

**COVERAGE OF GLOBAL CLIMATE CHANGE BY SELECT NEWSPAPERS' AND BAYELSA
STATE RESIDENTS' PERCEPTION OF THE STATE ECOSYSTEM
(NOVEMBER 30, 2023 – FEBRUARY 19, 2024)**

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ABSTRACT

This study examines the role of Nigerian newspapers in shaping public perceptions of climate change in Bayelsa State, a climate-vulnerable region in the Niger Delta, from November 30, 2023, to February 19, 2024. Employing a mixed-methods design grounded in Agenda-Setting and Framing Theories, the research integrates content analysis of 101 climate change articles from *The Guardian*, *The Punch*, and *The Nation* with a survey of 400 Bayelsa residents. Findings reveal high resident exposure to and awareness of climate change, particularly local impacts like flooding and biodiversity loss, with calls for government intervention. However, newspaper coverage was moderate in frequency, predominantly focused on international themes (e.g., COP28), and lacked prominence, with only 11.88% of articles on front pages. While 51.49% of reports adopted a positive, solution-oriented tone, local issues like public health and community adaptation received minimal attention. These findings highlight a disconnect between global climate narratives and local realities, limiting the media's role in fostering resilience. The study contributes to SDG 13 (Climate Action) by advocating for localized, prominent, and consistent climate journalism to enhance public engagement and adaptation in vulnerable regions. Recommendations include prioritizing localized framing, diversifying reporting formats, and increasing editorial prominence to bridge the perception-action gap in Bayelsa.

Keywords: *Climate Change, Media Framing, Public Perception, Environmental Communication, Newspaper Coverage, Media Framing, Environmental Communication*

INTRODUCTION

Newspapers are pivotal in shaping public discourse on critical societal issues, particularly in Nigeria, where uneven access to reliable information and reactive policy responses amplify the need for effective climate communication. By simplifying complex scientific data, personalizing abstract risks, and amplifying human-interest narratives, newspapers can bridge the gap between global climate science and local realities, fostering awareness and action (Mbamalu, 2020). In Nigeria's democratic context, newspapers not only inform but also frame debates, reflect political priorities, and influence public sentiment and policy formulation, making their role in climate change communication indispensable (Ukonu et al., 2020). Editorial choices—such as headline framing, story frequency, and source selection—determine whether climate change is perceived as a distant global issue or an urgent local reality requiring immediate action (Boykoff, 2011).

Bayelsa State, located in Nigeria's Niger Delta (longitudes 5°–6° East, latitudes 4°–6° North), exemplifies a region facing severe climate-induced disruptions. Its low-lying wetlands, extensive coastlines, and estuarine ecosystems are acutely vulnerable to sea-level rise, coastal erosion, flooding, and saltwater intrusion, which threaten agriculture, freshwater access, health, and livelihoods, particularly for fishing and farming communities (Elum & Snijder, 2023). These challenges are exacerbated by decades of oil-related environmental degradation, making effective climate communication critical to empower communities and drive adaptation (Amakiri & Ikiroma, 2022). However, scientific projections, such as those from the Intergovernmental Panel on Climate Change (2021), often fail to penetrate public consciousness without media translation into accessible, locally relevant narratives.

The problem lies in the urban-centric and event-driven nature of climate change coverage in Nigerian media, which often marginalizes peripheral regions like Bayelsa despite their disproportionate environmental burdens (Ajaero & Anorue, 2018). This limited focus on local impacts, coupled with a paucity of research on how media coverage shapes public perceptions in ecologically sensitive subnational contexts, hinders the development of tailored communication strategies that could enhance resilience (Onyechi & Nwabueze, 2021). The framing of climate stories—whether as disasters, policy debates, or community struggles—significantly influences public engagement and adaptive behavior, yet studies specific to Bayelsa remain scarce (Oramah et al., 2023).

This study addresses this gap by analyzing climate change coverage in three prominent Nigerian newspapers—The Guardian, The Punch, and The Nation—from November 30, 2023, to February 19, 2024, and its influence on Bayelsa residents' perceptions of their ecosystem. It seeks to;

1. find out the frequency of global climate change reports in the select newspapers;
2. examine the categories of the reports on global climate change in the select newspapers;
3. determine the prominence given to reports on global climate change in the select newspaper;
4. ascertain the direction of global climate change reports in the select newspaper;
5. investigate the residents extent of exposure to reports of global climate change in the select newspapers; and
6. find out the perception of Bayelsa residents on consequences of global climate change to Bayelsa ecosystem.

By pursuing these objectives, the study contributes to Sustainable Development Goal (SDG) 13 (Climate Action) by promoting awareness and resilience, SDG 4 (Quality Education) by enhancing informed public discourse, and SDG 11 (Sustainable Cities and Communities) by fostering demand for adaptive infrastructure and sustainable planning. This research underscores the urgent need for journalism that bridges global climate science with local realities, empowering communities to demand accountability and innovate solutions.

Literature Review

Understanding Climate Change and Its Global Communication Imperatives

Climate change, a defining global challenge, manifests in rising temperatures, erratic precipitation, sea-level rise, ocean acidification, and frequent extreme weather events, driven by anthropogenic activities such as fossil fuel use and deforestation (Intergovernmental Panel on Climate Change, 2021). Effective communication is essential to translate these complex scientific findings into public understanding and action. Newspapers play a critical role by contextualizing climate risks, yet global studies highlight persistent gaps in coverage, with narratives often oscillating between technical jargon and politicized debates (Boykoff, 2011). Schäfer and Painter (2021) argue that impactful climate journalism requires storytelling that humanizes data, integrates local perspectives, and emphasizes actionable solutions to foster agency among audiences. Similarly, Anderson (2017)

emphasizes that media must balance scientific accuracy with emotional resonance to engage diverse publics, a challenge particularly acute in regions with varying literacy levels.

In Nigeria, where media access and literacy vary widely, newspapers remain a trusted information source, especially in rural and semi-urban areas. However, crafting narratives that resonate with diverse audiences—from policymakers in Abuja to farmers in Bayelsa—requires overcoming structural barriers like limited resources and editorial biases (Ukonu et al., 2020). Effective climate communication must prioritize local relevance to ensure that climate change is perceived as a tangible threat to livelihoods rather than an abstract global issue, a need particularly pressing in vulnerable regions like Bayelsa (Eze & Okeke, 2022).

Newspaper Coverage of Climate Change in the Global South

In the Global South, newspapers remain influential agenda-setters, shaping public discourse despite the rise of digital platforms (Nielsen, 2015). In Africa, climate change coverage is often sporadic, event-driven (e.g., tied to COP summits), and lacks scientific depth or local context, limiting public engagement (Ajaero & Anorue, 2018). González and Sánchez (2021) found that media access significantly influences climate perceptions across Africa, but inconsistent reporting leaves rural populations underinformed about adaptation strategies. This episodic approach is evident in Nigeria, where newspapers like *The Guardian* and *The Punch* often prioritize urban and political narratives, sidelining rural regions like Bayelsa (Onyechi & Nwabueze, 2021). Such urban bias marginalizes vulnerable communities, reducing their visibility in national discourse.

Globally, scholars argue that effective climate journalism in the Global South must prioritize localized framing to amplify indigenous voices and highlight community-driven solutions (Corner & Clarke, 2017). In Nigeria, studies like Tagbo (2010) reveal that reliance on foreign wire services often results in coverage that lacks local relevance, undermining public engagement in regions like the Niger Delta. Integrating local narratives, as suggested by Schäfer and Painter (2021), can foster resilience by connecting global climate trends to community experiences, a strategy critical for Bayelsa's context.

Media Representation of Climate Change in Nigeria

Nigerian newspapers face structural constraints—limited resources, reliance on wire services, and editorial priorities favoring political stories—that shape their climate change coverage (Ukonu et al., 2020). Ajaero and Anorue (2018) conducted a content analysis of Nigerian and Ghanaian newspapers, finding that climate change is often framed as a policy or international issue, with minimal focus on grassroots impacts or environmental justice. For instance, coverage frequently emphasizes government commitments at global summits rather than the lived experiences of Niger Delta communities facing floods or erosion. Similarly, Mbamalu (2020) found that renewable energy reporting in Nigeria adopts a political frame, presenting energy transitions as government-driven rather than environmental imperatives, obscuring the broader climate context.

Oramah et al. (2023) highlighted how securitization framing—portraying climate change as a national security threat—overshadows community-based adaptation efforts, alienating local stakeholders in regions like Bayelsa. This aligns with findings by Okoro and Ndoma (2019), who noted that Nigerian media often prioritize elite perspectives, marginalizing rural voices. To address this, scholars like Ekwueme and Okoro (2021) recommend that Nigerian newspapers adopt solution-oriented frames that highlight local adaptation strategies, such as climate-smart agriculture, to foster public engagement and resilience in vulnerable communities.

Bayelsa State Ecosystem and Its Climate Vulnerabilities

Bayelsa State's Niger Delta location makes it one of Nigeria's most ecologically sensitive regions, characterized by mangrove swamps, rivers, and estuaries. Climate-induced threats—sea-level rise, flooding, coastal erosion, and saltwater intrusion—compound existing environmental degradation from oil extraction and gas flaring (Elum & Snijder, 2023). These impacts disrupt fishing, farming,

and water access, threatening socio-economic stability for resource-dependent communities (Amakiri & Ikiroma, 2022). The media's role in highlighting these vulnerabilities is critical, yet coverage often lacks depth or continuity, with floods receiving attention only during peak events (Onyechi & Nwabueze, 2021).

Globally, studies like Adger et al. (2013) emphasize that effective communication in vulnerable regions requires integrating scientific projections with local knowledge to support adaptation. In Bayelsa, the paucity of sustained reporting on long-term adaptation strategies hinders public understanding and policy advocacy (González & Sánchez, 2021). Nigerian scholars like Akpan and Anorue (2020) argue that media must emphasize community-driven solutions, such as mangrove restoration, to empower residents and policymakers, aligning with global calls for localized climate journalism (Hulme, 2015).

Residents' Perception of Climate Change and the Role of Media

Public perceptions of climate change are shaped by lived experiences, cultural knowledge, and media exposure. In Bayelsa, where residents face recurrent flooding and habitat loss, awareness is high, but understanding of climate science and adaptation options remains limited (Elum & Snijder, 2023). Ajaero and Anorue (2018) noted that Nigerian newspapers often fail to bridge global climate discourse with local realities, resulting in a perception-action gap. Across Africa, González and Sánchez (2021) found that communities with greater media access exhibit higher climate awareness, but the quality of information matters, a finding echoed in Nigeria by Eze and Okeke (2022).

Globally, scholars like Moser (2016) argue that media narratives must be relatable and solution-focused to translate awareness into action. In Bayelsa, newspapers can play a transformative role by framing climate change as a local issue, using stories of farmers or fishers to foster empathy and motivate action (Obiefuna & Offorma, 2014). Such narratives can empower residents to demand accountability and adopt adaptive practices, strengthening community resilience (Whitmarsh & O'Neill, 2010).

Media's Influence on Environmental Awareness and Behavioral Response

The media's influence on environmental behavior is well-documented. Schäfer and Painter (2021) argue that credible, relatable journalism inspires pro-environmental actions, while alarmist reporting may foster apathy. In Nigeria, inconsistent climate coverage exacerbates the perception-action gap, as audiences receive fragmented information (González & Sánchez, 2021). Obiefuna and Offorma (2014) found that media are underutilized in teaching climate change, missing opportunities for public education. In Bayelsa, newspapers can catalyze advocacy by highlighting success stories, such as community-led adaptation, shifting narratives from despair to empowerment (Akpan & Anorue, 2020).

Globally, studies like Brulle et al. (2012) demonstrate that sustained, emotionally resonant coverage increases public concern and action. In Nigeria, Okoro and Ndoma (2019) suggest that newspapers should integrate indigenous knowledge to enhance relevance, a strategy critical for Bayelsa where cultural narratives shape perceptions (Amakiri & Ikiroma, 2022). By adopting such approaches, Nigerian journalism can foster civic engagement and resilience in vulnerable regions.

Theoretical Framework

This study employs Agenda-Setting and Framing Theories to analyze how newspaper coverage shapes climate change perceptions in Bayelsa State.

Agenda-Setting Theory

Proposed by McCombs and Shaw (1972), Agenda-Setting Theory posits that media influence public priorities by emphasizing certain issues through frequent and prominent coverage. In climate change communication, the frequency and placement of stories—whether on front pages or buried in back sections—shape what audiences consider important. Sampei and Aoyagi-Usui (2009)

demonstrated in Japan that sustained, emotionally resonant coverage increased public concern about climate change, particularly when linked to local impacts. In Nigeria, newspapers like *The Guardian*, *The Punch*, and *The Nation* can set the agenda by consistently highlighting Bayelsa's climate challenges, elevating community voices, and contextualizing global developments. This study investigates whether such coverage influences Bayelsa residents' perceptions of their ecosystem's vulnerabilities.

Framing Theory

Framing Theory, articulated by Entman (1993), explains how media shape perceptions by emphasizing certain aspects of an issue while downplaying others. Ajaero and Anorue (2018) identified dominant frames in Nigerian newspapers—disaster, policy, and economic implications—that often overshadow human-interest or environmental justice perspectives. In Bayelsa, framing flooding as a consequence of climate inaction rather than a natural disaster could shift public discourse from resignation to responsibility. Similarly, Oramah et al. (2023) noted that securitization framing can marginalize grassroots voices, highlighting the need for inclusive, solution-oriented frames that empower local communities. This study uses Framing Theory to analyze how climate change is portrayed in selected newspapers and how these portrayals affect Bayelsa residents' understanding and responses.

Empirical Review

Empirical research on media coverage of climate change and its influence on public perceptions provides critical insights for understanding how newspapers shape discourse and awareness in vulnerable states like Bayelsa State, Nigeria. Ajaero and Anorue (2018) conducted a framing analysis of climate change coverage in Nigerian and Ghanaian newspapers, aiming to explore how national dailies frame climate change mitigation. Grounded in Framing Theory, their study found that coverage predominantly emphasized governmental and international policy perspectives, often sidelining grassroots narratives and local ecological impacts. They recommend that newspapers incorporate more human-interest and community-based frames to enhance public engagement. Similar to the current study, Ajaero and Anorue focus on Nigerian newspapers, including *The Guardian* and *The Punch*, and examine framing, which aligns with analyzing categories and tone of climate change reports. However, their study covers a broader geographical scope (Nigeria and Ghana) and does not specifically address Bayelsa or its residents' perceptions, unlike the current study's localized focus on Bayelsa's ecosystem and public awareness during a specific period (November 30, 2023 – February 19, 2024).

Elum and Snijder (2023) investigated climate change perceptions and adaptation among farmers in Bayelsa State's coastal communities, using surveys and photovoice to assess how media influences awareness. Informed by participatory communication theories, they found that farmers recognized climate impacts like flooding and saltwater intrusion but had limited access to adaptation information, partly due to inconsistent media coverage. They recommend integrating participatory media approaches, such as community-driven storytelling, to improve awareness and resilience. This study closely aligns with the current research by focusing on Bayelsa residents' perceptions of their ecosystem and the role of media exposure, directly supporting the exploration of public awareness. However, it differs by emphasizing farmers' perspectives and adaptation strategies rather than analyzing specific newspaper content, frequency, prominence, or tone, as the current study does.

Mbamalu (2020) examined newspaper coverage of renewable energy in Nigeria, aiming to identify dominant frames, themes, and actors in national dailies. Using Framing Theory, the study revealed that coverage often adopted a political lens, prioritizing government initiatives over environmental or local impacts, which limited public understanding of climate-related issues. Mbamalu recommends that journalists adopt more environmental and community-focused frames to foster sustainable behaviors. This study shares similarities with the current research through its focus on Nigerian

newspapers and framing analysis, relevant to evaluating categories and tone of climate change reports. However, it focuses on renewable energy rather than broader climate change issues and does not specifically address Bayelsa or its residents' perceptions, unlike the current study's targeted regional and temporal scope.

Oramah et al. (2023) explored securitization framing in Nigeria's climate change discourse, aiming to assess how media and policy narratives portray climate change as a security threat. Grounded in Securitization Theory, they found that such framing often overshadows community-based adaptation efforts, marginalizing local voices in regions like the Niger Delta. They recommend balancing securitization with inclusive, solution-oriented narratives to empower communities. This study aligns with the current research by examining media framing in Nigeria, relevant to analyzing tone and categories of newspaper coverage. However, it differs by focusing on securitization across broader platforms rather than specific newspapers or Bayelsa residents' perceptions, and it lacks the temporal specificity of the current study's 2023–2024 period.

González and Sánchez (2021) analyzed climate change perceptions across Africa using Afrobarometer data, aiming to identify factors shaping public awareness, including media exposure. Drawing on social learning theory, they found that access to newspapers and radio significantly influences climate knowledge, though rural areas often receive fragmented information. They recommend strengthening media access and literacy to bridge perception-action gaps. This study supports the current research by highlighting media's role in shaping perceptions, directly relevant to assessing Bayelsa residents' exposure and ecosystem awareness. Unlike the current study, it covers a pan-African context rather than focusing on Bayelsa or specific newspapers, and it does not analyze content-specific attributes like frequency or prominence.

Schäfer and Painter (2021) investigated global trends in climate journalism, aiming to understand how media ecosystems shape coverage and public engagement. Using Agenda-Setting and Framing Theories, they found that effective climate journalism requires context-sensitive, solution-oriented reporting to enhance public action, though coverage often remains event-driven and lacks local relevance. They recommend integrating local narratives and scientific clarity to improve impact. This study aligns with the current research by providing a framework for analyzing newspaper content, frequency, prominence, and tone, applicable to Nigerian dailies. However, it differs by offering a global perspective rather than a localized focus on Bayelsa or Nigeria, and it does not specifically address residents' perceptions within a defined period.

Together, these studies underscore the critical role of media in shaping climate change awareness and the need for localized, inclusive reporting to address regional vulnerabilities. They provide a robust foundation for analyzing how Nigerian newspapers cover climate change and influence Bayelsa residents' perceptions, while highlighting gaps in localized coverage that the current study seeks to address.

METHODOLOGY

This study employs a mixed-methods research design, integrating quantitative content analysis and survey methods to examine the coverage of global climate change in select Nigerian newspapers and its influence on Bayelsa State residents' perceptions of their local ecosystem. The content analysis systematically evaluates climate change reportage in three widely circulated Nigerian newspapers—The Guardian, The Punch, and The Nation—over the period from November 30, 2023, to February 19, 2024. This component assesses the frequency, prominence, thematic focus, and tone of climate change coverage. Concurrently, a structured survey captures Bayelsa residents' exposure to media coverage, their perceptions of its adequacy, and their understanding of climate change impacts on the state's ecosystem.

The population for the content analysis consists of all editions of The Guardian, The Punch, and The Nation published between November 30, 2023, and February 19, 2024. A total of 82 newspaper editions were reviewed, from which 101 articles explicitly addressing global climate change or its local implications were extracted for analysis.

The survey targets the adult population of Bayelsa State, projected at 2,411,588 in 2023, based on a population growth rate for Nigeria (UN estimate, 2020s): approximately 2.1% per annum from the 2006 National Population Commission census (NPC, 2006). The sample size was determined using the Taro Yamane (1967) formula, $n = N/[1 + N(e)^2]$, with a 5% margin of error, yielding approximately 400 respondents.

The three newspapers—The Guardian, The Punch, and The Nation—were purposively selected based on their national circulation, credibility, and history of environmental reporting in Nigeria.

A multi-stage sampling technique was employed to ensure representativeness across Bayelsa State. In the first stage, all eight Local Government Areas (LGAs) were included to reflect the state's geographical diversity. In the second stage, two communities per LGA were purposively selected based on their documented vulnerability to climate change impacts, such as flooding, as reported by the Bayelsa State Ministry of Environment (2023). In the third stage, 25 respondents per community were selected using simple random sampling, targeting individuals with exposure to media content on climate change and awareness of its local environmental impacts.

For the content analysis, the unit of analysis is each newspaper article addressing global climate change or its implications for Bayelsa's ecosystem. Articles were coded based on the following categories:

1. Thematic Focus: Erosion/flooding, gas flaring/pollution, health impacts, greenhouse gas emissions, political/economic dimensions, or government policies.
2. Article Type: News report, editorial, feature, or opinion piece.
3. Prominence: Placement in the newspaper (front page, inside page, back page, or center spread).
4. Tone: Positive (solution-oriented), neutral (balanced), or negative (catastrophic).

For the survey, the unit of analysis is the individual respondent, with responses measured through a structured questionnaire.

Articles were retrieved from physical and online archives of the selected newspapers. Inclusion criteria required articles to explicitly discuss global climate change or its localized impacts.

A structured questionnaire was administered to collect quantitative data. The questionnaire comprised two sections:

1. Section A: Demographic information (e.g., age, gender, education level, and media consumption habits).
2. Section B: Items assessing respondents' exposure to climate change media coverage, perceived adequacy and relevance of the coverage, and awareness of climate change impacts on Bayelsa's ecosystem. Responses were measured using a four-point Likert scale (1 = Strongly Disagree, 2 = Disagree, 3 = Agree, 4 = Strongly Agree).

The questionnaire was administered in person by trained research assistants and interpreters, who worked across all LGAs to ensure geographical and linguistic inclusivity. These personnel were also trained as coders for the content analysis, enabling them to apply the coding scheme consistently and accurately across the selected newspaper articles. Informed consent was obtained from all participants prior to data collection.

Content analysis data were analyzed using descriptive statistics, including frequencies and percentages, to identify patterns in thematic focus, article type, prominence, and tone. Cross-tabulations were used to explore relationships between variables, such as the association between article prominence and tone.

Survey data were analyzed using descriptive statistics, including frequency distributions, percentages, and weighted mean scores (WMS). A WMS threshold of 2.5 or higher was considered indicative of agreement or positive perception. To examine the extent of residents' exposure to climate change reports the WMS scale was categorized as follows: 0–2.00 (very low), 2.01–2.49 (low), 2.50–3.00 (high), and 3.01–4.00 (very high).

The coding scheme's validity was established through expert review by two communication scholars with expertise in content analysis. Inter-coder reliability was assessed using Cohen's Kappa, with a

minimum of 20% of the articles coded by two independent coders. Kappa values exceeded 0.80 across all categories, indicating strong agreement and reliability.

The questionnaire's face and content validity were confirmed through expert review by environmental communication scholars. A pilot test was conducted with 30 respondents from two Bayelsa communities, followed by revisions to enhance clarity and relevance. Test-retest reliability was assessed by re-administering the questionnaire to the same group after two weeks, yielding a Pearson correlation coefficient of 0.85, confirming the instrument's stability.

RESULTS

Survey Response Rate

Out of 400 questionnaires administered to residents across selected communities in Bayelsa State, 335 were duly completed and returned, representing a response rate of 83.75%. A small fraction (14%) was unreturned, while 2.25% were void and unusable. The high response rate suggests strong community engagement and interest in climate change issues affecting the state ecosystem.

Demographic Profile of Respondents

The demographic characteristics of the respondents (N = 335) are summarized in Table 1. These variables offer context for understanding how different segments of the population engage with newspaper content and perceive environmental issues.

Table 1: Demographic Characteristics of Respondents (N = 335)

Variable	Category	Frequency	Percentage (%)
1.Age	18-28 years	54	16.1
	29-39 years	86	25.7
	40-50 years	105	31.3
	51 & above	90	26.9
2.Gender	Male	234	69.9
	Female	101	30.1
3.Education	Primary	89	26.6
	Secondary	128	38.2
	Tertiary	91	27.2
	Others (vocational, adult ed.)	27	8.1
4. Marital Status	Single	48	14.3
	Married	249	74.3
	Divorced	21	6.3
	Widowed	17	5.1
5.Occupation	Employed (public/private)	188	56.1
	Self-employed	61	18.2
	Unemployed	86	25.7
6.Location	Yenagoa	45	13.4
	Sagbama	42	12.5
	Ekeremor	42	12.5
	Kolokuma/Opokuma	43	12.9
	Brass	40	11.9
	Nembe	41	12.2
	Ogbia	43	12.9
	Southern Ijaw	39	11.7

Source: Field Survey -2024

The demographic data reveal that the majority of respondents were middle-aged (40–50 years) and predominantly male. Most had at least a secondary education, with a notable proportion attaining tertiary education. A significant number were married and actively employed, reflecting a relatively

stable socio-economic profile. The respondents were fairly distributed across all major local government areas of Bayelsa State, ensuring geographic diversity. This demographic spread offers a balanced representation of adult residents with sufficient exposure to and engagement with climate and media-related issues in the state.

Research Question One:

Table 2: Extent of Exposure to Climate Change Reports

Item	SA	A	D	SD	Total	WM	Remark	Extent
7. I regularly read physical or online copies of one or more of the following newspapers: The Guardian, The Punch, or The Nation.	86 25.7% 344	107 31.9% 321	59 17.6% 118	83 24.8% 83	335 100% 866	2.58	Accepted	High
8. I would be more likely to read a climate change report if it focused on the local impacts for Bayelsa State.	133 39.7% 532	169 50.4% 507	31 9.3% 62	2 0.6% 2	335 100% 1103	3.29	Accepted	Very high
9. I discuss the issue of global climate change with friends and family after reading about it in the newspapers.	100 29.9% 400	148 44.2% 444	53 15.8% 106	34 10.1% 34	335 100% 984	2.93	Accepted	High
10. I feel a sense of urgency to take action on climate change after reading reports in these newspapers.	107 31.94% 428	109 32.54% 327	85 25.37% 164	34 10.15% 34	335 100% 953	2.84	Accepted	High
11. The climate change reports in these newspapers motivate me to learn more about the issue.	88 26.27% 352	152 45.37% 456	64 19.10% 128	31 9.26% 31	335 100% 967	2.88	Accepted	High

Grand Weighted Mean Score

2.90

Accepted High

Source: Field Survey -2024

The findings indicate that Bayelsa residents exhibit a generally high level of exposure to climate change reports in *The Guardian*, *The Punch*, and *The Nation*, online or physically. Respondents are more inclined to engage with reports when the content focuses on local environmental impacts, particularly those affecting Bayelsa State. The reports also stimulate interpersonal discussions, a sense of urgency, and a desire to learn more, suggesting that climate-related newspaper content plays a significant role in shaping public awareness, interest, and action. Overall, the exposure level to such media content is high and suggests strong audience receptivity.

Research Question Two:

Table 3: Perceptions of Consequences of Global Climate Change on Bayelsa Ecosystem

Item	SA	A	D	SD	Total	WM	Remark
12. I am concerned about the potential effects of global climate change.	133 39.7% 532	169 50.4% 507	31 9.3% 62	2 0.6% 2	335 100% 1103	3.29	Accepted
13. I believe that global climate change is already having a negative impact on the environment in Bayelsa State.	108 32.2% 432	146 43.6% 438	65 19.4% 130	16 4.8% 16	335 100% 1016	3.03	Accepted

14. I am worried about the potential consequences of climate change for the future of the Bayelsa ecosystem (e.g., loss of biodiversity, flooding).	166 49.55% 664	164 48.96% 492	4 1.19% 8	1 0.30% 1	335 100% 1165	3.47	Accepted
15. I believe that human activities are a major cause of global climate change.	101 30.2% 404	160 47.8% 480	50 14.9% 100	24 7.1% 24	335 100% 1008	3.00	Accepted
16. I believe that the government of Bayelsa State should take action to address climate change.	156 46.56% 624	175 52.24% 525	2 0.60% 4	2 0.60% 2	335 100% 1155	3.44	Accepted

Source: Field Survey -2024

The data suggest that Bayelsa residents overwhelmingly recognise the seriousness of global climate change and its negative impact on their local environment. There is strong concern about present and future consequences—particularly threats to biodiversity and increased flooding. Respondents largely attribute these changes to human activities and believe that climate change is already affecting the Bayelsa ecosystem. Importantly, there is widespread support for proactive governmental intervention, with residents calling on the Bayelsa State Government to take urgent action. These findings indicate high awareness, concern, and a desire for collective responsibility and policy-driven solutions to mitigate climate-related risks.

Presentation and Analysis of Data from the Code Sheet

Research Question Three

Table 4: Content Analysis Data on Frequency of Reports on Global Climate Change in the Select Newspapers.

Coding Parameter	Category/Code	Frequency	Percentage (%)
Newspaper Source	The Punch (1)	30	29.70
	The Nation (2)	30	29.70
	The Guardian (3)	41	40.60
	TOTAL	101	100

Source: Content Analysis -2024

The analysis revealed that global climate change was reported with moderate frequency across the selected newspapers, with *The Guardian* demonstrating slightly higher editorial commitment to the issue compared to *The Punch* and *The Nation*. This pattern suggests a shared but uneven emphasis on environmental journalism among the outlets, with *The Guardian* emerging as a relatively more consistent platform for climate-related coverage during the study period.

Research Question Four

Table 5: Content Analysis Data on Categories of Content Covered in Reports on Global Climate Change in the Select Newspapers.

Coding Parameter	Category/Code	Frequency	Percentage (%)
Categories of Content	Erosion/Flood/Desertification/Weather (1)	3	2.97
	Gas Flaring/Soot/Pollution (2)	18	17.82
	COP28/Political/Economic (3)	49	48.52
	Health Impact of Climate Change (4)	4	3.96
	Global Warming/Greenhouse Emission (5)	12	11.88
	Government Policy/Regulations (6)	14	13.86
	Others- Food security (7)	1	0.99
	TOTAL	101	100

Source: Content Analysis -2024

The analysis reveals that newspaper coverage of global climate change during the study period was heavily skewed toward political and economic issues, particularly those related to international conferences like COP28. While topics such as gas flaring, pollution, government policy, and greenhouse emissions received moderate attention, more localized environmental concerns—like erosion, flooding, and public health impacts—were marginally reported. This suggests a coverage pattern that privileges global and policy-level discourse over grassroots or community-specific environmental challenges relevant to Bayelsa State.

Table 6: Content Analysis Data on Unit of Analysis for each Article

Coding Parameter	Category/Code	Frequency	Percentage (%)
Unit of Analysis	News Report (1)	64	63.37
	Feature Article (2)	4	3.96
	Editorial (3)	4	3.96
	Cartoon (4)	0	0.00
	Letter to the Editor (5)	3	2.97
	Opinion Column (6)	21	20.79
	Interview (7)	1	0.99
	Photograph (8)	3	2.97
	Others (9)	1	0.99
	TOTAL	101	100

Source: Content Analysis -2024

The analysis reveals that newspaper coverage of climate change during the study period relied predominantly on straight news reporting, with limited use of interpretive or in-depth formats such as features, editorials, and opinion columns. While opinion pieces offered some analytical perspective, the minimal presence of interviews, letters to the editor, photographs, and the complete absence of visual formats like cartoons suggest a narrow storytelling approach. This indicates an underutilization of diverse journalistic genres that could have enhanced public engagement and provided more comprehensive narratives on climate change issues.

Research Question Five

Table 7: Content Analysis Data on Prominence of each Article in the Select Newspaper

Coding Parameter	Category/Code	Frequency	Percentage (%)
Prominence	Front Page (1)	12	11.88
	Back Page (2)	2	1.98
	Centre Spread (3)	3	2.97
	Inside Page (4)	84	83.17
	TOTAL	101	100

Source: Content Analysis -2024

The analysis reveals that while climate change is consistently reported in the selected newspapers, it is largely relegated to less prominent sections, with the majority of articles placed on inside pages. This pattern suggests that despite the frequency of coverage, climate change is not prioritised as a leading editorial concern. The minimal placement on front, back, or centre pages indicates limited visibility, which may affect public attention and engagement with the issue. Such editorial positioning reflects a tendency to treat climate change as a secondary topic rather than a headline-worthy agenda in the newspapers studied.

Research Question Six**Table 8: Content Analysis Data on Direction or Tone of each Report on Global Climate Change in the Select Newspaper**

Coding Parameter	Category/Code	Frequency	Percentage (%)
Direction	Redeemable (1)	52	51.49
	Irredeemable (2)	10	9.90
	Neutral (3)	39	38.61
	TOTAL	101	100

Source: Content Analysis -2024

The data indicate that the majority of climate change reports in the selected newspapers adopted a redeemable tone, suggesting a media framing that emphasizes solutions, resilience, and mitigation strategies. A significant portion maintained a neutral stance, reflecting balanced reporting without clear advocacy or alarm. Only a small fraction presented climate change as irredeemable, highlighting limited coverage that frames the issue as catastrophic or beyond resolution. This overall orientation suggests a cautious optimism in media narratives around climate change, aligning with a constructive communication approach.

DISCUSSIONS

The first research question, addressing the extent of Bayelsa residents' exposure to climate change reports, revealed a high level of exposure, particularly when coverage emphasized local impacts like flooding. This finding aligns with González and Sánchez (2021), who found that media access, including newspapers, significantly shapes climate knowledge across Africa, including Nigeria. The emphasis on local impacts fostering engagement corroborates Elum and Snijder (2023), who noted that Bayelsa farmers' awareness of climate impacts was heightened when media connected global issues to local realities. This supports Agenda-Setting Theory (McCombs & Shaw, 1972), as frequent and relevant coverage appears to elevate climate change on residents' agendas, prompting discussions and information-seeking behavior. However, unlike González and Sánchez's broader African focus, the current study's specificity to Bayelsa highlights a localized effect, suggesting that context-sensitive reporting enhances exposure and engagement in vulnerable regions.

Regarding the second research question, Bayelsa residents demonstrated strong awareness of climate change's negative impacts, such as flooding and biodiversity loss, attributing these to human activities and advocating for government intervention. This corroborates Elum and Snijder (2023), who found that Bayelsa farmers recognized climate impacts like flooding but faced challenges accessing adaptation information due to inconsistent media coverage. Similarly, González and Sánchez (2021) reported high awareness in rural African communities but noted a perception-action gap due to fragmented information. The current study's focus on residents' support for government action aligns with these findings, reinforcing Framing Theory (Entman, 1993), as media frames that link climate change to local consequences shape residents' understanding and policy expectations. However, the current study extends these insights by emphasizing broader resident perspectives beyond farmers, offering a more comprehensive view of Bayelsa's community awareness.

The third research question, examining the frequency of climate change coverage, found moderate coverage, with The Guardian publishing slightly more articles than The Punch and The Nation. This finding partially aligns with Ajaero and Anorue (2018), who noted sustained but uneven coverage in Nigerian newspapers, often driven by international events. However, the moderate frequency contrasts with their observation of sparse coverage, suggesting a potential increase in attention during the 2023–2024 period, possibly due to events like COP28. This supports Agenda-Setting Theory, as the frequency of coverage influences public salience, though the moderate level indicates that climate change may not yet be a top editorial priority, consistent with Schäfer and Painter's (2021) observation of event-driven journalism.

For the fourth research question, the analysis revealed a predominance of international political and economic themes, such as COP28, with limited coverage of local issues like flooding, erosion, or

public health. This corroborates Ajaero and Anorue (2018) and Mbamalu (2020), who found that Nigerian newspapers often prioritize policy and economic frames over local environmental impacts. Similarly, Oramah et al. (2023) noted that securitization and policy-focused framing in Nigerian media overshadow community-based narratives, marginalizing regions like the Niger Delta. This finding supports Framing Theory, as the dominance of international frames shapes public discourse, potentially distancing Bayelsa residents from localized climate impacts. The current study's focus on Bayelsa highlights a critical gap, as the lack of local framing may limit residents' ability to contextualize global climate change within their ecosystem.

The fifth research question found that 83% of climate change articles appeared on inside pages, with only 11.88% on front pages, indicating low editorial prioritization. This aligns with Schäfer and Painter (2021), who noted that climate journalism often lacks prominence, reducing its agenda-setting impact. It contrasts slightly with Ajaero and Anorue (2018), who reported inconsistent but occasionally prominent coverage during major events. The low front-page presence in the current study suggests that, despite moderate frequency, climate change remains underprioritized, partially disproving Agenda-Setting Theory's expectation that prominent placement significantly boosts issue salience. This finding underscores the need for Nigerian newspapers to elevate climate stories to enhance public engagement, particularly in vulnerable regions like Bayelsa.

The sixth research question revealed that 51.49% of reports adopted a positive, solution-oriented tone, followed by neutral (38.61%) and negative (9.9%) tones. This contrasts with Ajaero and Anorue (2018) and Mbamalu (2020), who found Nigerian coverage often leaned toward policy-driven or neutral tones, with limited solution-oriented framing. However, it aligns with Schäfer and Painter's (2021) recommendation for positive, context-sensitive reporting to foster public action. The prevalence of positive tones supports Framing Theory, as solution-oriented frames may encourage residents to view climate change as actionable, enhancing their support for government intervention, as noted in the second research question. Unlike Oramah et al. (2023), who criticized securitization framing for marginalizing local voices, the current study's positive tone suggests a shift toward more empowering narratives, though the focus on international themes limits local relevance.

Overall, the current study's findings corroborate prior research by highlighting the media's role in shaping climate awareness and the challenges of urban-centric, policy-driven coverage in Nigeria (Ajaero & Anorue, 2018; Mbamalu, 2020; Oramah et al., 2023). The high exposure and awareness among Bayelsa residents align with Elum and Snijder (2023) and González and Sánchez (2021), confirming media's influence on perceptions, particularly when locally relevant. The moderate frequency, low prominence, and international focus of coverage reflect persistent gaps noted by Schäfer and Painter (2021), underscoring the need for localized journalism. These findings strongly support Framing Theory, as the categories and tone of reports shape residents' understanding and policy expectations, and partially support Agenda-Setting Theory, as frequency and exposure elevate issue salience, though low prominence limits impact. The study's emphasis on Bayelsa's unique vulnerabilities and specific temporal scope (2023–2024) addresses gaps in prior research, proving the need for tailored, community-focused reporting to bridge perception-action gaps in climate-vulnerable regions.

CONCLUSION

This study investigated how three leading Nigerian newspapers—*The Guardian*, *The Punch*, and *The Nation*—covered global climate change and its impact on the perceptions of Bayelsa State residents regarding their local ecosystem. The research was conducted from November 30, 2023, to February 19, 2024. Grounded in Agenda-Setting and Framing Theories, our findings offer six key insights that contribute to the scholarship on environmental communication in climate-vulnerable contexts.

First, survey results indicate that Bayelsa residents were highly exposed to climate change reports, particularly when coverage highlighted local impacts like flooding. Second, residents demonstrated strong awareness of climate change's adverse effects on Bayelsa's ecosystem, specifically flooding

and biodiversity loss. They largely attributed these issues to human activities and advocated for government intervention. Third, content analysis revealed moderate coverage of climate change across the newspapers, with *The Guardian* publishing slightly more articles than *The Punch* and *The Nation*. Fourth, the coverage predominantly focused on international political and economic themes, such as COP28, with minimal attention to local issues like flooding or public health. Fifth, the low prominence of climate change articles, with 83% appearing on inside pages and only 11.88% on front pages, suggests limited editorial prioritization. Sixth, the majority of reports (51.49%) adopted a positive, solution-oriented tone, followed by neutral (38.61%) and negative (9.9%) tones. This constructive framing, as noted by Ogbodo et al. (2018), fosters hope and engagement, supporting Framing Theory's emphasis on how tone shapes public attitudes and behavioral intentions (Nisbet, 2009).

In summary, while Bayelsa residents show significant awareness and engagement with climate change, largely driven by localized media content, the selected newspapers' coverage is constrained by moderate frequency, low prominence, and a focus on global rather than local issues. These findings underscore the need for more consistent, prominent, and locally relevant reporting to enhance the media's role in shaping public perceptions and supporting climate adaptation in vulnerable regions like Bayelsa.

RECOMMENDATIONS

Based on the study's findings, we propose the following recommendations to enhance newspaper coverage of climate change in Nigeria and support adaptive capacity in climate-vulnerable regions like Bayelsa State:

1. **Prioritize Localized Framing:** Newspapers should emphasize climate change narratives that directly connect global issues to local experiences, such as the specific challenges of flooding and biodiversity loss in Bayelsa.
2. **Diversify Reporting Formats:** Media outlets should incorporate in-depth formats, including feature articles, editorials, and community interviews, to provide nuanced insights into climate change's local impacts.
3. **Increase Frequency and Consistency of Coverage:** To strengthen agenda-setting effects, newspapers should sustain and expand climate change coverage through dedicated environmental beats or special sections.
4. **Balance Global and Local Perspectives:** Coverage of international events like COP28 should be complemented with stories addressing pressing local challenges, such as gas flaring, erosion, or community-led adaptation initiatives.
5. **Enhance Editorial Prominence:** To elevate climate change's perceived importance, newspapers should strategically place articles on front or back pages and leverage visual storytelling, such as infographics and photojournalism.
6. **Maintain Solution-Oriented Framing:** Media practitioners should continue utilizing positive, solution-focused frames that highlight resilience, effective adaptation strategies, and viable policy solutions.

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