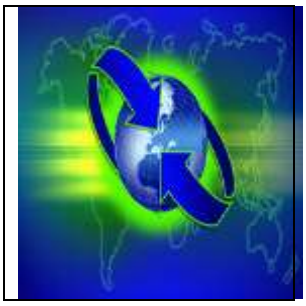

Harnessing Trado-Media in Reducing Water Pollution and Sustainable Development Goals in Nigeria: The case of Cross River State

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Abstract

Water pollution is a significant environmental and public health challenge in Cross River State, Nigeria. Traditional media (Trado-media), including folklore, proverbs, traditional festivals, town criers, and community gatherings, play an essential role in disseminating information and shaping public behavior. This paper explores the potential of Trado-media in reducing water pollution and promoting Sustainable Development Goals (SDGs) in Cross River State. The study examines the effectiveness of indigenous communication channels in influencing local communities to adopt sustainable water management practices. It also discusses policy recommendations for integrating Trado-media into environmental conservation strategies. The findings suggest that Trado-media, when effectively harnessed, can foster grassroots engagement, enhance environmental awareness, and contribute to achieving SDG 6 (Clean Water and Sanitation) and SDG 13 (Climate Action).

Keywords: Trado-media, water pollution, sustainable development, SDGs, Cross River State, environmental conservation

Introduction

Traditional media, or trado-media, remains a powerful tool for disseminating information and influencing behavior in rural communities. Unlike modern media, trado-media resonates with local customs, beliefs, and practices, making it an effective channel for promoting awareness about environmental issues. In most developing countries, Nigeria inclusive, water pollution is a common phenomenon, especially in most rural communities where streams serve multiple purposes: toilets, corridor for the evacuation of waste, dipping/drenching animals against ectoparasites and washing of animals, bathing, washing clothes, cassava fermenting, and sources of drinking. Adeyemi and Olufemi, (2021) hwever observed that the resultant effects are therelease of pollutants from pesticides, herbicides, solid and liquid wastes, fertilizers, feeds, metals such as copper, zinc, arsenic, cyanides) that are found in these available sources of water.

Anikpe, Akabuike and Itiav, (2023) further posited that unfortunately, these communities are ignorant of the fact that such water bodies are susceptible to diseases such as cholera, typhoid, hepatitis, polio, bilharzias, leprosy, tuberculosis, whooping cough, tetanus, among others. It is as a result of both land and water pollutions that rural areas in Nigeria suffer acute shortage of fresh water. According to a survey, 32.2 percent of rural households in Nigeria depend on rivers, lakes, ponds, dams, streams and rainfall for water supply, (Okeke, 2023).

Eneji, Asuquo, Acha, Ochiche and Eneji, (2015) found that every pollution in the environment has an origin. The effects of these pollutions have corresponding consequences to man and other living organisms including the environment itself. This assertion is further corroborated by Eneji, Eneji, Ngoka and Abang, (2017) who stated that environmental pollution are so pervasive on account of their obvious consequences on mankind and sustainable development goals. This sordid state of affair has led to the creation of so many documents, records and establishment of environmental agencies or bodies in Nigeria. Eneji, et al., (2015) found in evidence that in most rural communities, the lack of sanitation facilities (excreta disposal facilities) has encouraged open defecation and other unwholesome environmental practices that go unabated.

To mitigate the problem of water pollution in most rural communities, different methods have been employed to create the needed awareness, but most often than not, funding and materials needed to create these awareness seems to be a gap, however, the programs have produce at best very minimal effect or result. Governments also have made a lot of concerted efforts in combating pollutions across the country by introducing water, sanitation and hygiene programs (WASH), Rural Water Supply and Sanitation in Nigeria (RUWATSSAN) but these have ended almost unsuccessful. This paper explores the role of Trado-media in addressing water pollution and advancing sustainable development goals in Cross River State and in Nigeria by the set target of 2030. It argues that leveraging traditional communication methods can enhance

environmental awareness, promote clean water practices, and support policy implementation at the grassroots level.

The Role of Trado-Media in Environmental Communication

Trado-media refers to traditional forms of communication that predate modern mass media. These include oral traditions, storytelling, songs, dance, proverbs, traditional festival and the use of town criers. In rural communities, trado-media plays a vital role in information dissemination, cultural preservation, and social mobilization (Okeke, 2020). Studies have shown that trado-media is highly effective in rural communities due to its accessibility, cultural relevance, and ability to foster communal participation (Ekanem, 2019). In the context of environmental awareness, traditional communication methods have been used to educate communities about sustainable farming practices, hygiene, and natural resource conservation.

Trado-media has long been used in African societies to educate, inform, entertain and influence behavior. In the rural communities, information from the traditional leaders are usually passed freely. In the context of environmental communication about water pollution and its conservation, it is assumed that trado-media can play some significant roles.

Water pollution remains a pressing issue in Nigeria, particularly in Cross River State, where industrial activities, poor waste disposal, and agricultural runoff contaminate water sources. Conventional media, such as television, radio, and newspapers, have played a role in environmental education but often fail to reach rural communities with limited access to modern communication technologies. Traditional media (Trado-media) encompassing oral traditions, cultural practices, and indigenous communication channels serve as vital tools for information dissemination, behavioral change, and community engagement.

Eneji, et al., (2015) found that in Cross River State and most states of the federation lack access to improved excreta disposal facilities in the rural areas, thereby encouraging open defecation in the bushes, fields, and water bodies. These water bodies serve as corridor for waste (solid and liquid) evacuation. The sight of rainfall is an opportunity for rural households to

dispose of their waste. For a few households with sanitation facilities, their bathroom and kitchen waste water are channelled into gutters and drainages which eventually find their ways into community streams and rivers.

Unknown to the rural people, water pollution has consequences on sustainable development goals. Regrettably, there seem to be no corresponding response, by way of attitudinal change from the rural populace. One may ask why is it that despite the conventional media, having played great roles in the dissemination of environmental information on pollution in the country, there still appear to have been deficient in some specific areas, like the use of communication channels that increases the rural people's environmental awareness.

Muller, Elizabeth and Rudy, (2018) conducted a study on communicating information on nature-related topics: Preferred information channels and trust in sources (https.//ncbinim nih.gov). The study examined how information communicated influences the public's environmental perceptions and behaviours. Information channels and sources both play an important role in the dissemination of environmental issues. Trust in a source is often used as a proxy for whether a particular piece of information is credible. To determine preferences for information channels and related topics, mail-out survey was sent to randomly selected United States addresses (n=1,030). The study established that diverse group of people may have different communication preferences.

Therefore the authors explored differences in channel preferences and trust by demographics, using regression models. Over all, the most preferred channels were personal experience, reading on-line content and watching visual media on-line. The most trusted sources were science organizations, universities, friends and family communicating to the public about environmental pollution. They concluded that environmental management planners assess their opportunities to foster both a broader public engagement and behavioural modifications in a way that complements and extends information interventions. What this review throws up is that

preferred channels and sources especially in the rural areas create credibility for environmental information dissemination.

Ekanem, (2019) found that trado-media has been used in various African societies to promote awareness on environmental issues, including deforestation, climate change, and water conservation. In Cross River State, oral traditions and folk narratives often incorporate environmental themes, teaching younger generations about the importance of preserving natural resources. A study by Udoh & Ekpo (2022) revealed that rural communities are more responsive to environmental messages when communicated through traditional media rather than modern platforms such as television or radio. This is because trado-media aligns with local customs, making the messages more relatable and impactful.

The roles which traditional communication media can play include:

Folklore and storytelling: Used to convey moral lessons about nature conservation, this was further corroborated by the finding of Okeke, (2020) who attested to the fact that folk media can educate community people and allow them to redefine their positions. Folk media are specifically useful with non-literate people, who take seriously what they hear. Folk media are in the form of traditional music, drama, dance and puppetry, with unique features in every society, race and religion, (Udoh & Ekpo, 2022). Udoh and Ekpo, (2022) further posited that folk media are used in the development communication to bring about attitudinal and behavioural change by the people. Traditional channels of communication are extensions of a people's culture which facilitates the exchange of ideas or information in a typical African society (Yadav, Alexander & Shenoy, 2021). People have continued to depend on these media especially because of their effective interpersonal nature. They are people and culture oriented. They give room for immediate feedback, (Udoh & Ekpo, 2022).

According to Bramantyo, (2021) observed that stories are embedded in the people's culture. When news and information are presented in a form that fits into the cultural model of a people, it evokes empathy and therefore greater interest and the likelihood of the story being

better understood. In a study conducted by Osong (2023), stories on environmental pollution presented to the rural people of Cross River State were believable, acceptable and credible, these evoke behavior and attitudinal change by the rural communities..

Town criers and village meetings: Chukwu, (2020) posited that town criers and village meetings serve as local news outlets for urgent environmental messages.The main broadcasting instrument used by the town-crier is the talking drum, with a stick struck intermittently to create public awareness. He moves from street to street, shouting at a proximal distance, as he explains what the message is all about. During environmental sanitation exercises, the town-crier informs the entire community to ensure they all stay in their respective homes to observe the clean-up exercise.

Theatre and dance: according to Chukwu, (2020) theater and dance raise awareness through dramatization of environmental issues. Others authors call this dramatization or role play by community members on issues affecting their lives in the communities.

Proverbs, idioms and adage: these are wise paying that encourages the conservation of natural resources, not just water, forest resources, animals and plants including farmland. These practices encourage wise use of natural resources. little wonder James Olarotitimi in his book ‘’The gods are not to blame’’ said proverbs are the oil that is used to eat the yam of wisdom. The implication of this sentence is that proverbs are used to guide the society to words of wisdom and understanding of idioms in the local dialect (Udoh & Ekpo, 2022).

Traditional festivals and rituals: Yadav, Alexander and Shenoy, (2021) found that these are also seen a process where some section, part or a whole stream, rivers, spring, forest or land are designated as the abodes of the gods, usage, entrance, or exploitation is strongly forbidden and comes with a huge sanction or fine. These practices promote respect for water bodies and ecosystems. These are traditional conservation systems like shrines, totems, burial grounds, evil forest, and sanctuaries among others. Most often these abodes of the gods are usually celebrated with different forms of festivals for initiation of young men into adulthood.

Taboos and totemism: These are symbolic representation of an ancient artifacts, event, belief or species which holds a special place in the ancestral history of a particular people. These could be animate or inanimate objects, plant, animals, streams or any other species. Totems are forbidden creature that particular ethnic groups are forbidden from eating, killing, touching or associating with. For example, species like python, different species of snakes, hunting dogs, birds, plant among others are forbidden from being eaten by different ethnic groups in Nigeria and in most parts of the world.

Water Pollution in Cross River State

Water pollution in Nigeria is a growing concern, particularly in rural areas where access to clean water is limited. According to studies, major contaminants in rural water sources include pesticides, heavy metals, organic waste, and microbial pathogens (Adeyemi & Olufemi, 2021). In Cross River State, water pollution has been linked to poor waste disposal habits, deforestation, and industrial effluents from nearby urban centers. Waterborne diseases such as cholera, typhoid, and dysentery are prevalent due to contaminated drinking water.

The World Health Organization (WHO) emphasizes the importance of community participation in ensuring water safety through awareness campaigns and proper sanitation practices. Eneji, et al., (2017) found in their study that Cross River State is home to significant water bodies, including the Cross River, Aya River, Ulu and several tributaries, which support agriculture, fishing, transportation and domestic use. However, water pollution has escalated due to factors such as:

a) **Corridor for waste evacuation:** Sanitation facility like waste bins are lacking in the rural areas. So, available streams and rivers serve as corridor for waste evacuation. Even the sight of rainfall is an opportunity for rural households to dispose of their waste in gutters and drainages.

b) **Domestic waste:** Improper waste disposal, including plastic pollution, affects water quality, household waste from food preparation. These are channelled into gutters and drainages that

eventually find their ways into community streams, rivers and other sources of community water like wells and boreholes.

c) **Sanitation facilities like toilet and waste from human sources.** Waste from toilet facilities are usually flushed into suck away, which eventually sip into the ground polluting ground water from where most water come from. These also include waste generated from open defecation. This is an ancient practice which is still very rampant in most rural communities. Osong (2023) asserts that most households in the various communities lack toilet facilities hence, resort to open defecation in bushes, water bodies and fields. This constitutes serious health hazards to man and development objectives.

d) **Industrial discharge:** Effluents from industries contaminate rivers and streams from the urban and semi urban areas and these eventually flow into water bodies in the rural communities. Most communities depend on water sources like streams, rivers, springs and rain water harvesting.

e) **Agricultural runoff**: Excessive use of fertilizers and pesticides leads to water pollution. In most rural communities, they use herbicides and pesticides for agricultural production, they indiscriminately use agrochemicals especially in open fields, and most of their farmlands are adjacent to water sources, like streams, rivers, and springs among others. At the end of the day, the point and nonpoint pollutants contaminate these water bodies bringing severe health and environmental consequences.

f) **Oil spills and illegal mining:** Activities such as oil exploration and sand mining contribute to pollution. Even during agricultural operations, oil spills from overused machines like tractors used for tiling, ridging and ploughing.

g) **Commercial waste disposal from businesses and markets:** Eneji, et al., (2017) found that waste from commercial and business places are one of the major causes of environmental degradation and water pollution. Wastes from these sources are indiscriminately dumped outside and municipal authorities reluctantly evacuate them only when they have properly constituted public nuisance. When rains fall, they wash the waste content into adjacent streams and rivers

thereby polluting the water consumed by man and other animals, (Ocherei, 2015; Punzalan, 2020; Osong, 2023).

Sustainable Development Goals (SDGs) and Water Pollution

At the 70th session of the United Nations General Assembly in late September, 2015, member States met and agreed to adopt a new global development agenda with a set of sustainable development plans, at its core. Osabohien, Matthew, Gershon, Ogunbiyi Nwosu, (2019) posited that the report stated that sustainable development is economic development which meets the needs of the present generation without compromising the ability of future generations to meet their own needs. The focus on sustainable development is on three main components: environment, society and economy, whose set target is by 2030. The SDGs provide a framework for addressing environmental and social challenges (Ngozi, 2017; Loizou, Karelakis, Galanopoulos & Mattas, 2018; Larder, Sippel & Argent, 2018; Dutta-Powell, Court & Clark, 2023). The SDG goals that this study sought to achieve by 2030 focus on:

SDG 6 -Clean Water and Sanitation: Ensuring access to clean and safe water.

SDG 13 -Climate Action: Promoting environmental conservation and sustainable practices.

Olabomia, Ogundolab, Yakubuc, Bolab, Adetorob and Nwubanib, (2021) observed that the SDG is a pathway through which the United Nation designed to make countries have a universal development agenda targeted at 2030, where most countries of the world should develop their economies and improve the living conditions of most of the population of the world. The SDG goals 6 and 13 strive to achieve universal access and affordable clean water and sanitation for all, while 13 said climate action, thereby promoting environmental conservation including water, (Loizou, et al., 2018; Larder, et al., 2018; Dutta-Powell, et al., 2023).

Health effects of water pollution on sustainable development goals:

Dutta-Powell, et al., (2023) in their study found that the effects of water pollution have gone unabated in the rural communities for too long and these constitute serious health problems and impede the achievement of sustainable development goals. Health is the most important

human resource (Wan, Shen & Choi, 2017). All the contents of the 17 SDGs, depend on an optimal enjoyment of good health, in all ramifications. The health effects of water pollution according to Wei, Xu, She, Wang and Zhang, (2021) are water-borne diseases, resulting from polluted or contaminated. Water contaminated by human, animal, or chemical waste cause diseases like cholera, typhoid, hepatitis (inflammation of the liver), polio and meningitis (inflammation of the outer brain) (Xu, Ling, Lu, & Shen 2017; Oyaniran, 2020; Wu, & Zhu, 2021; Xolisiwe, Grangxabe & Madonsela, 2023).

Wu, Zhu and Zhai, (2022) found that the ripple effects of these water borne diseases from polluted water can result in more severe diseases like leprosy, tuberculosis, whooping cough, tetanus and diphtheria which thrives in conditions where there is scarce freshwater and poor sanitation. Water-related vector or diseases are transmitted by insects such as mosquitoes and tsetse flies which live near or around water and cause more ill health like malaria, yellow fever, cholera, dysentery, dengue fever, sleeping sickness, and filariasis. Also, the flushed water from mills, factories, industries and sewage from human faeces find their ways into any available community streams and rivers affecting goal 6 which is focused on ensuring availability and sustainable clean water and sanitation for all, (Zhang, Huang, Yin & Gong, 2015; Zhang, Ruiz-Menjivar, Luo, Liang & Swisher, 2020; Xu, Li & Chi, 2021).

Objectives of the Study

1. To examine the impact of water pollution on rural communities in Cross River State.
2. To ascertain the role of trado-media in communicating environmental awareness about water pollution.
3. To provide recommendations on integrating trado-media with modern communication strategies for better water pollution management.

Research questions

The following research questions were formulated from the objective of the study

.1. What are the impacts of water pollution on rural communities in Cross River State?

2. To what extent can trado-media influence communicating environmental awareness on water pollution to the rural communities of Cross River State?

3. What recommendations can bring about integrating trado-media with modern communication strategies for better environmental management?

Research design and Method

This study employed a mixed-methods approach, combining qualitative and quantitative research methods to analyze the role of trado-media in addressing water pollution.

Study Area: The research was conducted in selected rural communities in Cross River State, Nigeria, including Odukpani, Yakurr and Obanliku Local Government Areas representing the three senatorial districts of Cross River State, Nigeria. These areas were chosen due to their high reliance on natural water sources and prevalent cases of water pollution.

Population and sample: the population of the study comprised of well over 15,000 respondents selected from two political wards in each of the selected local government areas, where a sample of 600 respondents were drawn proportionately across the six wards based on their population (0.5%).

Data Collection tools:

Four instruments were used for data collection; these instruments include:

1. Surveys – Structured questionnaires were distributed to 200 residents across different age groups to assess their awareness of water pollution and their exposure to trado-media messages.

2. Interviews – Key informant interviews were conducted with community elders, traditional rulers, and local environmental activists.

3. Focus Group Discussions – Community-based discussions were organized to understand the effectiveness of different trado-media forms in addressing environmental concerns.

4. Participatory observation – Field observations were carried out to document community practices related to water usage and pollution.

Data Analysis: Data collected from surveys were analyzed using descriptive statistics, (simple percentage), while qualitative data from interviews and focus groups were thematically analyzed to identify patterns in community engagement with trado-media.

Results and discussion

In answering question one, the result of the simple percentage analysis on table 1, shows that 368 respondents (61.3%) agreed that most rural communities in Cross River State have perceived different impacts of water pollution from different sources, 180 respondents (30%) disagreed that most communities have not perceived any impact of water pollution in Cross River State, while 52 (8.7%) of the respondents were undecided as to any perceived impacts of water pollution in Cross River State. From the result and figures computed from the response on table 1, (368; 61.3%), it is clear that most rural communities have perceived some degree of impacts from water pollution in their communities in Cross River State.

In answering question two, the simple percentage analysis on table 1 shows that 402 (67.0%) respondents agreed that trado-media can be used to communicate environmental awareness for behavioural and attitudinal change in the rural communities of Cross River State, 189 respondents (31.5%) disagreed that traditional media cannot be used to communicate environmental awareness for behavioural and attitudinal change in the rural communities of Cross River State, while 9 respondents (1.5%) were undecided.

Looking at the figured computed from the simple percentage analysis on table 1 (402; 67.0%), it is evidently clear that traditional media can be used to communicate environmental awareness towards behavioural and attitudinal change in the rural communities of Cross River State.

To answer the third question raised, the simple percentage analysis shown on table 1 further indicated that 412 respondents (68.7%) agreed that traditional media tools can be used to effectively communicate environmental awareness about water pollution in Cross River State; 182 respondents (30.3%) disagreed that traditional media cannot be used to communicate

environmental awareness about water pollution and its management, while 6 respondents representing 1% of the sample were undecided as to whether trado-media can be used to communicate environmental awareness about water pollution and its management in rural communities in Cross River State.

Table 1: Simple percentage analysis of respondents view on the extent of trado-media and water pollution

S/N	Questions	Response options		
		Agree	Disagree	Undecided
1	Most rural communities have perceived different impacts of water pollution in Cross River State	368 61.3%	180 30%	52 8.7%
2	Trado-media can be used to communicate environmental awareness for behavioural and attitudinal change in the rural communities of Cross River State	402 67%	189 31.5%	9 1.5%
3	Trado-media tools can be used to effectively communicate environmental awareness about water pollution in Cross River State	412 68.7%	182 30.3%	6 1.0%

Arising from the simple percentage figure computed on table 1, (412; 68.7%), traditional media tools can be used to effectively communicate environmental awareness about water pollution in rural communities in Cross River State

Table two shows response on the most effective trado-media that can be used for effective communication of environmental awareness on water pollution in rural communities in Cross River State.

Looking at the traditional media tools that could be used for environmental awareness creation, the simple percentage analysis shown on table two shows that 181 respondents representing 30.2% ticked that folklore and storytelling are effective tools for communicating environmental awareness message on water pollution in the rural communities of Cross River State. 202 respondents (33.7%) ticked that town criers and village meetings are better trado- media tools for

communicating environmental awareness on water pollution in the rural communities in Cross River State.

Table 2: Trado-media tools used for communicating environmental awareness

S/N	Trado-media tools	Score	Percentage
1	Folklore and storytelling	181	30.2
2	Town criers and village meetings	202	33.7
3	Theatre and dance	25	4.2
4	Proverbs, adage and idioms	85	14.2
5	Traditional festivals and rituals	56	9.3
6	Taboo and totems	51	8.4
	Total	600	100.0

25 respondents (4.2%) also said theatre and dance are tools for communicating environmental awareness on water pollution in the rural communities of Cross River State. Another 85 respondents (14.2%) ticked that proverbs, adage and idioms can be used to effectively communicate environmental awareness on water pollution in most rural communities in Cross River State. The result on table two further revealed that 56 respondents representing 9.3% of the sample ticked that traditional festivals and rituals can also be effective tools for communicating environmental awareness on water pollution in rural communities of Cross River State, while 51 respondents (8.4%) said taboos and totems are also effective tools for communicating environmental awareness on water pollution in some rural communities in Cross River State.

Discussion of findings

Data analysed in answering question on table 1 shows that 368 respondents (61.3%) agreed that in most rural communities in Cross River State, they have perceived different impacts of water pollution from different sources, 180 respondents (30%) disagreed that most

communities have not perceived any impact of water pollution in Cross River State, while 52 (8.7%) of the respondents were undecided saying they have not any perceived impacts of water pollution in Cross River State. It was revealed that 368 (61.3%), have perceived some degree of impacts from water pollution in their communities in Cross River State. This result is in line with the findings of Eneji, et al., (2017) whose work on attitude of the residents of Calabar south towards waste management found that people perceive the impacts of waste differently, some perceived negative health implication of water pollution and waste pollution to include diarrhoea, dysentery, cholera, malaria among others.

Furthermore, authors like Ocherei, (2015); Muller, et al., (2018) and Osong, (2023) in their respective studies found that water pollution have very serious deleterious effects if not properly managed in both urban and rural communities. They discussed on the aftermath of pollution saying that most communities suffer from widespread diseases like cholera, diarrhoea, and malaria among others. These authors further posited that in worst case scenarios, tuberculosis and whopping cough can also results from these pollutions. Punzalan, (2020) and Dutta-Powell, et al., (2023) also found that water pollution effects are most felt when there are not properly managed. That different people perceive the negative impacts of water pollution differently, may be based on their personal state of hygiene and sanitation, their educational level, gender and information available to them at different times. The implication of this result is that in most rural communities, the health impacts of water pollution are widespread across the communities. Most at times, in health centers and health post, there are reported cases of diarrhea, cholera outbreak, dysentery, malaria among others. These are tagged among the 7 killer diseases in most developing countries of the world. Hence there is the urgent need to address these issues of water pollution frontally.

The simple percentage analysis that answered question two on table 2 shows that 402 (67.0%) respondents agreed that trado-media can be used to communicate environmental awareness for behavioural and attitudinal change in the rural communities of Cross River State,

189 respondents (31.5%) disagreed that traditional media cannot be used to communicate environmental awareness for behavioural and attitudinal change in the rural communities of Cross River State, while 9 respondents (1.5%) were undecided. 402 (67.0%), posited that traditional media can be used to communicate environmental awareness towards behavioural and attitudinal change in the rural communities of Cross River State. Following this result, authors like Wan, et al., (2017); Wei, et al., (2021) and Wu, et al., (2022) agreed that there are different traditional communication tools that can be used within the rural communities in communicating environmental awareness on water pollution and its effects on the health of the rural communities. The result on table 2 also shows that of the 600 respondents, 181 respondents (30.2%) ticked that folklore and storytelling are effective tools for communicating environmental awareness message on water pollution in the rural communities of Cross River State.

202 respondents (33.7%) ticked that town criers and village meetings are better trado-media tools for communicating environmental awareness on water pollution in the rural communities in Cross River State. Another 25 respondents (4.2%) said theatre and dance are tools for communicating environmental awareness on water pollution in the rural communities of Cross River State. Another 85 respondents (14.2%) ticked that proverbs, adage and idioms can be used to effectively communicate environmental awareness on water pollution in most rural communities in Cross River State. The result on table two further revealed that 56 respondents (9.3%) ticked that traditional festivals and rituals can be effective tools for communicating environmental awareness on water pollution in rural communities of Cross River State, while 51 respondents (8.4%) said taboos and totems are also effective tools for communicating environmental awareness on water pollution in some rural communities in Cross River State.

Buttressing what Adeyemi and Olufemi, (2021) found earlier on, the authors said town criers, community meetings and age grades can be used as effective means of passing environmental awareness ,messages to the rural communities, these methods are like passing these messages mouth to mouth and its very effective. This same position was earlier held by

Ekanem, (2019) and Okeke, (2020) on how some traditional media tools like proverbs, adage and idioms can be used as effective channels of passing wise sayings to the younger generation from elders. These wise sayings help in conservation, management and action of community members. other authors like Udoh and Ekpo, (2022) and Anikpe, et al., (2023) listed dance and festivals, theater and dance, traditional festivals and rituals and taboos and totems as effective means of communicating conservation messages including water management.

Folklores and storytelling, taboos and totemism were also effective means of communicating environmental awareness messages to the rural communities, not just about water pollution, but also on different aspects of environmental management and conservation. Chukwu, (2020) and Bramantyo, (2021) in their discourse on digital media and conservation information dissemination posited that these digital media have their advantages, but their disadvantages discourage it usage from poor rural communities. These authors compared the traditional media and digital technology and concluded that the traditional media is far cheaper and comfortable to use in the rural communities. Authors like Oyaniran, (2020), Yadav, et al., (2021) and Okeke, (2023).

Looking further at the finding of this study, it was discovered that trado-media is deeply embedded in Cross River communities and plays a crucial role in environmental awareness, some of the the roles Environmental education can play through the use of Environmental awareness principles include but not limited to:

Folktales warning against water pollution: Traditional stories emphasize the dangers of contaminating water sources.

Proverbs promoting water conservation: Sayings like "Water is life, waste it and perish" reinforce responsible water use.

Festivals celebrating water deities: Events like the Ekpe Festival include rituals that honor clean water bodies.

Despite the laudable roles trado media can play in environmental awareness concerning water pollution, they seem to be some challenges associated with its usage, some of these challenges include:

Declining influence of traditional leaders: Younger generations rely more on digital media.

Urbanization and modernization: Traditional practices are fading in some areas.

Limited governmental support: There is little policy integration of indigenous communication.

Conclusion

This study highlights the significance of Trado-media in promoting environmental awareness and addressing water pollution in Cross River State. Traditional communication channels remain powerful tools for engaging rural communities in sustainable water management. When integrated with modern environmental strategies, Trado-media can effectively support the achievement of SDGs, particularly SDG 6 and SDG 13. By harnessing Trado-media, Cross River State can make significant strides in reducing water pollution and achieving sustainable development.

Recommendations

To maximize Trado-media's impact in reducing water pollution, the following strategies are recommended:

1. Integrate community-Based Environmental Campaigns: Government and NGOs should collaborate with traditional leaders to organize awareness programs.

2. Incorporation into School curricula: Indigenous knowledge on environmental conservation should be taught in schools.

3. Media Synergy: Blending Trado-media with modern media (radio, social media and their digital platforms) can enhance reach and effectiveness.

4. Legislative Support: Policies should recognize and support indigenous communication in environmental management.

5. Government Collaboration with Traditional Institutions: Establishing partnerships to promote environmental education.

6. Training for Traditional Communicators: Empowering town criers and storytellers with updated environmental knowledge.

7. Cultural Festivals as Advocacy Platforms: Using traditional events to promote clean water initiatives.

8. Documentation of Indigenous Knowledge: Creating archives of traditional water conservation practices for policy integration.

8. Youth Engagement: Encouraging young people to learn and apply Trado-media in environmental advocacy.

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