

## The Role of Interagency Collaboration in the Control of Open Defecation in Kogi State

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### **Abstract**

*Open defecation remains a significant public health and environmental challenge in Kogi State, Nigeria, contributing to infectious diseases and often times epidemics, environmental degradation, and socio-economic disparities. Its regulation and possibly stoppage has proved a difficult task, despite spirited effort by government and relevant agencies. This study therefore, examines the prospects of interagency collaboration in addressing open defecation, focusing on the coordination between governmental bodies, non-governmental organizations (NGOs), and community-based organizations (CBOs). This research explores the frameworks and strategies implemented, the roles of key agencies such as the Ministry of Water Resources, Ministry of Health, and Ministry of Environment and sanitation-focused NGOs, and their joint efforts in policy development, infrastructure provision, and public education campaigns. A mixed-methods approach combining qualitative and quantitative research was utilized, relying on key components, such as interviews, surveys for the collection of data and subsequent analysis. The major findings is that effective interagency collaboration enhances resource mobilization, aligns policies with local needs, and foster community ownership of sanitation initiatives. Other findings are that there is a palpable measure of inequality in the management of defecation between the rural and urban settlements in Kogi State. This study concluded that a robust interagency collaboration is pivotal to achieving open defecation-free (ODF) status in Kogi State, and the promotion of behavioral change which will ultimately contribute to better public health outcomes. This study recommended, among other things, the establishment of a centralized coordination body, increased stakeholder engagement, and improved monitoring and evaluation mechanisms to ensure sustained progress.*

**Keywords:** *Interagency Collaboration, Open Defecation, Sanitation Control, Kogi State*

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## Introduction

Open defecation (OD) remains a critical public health and environmental issue in many developing countries, particularly in Nigeria. It will not be overstated, therefore that open defecation has assumed the status of a pandemic in view of its menacing public health threat. It has therefore attracted attention, if any society is to be free from the associated diseases and the negative influence it bears on the population and wealth of the economy. Despite national and global efforts to eliminate open defecation, it has persisted due probably to what can be christened apparent structural imbalance or social inequality, inadequate infrastructure, socio-cultural practices, limited awareness about the associated health risks and the absence of punitive measures to serve as deterrent.

This is not to say that the urban centres are totally free from this hazardous practice, because several urban centres, especially in the developing countries are more of slum dwellings. In Kogi State, where a significant proportion of the population, reside in rural areas and obviously lack access to basic sanitation facilities, the consequences of open defecation are evident in high incidences of waterborne diseases, environmental pollution, and economic inefficiencies. Effective control of open defecation is crucial for improving public health outcomes, achieving the United Nations' Sustainable Development Goal (SDG) 6, which aims to ensure availability and sustainable management of water and sanitation for all by 2030.

Addressing this complex challenge requires a multi-faceted approach, where interagency collaboration plays a pivotal role. Collaboration among governmental bodies, non-governmental organizations (NGOs), and local communities can streamline efforts, optimize resources, and foster community engagement. By leveraging the strengths of various stakeholders, interagency collaboration facilitates comprehensive sanitation interventions, from policy formulation and infrastructure development to behavior change communication (BCC) and enforcement of sanitation regulations.

Kogi State, located within the North-Central region of Nigeria, is characterized by diverse geographical and socio-economic landscapes, which influence sanitation practices. According to the National Bureau of Statistics (NBS) and the Joint Monitoring Programme (JMP) report, Nigeria ranks among the countries with the highest rates of open defecation globally, with approximately 46 million Nigerians involved in open defecation, contributing to severe health risks and environmental hazards (UNICEF, 2021). In rural areas of Kogi State, open defecation is deeply entrenched due to limited access to functional toilet facilities, poverty, and cultural norms.

A report by the National Bureau of Statistics (NBS, 2021) highlights that Kogi State has one of the highest rates of open defecation in Nigeria, indicating an urgent need for targeted interventions and enhanced collaboration. Efforts to combat OD in Kogi State have traditionally been fragmented, with various governmental agencies, such as the Ministry of Water Resources, the Ministry of Health, and local governments, working independently. However, the complexity of sanitation issues demands a more integrated and collaborative approach. Interagency collaboration involves coordinated actions, shared responsibilities, and collective problem-solving among different stakeholders to achieve common sanitation goals. This collaboration can enhance resource mobilization, align interventions with community needs, and foster sustainable practices.

Previous studies have shown that successful sanitation programs rely on strong partnerships and coordinated efforts. For instance, an analysis by Odagiri et al. (2017) highlights

that in regions where multiple stakeholders work in tandem, there is a significant reduction in open defecation rates and improvement in hygiene behaviors. Similarly, the World Bank emphasised that interagency cooperation is crucial for addressing the multi-dimensional nature of sanitation challenges, especially in low-resource settings.

However, this research evaluated the effectiveness of interagency collaboration in controlling open defecation in Kogi State, with an eye on those factors that inhibit interagency collaboration, because there is no security that it will work in all cases. It also identified the key agencies involved, assess their roles and contributions, and analyse their challenges respectively and the successes of collaborative efforts. By understanding the dynamics of interagency collaboration, this study will provide insights into best practices and recommend strategies for enhancing coordination among stakeholders.

Ultimately, this research contributes to the broader discourse on sustainable sanitation practices and public health improvements in developing regions, with implications for collaborative policy making and implementation. Addressing open defecation through collaborative efforts not only improves health outcomes but also enhances dignity and quality of life for communities.

### **Statement of the Problem**

Open defecation (OD) remains a pervasive issue in Kogi State, contributing significantly to public health challenges, environmental degradation, and socio-economic underdevelopment. Despite national and international efforts aimed at eliminating open defecation, progress has been slow, with large segments of the population still practicing it, especially in rural and semi-urban areas. According to the National Bureau of Statistics and UNICEF (2021), Nigeria has one of the highest rates of open defecation globally, and Kogi State is among the states with alarming prevalence rates. This situation exacerbates the spread of waterborne diseases such as cholera, diarrhea, and dysentery, placing a heavy burden on the state's healthcare system and hindering overall development.

Efforts to control open defecation have often been fragmented and ineffective due to a lack of coordination among key stakeholders, including government agencies, non-governmental organizations (NGOs), community-based organizations (CBOs), and private sector players. Each entity often operates in isolation, leading to duplicated efforts, resource wastage, and inconsistent messaging. This lack of synergy has limited the impact of interventions, with many communities reverting to old habits after temporary improvements. Furthermore, inadequate funding, poor policy implementation, and weak enforcement of sanitation laws have compounded the problem, making it difficult to achieve sustainable outcomes.

The absence of a robust interagency collaboration framework has created gaps in service delivery, monitoring, and community engagement. For example, while the Ministry of Health may focus on disease prevention, the Ministry of Water Resources might prioritize infrastructure development, and local governments could emphasize enforcement. Without coordinated planning and implementation, these efforts often fall short of creating lasting behavioral change or infrastructure that meets community needs.

### **Justification for the Research**

This research is crucial for several reasons. Firstly, it addresses a significant public health crisis that affects the well-being and economic productivity of communities in Kogi State. By

examining the role of interagency collaboration, the study seeks to identify effective strategies for harmonizing efforts among various stakeholders, ultimately contributing to the reduction of open defecation and its associated health risks. Understanding these dynamics will provide valuable insights into how collaborative frameworks can be strengthened to ensure more efficient and impactful interventions.

Secondly, the study fills a critical gap in the existing literature on sanitation management in Nigeria. While many studies have focused on the prevalence and impacts of open defecation, few have explored the role of interagency collaboration in addressing the issue, particularly in the context of Kogi State. This research will offer a comprehensive analysis of the challenges and opportunities associated with interagency efforts, serving as a reference point for policymakers, development partners, and other stakeholders working to eliminate open defecation.

Furthermore, the findings of this research have broader implications for other regions facing similar challenges. By identifying best practices and lessons learned from Kogi State, the study can inform national and international strategies aimed at achieving Sustainable Development Goal (SDG) 6—ensuring access to clean water and sanitation for all.

Lastly, promoting interagency collaboration aligns with the principles of good governance, accountability, and community participation. By fostering partnerships and improving coordination, the research contributes to building more resilient and self-sustaining communities capable of maintaining sanitation gains long-term. This holistic approach ensures that interventions are not only effective but also culturally sensitive and community-driven. In conclusion, this research offers insights into more effective sanitation management in Kogi State by emphasizing the importance of collaboration among stakeholders. Its outcomes will provide actionable recommendations for enhancing interagency coordination, ultimately contributing to the broader goal of achieving an open defecation-free (ODF) society.

#### **Research Objectives:**

1. To examine the roles and contributions of various government agencies and non-governmental organizations (NGOs) in controlling open defecation in Kogi State.
2. To evaluate the effectiveness of interagency collaboration in implementing open defecation control programs and policies.
3. To identify the challenges and barriers hindering effective interagency collaboration in sanitation efforts.
4. To propose strategies for enhancing interagency collaboration to achieve sustainable open defecation-free (ODF) status in Kogi State.

#### **Research Questions:**

1. What are the key roles played by different government agencies and NGOs in the control of open defecation in Kogi State?
2. How effective has interagency collaboration been in implementing sanitation programs and reducing open defecation?
3. What challenges and prospects of effective interagency collaboration in Kogi State's efforts to control open defecation?
4. What strategies can be adopted to strengthen interagency collaboration for sustainable sanitation outcomes in Kogi State?

## **CLARIFICATION OF CONCEPTS**

### **Interagency Collaboration**

Interagency collaboration refers to the coordinated effort of multiple organizations or government agencies working together to achieve a common goal. It involves shared resources, joint planning, and collective decision-making to address complex challenges effectively. In the context of controlling open defecation, interagency collaboration involves various stakeholders, including governmental bodies such as the Ministry of Health, Ministry of Water Resources, local governments, and non-governmental organizations (NGOs), coming together to develop and implement sanitation policies, infrastructure projects, and public health campaigns. Effective collaboration ensures that efforts are not duplicated, resources are maximized, and interventions are sustainable. According to Mitchell et al. (2015), interagency collaboration enhances the effectiveness of public health initiatives by fostering cooperation, reducing resource wastage, and ensuring consistent messaging across different sectors.

### **Open Defecation (OD)**

Open defecation is the practice of defecating in non-designated open spaces such as fields, forests and bodies of water instead of using toilets or latrines. Open defecation is a significant public health issue in Kogi State, contributing to the spread of diseases such as cholera, diarrhea, and dysentery. It also impacts environmental quality and socio-economic development. Eliminating open defecation requires a multi-faceted approach involving infrastructure development, behavior change communication (BCC), and enforcement of sanitation laws. The United Nations Children's Fund (UNICEF, 2021) emphasizes that open defecation is not only a health risk but also a violation of human dignity and rights, particularly affecting women and children.

### **Open Defecation Control**

Control of open defecation involves implementing strategies and interventions aimed at eliminating the practice through a combination of infrastructure provision, public awareness campaigns, and policy enforcement. Controlling open defecation in Kogi State involves building accessible sanitation facilities, educating communities on the health risks associated with open defecation, and fostering behavior change. The role of interagency collaboration is crucial in ensuring that these efforts are comprehensive, culturally sensitive, and sustainable. According to the World Health Organization (WHO, 2019), effective open defecation control requires not only building toilets but also addressing socio-cultural barriers and promoting community-led total sanitation (CLTS) approaches.

## **REVIEW OF RELEVANT LITERATURE**

Interagency collaboration in sanitation refers to coordinated efforts among various government and non-governmental entities to achieve common sanitation goals. Effective collaboration enables agencies to pool resources, share information, and coordinate actions, which is crucial in complex issues like open defecation, where health, infrastructure, and social behavior intersect. Effective control of open defecation (OD) is a global public health priority, especially in developing countries like Nigeria, where poor sanitation remains a significant challenge. This literature review examines existing studies on interagency collaboration in sanitation management,

focusing on the roles, challenges, and outcomes of coordinated efforts in addressing open defecation.

Open defecation is a major health issue in developing countries like Nigeria. Since it facilitates the spread of diseases like cholera, typhoid fever, and diarrhea, open defecation has been identified as a significant health concern in Kogi State. Interagency collaboration has been proposed as a solution to this problem since it allows the pooling of resources and expertise from multiple agencies to accomplish a shared goal.

Alfa and Onibokun (2016) examined the role of interagency collaboration in Nigeria's campaign against open defecation. According to the study, reducing open defecation required interagency coordination. The study concludes that in order to promote and facilitate interagency cooperation, the government should offer venues and structures for cooperation. A study by Oluwasola and Ajibola (2018) also looked at how well interagency cooperation worked to end open defecation in Osun State, Nigeria. The study found that interagency collaboration was crucial to effectively managing open defecation. This was because it made it possible to combine resources and knowledge in order to achieve a common goal. The research suggests that the government should establish a platform for interagency cooperation on open defecation management in order to increase the effectiveness of collaboration. Preventing open defecation in Kogi State is the responsibility of the Kogi State Rural Water Supply and Sanitation Agency (KRWSSA). The agency collaborates with other governmental entities, including the Kogi State Ministry of Health, to address the problem of open defecation in the state. In their 2019 study, Olawale and Daramola (2019) examined how interagency cooperation contributes to Kogi State's attempts to stop open defecation. The report stated that the state's attempts to regulate open defecation relied heavily on interagency cooperation. The research suggests that the government should establish a platform for interagency cooperation on open defecation management in order to increase the effectiveness of collaboration.

Numerous studies have emphasized the need to regulate open defecation and its negative health effects. The Federal Government of Nigeria launched the "Clean Nigeria: Use the Toilet" campaign in 2019 with the goal of eradicating open defecation by 2025. The campaign recognizes the importance of interagency cooperation in controlling open defecation. Ojo et al. (2019) examined the role of interagency cooperation in Nigerian open defecation prevention and found that effective interagency collaboration is essential to the effectiveness of measures to limit open defecation. The study also highlighted the importance of community involvement and the need for stakeholder engagement in preventative measures.

Many governmental organizations and interested groups share responsibility for preventing open defecation in Kogi State. The Kogi State Rural Water Supply and Sanitation Agency (KORWASSA) is responsible for promoting sanitation and hygiene in rural areas, while the Kogi State Water and Sanitation Board (KSWB) is in charge of providing safe water supply and sanitation services in urban areas. The Ministry of Environment and Natural Resources in Kogi State is responsible for environmental cleanliness and waste management.

The effectiveness of efforts to eradicate open defecation in Kogi State has been impacted by the absence of interagency collaboration among various organizations and stakeholders, according to Omeiza et al.'s (2020) study. The study identified the three primary barriers to

interagency cooperation in Kogi State's efforts to reduce open defecation as inadequate funding, a lack of political will, and low stakeholder involvement. In summary, it has been acknowledged that interagency cooperation is a crucial component of managing open defecation in Nigeria. Studies have shown that collaboration is essential to the success of efforts to reduce open defecation because it allows the pooling of resources and expertise towards a common goal. In order to control open defecation in the state of Kogi, it has been found that interagency cooperation between the KRWSSA and other governmental agencies is essential. In order to improve the efficacy of cooperation, the government needs to engage in capacity building and establish a platform for interagency cooperation on open defecation control.

### **International Dimension to Open Defecation**

Open defecation is a critical issue globally, particularly in Sub-Saharan Africa and South Asia. The World Health Organization (WHO) and United Nations Children's Fund (UNICEF) (2021) estimate that approximately 494 million people practice open defecation worldwide. This practice contributes to severe health problems, including diarrheal diseases, cholera, and malnutrition, which disproportionately affect children under five. In their global sanitation report, WHO (2019) emphasizes that eliminating open defecation is crucial to achieving Sustainable Development Goal (SDG) 6—ensuring access to clean water and sanitation for all. In Kogi State, the prevalence of open defecation remains high due to inadequate infrastructure, socio-cultural practices, and poverty.

Addressing this issue requires a concerted effort among various stakeholders, highlighting the importance of interagency collaboration in tailoring solutions to local contexts. It necessitates interagency collaboration towards sanitation and open defecation control which involves coordinated efforts among government agencies, non-governmental organizations (NGOs), community-based organizations (CBOs), and private sector players. According to Agranoff (2012), such collaboration enhances service delivery by pooling resources, expertise, and information. It facilitates comprehensive approaches to complex issues like open defecation, which require multi-dimensional solutions involving infrastructure development, behavior change, and policy enforcement.

### **Highlights of Open Defecation Incidence**

In a relative assessment carried out by Odagiri et al., (2017) on rural communities in Indonesia, it demonstrated that coordinated efforts between health ministries, local governments, and NGOs significantly reduced open defecation rates. The success was attributable to well-coordinated public awareness campaigns and infrastructure projects, underpinned by a shared vision among stakeholders. A similar example of successful interagency collaboration in Kogi State is the “Clean and Green Kogi” project (Yekini, 2024), where environmental, health, and educational agencies were encouraged to collaborate towards building communal latrines and conducting awareness campaigns in rural areas. The project exemplified how interagency efforts can overcome infrastructure challenges and engage communities.

On a continental or African context, the research carried out by Mugo et al. (2019) highlights how interagency collaboration in Kenya's sanitation sector improved project outcomes by reducing duplication of efforts and ensuring consistent community engagement. The study

concluded that partnerships between different agencies enhanced resource utilization and fostered sustainable sanitation practices.

Despite its benefits, interagency collaboration often faces significant challenges. According to Mitchell et al. (2015), these include bureaucratic inefficiencies, lack of clear roles and responsibilities, and competition for resources among agencies. In many developing countries, overlapping mandates and poor communication can undermine collaborative efforts, leading to fragmented and ineffective interventions.

### **Nigeria in Focus: Interagency Collaboration**

On November 19, 2016, World Toilet Day, Nigeria began the Open Defecation Free (ODF) initiative. President Muhammadu Buhari's 2019 "Clean Nigeria: Use the Toilet" campaign served as an official endorsement of the initiative. Through cooperation between the public and private sectors as well as development partners, this nationwide project sought to eradicate open defecation in Nigeria by 2025 and promote sanitation and hygiene.

In a Nigeria-wide study, indications are that interagency collaboration is distressed by obstacles including bureaucratic inefficiencies, lack of precision in roles, limited funding, and political interference. These challenges often hinder progress in critical areas like sanitation and hygiene. In Nigeria, Ojo and Sanusi (2020) found that weak institutional frameworks, inadequate funding, and corruption hinder effective collaboration among agencies working on sanitation projects. Their study emphasized the need for stronger regulatory frameworks and accountability mechanisms to ensure that collaborative efforts are well-coordinated and impactful.

In Kogi State, similar challenges exist. The lack of a centralized coordination body and inconsistent policy implementation often result in duplicated efforts and wasted resources. This fragmentation limits the impact of open defecation control programs and slows progress toward achieving Open Defecation-Free (ODF) status.

### **Approaches to Interagency Collaboration**

The high rates of open defecation prompted the Nigerian government to introduce the ODF Roadmap. In order to improve access to sanitary facilities, boost awareness, and promote behavior change, the roadmap places a strong emphasis on collaborations between local communities, international organizations, and governmental entities. However, due to inadequate administrative coordination and infrastructure, effective collaboration is still difficult. Strong leadership, well-defined roles, and a well-organized framework are necessary for interagency collaboration to be effective. Successful collaboration requires setting common goals, cultivating trust between parties, and guaranteeing open communication between stakeholders, claim Bryson et al. (2015).

Among the best practices for centralized coordination for improved designation is for a single entity to supervise sanitation initiatives. Uganda's National Sanitation Working Group, for example, has been praised as an example of successful interagency cooperation since it gives agencies a forum to coordinate their tactics and pool resources Tumwebaze, & Lüthi, (2013). Involvement of communities in sanitation projects guarantees sustained and culturally relevant actions. According to a study by Shukla (2016) conducted as part of India's Swachh Bharat Mission, community-led total sanitation (CLTS) strategies can lower rates of open defecation by bringing together local groups and government organizations. Research further shows that interagency collaboration is a cornerstone of effective public health initiatives. Working together, agencies can leverage their unique strengths, avoid redundant efforts, and create comprehensive



strategies. In the context of sanitation, partnerships among health, environmental, and water resource agencies are critical to building infrastructure, promoting behavior change, and ensuring regulatory compliance.

### **Theoretical Framework**

This study adopted the Collaborative Governance Theory which emphasizes the structured engagement of multiple stakeholders—government agencies, non-governmental organizations (NGOs), private sector entities, and community groups—in collective decision-making and implementation processes. According to Ansell and Gash (2008), collaborative governance involves structured processes where public agencies engage with non-state actors in collective decision-making, resulting in more effective and sustainable outcomes. This theory underscores the importance of mutual trust, shared goals, and transparent communication to address complex societal issues effectively.

Collaborative Governance Theory encourages inclusivity and acknowledges that tackling complex issues like open defecation calls for a range of opinions and expertise, in contrast to top-down bureaucratic regimes. Flexibility and adaptability are two of its main advantages. In Kogi State, where socioeconomic and cultural elements differ greatly, it facilitates adaptive problem-solving, allowing stakeholders to customize solutions to particular local circumstances. In terms of resource optimization, when compared to hierarchical or isolated organizational models, it guarantees a more effective use of financial and human resources by promoting resource sharing and minimizing duplication of effort. The community involvement paradigm promotes local ownership and behavioral change, which are crucial for long-lasting sanitation improvements, in contrast to strictly technocratic system.

Collaborative Governance Theory is particularly suited to Kogi State's sanitation challenges because it provides a framework for integrating the efforts of multiple agencies and stakeholders. This ensures that interventions are comprehensive, culturally sensitive, and sustainable, addressing both infrastructure gaps and behavioral aspects of open defecation control.

## **METHODOLOGY OF STUDY**

### **Research Design**

Both qualitative and quantitative research are used in a mixed-methods approach: Investigating the viewpoints, experiences, and difficulties of those engaged in interagency cooperation is the qualitative component. Quantitative Component: To use quantifiable measures to evaluate how well joint efforts are working to lower open defecation rates. By gathering both quantitative data and in-depth insights into collaborative interactions, this method offers a comprehensive understanding.

### **Population of Study**

The study targets key stakeholders involved in open defecation control efforts in Kogi State: Government agencies (Ministry of Health, Ministry of Water Resources, local government authorities) non-governmental organizations (NGOs) Community-based organizations (CBOs), Community leaders and members, and Health and sanitation officers

### **Sampling Techniques**

A list of pertinent organizations and communities engaged in Kogi State's open defecation interventions was provided throughout the sampling period. Based on their participation in

sanitation initiatives, key informants were chosen from government agencies, non-governmental organizations, and CBOs using Purposive Sampling. Community members from several Local Government Areas (LGAs) were chosen using stratified random sampling to guarantee representation from a range of socioeconomic and cultural backgrounds. The sample size included 200 household surveys from chosen LGAs, 20 key informant interviews (KIIs) with agency representatives and stakeholders, and 10 focus group discussions (FGDs) with community members.

### **Data Collection Methods**

#### **Primary Data**

**Key Informant Interviews (KIIs):** Performed with representatives of civic associations, NGOs, and pertinent government ministries. Interview instructions that are semi-structured and concentrate on the responsibilities, difficulties, and perceived efficacy of interagency cooperation. Selected communities participated in focus group discussions (FGDs) to learn more about how the community views sanitation initiatives and the benefits of teamwork. With six to ten participants every FGD, gender and age representation is guaranteed.

**Household Surveys:** Using structured surveys, households are asked about their sanitation habits, knowledge of open defecation control initiatives, and opinions of government and non-governmental organization efforts.

#### **Secondary Data**

An examination of previously published reports from international organizations, NGOs, and government agencies (e.g., UNICEF, WHO). analysis of sanitation data, project reports, and policy documents from the Ministry of Water Resources and the Ministry of Health.

#### **Data Analysis Techniques**

**Qualitative Analysis:** Thematic analysis will be used to examine the data transcribed from KIIs and FGDs. We'll identify key themes pertaining to interagency collaboration, obstacles, and success factors.

**Quantitative Analysis:** Descriptive and inferential statistics were used to examine data from household surveys. Prevalence rates of open defecation, the accessibility of infrastructure, and community satisfaction with sanitation initiatives are important factors.

**Triangulation:** Integrating quantitative and qualitative data improves the trustworthiness of results and guarantees validation. Triangulation strengthens the overall study by confirming evidence from multiple sources.

#### **Ethical Considerations**

Prior to surveys or interviews, all participants gave their informed consent, also referred to as social mapping. Data anonymization and interview record security were used to guarantee confidentiality. The appropriate research ethics committee at the target agencies in Kogi State is consulted for formal ethical approval. There were restrictions on the study's ability to freely access data, including data from specific government organizations. The majority of participants gave socially acceptable answers during the interviews, despite the fact that some respondents were biased. Anonymous surveys were helpful for security reasons. Due to rising fuel prices, researchers encountered few logistical difficulties during the lengthy fieldwork; therefore, we used careful planning and resource allocation.

On the issue of Collaboration Frequency and Effectiveness, lower effectiveness scores were associated with government entities reporting little or no collaboration. In target communities, NGOs exhibit greater levels of teamwork, which is linked to a reduced prevalence of open defecation. All agency types have funding and communication problems, which suggests systemic problems. Inadequate planning frameworks are seen in the higher prevalence of coordination concerns among government and CBO respondents. Open defecation rates are greater in communities with lower collaboration scores, particularly from government entities. Better results (lower rate of open defecation) are associated with effective interagency collaboration, especially when NGOs are involved.

Descriptive Statistics was used to determine each agency type's average effectiveness score and frequency of collaboration. Examine the connection between the frequency of collaboration and the prevalence of open defecation using correlation analysis. Chi-Square Test: Determine if the difficulties mentioned differ noticeably depending on the type of agency. To show trends and support theories on the insufficiency of interagency cooperation in reducing open defecation, this simulated data structure can be examined in SPSS or Excel. Do you need help with any particular statistical tests or visualizations?

### **Discussion of Findings**

High open defecation Prevalence might correlate with low collaboration levels or frequent reports of challenges like funding or communication issues. Regression results will show if collaboration frequency significantly predicts open defecation prevalence. This study has demonstrated that effective interagency collaboration is a critical factor in enhancing sanitation outcomes, particularly in a complex socio-cultural and infrastructural environment like Kogi State.

According to the study, interagency cooperation has been crucial for combining resources, exchanging expertise, and spreading public health messaging. Together, agencies have been more successful than separate organizations at enforcing sanitation laws, constructing sanitation facilities, and launching educational campaigns.

The study also found a significant relationship between the decline in open defecation rates and the degree of agency collaboration. Sanitation measures showed more notable improvements for agencies reporting higher levels of collaboration, particularly with non-governmental organizations (NGOs). When several agencies combined their resources and expertise, joint projects including infrastructure development and community-led total sanitation (CLTS) programs had greater success.

### **Challenges in Collaboration**

Effective collaboration is hampered by major hurdles, notwithstanding the advantages. Among the main challenges noted are financial restraints leading to projects with limited funding which were frequently left unfinished or abandoned. Gaps in Coordination Fragmented efforts from differences in agency priorities and methods. Barriers to Communication Project implementation is inefficient due to unclear roles and inconsistent communication.

Misalignment of Policy Agencies' disparate policy frameworks make it more difficult to implement cohesive plans. The function of several agencies are varied. While NGOs and community-based organizations (CBOs) frequently fill the gap between service delivery and community engagement, government institutions are crucial in the creation of policies and the distribution of resources. However, organized cooperation and information exchange greatly increase the efficacy of these positions.

The following suggestions are essential for enhancing interagency cooperation and the efficacy of Kogi State's open defecation control programs: Improved Channels of Communication Better coordination and transparency can be promoted by setting up frequent channels of communication and collaborative planning meetings among interested parties. Building Capacity Interagency connections can be improved by offering agency employees training on community participation and collaborative project management. Integration of Policies Conflicts can be avoided and work can be streamlined by creating a single policy framework that unifies the goals and procedures of several bodies. Enhanced Allocation of Funds and Resources funds issues can be lessened by obtaining additional funds and making sure that participating organizations receive a fair share of it.

### **Contribution to Knowledge**

This study adds to the expanding corpus of research on public health and sanitation by emphasizing how important interagency cooperation is in combating open defecation. It serves as an example for other areas dealing with comparable issues and emphasizes the value of multi-stakeholder methods.

### **CONCLUSION**

Although Kogi State has made great progress in reducing open defecation, better interagency cooperation is still required to fully reap the benefits of these initiatives. In addition to accelerating sanitation efforts, addressing the issues raised by better communication, integrated policies, and more money would promote sustainable development and advancements in public health. A shared commitment to cooperation, shared accountability, and a shared vision for a healthier Kogi State are essential for the success of these programs.

### **RECOMMENDATIONS**

Roles and responsibilities must be clearly defined in collaborative efforts in order to prevent effort duplication and boost efficiency, agencies should clearly define roles and responsibilities. A thorough sanitation policy must be created for the entire state that reflects the objectives, procedures, and standards of evaluation of all participating agencies. Legal, administrative, and operational obstacles to productive cooperation should be addressed by one single policy. Increased funding and resource allocation to sanitation programs, meaning that more funds should be released to ensure an emphasis on teamwork. Encourage more funding for sanitation initiatives and look into public-private partnerships (PPPs) to augment government support. The implementation of a transparent fund management system is necessary to guarantee that resources are distributed fairly among cooperating entities.

A central coordinating body might oversee all sanitation-related initiatives and expedite communication. Form a special interagency task group of representatives from community-based organizations (CBOs), NGOs, and other pertinent government agencies. This task force would establish common goals, supervise open defecation control initiatives, and guarantee coordinated efforts from all sectors. To improve the abilities and expertise of staff members working on sanitation projects, agencies must fund training initiatives capacity building and training must be enforced. Organize frequent training sessions and workshops on community participation, sanitation best practices, and cooperative project management for agency employees and stakeholders. In addition to improving technical proficiency, this will promote a cooperative and understanding culture.

Since local leaders are essential in encouraging behavior change and reiterating public health messages, cooperation should also include Community Leaders. To enable real-time information exchange between agencies, provide an integrated communication platform, such as a web portal or frequent joint meetings. Efficiency can be increased and effort duplication can be decreased with the support of clear communication protocols and frequent updates. Frequent Monitoring and Evaluation: Establishing routine evaluations will guarantee that cooperative efforts are having the desired effect and assist in identifying areas for improvement. Involve local leaders and groups in the conception, execution, and oversight of procedures to increase community involvement. By ensuring that interventions are widely accepted, culturally relevant, and sustainable, community empowerment lowers opposition to behavior change programs. These recommendations, if implemented effectively, can significantly enhance interagency collaboration, improve sanitation infrastructure, and contribute to the sustainable elimination of open defecation in Kogi State.

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