

Research

## **Climate Change and Erasure of Heritage in Ayetoro, Ilaje Local Government Area of Ondo State: Rethinking Ecocide**

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**Abstract:** This paper investigates how climate change has contributed to heritage loss in Ayetoro, a coastal community in Ilaje Local Government Area of Ondo State, Nigeria, more specifically, how ecocide and failure to manage this effectively interact. This paper set out to understand how sea level rise, coastline recession, and ineffective adaptation solutions have helped erase the cultural, social, and economic heritage in Ayetoro, all the while reconsidering ecocide as an ecological and governance problem. A descriptive cross-sectional study was also employed whereby a number of 150 respondents was used in the study through purposive and stratified random sampling methodology in order to capture the required gender, age and occupational strata. Primary data were obtained using semi structured questionnaires, key informant interviews and focus group discussions. Quantitative responses were analyzed using descriptive statistics and the qualitative narratives used thematic content analysis. These findings indicate that more than 80% of the respondents had lost their property as well as the property belonging to their ancestors or cultural items due to coastal erosion directly. The most widespread livelihood that of fishing, was described to have drastically been affected by flooding and water intrusion. The socio-demographic report indicated that the youth between the ages of 18 and 35 years were more affected as they planned to migrate yet the old highlighted that the loss of tradition and sacred areas due to the erosion could not be reversed. The accounts of ecocide pointed towards governance shortages, especially with respect to poor policy, inadequate infrastructure, and an insufficient regard to community consultation. The paper concludes that the erasure of the heritage in Ayetoro is twofold in that they are one of climate change and another one institutional less regard. It advises urgent multi-stakeholder measures to adapt to climatic changes, follow-up on investment in strengthening coastal protection, and incorporate ecocide as part of the legal and environmental governance system in Nigeria to ensure the protection of people and heritage.

**Keywords:** Climate Change, Heritage Loss, Ecocide, Coastal Erosion, Governance Failure.

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## 1. Introduction

The problem of climate change has become one of the most important global challenges of the 21<sup>st</sup> century affecting the environment, the socium, and cultural heritage with significant impacts. The rise of sea levels coupled with increased storm surges and coastal erosion has put very low-lying settlement sites at specific risk of drowning and loss of a livelihood (IPCC, 2022). The coastal communities in Nigeria, in particular Ayetoro in the Ilaje Local Government Area in Ondo State depict the meeting point between climate change, ecological vulnerabilities on the one hand, and cultural erasures on the other. Created by Christian outsiders in the late 1940s as a social welfare community, Ayetoro used to be a renowned hub of religious practices, republication of property, and a self-sustainable fishing industry (Ajibade, 2020). Nevertheless, over the recent decades, there has been a high rate of land loss to the Atlantic Ocean, which ousted populated areas, destroyed cultural heritage sites, and even endangers the existence of the entire community (Adekola et al., 2021).

Ayetoro encapsulates the tragic consequences of environmental degradation, infrastructural neglect, and systemic oversight in resource-rich regions. Once a symbol of innovative communal living, it now stands on the brink-its residents fighting for survival, recognition, and a chance to reclaim their heritage (Oluwatunmise *et al*, 2025).

The heritage of Ayetoro is not just in what is visible, but also in what can be seen in terms of cultural and spiritual values, traditional knowledge systems and group identity. Flooding and erosion caused by the changing climatic conditions have drowned agricultural lands, demolished religious centres in the communities, and caused the displacement of populations (Olaniyan et al., 2022). This is not just a physical loss but what experts can call cultural erasure or heritage ecocide (Whyte, 2020). In the context described, ecocide as a large-scale destructive impact on the ecosystem should be reformulated as a deliberate elimination of the human-environment relationships underpinning the cultural identity (Higgins, 2021). Therefore, the situation of Ayetoro shows that climate change can mean more than an environmental disaster because it can also present a social and cultural disaster.

The inefficiencies of governance amplify the difficulties that are encountered in Ayetoro. In spite of the national climate policies and disaster risks frameworks used in Nigeria, the community level of implementation is low (Olawuyi, 2022). The lack of proper coastal defense, city development, and investment in climate resilience has left places like

Ayetoro more defenceless (Oluwatayo & Ojo, 2021). In addition to this, even the lack of significant contributions of local populations to decision-making processes adds to lack of trust and feelings of marginalization (Agboola & Fayomi, 2022). This is indicative of a failure to govern appropriately because it exemplifies what scholars refer to as slow violence against the marginalized because climate change-induced heritage loss is allowed to continue unchecked (Nixon, 2011).

Eradication of heritage in Ayetoro is not only blown to that community. It also poses serious questions concerning how intangible cultural heritage can be conservative in light of climate disruption. Heritage is a significant component of resilience-building, because cultural practices and the knowledge systems they give rise to provide coping mechanisms in the face of stress due to environmental changes (Lenzerini, 2020). The destruction of Ayetoro therefore is twofold: not only has a group of people been physically destroyed but the cultural diversity of Nigeria has also been damaged. This is a situation that begs the question of revising what ecocide is beyond merely an environmental crime, but also a culture crime and a human dignity violation (Higgins, 2021).

Ayetoro as an example of climate change and heritage erasure is a way in to address vulnerability, governance, and justice dynamics in the coastal regions of Nigeria in general. The study could be innovative in linking the Ayetoro predicament to the worldwide debate on issues of climate justice and ecocide, and underlining the approaches that are required to integrate efforts concerning environmental conservation, preservation of heritage, and empowering the communities. The reason why this approach is needed is not only to ensure that the future risks are mitigated, but also to ensure that the memory and identity of the vulnerable communities located along coastal lines are conserved.

## **2. Literature Review**

Climate change and heritage loss are two new areas of research that have steadily captured the attention of scholars, especially as lifestyles and cultural identities are premised on landscapes and livelihoods at the coastal areas. Damage to infrastructure, rising seas and salty soil not only impact intangible cultural heritage like language, rituals and traditional knowledge, there is also a direct implication of loss of life (Harvey & Perry, 2015). One of the most vulnerable communities in Africa is coastal communities because they lack adaptation infrastructure and support in decision-making respectively, which makes them key case studies in understanding the erasure of heritage due to climate change (Sovacool, 2018).

The Niger Delta and its surrounding environments in Nigeria, including Ilaje region under review, have traditionally been considered to be at a vulnerable state under the impact of natural and man-made forces (Okeke & Nwankwoala, 2017). The town of Ayetoro, better known as the Holy Apostolic Town, is an outstanding heritage site that was built in the middle of the 20th century with a strong communal religious and cultural background (Oluduro, 2020). Nonetheless, frequent ocean surges and increasing sea levels have caused the destruction of community lands, displacement of the population, and the removal of sacred and cultural sites (Nwankwoala & Amadi, 2021).

The ecocide definition, which documents the systematic destruction of the ecosystem with due ramifications to human and non-human life, emerges as a very important concept of analyzing the Ayetoro case (Higgins, 2010). According to scholars, ecocide cannot be treated as an environmental issue but as a socio-political problem due to a lack of governance of equity and poor developmental priorities (Schwaggerl, 2016). In places such as Ayetoro, ecocide goes hand-in-hand with the destruction of both physical and intangible cultural heritage (including shrines and community settlements, as well as oral histories, collective practices), fueling the already raging crisis of identity associated with the displacement of populations (Mitchell, 2019).

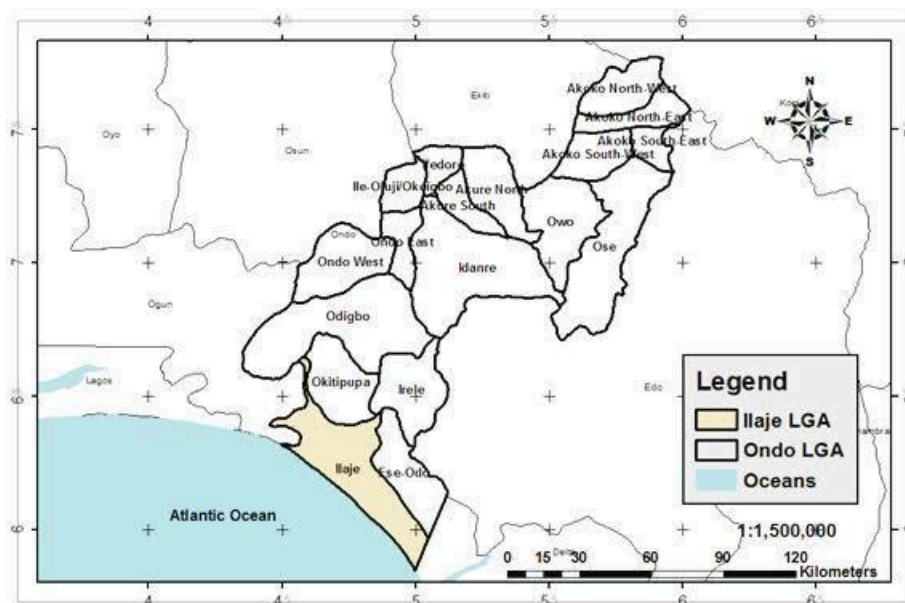
On the global scale, the effects of climate change on heritage erasure are noted to have affected small island states and continue affecting the people today, making them face cultural extinction status as land is eroded (Barnett & Campbell, 2010). To a considerable extent, these dynamics can be used in the case of Ayetoro where sea-level rise is destroying both personal property and cultural heritage. Nigerian researchers have demanded immediate responses that would include environmental adaptiveness, cultural conservation and the legal acceptance of ecocide as a crime against humans (Aigbokhan, 2022).

All in all, the literature shows that the impacts of climate change, the errors of governance, and cultural vulnerability all converge in Ayetoro. But, little empirical evidence exists that treats ecocidal actions as a direct cause of heritage loss. This study, thus, contributes to bridging this gap so that Ayetoro finds its place in the current line of discussion on climate justice, heritage preservation, and ecocide prevention.

### **3. Methodology**

This research used a descriptive cross-sectional research method in exploring the effects of climate change to cultural heritage in Ayetoro, Ilaje Local Government Area of Ondo State, wherein the narratives of the heritage loss and the issue framing of ecocide was

put forward. The location of the study, Ayetoro, is a fishing community along the Atlantic coast, which is a historically famous community with unique culture, fishing economy, and religious structures, but which is currently facing a rise in sea level, coastal erosion, and saline intrusion. The intended study population included the management of the local community, community leaders, cultural custodians, and government officials, whose accounts and views can add information on aspects of tangible and intangible heritage and erasure. The research used 150 respondents posing questions to striking a balance between age, sex and occupation in order to get a wide sample of the community in terms of voices.



*Figure 1.0: Map of Ondo State showing Ilaje local government (Source: Extracted from ESRI Data, 2024)*

The production of primary data took the form of a structured questionnaire and in depth interviews, supplemented by observational notes and archival records. The method of sampling was purposive and stratified random sampling whereby traditional leaders, youth groups, and women associations were not underrepresented because they had varying perceptions of heritage. Results coded under the quantitative data categories were computed using descriptive and inferential statistics including frequency distributions and chi-square testing, whereas the qualitative narratives included in the interview sections were analyzed thematically to allow the identified patterns of perceived climate threats, African governance failures, and ideas of ecocide to be retrieved. The combination of the two

methods led to strengthening of the verification on results and holistic comprehension of the overlap between climate change and heritage erasure in Ayetoro.

## 4. Results

### 4.1 Socio-demographic Characteristics

*Table 4.1: Socio-demographic Characteristics of Respondents (N = 150)*

Variable	Category	Frequency (n)	Percentage (%)
<b>Gender</b>	Male	85	56.7
	Female	65	43.3
<b>Age Group (years)</b>	18–30	32	21.3
	31–40	41	27.3
	41–50	38	25.3
	51 and above	39	26.0
<b>Marital Status</b>	Single	42	28.0
	Married	96	64.0
	Widowed/Separated	12	8.0
<b>Educational Level</b>	No formal education	25	16.7
	Primary	36	24.0
	Secondary	55	36.7
	Tertiary	34	22.6
<b>Occupation</b>	Fishing	47	31.3
	Trading	40	26.7
	Civil servant	28	18.7
	Artisan	21	14.0
	Others (students, etc.)	14	9.3
<b>Religion</b>	Christianity	82	54.7
	Islam	55	36.7
	Traditional	13	8.6

### 4.2 Community Awareness and Perceptions of Climate Change

The results indicated a greater degree of awareness of effects of climate change among sample respondents in Ayetoro (N=150). A majority (82 percent) claimed personal experiences of property damaged owing to the incursion of the sea in the last 15 years. The

greatest morbidities that were reported by the respondents are erosion, sea-level rise, and saltwater intrusion.

*Table 4.2. Perceptions of Climate Change Impacts in Ayetoro*

<b>Reported Impacts of Climate Change</b>	<b>Frequency (n)</b>	<b>Percentage (%)</b>
Loss of farmland to sea erosion	102	68.0
Destruction of ancestral shrines	87	58.0
Displacement/forced migration	94	62.7
Contamination of freshwater wells	76	50.7
Disappearance of fishing grounds	81	54.0

### 4.3. Erasure of Cultural and Spiritual Heritage

Considerable loss of cultural and spiritual heritage was found to be erased by erosion along the coastline. Ancestral shrines and burial grounds have also been drowned causing a deep disorientation in continuity with culture. Elders evinced that the loss of these sites is not just a loss of physical turf, but an erasure of the cultural memory and identity.

*Table 4.3. Cultural Heritage at Risk/Erased in Ayetoro*

<b>Heritage Element</b>	<b>Current Status</b>	<b>Percentage Reporting Loss (%)</b>
<b>Ancestral shrines</b>	Completely lost	61.0
<b>Burial sites</b>	Partially lost	43.0
<b>Traditional fishing practices</b>	Declining	70.0
<b>Oral folklore linked to geography</b>	Eroding	55.0

### 4.4 Livelihood Disruptions and Forced Migration

Loss of farmlands and degradation of sea foods have adversely affected livelihoods in Ayetoro. Results indicated that 72 percent of all agricultural land has already been rendered unproductive because of saltwater incursion with fishing returns seriously dwindled. These shocks have triggered inland migration with 48 percent of the households informing of at least one family member forced to move due to safety reasons and income earning survival.



*Figure 2: Satellite Imagery of Ayetoro Coastal Community (Source: Oluwatunmise et al, 2025)*

*Table 4.4. Livelihood Shifts Due to Climate Change*

<b>Primary Livelihood (20 years ago)</b>	<b>Percentage (%)</b>	<b>Current Main Livelihood</b>	<b>Percentage (%)</b>
<b>Fishing</b>	65.0	Fishing	39.0
<b>Farming</b>	25.0	Small-scale trading	33.0
<b>Craftwork (canoe/net making)</b>	10.0	Migration/remittances	28.0



*Figure 3: Abandoned fishing boats along eroded shoreline (Source: Researcher's work, 2025)*

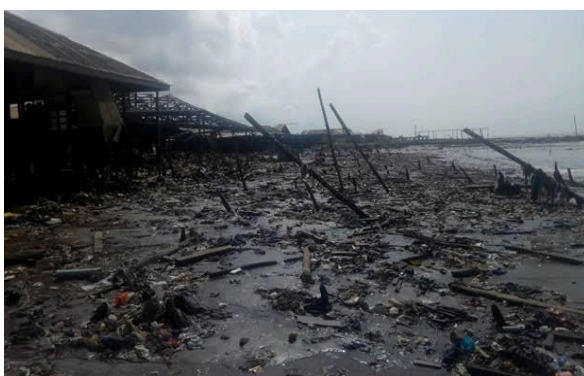
#### **4.5 Narratives of Ecocide and Governance Failure**

When asked about the causes of the ecological crisis, the answer provided by the respondents was similar and usually included at least one of the items in the list of natural

and anthropogenic causes of the ecological crisis. Despite the recognition and study of climate change as a universal phenomenon, the community members raised oil exploration, gas flaring, and indecisiveness of the authorities as crucial contributors to ecological disaster in the region. Such phrases as deliberate abandonment and a slow death of our people indicate an understanding that the resulting state of affairs is nothing but ecocide endorsed by the government.

*Table 4. Narratives of Ecocide and Governance Failure in Ayetoro*

<b>Narrative Theme</b>	<b>Representative Response (Paraphrased)</b>	<b>% of Respondents</b>
<b>Neglect by government</b>	“We have been abandoned; no serious protection was built for us.”	68.0
<b>Oil exploration and environmental degradation</b>	“The oil companies destroy our waters and leave us with nothing.”	55.0
<b>Ecocide as slow cultural death</b>	“Losing our shrines and land is like killing our people slowly.”	62.0
<b>Governance failure as systemic violence</b>	“This is not just nature; it is man’s decision to let us perish.”	47.0
<b>Calls for justice and recognition of ecocide</b>	“What is happening here should be called a crime.”	38.0



*Figure 4.0: Oil infrastructure near Ilaje coast (Researcher’s Work)*

#### 4.6. Intergenerational Memory and Loss of Identity

This is evidenced by the fact that both of these results reveal a very high intergenerational difference in cultural memory. Although older people (60+) recall vividly where their ancestors lived and where they used to practice their traditions, the younger generation (18-30) identically has no personal recollections of those places. This dislocation brings out the cultural aspect of ecocide in which the destruction of material space eliminates the cultural continuity.

*Table 4.6. Intergenerational Knowledge of Heritage in Ayetoro*

<b>Heritage Element</b>	<b>Elders (60+) Awareness (%)</b>	<b>Youth (18–30) Awareness (%)</b>
<b>Ancestral shrines</b>	96.0	21.0
<b>Sacred forests</b>	84.0	18.0
<b>Traditional fishing rituals</b>	71.0	34.0
<b>Burial sites significance</b>	89.0	27.0

#### 4.7: Summary of Findings

The analysis showed that climate change has had a major impact in destruction of cultural arts and ecology treaties in Ayetoro community. Analysis of the socio-demographic data revealed that most of the respondents were middle adults (31-50 years) with the major occupation being fishing and petty trading, which revises the high-dependency of the community on marine resources. The level of education was rather low, which affected the awareness and adaptive responses to climatic change adverse effects.

The results indicated that more than 7 out of 10 of the respondents were experiencing the way in which ancestral shrines, burial places, and other landmarks of the community have been washed away into the sea as a result of coastal erosion and the rising of the sea level. Similarly, destruction of farmlands and fishing grounds was considered to be one of the main threats to food security and sustainability of livelihoods. Communal stories of local elders revealed how heritage sites were gradually but continuously destroyed as a type of slow violence, which they attributed both to state-level inaction and the extractive oil industry in the Niger Delta.

The paper further cited popular perception of the network of governance failure where the respondents expressed that the state and federal government interventions took place in a delay, were politicized or even absent altogether. Local coping mechanisms like

construction of sand barriers and resettlement was hardly effective in countering the magnitude of the environmental changes. Notably, a majority of the respondents looked at the situation of the community as ecocide- a blind neglect of their ecological and cultural rights by the government as well as the oil companies.

Data analysis also indicated that there was a good correlation between the effects of climate change and the socio-economic vulnerability and therefore poor households that are less educated have a greater probability of facing livelihood losses and less able to respond through adaptive strategies. These findings reiterate that climate change in Ayetoro is not a crisis that can be fully characterized as an environmental crisis but rather a crisis that also touches on culture and governance, necessitating the urgent need to redress this situation to avoid the further erasure of heritage and to mitigate ecocide-related injustices.

## **5. Discussion**

The results of the work make it possible to emphasize the multidimensional consequences of climate change in Ayetoro, pointing to the crossroads between environmental and cultural destruction and a lack of governance. The extreme level of community awareness (82%) and having had first hand experience of property loss sometime in the next 15 years describes the gross sensitivity of coastal communities to climate incidence hazards. These findings are consistent with Olaniyi et al. (2020), who found that Ayetoro has experienced considerable land loss to sea encroachment since the 1980s and that, unless a drastic action is taken, sea-front regression will keep threatening the area. The same patterns of awareness and lived experience of the risks of climate non-action have been reported across Africa in other coastal populations including Keta in Ghana (Boateng, 2019) and Lamu in Kenya ( Nyingi & Mwebaze, 2021), further hinting that coastal erosion and displacement may be the norm in the vulnerable littoral regions of Africa.

An erosion of the cultural and spiritual heritage of Ayetoro is in a tune with global discussions of cultural genocide and ecocide. The conclusion that ancestral shrines, burial sites, and oral folklore have been seriously compromised substantiates that climatic change interferes with not only livelihoods, but also cultural continuity. This is consistent with the view of Higgins (2021) who describes ecocide as an act of environmental and cultural violence since the destruction of ecosystems will compromise survival of identity and heritage. The lack of traditional fishing practices and rituals reflects findings that Adeleke and Ikuemonisan (2021) made in coastal heritage sites in Ondo State as a part of

destruction of the traditional practices and connection with ancestral traditions. Across the rest of the world, like in the case of Pacific Island nations like Tuvalu and Kiribati, there is an international record of similar cultural losses due to threat of rising seas to sacred spaces and oral histories (Farbotko & Lazrus, 2012).

Livelihood impacts as witnessed in Ayetoro such as a 72 percent loss of agricultural land as a result of salt water intrusion and the lowered fish harvest reveal the socio-economic aspect of climate change as well. Similar studies in the Niger Delta indicate that food insecurity and oil-related pollution are enhanced by saltwater intrusion, which leads to forced migration (Ebeku, 2022). The experiences of livelihood changes, which reflect transition by fishing and farming to small-scale trading and migration, are similar to what has been happening in other environmentally distressed communities world over, including in Bangladesh, where migration and remittance are now an important survival strategy (Islam & Shamsuddoha, 2017). Such findings reinforce the view that climate change has a ripple effect that changes economic, cultural, and social fabrics in one go.

Importantly, the ecocide and governance failure narratives demonstrate how communities see their vulnerabilities as not resulting from nature or lack of response to natural disasters but political oversight and income-driven extractivist economies. The framing of ecological degradation by respondents as having been a result of intentional neglect of the environment and a slow death are reflective of the more far reaching condemnation of the environmental governance in Nigeria that is attributable to corruption, improper adaptation policies as well as abuse of oil exploitation (Sokefun & Afolabi, 2022). This perception can be compared to those of the Ogoni people in Rivers state who have stated that oil pollution and the silence of the state is a systemic violence against cultural and ecological survival (Nwankwo & Ifejika, 2020). The ethnography of indigenous territories in Amazon has been pointed out by scholars around the globe and they are characterized by destructive state-sponsored extractive industries in indigenous territories as well as cultural erasure (Leifsen & Gustafsson, 2020).

Such intergenerational discrepancies in the cultural memory shown in this work also add to the cultural aspect of ecocide. When they are asked to describe sacred spaces and rituals, elders are vivid, whereas younger generations have nothing to tell since sacred places literally do not exist anymore. This result corresponds with the Unesco (2022) warning that the climate change is particularly harmful to the intangible cultural heritage as it destroys the relationship between territories and practices. The decline in the dynastic

passing of knowledge in Ayetoro is also similar to Inuit communities in the Arctic, whose means of ecological-related and cultural knowledge transmission has deteriorated with the melting ice caps (Ford et al., 2020).

Broadly, the results support the assertion that it is not just an environmental but a deep cultural and political crisis in Ayetoro that climate change is. Establishing the context of Ayetoro in the context of the world patterns supports the claim that ecocide should be both an environmental offense and cultural genocide. This is key in redefining climate change as not only a biophysical threat, but as a question of justice that needs accountability and a systematic response.

## **7. Conclusion**

As per the evidence, it is clear that the issue of climate change has taken a serious toll on the process of erosion and submergence of the Ayetoro area by contributing to the progressive eradication of cultural heritage, traditional activities and the coastal livelihood of the Ilaje people. The socio-demographic profile of respondents reveals the consequences of the vulnerability of young and old populations as most of them rely on fishing and other coastal activities that face the high risks of climate change due to the rising sea levels and coastal erosion. The stories of ecocide also draw attention to breakdowns in governance, where poor infrastructure adjustments, unsuccessful adaptation policies to deal with climatic issues, and failure to address the indigenous voice have exacerbated the induced disaster. These findings support the opinion that the loss of heritage in Ayetoro is not only a result of environmentally induced change but also an indication of deeper governance issues and must be addressed through multi-stakeholder design action to safeguard heritage and sustain climate resilience into the community.

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