation.

Causes of Climate Change

Respondents identified various causes, with 34.5% citing human activities (such as deforestation), 23.6% pointing to overpopulation, and 31.5% attributing it to technological advancement. A smaller percentage (10.3%) linked climate change to "acts of

God," indicating a blend of traditional beliefs and modern understanding. These responses reflect a mix of traditional beliefs and modern understanding of environmental science. The attribution to divine forces suggests a socio-cultural barrier to fully grasping human-induced climate change (Abdulkadir et al., 2018).

Familiar Mitigation Strategies

Commonly recognized mitigation strategies included tree planting and recycling (59.4%), energy conservation (18.2%), and renewable energy use (22.4%). This familiarity is largely due to local sustainability initiatives, consistent with other research on community-based strategies. Tree planting and waste recycling were the most familiar, likely due to local initiatives promoting environmental sustainability. This is in line with earlier studies that

emphasized community-based mitigation strategies in developing regions (Ikeme, 2003).

Perceived Effectiveness of Strategies

Regarding the effectiveness of these strategies, 41.2% of respondents viewed them as “moderately effective,” while 35.2% deemed them “very effective.” However, a notable percentage expressed uncertainty or scepticism, pointing to the need for improved public education and policy implementation. The varying levels of confidence in these strategies suggest a need for enhanced public education and better implementation of climate mitigation policies (Akinola et al., 2020).

Initiators of Mitigation Projects

The study identified the government (35.2%) and NGOs (29.7%) as the primary initiators of climate change mitigation projects, with individual households (26.6%) and community leaders (8.5%) playing lesser roles. This distribution emphasizes the pivotal role of government and NGOs in driving climate action, with community leaders playing a less significant role (Ayoade, 2004).

Involvement in Mitigation Activities

Most respondents (58.2%) reported moderate involvement in mitigation activities, with 29.7% being very involved. The moderate level of involvement points to a growing engagement in climate action, though there is still room for increased participation, particularly through grassroots efforts (Chista et al., 2022). While awareness and familiarity with climate change are high in Badagry, socio-cultural factors such as beliefs in divine causation and limited community leader involvement impede full engagement in mitigation efforts.

1.3 Cultural Beliefs, Values, and Practices in Environmental Conservation

Table 3: Cultural Beliefs, Values, and Practices in Environmental Conservation

Variables	Options	Frequency
Cultural beliefs or Practices in Badagry that address environmental conservation	Yes	15.8%
	No	0.0%
	Unsure	84.2%
Traditional ceremonies and festivals incorporate environmental conservation practices	Yes	50.9%
	No	49.1%
Variables	Responses	Frequency

Effectiveness of Cultural Practices	No response	73.3%
	Moderately effective	4.5%
	Not effective	15.0%
	Fairly effective	1.8%
	Prospective in directing growth and development	1.8%
	No idea	1.8%
	Effective in wave control	1.8%

Source: Author's Field survey 2024

Cultural Beliefs and Practices Addressing Environmental Conservation

The findings in Table 3 indicate a significant gap in recognizing cultural beliefs related to environmental conservation, with 84.2% of respondents unaware of any such practices. This suggests that, for many in Badagry, environmental conservation is not perceived as a culturally rooted practice. Only a small fraction (15.8%) of respondents identified some cultural practices that align with environmental conservation. This limited recognition suggests a gap in the integration of traditional knowledge and environmental conservation practices. This finding is in line with previous research, which often shows that indigenous practices related to environmental conservation are not always widely recognized, particularly in rapidly modernizing societies (Smith, 2015). The lack of awareness may be due to changing societal norms or a disconnect between younger generations and traditional practices (Agundu et al., 2025). The respondents acknowledged that specific cultural practices such as heritage development, masquerade festivals, sacred lands, taboos, tree planting, and water conservation techniques promote environmental conservation. While these practices reflect a historical connection to nature, their limited recognition points to a potential disconnect between traditional knowledge and contemporary environmental efforts. These findings suggest that while there is a general lack of awareness among the wider population, specific cultural practices aimed at conserving the environment are recognized by certain groups. The presence of these practices reflects the community's historical connection to nature, which aligns with previous studies highlighting the role of indigenous knowledge in promoting sustainable environmental practices (George et al.,

2024). The diversity of cultural practices identified, although recognized by smaller percentages of respondents, underscores the potential role that culture could play in promoting climate change mitigation, particularly if these practices were more widely embraced or formalized.

Role of traditional ceremonies and festivals in incorporating environmental conservation practices

The study also explored the role of traditional ceremonies in incorporating environmental conservation practices for climate change mitigation, revealing ambivalence among respondents. Approximately 50.9% (Table 3) believed that traditional ceremonies incorporate environmental conservation practices, while 49.1% disagreed. This division reflects uncertainty about the effectiveness of traditional ceremonies in promoting sustainable practices, suggesting that while they could play a pivotal role, their influence may be underutilized in the face of modern governance structures. On the other hand, a significant portion of the population remains unconvinced of their effectiveness, likely due to the lack of visible action or the disconnect between traditional ceremonies and modern environmental challenges.

Effectiveness of Cultural Practices

Respondents showed a lack of awareness regarding the effectiveness of these cultural practices, with 73.3% as seen in Table 3 not responding to questions about their impact. This non-response highlights a disconnection between cultural practices and their perceived relevance in addressing environmental issues. About 15% of the respondents believed that these cultural practices are not effective while a small minority rated the practices as moderately effective, while other responses ranged from “not very effective” to “fairly effective,” with minimal variation. The overwhelming non-response highlights a general disconnect between the community’s cultural practices and the perception of their relevance or effectiveness in addressing environmental issues. This may indicate either a lack of communication about the role of cultural practices in environmental sustainability or a broader issue of disengagement with traditional practices as mechanisms for environmental conservation (Akinola et al., 2020). The limited recognition of effectiveness could also suggest that these practices are not being leveraged or understood within the context of modern environmental challenges and may hinder their potential contribution.

1.4 Socio-Cultural Factors Shaping Community Attitudes

This section explores the perceived socio-cultural factors influencing community attitudes toward climate change in Badagry.

Figure 3: Perceived Socio-Cultural Factors Shaping Community Attitudes

Source: Author’s field survey 2024

Influence of Educational Levels

A strong majority of respondents (81.2%) agreed that education significantly shapes attitudes towards climate change, highlighting its critical role in enhancing awareness and support for mitigation measures as presented in Figure 3. This aligns with existing literature emphasizing education’s importance in fostering environmental consciousness. This finding is consistent with other studies that suggest education plays a critical role in shaping environmental attitudes and behaviors (Stern, 2000; Leiserowitz, 2006).

Influence of Religion on Climate Change Views

While 45.5% of respondents acknowledged that religion influences their climate change perceptions, a notable 35.2% disagreed (Figure 3). This suggests that while religion plays a role, it is not the sole factor influencing attitudes. Previous research has highlighted the complex relationship between religious beliefs and environmental concerns, noting that religious teachings can both support and undermine climate change mitigation efforts (Guth et al., 2006; Riley, 2014).

Gender Roles Affecting Participation

The data indicates that traditional gender roles significantly affect participation in climate change mitigation, with 61.8% of respondents agreeing on this influence. This suggests that societal expectations can both restrict and encourage involvement in environmental efforts. Also, traditional gender roles that can restrict or encourage participation based on societal expectations. This finding aligns with literature suggesting that gender norms can impact environmental activism and participation (Kerkhof & Wiczorek, 2006; Hunter et al., 2013).

Cultural Norms or Values

As seen in Figure 3, cultural norms and values also significantly shape attitudes, as 57.6% of respondents recognized their impact. This supports research indicating that cultural context plays a vital role in how communities perceive and prioritize environmental issues and the importance they place on addressing them. This supports existing research

that emphasizes the role of cultural context in environmental attitudes (Chapin et al., 2010; Armitage et al., 2008).

Influence of Political Ideology on Climate Change

Political ideology was found to strongly affect climate change perceptions, with 59.4% agreeing that their political views shape their attitudes (Figure 3). This suggests that political alignment can greatly influence individuals' understanding and urgency regarding climate change issues. Previous studies have documented the impact of political ideology on environmental attitudes, noting that political affiliations can lead to divergent views on climate change (McCright & Dunlap, 2011; Inglehart & Norris, 2003).

Belief in Human-Caused Climate Change

As seen in Figure 3, a notable 57.6% of respondents strongly agreed with the belief in human-caused climate change, underscoring the importance of recognizing human responsibility in driving climate change and motivating action towards mitigation.

Urgency of Climate Change Issues

Finally, 73.3% of respondents expressed a strong sense of urgency regarding climate change, reflecting heightened awareness and concern about its immediate impacts (Figure 3). This aligns with broader societal trends advocating prompt action against climate change. This high level of urgency reflects growing awareness and concern about the immediate impacts of climate change, aligning with broader societal trends that emphasize the need for prompt action (IPCC, 2021; Schneider et al., 2007).

1.5 Socio-Cultural Barriers to Climate Change Mitigation

Table 4: Socio-Cultural Barriers to Climate Change Mitigation

Variables	Options	Frequency
Main socio-cultural barriers	Lack of awareness	70.9%
	Traditional beliefs and values	12.1%
	Economic constraints	17%
	Gender roles	0.0%
Social norms in Badagry support climate change mitigation efforts	Yes	41.2%
	No	58.8%
Does community leadership support Climate change initiatives	Yes	35.2%
	No	64.8%

Source: Author's Field survey 2024

Socio-Cultural Barriers to Adoption of Climate Change Mitigation Measures

Table 4 identified several socio-cultural barriers hindering the adoption of climate change mitigation measures in Badagry. The most significant barrier is a lack of awareness, reported by 70.9% of respondents, underscoring the need for enhanced education and information dissemination. This result highlights the importance of education and information dissemination in shaping community responses to climate change. Many residents are either unaware of the dangers posed by climate change or do not fully understand the actions required to mitigate its effects. This aligns with previous studies that emphasize the need for targeted awareness campaigns in rural and underserved areas to foster community engagement in climate change initiatives (Abdulkadir et al., 2025). Economic constraints are another significant barrier, with 17% of respondents citing financial limitations as a reason for their inability to adopt climate-friendly practices. This reflects a broader pattern seen in low-income regions where poverty exacerbates environmental degradation as communities are often more focused on meeting immediate economic needs than on long-term environmental sustainability (Olatunji & Olagoke, 2019). Traditional beliefs and values were also highlighted as barriers by 12.1% of respondents. In

many communities, cultural practices such as bush burning for land clearance and deforestation are deeply ingrained and considered normal. These practices, while economically viable for some, have devastating environmental consequences (Musiliyu et al., 2015). The findings suggest that addressing these cultural barriers will require a combination of education, policy interventions, and community-based initiatives to provide sustainable alternatives to traditional practices.

Perception of Social Norms

A majority (58.8%) of respondents (Table 4) felt that social norms in Badagry do not support climate change mitigation efforts. This indicates a tendency to conform to harmful practices, which necessitates community-based education programs aimed at reshaping social norms towards sustainability. Social norms play a critical role in shaping individual behaviour, particularly in rural communities where conformity to cultural expectations is highly valued. The data indicate that any efforts to promote climate change mitigation in Badagry must consider these social norms and work towards reshaping them in favor of environmentally sustainable practices. Community-based education programs that challenge harmful norms and promote collective environmental responsibility could be instrumental in this regard.

Community Leadership Support

The findings in Table 4 revealed that 64.8% of respondents believe community leadership does not actively support climate change initiatives. This lack of visible support from leadership can hinder the effectiveness of any community-based interventions. Local leaders often serve as role models and their attitudes toward climate change can significantly influence community behaviour (Ensor, 2021). This lack of support can impede effective community engagement, emphasizing the need for workshops and advocacy to enhance leadership understanding and prioritization of environmental issues. Alternatively, leaders may face economic and political pressures that prevent them from fully endorsing climate mitigation efforts. These challenges suggest that any successful intervention will need to involve a concerted effort to engage community leadership and integrate their participation into climate change mitigation strategies. This could include workshops for leaders to increase their awareness and knowledge of climate change and its impact on the community, as well as policy advocacy to align local governance with climate-friendly policies.

1.6 Integrating Local Knowledge into Climate Policies and Programs

Table 5: Importance of Integrating Local Knowledge and Cultural Practices into Climate Change Policies

Variables	Options	Frequency
Importance of integrating local knowledge and cultural practices into climate change policies	Very important	64.8%
	Important	27.3%
	Moderately important	4.2%
	Not important	3.6%
Traditional Practices Beneficial for Climate Change Mitigation	Nil	84.0%
	Don't know	6.7%
	Agroforestry and tree planting	9.3%

Source: Author's Field survey 2024

Importance of Integrating Local Knowledge and Cultural Practices into Climate Change Policies

The study in Table 5 revealed a strong consensus among respondents regarding the significance of integrating local knowledge and cultural practices into climate change policies. A substantial 92.1% of respondents consider this integration to be either "important" or "very important," with a striking 64.8% identifying it as "very important." These findings underscore the vital role that cultural sensitivity plays in the development and implementation of climate change policies. Cultural practices, which are deeply embedded in local communities, can provide a framework that enhances the acceptance and effectiveness of climate change initiatives. The high level of agreement among respondents aligns with the growing recognition in literature that local knowledge is crucial for sustainable climate change mitigation (Mistry & Berardi, 2016). It can enhance the resilience of communities by providing strategies that are culturally acceptable and ecologically relevant (Nzeadibe et al., 2011). Furthermore, cultural practices often possess deep-rooted environmental conservation principles that can be leveraged to promote sustainable development and climate action.

Traditional Practices Beneficial for Climate Change Mitigation

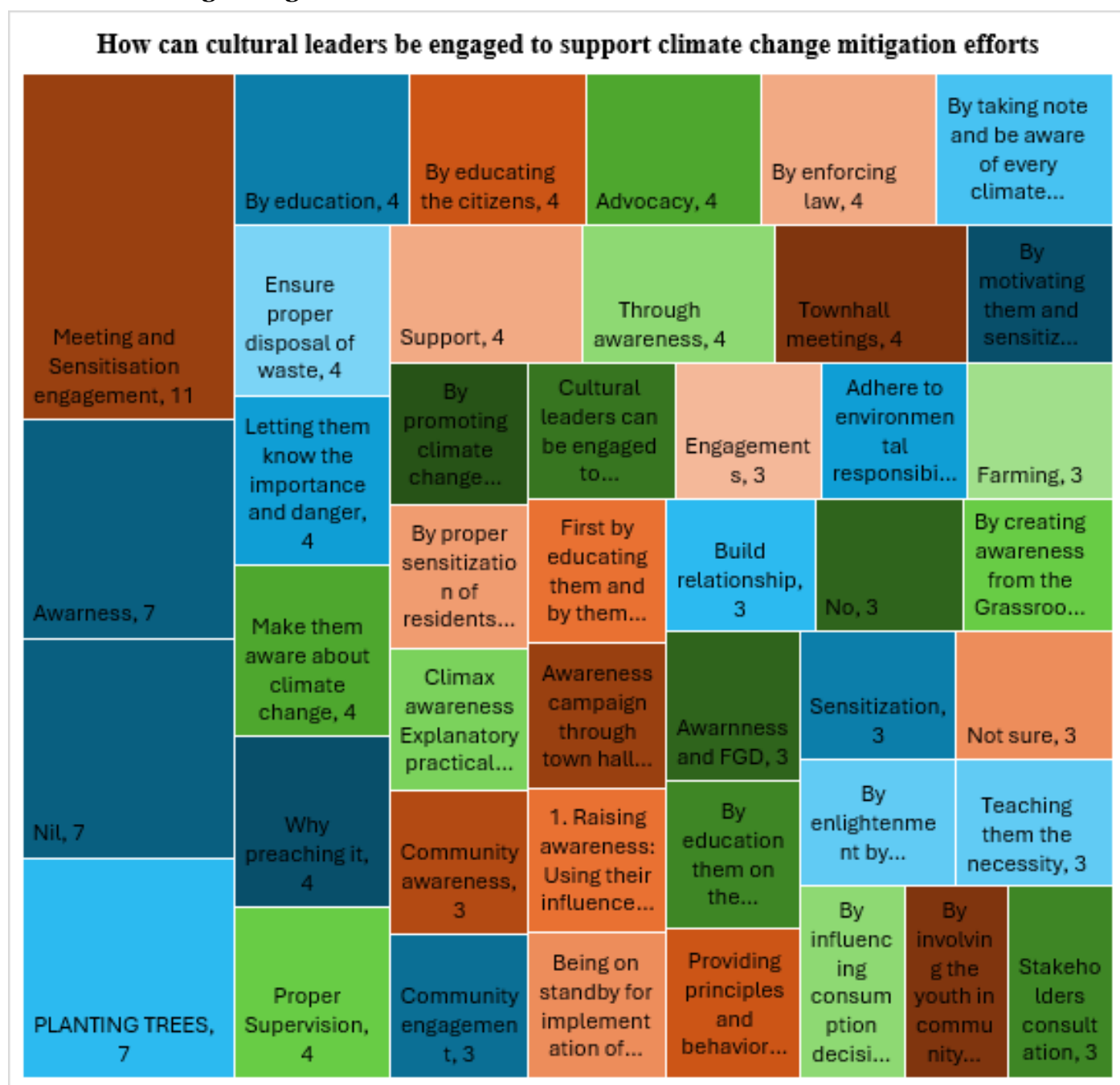
The study in Table 5 also identified few traditional practices that respondents believe could

contribute to climate change mitigation. However, there is significant uncertainty regarding which practices are most effective since the most common response was “*Nil*” (84.0%), along with similar expressions of uncertainty such as “*Don’t know*” (6.7%). This suggests that while traditional practices such as agroforestry and tree planting are recognized by 9.3% of the respondents, a substantial knowledge gap exists concerning their application to modern climate change challenges. This finding suggests the need for targeted educational and awareness-raising initiatives to promote Traditional Ecological Knowledge (TEK). TEK has been recognized in global literature as a valuable resource for adapting to and mitigating climate change (Berkes, 2018). However, without a clear understanding of the relevance and application of these practices, their potential for climate resilience may remain untapped. A systematic effort to document and integrate these practices into modern climate strategies could enhance sustainability and resilience (Ensor, 2011).

Engagement of Cultural Leaders in Climate Change Mitigation

To effectively engage cultural leaders in Badagry in climate change mitigation efforts, the most effective method is raising awareness and sensitization as seen in Figure 4. Many respondents specifically emphasized the importance of meetings and sensitization programs for this purpose. Other responses include tree planting activities and proper supervision by the leaders. This is consistent with findings from other regions where cultural leaders have successfully led climate action by serving as trusted messengers (Ochieng et al., 2019). The engagement of cultural leaders is particularly important because they possess social capital and influence that can facilitate the acceptance of climate policies and practices (Sithole, 2020). By empowering cultural leaders with climate change knowledge and strategies, they can become champions of environmental conservation and mitigation within their communities. According to related literature, effective climate governance must involve local communities as active participants in policy design and implementation (Reed, 2008). This approach fosters local ownership of climate initiatives and ensures that policies are contextually relevant. In the case of Badagry, such involvement would bridge the gap between top-down policy frameworks and grassroots-level action.

Figure 4: Engagement of Cultural Leaders in Climate Change Mitigation



Source: Author's field survey report, 2024

Incorporating Local Knowledge and Traditions into Climate Change Mitigation Strategies

The integration of local knowledge and traditions into climate change strategies is critical for the development of sustainable and culturally appropriate solutions. The result in Table 6 outlines various suggestions on how this integration can be achieved. Responses such as “decolonizing climate knowledge” and “climate change education in local languages” highlight the need to move away from

Western-centric approaches and embrace more inclusive, locally driven strategies. The literature supports this by emphasizing that indigenous knowledge systems, which are often excluded from formal climate policies, can provide innovative solutions for resilience (Nakashima *et al.*, 2012).

Moreover, suggestions such as creating awareness through technology and bridging local knowledge with modern ideologies indicate a growing recognition of the need to blend traditional practices with scientific approaches. This aligns with contemporary

frameworks that advocate for the integration of indigenous and local knowledge into climate adaptation strategies (Ford *et al.*, 2016). To fully realize the benefits of this integration, policymakers must ensure that local knowledge is respected and valued in the decision-making process.

Table 6: Responses on how local knowledge and traditions can be incorporated into Climate Change Mitigation Strategies

Category	Responses	Frequency
Local Knowledge & Traditional Practices	Decolonize climate knowledge: Recognize and respect indigenous knowledge systems and traditional practices, co-create solutions with local communities, embrace holistic approaches (spiritual, cultural, ecological)	7
	Cultural practices	7
	Local innovation	6
	Forest conservation should be implemented	6
Community Participation & Sensitization	Adequate participation and sensitization	14
	Continuous engagement	3
	Enlightening community leaders respected by indigenes to spread the word on climate change impacts and mitigation	3
	Establishing ministry for that and having delegates at grassroots level	3
Education & Awareness Creation	Create awareness through technology	4
	Creating awareness and setting standards	3
	Climate change education in local languages	3
	I suggest awareness should be created strongly in primary and secondary schools, markets, and worship centers in Badagry	3
	If community leaders and youth are well educated about climate change and its effects, they can enlighten others	3
	Sensitization	21
	Supporting community-led initiatives	3
Sustainable Practices	Rainwater harvesting, drip irrigation, and conserving ponds and wetlands	4
	Maintaining cleanliness	4
	Tree planting	4
	Don't know	7
Lack of Knowledge/Uncertainty	Nil	7
	No response	7
	No	3
	None	13
	Nothing	7
	Not sure	7
	By ensuring maximum information on how they can effectively strategize for climate change mitigation	4
Others	Recognizing the value of traditional knowledge and promoting its integration into climate change policies for sustainable development, resilience, and understanding of environmental relationships	3
	Reducing vulnerability to climate change or improving community resilience	3
	Farming	3

SOURCE: Author's field survey 2024

Conclusion/Recommendations

The study explored the socio-cultural hindrances to climate change mitigation in Badagry Local Government Area, Lagos State, Nigeria through a quantitative research design. Purposive, Stratified and Convenient sampling techniques were used to administer 165 questionnaires. Results show that while there is a high level of awareness about climate change, traditional beliefs and limited engagement with local knowledge hinder broader participation in mitigation efforts. To overcome these barriers, it is essential to integrate local knowledge into climate change policies, enhance education and awareness. The findings conclude that local knowledge, when effectively integrated into climate policies, and actively engage cultural leaders and community members in climate governance can enhance community resilience and foster sustainable development in the Badagry LGA, Lagos State. However, concerted efforts are needed to address cultural and economic barriers that impede participation in climate change mitigation. In line with the findings of the study, the following recommendations are made.

1. Education and Awareness Campaigns:

Targeted educational programs can be implemented to inform the community about the impact of climate change and the role of traditional practices in mitigating these effects. These campaigns should also promote the co-creation of solutions that blend local knowledge with modern scientific approaches.

2. Engagement of Cultural Leaders: Cultural leaders can be empowered through continuous education and sensitization programs to promote climate-friendly practices within their communities. Their influence can be pivotal in shaping community attitudes towards climate change mitigation.

3. Incorporation of Local Knowledge in Policy Development: Policymakers should recognize and integrate local ecological knowledge into climate policies. This will not only enhance the relevance and acceptability of these policies but also promote culturally appropriate solutions for climate resilience.

4. Promotion of Sustainable Traditional Practices: Sustainable practices such as agroforestry, tree planting, and water conservation, rooted in traditional knowledge, should be promoted through government and community-led initiatives. These practices can serve as effective climate change mitigation strategies.

5. Capacity Building and Training: Programs aimed at building the capacity of both community members and leaders in climate change adaptation and mitigation should be prioritized. This will help

bridge the knowledge gap and equip communities with the necessary tools to address environmental challenges.

6. Strengthening Institutional Support: Local governments and NGOs should work together to provide institutional support for climate change initiatives. This includes funding for community led projects and the creation of platforms for knowledge exchange between scientific and traditional knowledge systems. By implementing these recommendations, Badagry Local Government Area can significantly improve its climate resilience and actively contribute to broader climate change mitigation efforts because the socio-cultural barriers to climate change mitigation in Badagry are significant but not insurmountable.

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