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## Online News Media and Environmental Management in Nigeria: Evidence from Owerri Metropolis

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### ABSTRACT

This study presents a critical investigation into the complex role of online news media in shaping Nigeria's contemporary environmental management landscape. The advent of digital platforms has democratized access to environmental information, increasing the dissemination of pollution data, policy announcements, and news on nature to the Nigerian populace. This paradigm shift, while laudable for its informational democratization, has brought about challenges and therefore necessitated the need for this study. The primary research problem addresses the growing dissonance between the information flow and its veracity, depth, and analytical rigor. Employing a quantitative survey methodology, this research gathered data from a random sample of 134 online news media practitioners operating in the Owerri urban area in Imo State, Nigeria. The findings of the study indicate that the availability of information on flooding, soil erosion, waste management, and plastic pollution in online media platforms was mainly ranked high. PCA of environmental information availability has a three-component structure: anthropogenic, physical, and trendy environmental factors. Furthermore, the study found that online media platforms and influencers mostly had a minor to moderate impact on young adults' increased environmental attitude, predominant use of eco-friendly items, and increased faith in eco-friendly products. Therefore, the study recommends that more efforts should be made towards expanding access to internet connectivity in the study area. This can be achieved by creating an enabling environment where broadband internet access can become more affordable. In addition, increased environmental awareness should be bolstered, especially at the secondary and tertiary levels of education in Nigeria.

### INTRODUCTION

Mass media plays a crucial role in information dissemination; thus, it can bridge the gap between the public and the government, thereby empowering citizens to demand accountability from leaders. On the part of online media/digital technology, which is an offshoot of the mass media, the information dissemination not only goes viral but is also used to keep the government in check. Guanah and Bebenimibo (2025) believed that digital technology has revolutionized the way society functions in all strata. More so, it has impacted so much to enhancing environmental awareness in Nigeria, altering environmental models, and causing great changes positively and negatively. The importance of environmental management in shaping how the natural environment is designed, implemented, and operated cannot be overstated. Apart from shaping how the populace perceives environmental issues and policy mechanisms, environmental management goes a long way in determining vital aspects of the natural environment components like air, water, landforms, plants, animals, among other environmental variables (Amon *et al.*, 2022; Emetumah, 2017; Emetumah & Emetumah, 2025; Ahmed, 2026). Furthermore, online news on environmental issues is very accessible to many Nigerians due to an exponential increase in the use of internet-connected devices over the last two decades. Thus, it is

not surprising that internet access through mobile devices in Nigeria was over 16 million in 2020 and is expected to exceed 100 million by the year 2029, a growth of more than 500% in less than a decade (Sasu, 2026).

Online news reporting has provided a viable means of adequately espousing Nigeria's environmental management issues. Due to the proliferation of the internet as a predominant source of information in today's world, likely, news on environmental issues can also be shaped by online news reporting through various digital platforms like Facebook, X, Instagram, LinkedIn, Reddit, etc. According to Anyanwu *et al.* (2024), Digital platforms, through the incorporation of Blockchain technology, Internet of Things (IoT), and artificial intelligence (AI), provide important means of enhancing sustainability through information dissemination on environmental degradation. Also, the trend of using podcasts and vlogs hosted by social media influencers has become a persistent aspect of environmental news formation and distribution in Nigeria. Many of these social media platforms and their hosts make posts on environmental issues in Nigeria, which can shape the overall narrative of public discourse. According to Wasike (2026), many of these social media influencers have developed strong followership, comprising different individuals who readily accept their positions on several environmental issues. Therefore, these media platforms

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and social media influencers can play a significant role in determining how many people perceive environmental policies.

On that note, the study aims to analyze Online News Media in Nigeria, to shed more light on its role in the management of Nigeria's natural environment. To achieve this aim, the study focused on examining the effects of online reporting on environmental management in Owerri, Nigeria; ascertaining the importance of online news reporting in enhancing environmental management in Owerri, Nigeria; and determining the extent to which online media platforms and influencers shape the narrative with respect to environmental management in Owerri, Nigeria

## LITERATURE REVIEW

Digital media, no doubt, has helped to accelerate environmental knowledge in Nigeria. According to Arinze (2024), the Nigerian government has implemented numerous policies aimed at promoting digital innovation, digital technology, and digital entrepreneurship to drive economic growth. In another development, Ito and Ivwighren (2024), in their study, believed that the new media can only create environmental awareness when they are appropriately adopted and integrated into learning and teaching practices. The influence of the digital media is not in doubt, owing to its influence on environmental communication and democracy. It has given access for the populace to contribute to total environmental discourse and emancipation. This was confirmed in a paper authored by Aondover *et al.* (2025), where they agreed that the advent of digital media in Nigeria has contributed to the flourishing of social interactions more than any other mass media, therefore confirming the importance of information for effective and sustainable development in society. Furthermore, the emergence of social media in the last few decades has made it the centre of social interactions, surpassing contributions of any other innovations in the history of mass media (Aondover *et al.*, 2025). Generally, information is necessary for effective modern environmental development; social media has made people the sources, the processors, as well as the purveyors of information, as opposed to what was obtained in traditional media.

In the bid to promote environmental awareness, the Nigerian government developed several policies, among which is the policy on ICTs, which looks to expand access to Broadband internet, especially in Nigeria's large urban centers, as well as rural areas (Arinze, 2024). In addition, digital technology has played a significant role in revamping environmental management and sustainable development in many developing countries. In finding out the effectiveness of broadcast media in environmental management within Imo state, Nigeria, Igbokwe *et al.* (2025) determined that both radio and television have been instrumental in enhancing environmental awareness, particularly as a result of artificial intelligence (AI), which has been significantly applied in most social media

platforms. The study, which used a quantitative approach, also determined that most of the study respondents receive information about climate and global warming, while less than half of them have access to good waste management. Nonetheless, 21st-century technological advancements have made it possible for all digital platforms to be accessible, manageable, and operable by anyone, so long as you have an Android phone or something like it. As a result, many users embark on unethical practices, thus abusing the privilege. More so, challenges of cyber threats, data breaches, and the spread of falsehood have become a reality in view of the non-availability of checks and balances in the online space, even in the face of a viable law (Oloyede *et al.*, 2023).

In examining the effectiveness of digital communication in managing environmental degradation in Imo State, Anyanwu *et al.* (2024) posited that environmental decline in the study area poses significant health risks to the people, due to the lackadaisical attitudes of both government agents and the general populace. The study, which used the technological determinism theory to analyze primary data collected from randomly sampled residents in the study area, also identified that over 50% of the study respondents established that online communication has not been very effective in providing information on environmental degradation in Imo State, due to challenges centered on poor internet access and connectivity issues. Therefore, digital platforms must be applied in environmental information dissemination and distribution; this can also foster environmental awareness on pertinent environmental issues. On that note, Chukwudebe *et al.* (2022) assessed how households perceive the use of ICT and improved ways of managing waste in Owerri, Nigeria. The study, which used a survey questionnaire in collecting the required data, identified that most of the respondents have improved their attitude towards waste management in the study area. The study also found that even though most respondents are willing to engage in sustainable waste management practices, online media has not been effective in providing environmental information, due to ICT deficiencies in the study area.

However, communication and mass media tools can be applied to ensure that as many people as possible are adequately informed on current environmental issues. As a result, environmental problems like improper waste management have become challenging to manage in many parts of Nigeria. To buttress the aforementioned, Okeke *et al.* (2024) opined that poor infrastructure for waste collection, storage, and disposal has significantly hampered efficient solid waste management. The study, which used social marketing theory and media case study analysis, also identified that print media reportage in Nigeria can apply targeted outreach approach, serious communal arrangements, as well as 21st century waste management systems, thereby making sure that many Nigerians are well – informed on 21st century waste management techniques. However, media reports on

environmental issues may be biased when the reporters do not have significant environmental knowledge or are simply playing to the gallery. “Brown envelope” journalism, where media houses undertake editorials based on how much they receive from political bigwigs, can reduce the quality of media output and also hamper evidence-based investigative journalism. The prevalence of corruption in the relationship between Nigerian media outlets and the government structures has been compounded by the inroads made by information technology, which not only eases access to a plethora of news outlets, but it has also turned environmental journalism into an all-comers affair when many unqualified persons now pose as journalists and media practitioners (Josiah, 2024).

The importance of online news reporting in enhancing environmental management cannot be overemphasized, particularly considering how the internet has affected life in today’s world. This is because environmental information cannot be useful unless it is shared; mass media through the internet appears to be the best approach to doing that. In examining the perception of media effectiveness in managing environmental health issues in Auchi, Nigeria, Arikenbi *et al.* (2023) found that mass media, especially online media platforms, have been effective in spreading environmental awareness to the wider public. The study, which was based on the uses and gratification theory, also identified that even though the media plays a positive role in creating environmental awareness among the study respondents, improper waste disposal, which is detrimental to people’s health and well-being, is commonly practiced in the study area. In the same vein, Kibonde and Sawe (2025) used a mixed-method approach to study the extent to which sustainable environmental management is influenced by mass media within Tanga city, Tanzania, and determined that environmental news concentrates on climate change and waste management issues. The study findings also indicate that even though television was the most approved medium for environmental information, online vlogs on websites like YouTube are very vital channels for finding environmental information. Furthermore, Jain and Meena (2024) investigated the role of online journalism in enhancing environmental awareness and determined that environmental journalism mainly focuses on print media and digital/electronic platforms, with the latter becoming very predominant, due to accessibility, speed, and convenience provided by the internet. That study, which used a comparative content analysis approach, also found that there are significant differences in how environmental news is shared and who receives and shares it. Despite the proliferation of online news sources, there are still concerns with respect to the extent to which environmental information is actually covered in news editorials. According to Ogadimma *et al.* (2023), even though the media is a powerful force shaping environmental news, a comparative assessment of four Nigerian newspapers in terms of environmental news indicates that there were only eight editorials and fewer

than 800 news stories over two years. Therefore, creating awareness on environmental sustainability requires much more effort, since media platforms may not be able to provide enough force to create the needed awareness.

Online media platforms and influencers can play a vital role in shaping the narrative with respect to environmental management in Nigeria. The concept of sustainable development, which can drive environmental awareness, is vital to many marketing brands that use social media influencers. According to the study by Christian *et al.* (2025) on the impact of social media influencers in online platforms like Facebook, X, Instagram, among others, on sustainable brand narratives in Nigeria, the use of social media influencers to market sustainability in some products has become very rampant in recent years. Furthermore, the use of social media influencers in marketing sustainability has continued due to the lower likelihood of the populace believing and buying these products without recommendations from social media influencers. Also, celebrities and social media influencers are important in spreading information about the dangers and threats posed by environmental pollution in Nigeria. With contributions from social media influencers and celebrities towards creating awareness on environmental pollution, Omoyajowo *et al.* (2024) identified that environmental awareness has significantly increased because many people agree with the message when celebrities and social media influencers they respect are involved. In assessing the extent to which sustainability can be promoted through the influence of journalism, Obun-Andy *et al.* (2025) determined that even though traditional media (newspapers, radio, television, etc.) have maintained consistency in environmental journalism, digital online platforms are very critical in creating more environmental awareness because these platforms are very accessible to anyone with an internet-connected device.

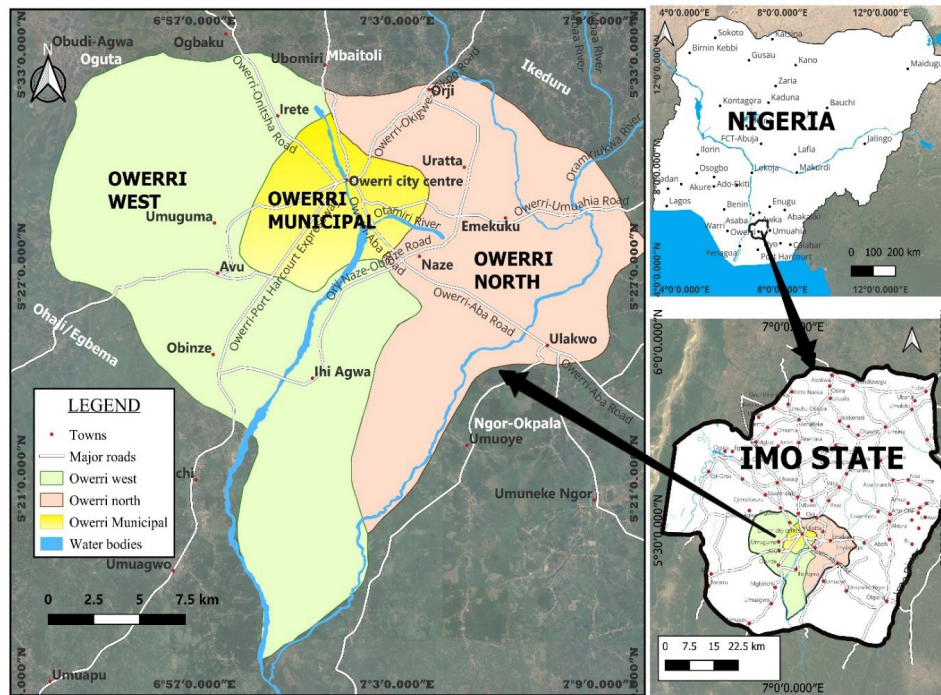
## MATERIALS AND METHODS

The study was conducted in the Owerri Metropolitan area, which includes the capital territory of Imo State, Nigeria. Owerri metropolis covers three Local Government Areas (LGAs): Owerri Municipal, Owerri West, and Owerri North. Figure 1 shows a map of Owerri metropolis, which is the study area. Owerri metropolis has a significant number of broadcast outlets, with about sixteen broadcast media (including 14 radio and 2 television stations) operating within the metropolis. Some of them include: Zanders FM, Glitz FM, Boss 98.9 FM, Ozisa FM, Orient FM/TV, Nigerian Television Authority (NTA), among others. The city is also home to several newspaper operations, including Nigeria Newspoint, The Statesman, and other tabloid outlets. Similarly, content creation is a prominent and sought-after field in Owerri, with many individuals defining their work in this digital space. The media scene in Owerri is supported by a vast network of skilled artisans who form the backbone of content production. Practitioners range from freelancers



with years of experience in video editing and production. In addition, Owerri metropolis has a wide array of photo

studios and service providers that serve both private and commercial clients, documenting life in the city.



**Figure 1:** Owerri Metropolis, Imo State, Nigeria

With respect to research design, a survey approach was adopted in the study, where a cross-sectional approach was applied using a structured questionnaire as the data collection instrument. A random sampling approach was applied, where 150 media practitioners (journalists, content creators, and artisans) in digital communication were the study participants. These media practitioners were sampled from major towns within the three Local Government Areas (LGAs) that make up Owerri metropolis: Owerri West LGA (Umuguma, Avu, Obinze,

Irete, and Ihi Agwa); Owerri Municipal LGA (Owerri city center); Owerri North (Orji, Uratta, Emekuku, Naze, and Ulakwo). In designing the structured questionnaire used for the study's data collection, the study objectives were applied. Apart from extracting demographic information (gender, education, age) of the study respondents, the questionnaire also elicited information on the study objectives. A total of 134 valid questionnaires were eventually retrieved and examined from the 150 that were distributed (See Table 1).

**Table 1:** Distributed and retrieved mail questionnaire for the study

| LGA                | Distributed | Retrieved |
|--------------------|-------------|-----------|
| Owerri West        |             |           |
| Umuguma            | 15          | 12        |
| Avu                | 15          | 14        |
| Obinze             | 10          | 8         |
| Irete              | 15          | 13        |
| Ihi Agwa           | 10          | 9         |
| Owerri Municipal   |             |           |
| Owerri city centre | 35          | 31        |
| Owerri North       |             |           |
| Orji               | 10          | 9         |
| Uratta             | 10          | 10        |
| Emekuku            | 10          | 9         |
| Naze               | 10          | 10        |
| Ulakwo             | 10          | 9         |
| TOTAL              | 150         | 134       |

In analyzing data collected, the study adopted mainly descriptive statistics. Descriptive statistics for the study involved the use of percentage and frequency tables. Furthermore, PCA was applied to the 14 variables from rankings of information availability on environmental issues in online media platforms. Running PCA is suitable given that the 14 variables being analyzed (see Table 7) are in ordinal scale [Question: rank the extent information on the following environmental issues are available in online media platforms; Response: Very low (1), Low (2), High (3), Very High (4)], and sample size is large (Over 130 respondents). The scatter plots from the dataset that interpret the linearity of the variables are displayed as PCA output. Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy was employed to determine sample adequacy since it evaluates adequacy. Furthermore, the dataset's appropriateness for PCA was determined using Bartlett's test of sphericity.

## RESULTS AND DISCUSSION

Study results on socio-demographic characteristics of the study respondents are shown in Table 2. Over 38% of

the study respondents are between the ages of 18 and 30 years, while those aged between 31 and 45 years made up about 30%. Furthermore, about 25% of the study respondents are aged between 46 and 60 years, while respondents aged 60 years and above made up less than 7% of the study respondents. Also, study results on the gender category of the study respondents show that the majority of the study respondents are male, at over 66%, while about 33% are female. In terms of respondents' level of education, the secondary level of education had the highest percentage frequency at 48.5%. This was followed by the tertiary level of education, which had a percentage frequency of 29.1%. Primary level of education had a percentage frequency of 14.2%, while informal education had a percentage frequency of 8.2%, which was also the lowest level of education. In terms of the professional background of the study respondents, about 54% are journalists, which was also the profession with the highest frequency. This was followed by artisans, who made up about 30% of the study respondents. Furthermore, marketing/PR had the lowest percentage frequency, out of the three media professions, at 16.4%.

**Table 2:** Socio-Demographic information

|                    | Frequency | Percentage |
|--------------------|-----------|------------|
| Gender             |           |            |
| Male               | 89        | 66.4%      |
| Female             | 45        | 33.6%      |
| Age Category       |           |            |
| 18 – 30 years      | 51        | 38.1%      |
| 31 – 45 years      | 40        | 29.9%      |
| 46 – 60 years      | 34        | 25.4%      |
| 60+ years          | 9         | 6.6%       |
| Level of Education |           |            |
| Informal           | 11        | 8.2%       |
| Primary            | 19        | 14.2%      |
| Secondary          | 65        | 48.5%      |
| Tertiary           | 39        | 29.1%      |
| Media Profession   |           |            |
| Journalism         | 72        | 53.7%      |
| Marketing/PR       | 22        | 16.4%      |
| Artisan            | 40        | 29.9%      |

Table 3 shows online media activity and environmental information sources of the study respondents. In terms of respondents' category of online activity, content creation had the lowest percentage frequency at 16%; this was followed by others at 26%. Also, online reporting had the highest category of online activity at 57%. With respect to the predominant

online media source of environmental information, social media platforms had the highest percentage frequency at 53%, which was followed by websites at 32.1% of the study respondents. Also, other online media sources accounted for 9%, while internet TV accounted for 6% as a predominant source of environmental information.

**Table 3:** Online media activity and environmental information sources

|                                   | Frequency | Percentage |
|-----------------------------------|-----------|------------|
| Category of online media activity |           |            |
| Content creating                  | 33        | 16%        |

|                                            |    |       |
|--------------------------------------------|----|-------|
| Online reporting                           | 77 | 57%   |
| Others                                     | 35 | 26%   |
| Online source of environmental information |    |       |
| Internet TV                                | 8  | 6%    |
| Websites                                   | 43 | 32.1% |
| Social media platforms                     | 71 | 53%   |
| Others                                     | 12 | 9%    |

Table 4 shows rankings of information availability on 14 common environmental issues in online media platforms within the study area. Availability of Climate change information in online media platforms was mainly ranked high and very high, while deforestation was mainly ranked low and very low by the study respondents. Also, the availability of information on environmental advocacy and the human population problem on online media platforms was mainly ranked low and very low. Availability of flooding and soil erosion information in online media platforms was mainly ranked high and

very high, while availability of air and water pollution information in online media platforms was mainly ranked low and very low by the study respondents. Furthermore, the availability of information on waste management and plastic pollution in online media platforms was mainly ranked high and very high, while the availability of information on desertification, biodiversity management, environmental awareness, and hazardous incidents in online media platforms was mainly ranked low and very low by the study respondents.

**Table 4:** Rankings of information availability on environmental issues in online media platforms

| Variable                         | Very low   | Low        | High       | Very high  | Min. | Max. | Mean | REMARK  |
|----------------------------------|------------|------------|------------|------------|------|------|------|---------|
| Climate change                   | 9 (6.7%)   | 15 (11.2%) | 68 (50.7%) | 42 (31.3%) | 1    | 4    | 3.07 | WEIGHTY |
| Deforestation                    | 43 (32.1%) | 66 (49.3%) | 17 (12.7%) | 8 (6%)     | 1    | 4    | 1.93 | LITTLE  |
| Environmental advocacy           | 44 (32.8%) | 53 (39.6%) | 24 (17.9%) | 13 (9.7%)  | 1    | 4    | 2.04 | LITTLE  |
| Human population problem         | 72 (53.7%) | 54 (40.3%) | 4 (3%)     | 4 (3%)     | 1    | 4    | 1.55 | LITTLE  |
| Flooding                         | 22 (16.4%) | 15 (11.2%) | 59 (44%)   | 38 (28.4%) | 1    | 4    | 2.84 | WEIGHTY |
| Soil erosion                     | 13 (9.7%)  | 24 (17.9%) | 54 (40.3%) | 43 (32.1%) | 1    | 4    | 2.95 | WEIGHTY |
| Air pollution                    | 44 (32.8%) | 49 (36.6%) | 33 (24.6%) | 8 (6%)     | 1    | 4    | 2.04 | LITTLE  |
| Water pollution                  | 37 (27.6%) | 45 (33.6%) | 36 (26.9%) | 16 (11.9%) | 1    | 4    | 2.23 | LITTLE  |
| Waste management                 | 7 (5.2%)   | 27 (20.1%) | 61 (45.5%) | 39 (29.1%) | 1    | 4    | 2.99 | WEIGHTY |
| Desertification                  | 57 (42.5%) | 58 (43.3%) | 12 (9%)    | 7 (5.2%)   | 1    | 4    | 1.77 | LITTLE  |
| Plastic pollution                | 21 (15.7%) | 36 (26.9%) | 46 (34.3%) | 31 (23.1%) | 1    | 4    | 2.65 | WEIGHTY |
| Biodiversity management          | 49 (36.6%) | 61 (45.5%) | 18 (13.4%) | 6 (4.5%)   | 1    | 4    | 1.86 | LITTLE  |
| Environmental awareness          | 31 (23.1%) | 48 (35.8%) | 33 (24.6%) | 22 (16.4%) | 1    | 4    | 2.34 | LITTLE  |
| Hazardous incidents (fire, etc.) | 53 (39.6%) | 57 (42.5%) | 21 (15.7%) | 3 (2.2%)   | 1    | 4    | 1.81 | LITTLE  |

LITTLE = Mean value of 0 – 2.5; WEIGHTY = Mean value >2.5

### Principal Component Analysis (PCA) of Environmental issues in Online Media platforms

The fourteen environmental issues in online media platforms were analysed using PCA in order to discover if

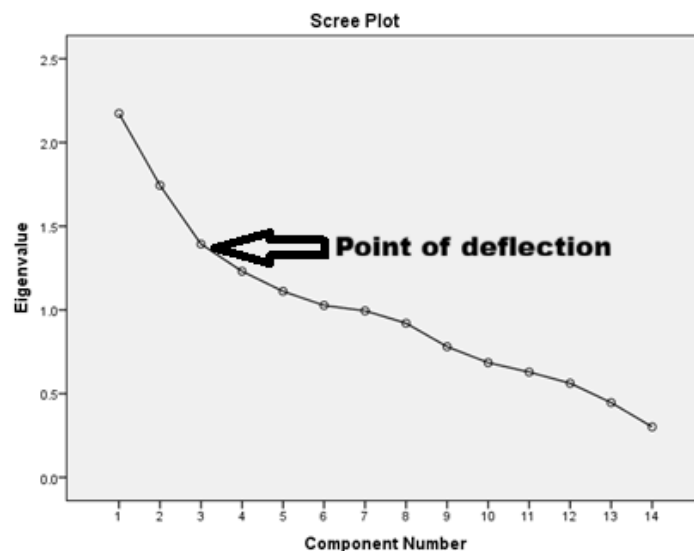
there is a significant disparity in their structure. In order to determine whether the dataset satisfied the presumptions regarding the number of variables, sampling suitability, and data linearity, it was first determined that environmental

**Table 5:** KMO and Bartlett's Test in the PCA

|                                                        |                        |             |
|--------------------------------------------------------|------------------------|-------------|
| <b>Kaiser-Meyer-Olkin Measure of Sampling Adequacy</b> |                        | <b>.542</b> |
| Bartlett's Test of Sphericity                          | Approximate Chi-Square | 223.626     |
|                                                        | Difference             | 91          |
|                                                        | Significance           | .000        |

factors in the analysis are multivariate, making them appropriate for PCA. The results in Table 5 show that each variable has a Kaiser-Mayer-Olkin (KMO) measure of sampling adequacy score of .542, which is fitting for PCA. Furthermore, Table 5 shows that Bartlett's test of sphericity was statistically significant:  $\chi^2 (91) = 233.626, p = .000$ . As a result, the PCA could use the KMO and Bartlett test results. The number of components to be preserved was selected using the scree plot test, the eigenvalue-one (Kaiser) criterion, the extracted loadings proportion of total variance accounted for, and the interpretability criterion. Each component's PCA eigenvalue indicates the

proportion of variation that can be accounted for by that component. The Kaiser criterion, sometimes referred to as the eigenvalue-one criterion, states that components are not allowed to be kept unless their eigenvalue score is at least 1. PCA's initial extraction using the Varimax technique yielded six components with an Eigenvalue of at least one. Furthermore, since the scree plot (see Figure 2) supported extracting three components. Therefore, a final extraction of three components which provide the interpretability required for the PCA was carried. The PCA scree plot showing a graph of eigenvalues is displayed in Figure 2, with the deflection zone noticeably demonstrated.



**Figure 2:** Scree plot showing eigenvalues for the PCA

Eigen values following the third component (the point of deflection) did not differ much, as shown by the scree plot in Figure 2, supporting that the first three elements ought to be retained. To determine the interpretability requirement, the “simple structure” idea is employed.

PCA became easier to comprehend as a result of its three-component structure. In light of this, the rotated component matrix table (refer to Table 6) illustrates how these three components were able to provide the simple framework required for the interpretation of PCA.

**Table 6:** Rotated Component Matrix with communalities for the three components of the PCA

| S/N | Details                         | Components |       |       | Communalities |
|-----|---------------------------------|------------|-------|-------|---------------|
|     |                                 | 1          | 2     | 3     |               |
| 1   | Air pollution                   | .860       |       |       | .740          |
| 2   | Water pollution                 | .772       |       |       | .677          |
| 3   | General environmental awareness | .712       |       |       | .532          |
| 4   | Soil erosion                    | .258       |       |       | .082          |
| 5   | Deforestation                   | -.244      |       |       | .087          |
| 6   | Desertification                 |            | .677  |       | .473          |
| 7   | Flooding                        |            | -.582 |       | .342          |
| 8   | Waste management                |            | .563  |       | .367          |
| 9   | Biodiversity management         |            | .520  |       | .393          |
| 10  | Hazardous incidents             |            | .264  |       | .152          |
| 11  | Plastic pollution               |            |       | .676  | .460          |
| 12  | Human population problem        |            |       | .563  | .442          |
| 13  | Environmental advocacy          |            |       | .562  | .347          |
| 14  | Climate change                  |            |       | -.391 | .214          |



The PCA's rotated component matrix and respective communalities for the fourteen environmental issues are shown in Table 6. Study results reveal that PCA of environmental issues is divided into three parts, with component 1 strongly loading on five variables (Air pollution, Water pollution, general environmental awareness, soil erosion and deforestation), component 2 strongly loading on five variables (Desertification, flooding, waste management, biodiversity management hazardous incidents), and component 3 strongly loading on four variables (plastic pollution, human population problem, Environmental advocacy and climate change). With a factor loading score of .860, the variable on air pollution had the highest out of the five variables that were strongly loaded to component 1; this was also the highest factor loading in the entire rotated component matrix in Table 8. However, the variable on deforestation had the lowest factor loading under component 1, with a score of .244; this was also the lowest factor loading in the entire rotated component matrix. Also, component 2 strongly loaded with five variables, with the variable on Desertification having the highest factor loading with a score of .677, while the variable on hazardous incident had the lowest factor loading under component 2, with a score of .264. Similarly, the variable on plastic pollution had the highest factor loading under component 3, with a

score of .676, while climate change had the lowest factor loading under this component, with a score of .391. In terms of communalities for the 14 environmental variables considered in the PCA, air and water pollution had the largest variance explained, with communalities of .740 and .677, respectively, while soil erosion and deforestation had the smallest variance explained, with communalities of .082 and .087, respectively.

Table 7 shows study results on the extent to which online media platforms and influencers affect the narrative with respect to environmental information in the study area. The results indicate that online media platforms and influencers have a considerable and huge effect on the narrative with respect to purchasing of environmental-friendly products, as well as being helpful in better understanding environmental products. However, online media platforms and influencers have mainly a slight and moderate effect on better trust of environmentally friendly products, predominant environmental-friendly product usage, and a more environmentally friendly attitude by young adults in the study area. Furthermore, online media platforms and influencers have a considerable and huge effect on the narrative with respect to better environmental engagement than traditional media platforms like radio and television, as well as better environmental attention than traditional media platforms.

**Table 7:** Extent online media platforms and influencers affect the narrative with respect to environmental information

| Variable                                               | Slight extent | Moderate extent | Considerable extent | Huge extent | Min. | Max. | Mean | REMARK  |
|--------------------------------------------------------|---------------|-----------------|---------------------|-------------|------|------|------|---------|
| Purchasing environmentally friendly products           | 29            | 19              | 55                  | 31          | 1    | 4    | 2.66 | WEIGHTY |
| Better trust in environmentally friendly products      | 41            | 51              | 22                  | 20          | 1    | 4    | 2.16 | LITTLE  |
| Predominant environmentally friendly product usage     | 49            | 30              | 25                  | 30          | 1    | 4    | 2.27 | LITTLE  |
| More environmental attitude by young adults            | 57            | 50              | 13                  | 14          | 1    | 4    | 1.88 | LITTLE  |
| Helpful in understanding environmental products        | 18            | 29              | 35                  | 52          | 1    | 4    | 2.90 | WEIGHTY |
| Better environmental engagement than traditional media | 9             | 15              | 39                  | 71          | 1    | 4    | 3.28 | WEIGHTY |
| Better environmental attention than traditional media  | 14            | 22              | 43                  | 55          | 1    | 4    | 3.04 | WEIGHTY |

LITTLE = Mean value of 0 – 2.5; WEIGHTY = Mean value >2.5

### Discussion of Findings

The study analyzed Online News Media in Nigeria to shed more light on its role in the management of Nigeria's natural environment. In doing this, the study examined the effects of online reporting on environmental management, ascertained the importance of online news reporting in enhancing environmental management, and

determined the extent to which online media platforms and influencers affect environmental management.

Study findings on online news activity, with respect to environmental management, indicate that content creation had the lowest percentage frequency, while online reporting had the highest category. The high frequency of online reporting can be attributed to advancements

in technology, which have made access to the internet a vital improvement in how information is accessed in the 21st century (Guanah & Bebenimibo, 2025). Also, the predominant online media source of environmental information was identified as mainly through social media platforms and internet websites. These findings on social media and internet websites are not surprising, given that Sasu (2026) has projected that internet access in Nigeria will exceed 100 million by 2029. Also, the dominance of social media and internet websites in accessing environmental information agrees with the findings of Anyanwu *et al.* (2024) on the importance of digital platforms in fostering environmental sustainability through AI, blockchain, and IoT systems. However, online communication can also be ineffective in disseminating information about environmental degradation because of problems with connectivity and poor internet access.

Study results show that the availability of Climate change information in online media platforms was mainly ranked high and very high. This finding can be attributed to the trendy nature of climate change issues in the 21st-century media's new discourse, especially due to its relevance to sustaining life on earth. Igbokwe *et al.* (2025) also found that the media have played a crucial role in raising public awareness of climate change and global warming, especially due to the widespread use of artificial intelligence (AI) on social media platforms. Availability of flooding and soil erosion information on online media platforms was mainly ranked high and very high. These high rankings could be attributed to the perennial occurrence of these environmental issues in South East Nigeria, where flooding and soil erosion are very frequent, as a result of its geographical characteristics (Duru & Emetumah, 2016). Also, careless attitudes of both government representatives and the general public have fostered environmental decline in the study area, which in turn poses serious health risks to the general public (Anyanwu *et al.*, 2024).

Furthermore, the availability of information on waste management and plastic pollution in online media platforms was mainly ranked high and very high. There is prevalent awareness of these environmental issues in the study area, hence the reason for their high rankings. This is in line with the findings of Okeke *et al.* (2024), who affirmed that effective solid waste management has been severely impeded in many parts of Nigeria by inadequate infrastructure for waste collection, storage, and disposal. These problems have been made worse by Nigerian print media coverage that has not used a targeted outreach strategy, making it difficult for many Nigerians to be well-informed about waste management practices of the twenty-first century. Furthermore, when reporters lack substantial environmental understanding or are merely playing to the gallery, their reporting on environmental concerns may be skewed. Brown envelope journalism can lower the caliber of media output and hinder evidence-based investigative environmental journalism (Josiah, 2024).

The availability of information on desertification, biodiversity management, environmental awareness and hazardous incidents on online media platforms was mainly ranked low and very low. These rankings may be due to the level of information available to the general public on these environmental issues. Many social media influencers may not have much to say about these environmental issues, which is why they have low rankings. According to Omoyajowo *et al.* (2024), when celebrities and respected social media influencers are involved, many people agree with the message, which has led to a considerable increase in environmental awareness. Therefore, low rankings for these environmental issues could be because influencers and online media platforms have not placed much emphasis on them. Also, new media can only raise awareness of environmental issues if they are properly embraced and used in instructional strategies, even though the impact of digital media on environmental communication and democracy is undeniable (Ito & Ivwighren, 2024).

Study results reveal that PCA of environmental issues is divided into three parts, with component 1 strongly loading on five variables (Air pollution, Water pollution, general environmental awareness, soil erosion, and deforestation). These variables seem to be related to anthropogenic environmental issues, since they are mainly concerned with human activities. Component 2 is strongly loading on five variables (Desertification, flooding, waste management, biodiversity management, and hazardous incidents). These variables seem to be related to physical environmental issues, since they are mainly concerned with natural features of the environment. Component 3 is strongly loading on four variables (plastic pollution, human population problem, Environmental advocacy, and climate change). These variables seem to be related to trendy environmental issues that may be described as 21st-century environmental problems, since they are mainly concerned with issues that have either not been fully understood or for which effective solutions have not yet been found (Emetumah *et al.*, 2025).

Study results on the extent to which online media platforms and influencers affect environmental information indicate that online media platforms and influencers have a considerable effect on the narrative with respect to purchasing environmentally friendly products, as well as being helpful in better understanding environmental products. According to Wasike (2026), social media influencers' podcasts and vlogs have become a common way for environmental news to be created and disseminated, because many of these social media influencers have amassed a sizable fan base of diverse people who quickly embrace their stances on a range of environmental issues. As a result, how many people view environmental regulations can be greatly influenced by media outlets and social media influencers. Results on online media platforms and influencers have mainly a slight and moderate effect on better trust of environmentally friendly products, predominant environmental-friendly

product usage, and a more environmentally friendly attitude by young adults in the study area. This is because there are still significant challenges to the ICT infrastructure in Nigeria, which affects internet services. This aligns with the findings of Chukwudebe *et al.* (2022), who determined that even though many people are willing to engage in environmentally sustainable practices, online media has not been effective in providing environmental information, due to ICT deficiencies. Furthermore, the lack of checks and balances in the internet sphere has made problems with cyber-attacks, data breaches, and the dissemination of misleading information a reality (Oloyede *et al.*, 2023). Furthermore, online media platforms and influencers have a considerable and huge effect on the narrative with respect to better environmental engagement than traditional media platforms like radio and television, as well as better environmental attention than traditional media platforms. This finding is not surprising, given that the 21st century has made access to the internet a faster and more convenient way of accessing environmental information. This is in line with the findings of Arikebi *et al.* (2023) that the public's knowledge of environmental issues has been effectively raised by mass media, particularly online media platforms. It was also identified that even though television was the most approved medium for environmental information, online vlogs on websites like YouTube are very vital channels for finding environmental information (Kibonde & Sawe, 2025).

## CONCLUSION

Availability of information about climate change on internet media platforms, flooding and soil erosion in online media platforms was mainly ranked high. Furthermore, the availability of information on waste management and plastic pollution in online media platforms was mainly ranked high. However, information on desertification, biodiversity management, environmental awareness, and hazardous incidents was mainly ranked low.

Analysis of environmental information availability in online media platforms has three components: anthropogenic (environmental issues primarily related to human activities), physical (environmental issues primarily related to the physical environment), and trendy (environmental factors primarily related to 21st-century environmental issues). Additionally, research on the extent to which online media platforms and influencers influence environmental information shows that they significantly shape the narrative surrounding the purchase of eco-friendly products and also help consumer understanding. Therefore, the study recommends that more efforts should be made towards expanding access to internet connectivity in the study area. This can be achieved by creating an enabling environment that makes broadband internet access more affordable. In addition, increased environmental awareness should be bolstered, especially at the secondary level of education in Nigeria. This can be

done by making environmental education a compulsory subject, particularly for senior school students and university freshers.

## REFERENCES

- Ahmed, K. (2026). Green Economy and Environmental Governance Pathways toward a Sustainable Future in Bangladesh. *American Journal of Environmental Economics*, 5(1), 1–11. <https://doi.org/https://doi.org/10.54536/ajee.v5i1.6262>
- Amon, D. J., Gollner, S., Morato, T., Smith, C. R., Chen, C., Christiansen, S., Currie, B., Drazen, J. C., Fukushima, T., & Gianni, M. (2022). Assessment of scientific gaps related to the effective environmental management of deep-seabed mining. *Marine Policy*, 138, 105006.
- Anyanwu, B. J. C., Jumbo, C. N., Anyi, O. S. A., Etumnu, E. W., Onyebuchi, A. C., & Asemah, E. S. (2024). Effectiveness of Digital Communication in tackling Environmental Degradation in Owerri, Imo State, Nigeria. *Library Philosophy and Practice (e-Journal)*, 8279.
- Aondover, E. M., Tosin, Y.-A. N., Akin-Odukoya, O. O., Onyejelem, T. E., & Ridwan, M. (2025). Exploring the application of social media in governance in Nigeria. *Journal of Religion, Social, Cultural and Political Sciences*, 10(1), 30–43. <https://doi.org/10.33258/siasat.v10i1.193>
- Arikebi, P. G., Kadiri, J. E., Omobude, T., & Ofei, E. K. (2023). Residents' perception of the effectiveness of the media in the management of environmental health issues in Auch, Edo State, Nigeria. *International Journal of Research Publication and Reviews*, 4(8), 2541–2548.
- Arinze, E. D. (2024). The impact of digital innovation on economic growth in Nigeria. *IDSOR Journal of Computer and Applied Sciences*, 9(2), 1–9. <https://doi.org/https://doi.org/10.59298/JCAS/2024/92.1900>
- Christian, C., Odoemelam, Z. C. B., & Queen Ohiolei, O. (2025). Sustainable Brand Narratives: How Influential are the Influencers in Marketing Brands in Nigeria? *International Journal of Sub-Saharan African Research*, 3(2), 387–402.
- Chukwudebe, G. A., Nwoko, C. O., Ayogu, I. I., Ikerionwu, C., Amadi, E. C., & Ogu, R. E. (2022). An assessment of household perceptions of use of ICT and improved methods of waste management in Owerri, South-East Nigeria. *International Journal of Engineering Research & Technology*, 11(4), 74–79.
- Duru, P., & Emetumah, F. (2016). Evaluating the effects of information literacy on climate change awareness among students in Imo State University. *Archives of Current Research International*, 4(3), 1–10. <https://doi.org/10.9734/ACRI/2016/27186>
- Emetumah, F. (2017). Modern Perspectives on Environmentalism: Ecocentrism and Technocentrism in the Nigerian Context. *Asian Research Journal of Arts & Social Sciences*, 2(4), 1–9. <https://doi.org/10.9734/arjass/2017/32821>
- Emetumah, F. C., Ajaegbu, O. O., & Nwokorie, C. N.

- (2025). Determinants of Occupational Health and Safety Practices Among Solid Waste Scavengers in Owerri, Nigeria. *African Journal of Health, Safety and Environment*, 6(1), 36–48.
- Emetumah, F. C. ., & Emetumah, F. I. (2025). Nigerian Oil and Gas Industry in an Era of Energy Transition : Analysis of TotalEnergies ' Activities in Nigeria. *American Journal of Environmental Economics*, 4(1), 104–112. <https://doi.org/https://doi.org/10.54536/ajee.v4i1.4871>
- Guanah, J. S., & Bebenimibo, P. (2025). Digital technology and the economic transformation of nigeria via the lens of Delta State: Opportunities, challenges, and future prospects. *Rowter Journal*, 4(1), 1–15.
- Igbokwe, B. N., Ejioogu, F. I., & Olewuike, E. C. (2025). Assessing Effectiveness of Broadcast Media Messages in Addressing Environmental issues in Imo State. *International Journal of African Language and Media Studies*, 5(4), 1–17.
- Ito, F. M., & Iwighren, H. E. (2024). Synergising New Media Potential and Business Education for Economic Growth in Nigeria. *ESUT Journal of Social Sciences*, 9(2), 537–553.
- Jain, A., & Meena, A. K. (2024). The role of journalism in promoting environmental awareness: A content and comparative analysis of media platforms. *Journal of Communication and Management*, 3(03), 248–253.
- Josiah, J. O. (2024). The Media and the Nigeria State in Constructivist Perspectives. In *Available at SSRN 4897679*.
- Kibonde, S. F., & Sawe, J. R. (2025). Media Information Role in Enhancing Sustainable Environmental Management Awareness: A Case Study of Chumbageni Ward in Tanga, Tanzania. *University of Dar Es Salaam Library Journal*, 20(2), 135–153.
- Obun-Andy, M. K., Aluko, T. A., & Olajuwon, I. M. (2025). Influence of Journalism and Media on Promoting Sustainable Development in Nigeria. *Journal of African Innovation and Advanced Studies*, 10(2), 221–233. <https://doi.org/10.70382/ajaias.v10i2.071>
- Ogadimma, Emenyeonu C, Raza, Syed Hassan, Khan, Sanan Waheed, & Mohamad, Bahtiar. (2023). Dearth of Media reportage of environmental issues in Nigeria: Need for innovation and adoption of green culture to curb environmental decay. *Information Development*, 41(1), 199–215. <https://doi.org/10.1177/02666669231187364>
- Okeke, A. O., Mohammed, U., & Garba, S. (2024). Evaluation of communication interventions for improved waste management system in Nigeria. *International Journal of Sub-Saharan African Research*, 2(1), 81–95.
- Oloyede, A. A., Faruk, N., Noma, N., Tebepah, E., & Nwaulune, A. K. (2023). Measuring the impact of the digital economy in developing countries: A systematic review and meta-analysis. *Helixyon*, 9(7).
- Omoyajowo, K. O., Raimi, M. O., Omoyajowo, K. A., Makengo, M. B., Adegboyoye, S., Innocent, D. C., Oni, S., Oguntuyi, J., Oyediran, A., & Ogunyebi, A. L. (2024). Towards a reduced pollution society: Systematic review on the role of storytelling, social media, humor and celebrities' influence for research communication. *Journal of Applied Sciences and Environmental Management*, 28(2), 603–623.
- Sasu, D. (2026). Nigeria: mobile internet users 2020-2029. <https://www.statista.com/statistics/972896/nigeria-mobile-internet-users/>
- Wasike, B. (2026). Influencing the news: how social media influencers affect news media trust. *Information, Communication & Society*, 29(1), 77–94. <https://doi.org/10.1080/1369118X.2025.2496907>