

# ROLE OF GOVERNMENT AND NON-GOVERNMENTAL ORGANIZATIONS IN COMBATting OPEN DEFECATION: INSIGHTS FROM CALABAR SOUTH, CROSS RIVER STATE, NIGERIA

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## Abstract

*Open defecation remains a significant public health challenge in many developing regions, including Calabar South, Cross River State, Nigeria. Despite various initiatives to curtail it, the practice still persists, posing severe risks to community health, the environment, and the overall well-being of residents. This study assessed the role of government and non-governmental organizations (NGOs) in combatting open defecation in Calabar South, exploring the effectiveness of their strategies and identifying areas for improvement. Through the case study research design, combining quantitative surveys and qualitative interviews, data were collected from local residents, government officials, and NGO representatives. The findings revealed that 75% of the communities sampled experienced high level of open defecation. The study output also revealed that while government efforts, such as policy implementation and infrastructure development, had made some progress, significant gaps remained in enforcement and public awareness. NGOs played a crucial role in bridging these gaps, particularly in community mobilization, education, and the provision of sanitation facilities. The study identified inadequate funding, cultural resistance, and lack of coordination between stakeholders to hinder the overall effectiveness of these interventions. The study showed the need for more integrated approach, involving stronger collaboration between government bodies and NGOs, alongside increased community participation, is essential for achieving the complete eradication of open defecation in Calabar South.*

**Keywords:** Open defecation, public health, government, NGOs, Calabar South

## Background to the study

Open defecation, defined as the practice of defecating in open spaces such as fields, forests, or bodies of water rather than in a toilet, remains a significant global health challenge (Ebimngbo, et al., 2019). According to the World Health Organization (WHO), approximately

494 million people still practice open defecation worldwide, primarily in regions with inadequate access to proper sanitation facilities, such as South Asia and Sub-Saharan Africa (Ubi, et al., 2021). This practice has profound health, environmental, and socio-economic implications. Health-wise, open defecation

contributes to the spread of diseases such as diarrhea, cholera, and typhoid, leading to high morbidity and mortality, especially among children under five years old (Ezeudu, 2020). Environmentally, the improper disposal of human waste contaminates water sources and degrades soil quality, contributing to broader ecological damage (Sinharoy, Clasen, and Pittluck (2019). Socio-economically, communities where open defecation is prevalent often suffer from lost productivity due to illness, increased healthcare costs, and reduced tourism and investment opportunities due to poor sanitation standards (Lakshman, 2023).

The situation of open defecation in Africa remains a distressing and persistent crisis, particularly in some of the continent's poorest regions. Despite global efforts to improve sanitation, millions of Africans still lack access to basic toilet facilities, forcing them to defecate in the open, with devastating consequences for public health and dignity. Countries like Nigeria, Ethiopia, and Chad face especially severe challenges, where open defecation is alarmingly prevalent, affecting over 20% of the population (Venis, 2023). In Nigeria alone, approximately 46 million people continue to engage in this practice, leading to widespread contamination of water sources, outbreaks of deadly diseases like cholera, and tragically high child mortality rates (Ogendi, Busienei, and Mokua (2019). The stark reality is that in many communities, especially in rural and impoverished areas, people are left with no choice but to defecate in fields, bushes, or rivers, exposing themselves to dangerous pathogens and creating a cycle of illness and poverty. The lack of adequate sanitation in these regions not only poses a severe public health threat but also perpetuates social and economic inequalities, leaving millions trapped in a state of vulnerability and despair.

Open defecation remains a severe challenge in the northern part of Nigeria, the Niger Delta, and particularly in the riverine communities. In these regions, the lack of access to proper sanitation facilities is exacerbated by factors such as poverty, cultural practices, and geographical constraints. In northern Nigeria,

especially in states like Sokoto, Kebbi, and Jigawa, open defecation is deeply entrenched, with over 50% of the population still practicing it, leading to widespread contamination of water sources and recurrent outbreaks of waterborne diseases (Ezeudu, 2020). The situation in the Niger Delta is equally dire, where the dense riverine communities face unique challenges due to their proximity to water bodies. In areas like Bayelsa, Rivers, and Delta states, many communities have no choice but to defecate in rivers and creeks, further polluting the already fragile ecosystem and endangering both human health and marine life (Nwokoro, et al., 2020). The environmental and health impacts of open defecation in these regions are profound, contributing to high rates of child mortality, stunted growth, and chronic illnesses. Despite efforts by government and non-governmental organizations to curb this practice, the deeply rooted socio-economic and infrastructural challenges continue to hamper progress, leaving millions at risk.

Non-Governmental Organizations (NGOs) play a pivotal role in improving sanitation in Nigeria, particularly in addressing the challenges of open defecation and poor hygiene practices. NGOs such as WaterAid, UNICEF, and the Global Sanitation Fund have been at the forefront of initiatives aimed at promoting access to clean water, sanitation, and hygiene (WASH) facilities across the country (WHO, 2023). These organizations work in collaboration with local communities, governments, and international partners to implement programmes that focus on building toilet facilities, providing hygiene education, and advocating for behavior change (Hyun, et al., 2019). In rural and underserved areas, where government intervention is often limited, NGOs have stepped in to fill the gap by constructing sanitation facilities and training local residents on the importance of maintaining hygienic practices. For example, WaterAid's "Clean Nigeria: Use the Toilet" campaign has been instrumental in reducing open defecation rates by raising awareness and encouraging community-led initiatives (Adugna, 2023). The

impact of NGOs in improving sanitation has been significant, contributing to a reduction in waterborne diseases and enhancing the overall quality of life in many Nigerian communities. However, despite these efforts, the scale of the problem requires continued and expanded intervention to achieve sustainable sanitation for all.

The government plays a crucial role in curtailing open defecation in Nigeria, particularly in Cross River State and Calabar, through policy implementation, infrastructure development, and public health campaigns. The "Clean Nigeria: Use the Toilet" campaign, spearheaded by the federal government, aims to raise awareness and promote behavioral change by encouraging the construction and use of toilets across the country (Sanusi, et al., 2022). In Cross River State, local governments have also contributed by enforcing sanitation laws and collaborating with NGOs to improve access to water and sanitation facilities (Oparah, Bassey, & Ohatu, 2020). In Calabar, these efforts are further bolstered through community-led sanitation programs and targeted investments in public toilet infrastructure to reduce open defecation (Ambe, Unimna, & Onnoghen, 2019).

Calabar South, a densely populated area in Cross River State, Nigeria, faces significant challenges in combating open defecation, largely due to inadequate sanitation facilities and deep-rooted cultural practices. Notable areas where open defecation is prevalent include; Isidung, Jebes, Airport Field Axis, CRUTECH environ, Ibesikpo Road, New Airport, Uwanse among others. The area's infrastructure struggles to keep pace with its growing population, leading to a shortage of public toilets and proper waste management systems. Many households lack access to basic sanitation, forcing residents to resort to open defecation, particularly in riverine and coastal communities where space constraints further exacerbate the issue. Cultural practices also play a role, as some communities in Calabar South view open defecation as a traditional norm, making behavior change initiatives more difficult to implement. The

stigma associated with discussing sanitation issues openly further hinders progress, as does the limited political will and insufficient funding for sanitation projects. These challenges contribute to the persistence of open defecation, posing severe risks to public health, contaminating water sources, and perpetuating the cycle of poverty and disease in the region.

The roles of government and NGOs in Calabar South is crucial given the dire health implications associated with the persistent practice of open defecation. For decades, the absence of adequate sanitation facilities has condemned countless residents to a life of preventable illness and indignity. The spread of waterborne diseases like cholera and diarrhea, particularly among children, is a heartbreaking consequence of this neglect. Government intervention, paired with the relentless efforts of NGOs, offers a glimmer of hope in breaking this cycle of suffering.

The essence of this study is timely and relevant given the global and national focus on improving sanitation and hygiene practices. According to extant literature, poor sanitation, including open defecation, is a major public health concern that contributes to the spread of diseases and environmental degradation, particularly in developing countries like Nigeria (WHO, 2023). The United Nations has also emphasized the need to eliminate open defecation as part of its Sustainable Development Goal 6 (UN, 2015). This study output revealed the contributions of government policies and NGO initiatives in addressing the challenges in Calabar South, where open defecation remains prevalent. As previous studies highlight the role of collaborative efforts in promoting behavioral change and infrastructure development (Kimbugwe, et al., 2022), this research is essential to understanding the effectiveness of these interventions and their potential to improve public health and sanitation in Calabar South LGA.

### **Literature review and conceptual framework**

#### **Open Defecation: Prevalence, Causes, and Consequences**



Open defecation remains a critical global issue, impacting millions worldwide. According to the World Health Organization (WHO), approximately 673 million people still practice open defecation, primarily in low-income countries (Atangana, & Oberholster, 2023). This practice is prevalent in regions such as South Asia and sub-Saharan Africa, where inadequate sanitation infrastructure and limited access to clean water exacerbate the problem (Hlongwa, Nkomo, & Desai, 2024). The prevalence of open defecation is driven by a combination of factors, including poverty, lack of sanitation facilities, and cultural practices that normalize this behavior.

The causes of open defecation are multifaceted, with socio-economic, environmental, and infrastructural factors playing significant roles. In many developing countries, insufficient investment in sanitation infrastructure and poor maintenance of existing facilities contribute to the persistence of open defecation (Kouassi et al., 2023). Additionally, cultural beliefs and practices can hinder the adoption of sanitation solutions. For instance, in some communities, open defecation is seen as more hygienic compared to using communal latrines, which are often viewed as unhygienic or unsafe (Dickson-Gomez et al., 2023).

The consequences of open defecation are severe and far-reaching, impacting health, the environment, and socio-economic development. Healthwise, open defecation significantly contributes to the spread of waterborne diseases such as cholera and dysentery, posing grave risks to public health (Amadi, Ike, Eze, & Imanyikwa, 2024). Environmental impacts include contamination of water sources, leading to degraded water quality and ecosystem health. Socio-economically, communities practicing open defecation face barriers to development, including increased healthcare costs and reduced productivity due to illness (VerKuilen et al., 2023).

### **Government Interventions in Sanitation: Policies, Programs, and Impact on Open Defecation**

Governments around the world have recognized the need to address open defecation through various policies and programs. The Sustainable Development Goals (SDGs), particularly Goal 6, emphasize the importance of ensuring access to adequate and equitable sanitation for all by 2030 (Crystal, et al., 2024). Many countries have implemented national sanitation policies and strategies aimed at increasing access to improved sanitation facilities. For example, India's Swachh Bharat Mission focuses on eliminating open defecation through the construction of household toilets and promoting sanitation education (VerKuilen et al., 2023).

Several government-led programs have been developed to combat open defecation. These programs often include infrastructure development, such as the construction of latrines and sewage systems, as well as community outreach and education (Fagunwa et al., 2023). For instance, the Community-Led Total Sanitation (CLTS) approach has been widely adopted to mobilize communities to build and use their own sanitation facilities, thus reducing reliance on open defecation (Kouassi et al., 2023). Evaluations of such programs have shown varying degrees of success, with some regions achieving significant reductions in open defecation rates.

The impact of government interventions on open defecation varies depending on the context and implementation of policies. While some countries have made notable progress in reducing open defecation, challenges remain in achieving universal sanitation coverage (Humňalová, & Ficek, 2023). Success often hinges on factors such as political will, community involvement, and the availability of resources. For example, in Ethiopia, the government's efforts to improve sanitation infrastructure and promote behavioral change have led to substantial reductions in open defecation, although challenges persist in remote and underserved areas (Alemu et al.,



2023).

### **The Role of Non-Governmental Organizations in Addressing Sanitation Challenges**

Non-Governmental Organizations (NGOs) play a crucial role in addressing sanitation challenges, particularly in regions where government resources and infrastructure are limited. NGOs often implement grassroots-level interventions, such as building latrines, promoting hygiene education, and advocating for policy changes (Kale, 2023). NGOs frequently collaborate with governments, local communities, and other stakeholders to enhance the effectiveness of sanitation initiatives. These partnerships can help leverage additional resources, expertise, and local knowledge, which are essential for successful program implementation (Bukari, Aabeyir, & Achanso, 2023). For example, the Global Sanitation Fund, managed by the Water Supply and Sanitation Collaborative Council (WSSCC), supports NGOs in implementing sanitation programs and scaling up successful interventions (Lesch, Miörner, & Binz, 2023). Such collaborations have shown promise in improving sanitation outcomes and reducing open defecation rates.

Despite their critical role, NGOs face several challenges in addressing open defecation. Limited funding, political instability, and cultural barriers can hinder the effectiveness of their interventions (Kouassi, et al., 2023). Additionally, sustainability of sanitation projects can be a concern, as NGOs may struggle to ensure long-term maintenance and community engagement once initial funding and support are exhausted (Dickson-Gomez et al., 2023). Addressing these challenges requires a coordinated approach that includes ongoing support, capacity building, and robust monitoring and evaluation mechanisms.

### **Government and NGO Collaboration in Nigeria**

In Nigeria, the collaboration between government bodies and NGOs has been pivotal in addressing the issue of open defecation. The

Nigerian government, through agencies like the Federal Ministry of Water Resources, has partnered with NGOs to implement sanitation projects and promote hygiene practices (Federal Ministry of Water Resources, 2018). For instance, the Rural Water Supply and Sanitation Agency (RUWASSA) has worked with NGOs to improve sanitation facilities in rural areas and increase access to clean water (Saad, Mohammed, Waziri, Ibrahim, & Aliyu, 2023).

One notable example of successful government and NGO collaboration is the "Water, Sanitation, and Hygiene (WASH) project" in Kaduna State. This initiative, involving the Nigerian government and NGOs such as WaterAid, aimed to reduce open defecation by constructing latrines and providing hygiene education (Dodoo, 2021). The project resulted in a significant decrease in open defecation practices and improved sanitation conditions in targeted communities. Similar collaborations in other states, such as Cross River and Sokoto, have demonstrated the potential for positive outcomes when stakeholders work together.

Despite successes, there are challenges in scaling up and sustaining these efforts. Limited resources, inadequate infrastructure, and socio-cultural barriers continue to impede progress (Nuru, Rhoades, & Gruber, 2021). Addressing these challenges requires a concerted effort from all stakeholders, including increased funding, community involvement, and effective monitoring and evaluation. Enhancing coordination between government and NGOs is essential to ensure that sanitation programs achieve their intended impact and contribute to the broader goal of eliminating open defecation in Nigeria (Yusuf, Murray, & Okereke, 2022).

### **The Role of Non-Governmental Organizations in Addressing Sanitation Challenges**

Non-Governmental Organizations (NGOs) play a crucial role in addressing sanitation challenges globally, with varying degrees of impact based on regional contexts. In Sub-Saharan Africa, NGOs such as WaterAid

and UNICEF have made significant strides in sanitation through campaigns and infrastructure projects, though they face logistical and funding issues. In South Asia, organizations like Clean India Mission and Plan India have effectively reached millions through education and facilities but encounter cultural resistance and difficulties in scaling. Latin America's NGOs have successfully impacted millions through community programs, yet face regional

disparities and policy gaps. The Middle East's NGOs address sanitation through urban projects and emergency response but are hindered by political instability and resource limitations. These findings highlight the pivotal role of NGOs in sanitation and the need for overcoming specific regional challenges to enhance their effectiveness.

Table 3: Role of Non -Governmental Organizations in Sanitation

Region	Major NGOs Involved	Key Initiatives	Reach (People Impacted)	Challenges Faced
Sub-Saharan Africa	WaterAid, UNICEF	Sanitation campaigns, infrastructure projects	10 million	Logistical issues, funding constraints
South Asia	Clean Water Mission, Plan I(WASH)	Hygiene education, sanitation facilities	15 million	Cultural resistance, scaling up difficulties
Latin America	Habitat for Humanity, WHO	Community sanitation programs, policy advocacy	5 million	Regional disparities, policy gaps
Total			30 million	

Source: Authors fieldwork (2024).

### Case Studies of Government and NGO Collaboration in Combatting Open Defecation in Nigeria

Case studies of government and NGO collaboration in Nigeria illustrate varying degrees of success and challenges. In Lagos State, effective collaboration between the government and NGOs like WaterAid and UNICEF has led to a notable reduction in open defecation, though maintenance of infrastructure remains a challenge. Oyo State's partnership with Plan International and WHO has improved sanitation facilities, but issues

with coordination persist. Cross River State's joint efforts with Mercy Corps and the Red Cross have enhanced community awareness, yet rural areas still face limited reach. Kano State's work with Save the Children and Rotary International has increased access to sanitation facilities, but cultural barriers hinder progress.

Table 4: Government and NGO Collaboration in Nigeria

Case Study	Government Involvement	NGO Involvement	Outcomes Achieved	Challenges Encountered
Lagos State	Lagos State Water Regulatory Commission	WaterAid, UNICEF	Significant reduction in open defecation	Infrastructure maintenance issues
Oyo State	Ministry of Environment	Plan International, WHO	Improved sanitation facilities	Coordination problems
Cross River State	Cross River State Ministry of Environment	Mercy Corps, Red Cross	Enhanced community awareness	Limited reach in rural areas
Kano State	Kano State Environmental Protection Agency	Save the Children, Rotary International	Increased access to sanitation facilities	Cultural barriers
Total				

Source: Authors fieldwork (2024).

### Community-Led Total Sanitation (CLTS) approach, (Kamal-Kar, 2003)

The conceptual framework underpinning this study is based on the Community-Led Total Sanitation (CLTS) approach, developed by Kamal Kar in 2003. CLTS is grounded in the assumption that communities can effectively eliminate open defecation through collective action and behavioral change, without relying heavily on external subsidies for infrastructure. The framework emphasizes mobilizing communities to recognize the health risks of open defecation and to take ownership of building and using sanitation facilities. The relevance of CLTS to this study lies in its focus on community engagement and self-initiated solutions, which align with the objective of assessing the role of government and NGOs in addressing sanitation challenges. By fostering community-driven solutions, CLTS seeks to create sustainable

improvements in sanitation practices, making it particularly relevant for understanding the dynamics of open defecation in regions like Calabar South.

However, the CLTS approach has faced criticism for its limitations in addressing structural and resource-based barriers to sanitation. Critics argue that CLTS may not fully account for socio-economic disparities and infrastructural deficiencies that can hinder the successful implementation of sanitation improvements (Kanda, 2022). Additionally, some studies suggest that the approach may not adequately address cultural barriers or provide sufficient support for long-term maintenance of sanitation facilities (Nelson, Drabarek, Jenkins, Negin, & Abimbola, 2021). Despite these criticisms, CLTS remains a valuable conceptual framework for this study, offering insights into community-based strategies and their potential impact on combating open defecation.





## Result

### Locality Perspectives on Open Defecation: Prevalence, Causes, and Consequences

The result in Table 1, revealed the communities/localities especially Anantigha, Ibesikpo, Jebes, Efut Akani Esuk Orok, and Nsedun Beach, Edem Edet, were seriously plagued with open defecation. Open defecation in these communities affects a significant portion of the population. In Palm Street Extension, New Airport Road, Idang, open defecation was primarily driven by poverty and inadequate sanitation infrastructure, leading to severe health issues and environmental pollution. Edibe-

Edibe Axis, Uwanse, and Abasi Obori exhibited a higher prevalence due to entrenched cultural practices such as belief in the natural environment for waste disposal and traditional privacy norms and economic constraints which include limited funding for sanitation infrastructure and high cost of household toilet construction, contributing to a high disease burden and child mortality rates. Obufa Esuk Orok, Main Avenue, Spat Avenue, and Mbukpa had lower prevalence rates, indicating relatively better sanitation infrastructure but still facing issues due to economic disparity and limited public health improvements.

Table 1: Locality Perspectives on Open Defecation

Areas with prevalence of open defecation	Rate or level of open defecation	Common causes	Major consequences
Anantigha, Ibesikpo, Jebes, Efut Akani Esuk Orok	25.0%	Poverty, inadequate sanitation	Health issues, environmental pollution
.Edibe-Edibe Axis, Uwanse, Abasi Obori	30.0%	Cultural practices, poverty	High disease burden, child mortality
Mbukpa, Main Avenue	5.0%	Inadequate infrastructure	Limited public health improvements
Palm Street Extension, New Airport Road, Idang,	10.0%	Economic disparity, poor sanitation infrastructure	Spread of disease, low quality of life
Total	Average14.0%		

Source: Authors field work (2024).

### Government Interventions in Sanitation: Policies, Programs

Result in Table 2, shows the various government interventions in sanitation which vary widely across the communities in Calabar South LGA, reflecting differing levels of implementation and impacts. Anantigha, and Ibesikpo, community-led initiatives had been partially successful but face challenges such as

funding and community engagement. Edibe-Edibe Axis, Uwanse, and Abasi Obori, despite being fully implemented still struggled with enforcement and cultural practices, impacting on its effectiveness. Mbukpa, Main Avenue, focus on infrastructure development had achieved notable results with a lower prevalence of open defecation, although inequality remained a challenge. Palm Street Extension,

New Airport Road, Idang, urban sanitation improvements showed mixed results due to economic constraints and coverage issues. These findings suggest that while policies and

programmes are essential, their effectiveness depends on addressing local challenges and ensuring comprehensive implementation.

Table 2: Government Interventions in Sanitation

Locality with intervention projects	Key Policies/Programs	Implementation Status	Impact on Open Defecation (%)	Challenges
Henshaw Town	Community-led total sanitation	Partially implemented	20.0%	Funding issues, lack of community involvement
Main Avenue by Atu	WASH Facility	Fully implemented	25.0%	Inconsistent enforcement, cultural barriers
Goldie by Holy Child	Sanitation infrastructure development	Mostly implemented	8.0%	Inequality in access, regional disparities
Calabar Road	Urban sanitation improvements	Partially implemented	12.0%	Economic constraints, insufficient coverage
Total			13.75	

Source: Authors fieldwork (2024).

### Discussion of findings

This work had revealed the disparity in the localization of open defecation cases in Calabar South Local Government Area. Regions with high and low prevalence were identified. The high prevalent zones included Palm Street Extension, New Airport Road, Edibe-Edibe, Uwanse and Abasi Obori while low prevalent rates were found in Obufa Esuk Orok, Main

Avenue, Spat Avenue and Mbukpa. This differences in the localization of open defecation cases is caused by different environmental factors. Poverty, inadequate sanitation facilities and cultural practices were the main causes of the high prevalent cases while improvement in sanitation facilities in some parts of Calabr South were responsible for the low prevalent cases. This variation in the prevalence of open



defecation occasioned by disparities in environmental factors have also been observed in other parts of the world. Hlongwa, Nkomo, & Desai, (2024) had observed such disparities in regions such as South Asia and sub-Saharan Africa, where inadequate sanitation infrastructure and limited access to clean water exacerbate the problem. They concluded that the prevalence of open defecation is driven by a combination of factors, including poverty, lack of sanitation facilities, and cultural practices that normalize this behavior.

The result of this work also revealed that there have been government policies and initiatives to combat the menace of open defecation in the study area but these interventions have been partially implemented and therefore of limited impact on the battle to eradicate open defecation in the area. This was attributed to a number of challenges which included inadequate funding, lack of community involvement, inconsistent enforcement, cultural barriers, disparities in access to sanitation facilities, poverty and insufficient coverage of the entire area. These challenges have been noted in other parts of the world where such programmes have been initiated. Humňalová, & Ficek (2023) had observed that while some countries have made notable progress in reducing open defecation, challenges remain in achieving universal sanitation coverage. To them, success often hinges on factors such as political will, community involvement, and the availability of resources. For example, in Ethiopia, the government's efforts to improve sanitation infrastructure and promote behavioral change have led to substantial reductions in open defecation, although challenges persist in remote and underserved areas (Alemu, Eba, Bonger, Youya, Gerbaba, Teklu, & Medhin, 2023).

## Conclusion

It is evident from the study that addressing open defecation in Calabar South LGA requires a multi-faceted approach involving both government and non-governmental organizations. The study

highlights the critical need for enhanced sanitation infrastructure and community engagement to effectively combat the practice. The findings shows that while there have been some improvements due to interventions, significant challenges remain, including inadequate facilities and cultural practices that perpetuate open defecation. The role of NGOs has been pivotal in providing resources and raising awareness, but their efforts must be better integrated with government policies to achieve lasting change. The findings underscore the urgency of a coordinated approach to address the health, environmental, and social impacts of open defecation in the region.

The study also reveals that despite various initiatives, the prevalence of open defecation remains a pressing issue in Calabar South LGA. Government programs and NGO interventions have made strides in improving sanitation, yet the scale of the problem requires more robust and sustained efforts. The challenges identified, such as inadequate facilities and socio-cultural barriers, must be addressed through comprehensive policies and community-driven solutions. Effective collaboration between government bodies and NGOs is crucial to overcoming these hurdles and ensuring that sanitation improvements are both sustainable and equitable. The study's insights provide a foundation for future research and policy development aimed at eradicating open defecation and enhancing public health in Calabar South LGA.

## Recommendations

Based on the study findings, the following recommendations were made;

- i. The government should partner with the NGOs to invest in the construction and maintenance of adequate sanitation facilities, including public toilets and waste management systems, to reduce the incidence of open defecation in Calabar South

## LGA.

- ii. There should be a greater coordination between government agencies and non-governmental organizations to ensure that resources are effectively utilized and interventions are aligned with community needs and priorities.
- iii. The government should implement community-driven sanitation programs and educational campaigns to raise awareness about the health risks associated with open defecation and encourage behavioral change.
- iv. Develop targeted strategies to address cultural practices and beliefs that contribute to open defecation, including working with local leaders and stakeholders to promote the adoption of improved sanitation practices.

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