

Human Right to Water and Water Problems in Nigeria (Pollution, Protection, and Preservation)

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ABSTRACT

This review examines the intersection between the human right to water and the persistent water-related challenges facing Nigeria. Despite international recognition of access to clean water as a fundamental human right, millions of Nigerians continue to suffer from inadequate access, contamination, and waterborne diseases due to pollution, infrastructural decay, and poor governance. The paper critically explores the major sources of water pollution—including industrial discharge, oil spills, and poor waste management—while assessing the regulatory and institutional failures that undermine water protection efforts. Additionally, the review highlights preservation strategies and community-led interventions aimed at ensuring sustainable water use and environmental resilience. By analyzing Nigeria's policy framework in light of global human rights standards, the study advocates for more integrated and enforceable approaches to water governance, emphasizing the need for accountability, public participation, and long-term preservation of water resources.

Keywords: Human Right to Water, Water Pollution, Water Protection, Water Preservation, Water Problems in Nigeria.

1. INTRODUCTION

1.1 Overview of the Human Right to Water as Recognized in International Law

The human right to water is firmly anchored in international human rights law, recognized as a standalone entitlement that ensures sufficient, safe, and accessible water for personal and domestic use. Alzamora (2015) emphasizes the evolution of this right through key UN instruments, most notably the 2010 UN General Assembly resolution and General Comment No. 15, which collectively emphasize state obligations to ensure safe and affordable water access as a prerequisite for dignity and health. This recognition shifts water access from a policy aspiration to a legally binding right that empowers individuals and communities to hold authorities accountable.

Daci (2012) further explores how international frameworks—customary law, treaties, and soft-law instruments—establish normative duties on states to guarantee water rights. He argues that while customary and treaty-based recognition affords significant legal grounding, effective protection necessitates an integrated framework that bridges international mandates with domestic governance. This includes establishing

enforceable benchmarks for water quality, quantity, affordability, and physical access. Such a framework enables rights-based litigation, bolsters legal strategies to challenge water scarcity, and aligns state policies with universal human rights norms. In sum, the international legal recognition of the human right to water represents both an ethical commitment and a concrete regulatory obligation, serving as the foundation for national policy reform and the pursuit of equitable water access in countries like Nigeria.

1.2 Importance of Access to Clean Water in Nigeria's Socio-economic and Public Health Landscape

Access to clean water remains a critical determinant of socio-economic development and public health in Nigeria. Poor households, particularly in rural areas, often rely on unimproved water sources—such as surface water and unprotected wells—which significantly elevates the risk of waterborne diseases and undercuts broader developmental outcomes. Abubakar (2019) found through demographic analysis that rural residence, low wealth, and limited education substantially reduce household access to improved water sources, translating into heightened vulnerability to health shocks and economic instability.

On the public health front, water contamination underlies high rates of gastrointestinal illnesses, particularly among children, which impairs school attendance, cognitive development, and educational attainment across vulnerable populations. Moreover, limited access to safe water forces households to allocate scarce financial resources toward medical care and alternate water procurement, further entrenching cycles of poverty. Economically, inadequate water access suppresses agricultural productivity—especially among women and youth who bear the responsibility of water collection—restricting income-generating activities and amplifying gender disparities.

Clean water access also underpins urban growth and industrialization. UNICEF and the Federal Ministry of Water Resources highlight that improved water supply contributes significantly to national GDP and socioeconomic progress, whereas water scarcity and pollution exact measurable economic costs. In sum, ensuring clean water access is not merely a public health priority—it is a foundational element of Nigeria's broader economic resilience, educational success, and equitable development trajectory (Rukayat, 2019).

1.3 Objectives and Scope of the Review

This review aims to critically examine the human right to water in Nigeria, focusing on the intersection of international legal standards, environmental degradation, water pollution, and national frameworks for water governance. Specifically, the objectives include: (1) evaluating how international human rights norms regarding access to clean and safe water have been localized in Nigeria's legal and institutional systems; (2) analyzing the socio-economic and public health implications of water scarcity and contamination across Nigerian regions; (3) identifying major pollution sources and governance failures hindering water sustainability; and (4) proposing legal, regulatory, and institutional reforms that support water protection and long-term preservation. The review covers three interconnected themes—pollution, protection, and preservation—within the human right to water. It further includes comparative insights from other jurisdictions, while keeping its primary geographical focus on Nigeria. The scope excludes marine water rights and focuses solely on freshwater used for domestic, agricultural, and public health purposes. Through this, the review intends to offer an integrated understanding of the legal, social, and ecological challenges confronting Nigeria's water landscape.

1.4 Methodological Approach and Structure of the Paper

This review adopts a qualitative legal and policy analysis methodology, integrating doctrinal research, content analysis, and empirical insights from secondary data. Sources include peer-reviewed journal articles, international legal instruments, Nigerian statutory laws, regulatory frameworks, government publications, and reports from international organizations such as the United Nations and World Health Organization. The study employs a thematic approach, categorizing findings into key areas that align with the broader objective of understanding the human right to water in Nigeria through the lenses of pollution, protection, and preservation.

The paper is organized into six sections. Section 1 introduces the background, objectives, and methodological foundation of the study. Section 2 discusses the international legal context and historical foundations of the right to water. Section 3 analyzes Nigeria's legal and institutional frameworks for water governance. Section 4 evaluates the core challenges to water accessibility in Nigeria, including pollution, infrastructural deficits, and socio-political barriers. Section 5 presents a critical discussion on advocacy, policy gaps, and innovations for protecting water rights. Finally, Section 6 offers conclusive insights and forward-looking recommendations for regulatory reform, community engagement, and future research. This structure ensures a comprehensive, multi-dimensional analysis of the human right to water within Nigeria's evolving legal and socio-environmental landscape.

2. WATER POLLUTION IN NIGERIA

3. LEGAL AND INSTITUTIONAL FRAMEWORK FOR WATER PROTECTION IN NIGERIA 3.1 Overview of Nigeria's National Water Policies and Environmental Laws

Nigeria's national water and environmental governance frameworks have evolved to address rising concerns over resource management, pollution, and access to clean water. The Federal Government's principal guiding document is the National Water Policy, which emphasizes integrated water resources management, equitable access, and sustainable use. However, implementation challenges persist due to fragmented institutional oversight and inadequate inter-agency coordination (Nwankwoala, 2014). This fragmentation has led to overlapping responsibilities among bodies such as the Federal Ministry of Water Resources, State Water Agencies, and the River Basin Development Authorities, weakening the enforcement of water quality standards and equitable distribution mechanisms.

Environmental laws, including the Environmental Impact Assessment (EIA) Act of 1992 and the establishment of the National Environmental Standards and Regulations Enforcement Agency (NESREA), form the backbone of Nigeria's regulatory system aimed at pollution control and ecological preservation. Nonetheless, enforcement has been sporadic and reactive, largely constrained by political interference, underfunding, and institutional inertia (Echefu, & Akpofure, 2002). For instance, oil-producing regions suffer from regulatory neglect despite existing provisions for corporate accountability and environmental remediation. These legal and policy gaps hinder Nigeria's capacity to fulfill both national development goals and international human rights obligations related to water. Strengthening regulatory coherence and operational capacity remains critical for effective water governance and sustainable environmental protection.

3.2 Key Institutions Responsible for Water Governance (e.g., Federal Ministry of Water Resources, NESREA)

Water governance in Nigeria is anchored on a constellation of institutions that operate at the federal, state, and local levels. The Federal Ministry of Water Resources (FMWR) is the principal agency responsible for policy

formulation, infrastructure development, and interstate water allocation. It also coordinates initiatives such as the Water Resources Master Plan and oversees River Basin Development Authorities (RBDAs) to manage catchment-level interventions. However, institutional overlap and inefficiencies often hamper the ministry's performance, particularly in inter-agency coordination and service delivery (Glazebrook, & Kola-Olusanya, 2011).

The National Environmental Standards and Regulations Enforcement Agency (NESREA) plays a complementary role in regulating industrial effluents and enforcing environmental compliance under various water protection laws. Although empowered to sanction violators, NESREA's effectiveness is constrained by logistical limitations, jurisdictional ambiguity, and political interference, especially in cases involving powerful stakeholders or multinational corporations. Furthermore, the involvement of state water boards, local councils, and donor-driven projects creates a fragmented institutional landscape, resulting in weak accountability structures and uneven service delivery as shown in Figure 2 (Adeoti, 2014).

This diffuse institutional arrangement contributes to inefficiencies in pollution control, data collection, and enforcement. Without improved inter-agency collaboration, stronger regulatory mandates, and capacitybuilding, Nigeria's current institutional framework will remain inadequate in ensuring sustainable water governance and environmental protection.



Figure 2: A Block Diagram Showing Institutional Structure of Water Governance in Nigeria.

Figure 2 illustrates the **multi-layered institutional structure of water governance in Nigeria**, representing the interactions and overlapping mandates among federal, state, local, and external actors. At the apex, the **Federal Ministry of Water Resources (FMWR)** is responsible for national water policy, strategic planning, and oversight of the **River Basin Development Authorities (RBDAs)**, which manage catchment-level projects. In parallel, the **National Environmental Standards and Regulations Enforcement Agency (NESREA)** enforces environmental compliance and monitors industrial pollution, often intersecting with FMWR's initiatives. **State Water Boards** translate federal policy into state projects, while **Local Government Councils** focus on rural water supply and sanitation. The diagram also includes **donor-driven projects and NGOs**, which supplement infrastructure and capacity-building efforts at the community level. Arrows highlight both the direct chains of authority and the dotted lines represent the significant coordination and overlap challenges between institutions. The resulting structure is highly fragmented, contributing to weak accountability, inefficiencies in service delivery, and persistent gaps in pollution control and data management. This visualization highligts the need for enhanced inter-agency collaboration, clearer statutory mandates, and integrated approaches to ensure effective and sustainable water governance in Nigeria.

3.3 Gaps in Policy Implementation and Regulatory Enforcement

Despite Nigeria's comprehensive water and environmental policies, significant gaps persist in their execution and regulatory enforcement. These deficiencies stem from institutional fragmentation, political interference, funding shortfalls, and poor stakeholder engagement. The disconnection between policy design and field-level realities is most pronounced in rural water schemes, where poorly resourced agencies fail to translate national objectives into localized outcomes (Akpabio, 2012). Many communities lack sustained water infrastructure because of corruption in procurement processes, unclear lines of responsibility, and inadequate maintenance mechanisms.

Moreover, regulatory enforcement is compromised by the absence of robust monitoring systems, insufficient manpower, and bureaucratic inertia. Agencies tasked with pollution control often lack the autonomy and operational tools necessary to hold violators accountable. Even when violations are identified—such as illegal discharges into water bodies or noncompliance with environmental impact assessments—sanctions are either delayed or inconsistently applied (Fasona, t al., 2019). This fosters a culture of impunity and deters private sector compliance.

The weak synergy between enforcement bodies and community stakeholders further undermines grassroots legitimacy. A disconnect persists between legal frameworks and the socio-cultural dimensions of water use, which limits the scope of voluntary compliance. Ultimately, closing these gaps requires institutional reforms, political will, decentralized accountability structures, and a stronger interface between policy frameworks and practical governance at the local level.

3.4 Analysis of Federal vs State Jurisdictional Challenges

Jurisdictional conflicts between federal and state authorities in Nigeria present a significant obstacle to coherent water governance. Although the Constitution vests water resources management primarily in the federal government, the states retain control over land use and local water schemes, resulting in a fragmented and often contradictory regulatory landscape. Ajai, (2012) argue that the overlap in responsibilities has created jurisdictional ambiguity that weakens enforcement and complicates the coordination of water infrastructure projects. For instance, while the Federal Ministry of Water Resources may initiate large-scale dam or irrigation

projects, state agencies often lack clarity on their implementation roles, delaying execution and distorting accountability mechanisms as presented in Table 2.

Moreover, states frequently challenge the legitimacy of federal interventions, especially when projects are perceived to bypass local priorities or threaten political autonomy. This resistance is amplified by divergent interpretations of legislative authority under the 1999 Constitution and the Water Resources Act, leading to regulatory inertia and intergovernmental friction (Goldface-Irokalibe, 2008). Additionally, local government councils—mandated to provide rural water—are often excluded from decision-making, exacerbating the coordination gap across tiers of governance.

The resultant decentralization without integration compromises policy coherence, disrupts funding flows, and obstructs grassroots participation. Addressing these jurisdictional challenges demands clearer statutory delineation of responsibilities, collaborative policy mechanisms, and a harmonized legal framework that aligns federal ambition with local realities.

Challenge	Description	Consequence	Required Solution
Overlapping Authority	Both federal and state	Weak enforcement,	Clear statutory
	governments share roles in	delayed project	delineation of
	water governance, creating	implementation	responsibilities
	ambiguity		
Conflicting Priorities	States often resist federal	Regulatory inertia,	Collaborative policy
	projects that bypass local	intergovernmental	mechanisms for joint
	interests or threaten	friction	decision-making
	autonomy		
Exclusion of Local	Local governments,	Coordination gaps,	Inclusive governance
Councils	responsible for rural water	reduced grassroots	with all tiers actively
	supply, are left out of	participation	engaged
	planning and		
	implementation		
Decentralization	Policy fragmentation	Loss of policy coherence,	Harmonized legal
without Integration	disrupts funding and	inefficient resource	framework aligning
	undermines effective	allocation	federal and local goals
	management		

Table 2: Summary of Analysis of Federal vs State Jurisdictional Challenges

4. WATER RESOURCE PRESERVATION AND SUSTAINABILITY EFFORTS

4.1 Traditional and Indigenous Water Preservation Practices

Traditional and indigenous water preservation practices in Nigeria have historically played a pivotal role in maintaining water sustainability, particularly in rural and semi-urban communities where formal infrastructure is limited. These practices are deeply rooted in cultural norms, ecological knowledge, and community governance structures as shown in Figure 3. Okeke, (2009) document how rural communities in southeastern Nigeria traditionally employ rainwater harvesting systems, use clay pots for water storage to

prevent contamination, and follow seasonal water-sharing rituals that reduce waste and conflict over resources. Such practices reflect an embedded environmental ethic and serve as adaptive responses to climatic variability. In northern Nigeria, pastoralist communities have developed complex systems of seasonal migration and water hole preservation, emphasizing cooperation and rotational access. Ajibade and Eche, (2017) notes that indigenous coping mechanisms such as building earth dams, maintaining sacred groves around water sources,

and using biodegradable materials for purification are not only environmentally sound but socially regulated to ensure equitable distribution and continuity. These practices, though often marginalized by formal policy, provide critical insights into localized water stewardship. They highlight the importance of integrating indigenous knowledge systems into national water management frameworks to enhance resilience, promote inclusivity, and ensure culturally sensitive

sustainability strategies in the face of growing environmental pressures.



Community Governance and Ecological Knowledge

Figure 3: A Picture Showing Traditional and Indigenous Water Preservation Practices: Community-Based Strategies for Sustainable Water Management in Nigeria.

Figure 3 illustrates the diversity and ingenuity of traditional and indigenous water preservation practices in Nigeria, emphasizing their regional specificity and cultural significance. In southeastern rural communities, rainwater harvesting, clay pot water storage, and seasonal water-sharing rituals are shown as vital techniques for securing and conserving clean water, all rooted in communal cooperation and traditional norms. In northern Nigeria, the diagram highlights pastoralist adaptations such as seasonal migration to water sources, earth dam construction, the protection of sacred groves near water points, and the use of biodegradable materials for natural water purification. At the heart of these practices lies a foundation of community governance and ecological knowledge, delineate as the connective tissue that ensures equitable distribution, sustainability, and conflict resolution. The visual flow highlights how these locally regulated systems—though often overlooked by formal policy—offer valuable lessons in resilience, inclusivity, and environmental stewardship, and should be integrated into broader water management strategies for sustainable development.

4.2 Role of NGOs, Donor Agencies, and Civil Society in Promoting Sustainable Use

In Nigeria, non-governmental organizations (NGOs), donor agencies, and civil society groups have become critical actors in promoting sustainable water use, especially in marginalized and underserved regions. These entities bridge institutional gaps in water governance by facilitating community-level interventions, policy advocacy, capacity-building, and infrastructure deployment. Çelik, et al, (2012) highlights how international NGOs and humanitarian donors implement decentralized water supply systems, particularly in humanitarian contexts like the North-East, where conflict has destabilized public service delivery. Such interventions often include borehole drilling, water purification training, and hygiene education campaigns that foster sustainable consumption behavior.

Civil society organizations also play a pivotal role in enhancing accountability and citizen participation in water governance. By engaging local communities through participatory monitoring frameworks, they foster transparency and build public trust. Gbadegesin, and Olorunfemi, (2007) note that such bottom-up approaches empower frontline workers and local leaders to track water supply reliability, identify system failures, and advocate for policy reform as presented in Table 3.

Additionally, donor agencies fund innovative pilot projects that test community-owned water management models, promoting sustainability through local ownership. These actors not only deliver technical support but also promote behavioral change, institutional collaboration, and policy diffusion—thereby reinforcing the water governance ecosystem. Their work is especially vital in rural regions where governmental presence is weak, and environmental degradation is severe.

Actor/Entity	Key Activities	Impact on Water	Strategic Importance
		Governance	
NGOs	Community-level	Decentralizes water	Critical in conflict-
	interventions,	provision, builds local	affected and
	infrastructure (e.g.,	capacity	underserved regions
	boreholes), hygiene		
	education		
Donor Agencies	Fund pilot projects,	Enable innovation,	Essential for
	provide technical	scale best practices,	sustainability and

Table 3: Summary of Role of NGOs, Donor Agencies, and Civil Society in Promoting Sustainable Use.

	support, promote local	catalyze investment	policy diffusion
	ownership		
Civil Society Groups	Policy advocacy,	Foster transparency,	Strengthen public
	participatory	accountability, and	engagement and local
	monitoring,	trust	governance
	community		
	mobilization		
Cross-sector	Institutional	Enhances	Reinforces ecosystem,
Collaboration	partnership,	coordination, amplifies	fills gaps in
	knowledge sharing,	impact	government delivery
	capacity-building		

4.3 Technological Interventions in Water Conservation

Technological innovations have increasingly played a pivotal role in addressing Nigeria's water scarcity and quality degradation. In recent years, the adoption of water-saving technologies such as drip irrigation systems, solar-powered borehole pumps, and low-flow fixtures has offered scalable solutions to both urban and rural water management challenges. Adewumi, Ilemobade, and van Zyl (2010) highlight the transformative potential of treated wastewater reuse systems, especially in urban environments where freshwater availability is under growing pressure. These systems not only reduce dependency on groundwater but also support urban agriculture and green infrastructure.

Moreover, remote sensing technologies and mobile-based water quality monitoring applications have begun to reshape how real-time data informs conservation decisions in Nigeria. Kanyerere, et al, (2018) emphasize the role of such tools in improving water governance, noting that geospatial mapping and predictive analytics allow policymakers and communities to respond proactively to pollution threats and overuse patterns.

These technological interventions are further reinforced by low-cost innovations such as water purification sachets, biosand filters, and rainwater harvesting systems. These solutions enable community-driven conservation, especially in regions where centralized infrastructure is weak. The synergy between high-tech solutions and grassroots tools reflects a growing movement toward inclusive, sustainable, and evidence-based water resource management in Nigeria.

4.4 Environmental Education and Grassroots Water Stewardship Campaigns

Environmental education and grassroots water stewardship campaigns in Nigeria have become essential strategies for fostering public awareness, civic participation, and behavioral change in water conservation efforts. Bakker, (2007) emphasize the critical role of environmental education in reshaping societal attitudes toward water as a communal resource rather than a commodified entity. This perspective supports localized advocacy for water rights and promotes sustainable consumption patterns, especially among youth and rural populations. In Nigerian communities, environmental education programs—often spearheaded by civil society groups and educational institutions—have incorporated participatory learning, school-based curriculum enhancements, and community theater to engage residents in water protection.

Parallel to these efforts, grassroots campaigns have emerged as catalytic forces in holding polluters accountable and amplifying community voices in water governance. Mukherji, Shah, and Giordano (2012) document how

decentralized mobilization and knowledge dissemination can influence both behavior and policy outcomes, particularly when citizens are equipped with practical knowledge of environmental impacts and rights-based advocacy tools. In Nigeria, such campaigns frequently involve town hall meetings, door-to-door sensitization, and the use of indigenous languages to communicate the importance of hygiene, pollution prevention, and sustainable practices.

These initiatives bridge the gap between policy and practice, fostering a sense of ownership and collective responsibility for water preservation among citizens who are most affected by its degradation.

5. THE HUMAN RIGHT TO WATER: INTERNATIONAL NORMS VS NIGERIAN REALITY 5.1 UN General Comment No. 15 and Its Relevance to Nigeria

UN General Comment No. 15, adopted in 2002 by the Committee on Economic, Social and Cultural Rights, affirms that access to safe and sufficient water is a fundamental human right necessary for the realization of all other rights. It obligates states to ensure water availability, quality, and accessibility without discrimination. Sultana, and Loftus, (2013) asserts that General Comment No. 15 shifted water from a developmental goal to a legal entitlement, emphasizing state accountability and justiciability. For Nigeria, this international norm is particularly relevant given the country's ongoing challenges in water governance, equity in access, and environmental degradation. Despite its ratification of the International Covenant on Economic, Social and Cultural Rights (ICESCR), Nigeria has yet to fully integrate this obligation into enforceable national frameworks.

Gleick (1998) highligts the necessity of aligning domestic water laws with international human rights standards, noting that implementation mechanisms—such as justiciable rights, effective remedies, and transparent governance—are pivotal to upholding General Comment No. 15. In Nigeria, where water insecurity is exacerbated by infrastructural deficits and pollution, this comment serves as a normative framework to compel federal and state institutions to adopt rights-based approaches to water provision. It also reinforces the moral imperative for prioritizing water in budgetary allocations and development planning, particularly for marginalized communities disproportionately impacted by water scarcity.

5.2 The Nigerian Constitution and the Absence of Explicit Water Rights

Despite Nigeria's ratification of several international human rights instruments affirming the right to water, its 1999 Constitution lacks an explicit recognition of access to clean and safe water as a justiciable right. This legal omission creates a significant barrier to enforcing water-related claims in domestic courts as represented in Table 4. As Adedeji, and Ako, (2009) argues, the absence of specific constitutional provisions for water rights means that water access in Nigeria remains a matter of policy discretion rather than enforceable entitlement. Consequently, judicial protection is weak, and affected communities have limited recourse against institutional neglect or environmental degradation affecting water sources.

Ebeku (2004) highlights the judicial reluctance in Nigeria to expansively interpret environmental and social rights in the absence of express constitutional backing. While cases like *Gbemre v. Shell* attempted to assert environmental protections under the right to life, such arguments have not consistently extended to water rights, despite their intrinsic connection to life and health. This legal vacuum leaves millions vulnerable, particularly in rural and underserved regions where water infrastructure is underdeveloped. The failure to constitutionally enshrine water as a right undermines

both accountability and public sector obligation, perpetuating disparities in access and contributing to ongoing water insecurity across the nation.

Aspect	Description	Implications	Vulnerable Groups /
			Outcomes
Constitutional	No explicit	Water access	Rural, underserved
Omission	recognition of water	remains policy-	communities; weak
	rights in the 1999	based, not	judicial protection
	Constitution	enforceable by law	
Judicial Reluctance	Courts rarely	Limited ability to	Victims of pollution,
	interpret right to life	challenge	those lacking
	to cover water or	government neglect	infrastructure
	environmental rights	or pollution	
Policy Discretion	Water provision	Accountability is	Millions lack
	subject to political	undermined;	recourse for water
	will rather than legal	inconsistent service	insecurity
	obligation	delivery	
Broader Impact	Failure to enshrine	Ongoing disparities,	Marginalized and
	right to water in law	continued water	vulnerable
	perpetuates inequity	insecurity	populations

Table 4: Summary of The Nigerian Constitution and the Absence of Explicit Water Rights

5.3 Judicial and Policy Interpretations of Access to Water as a Human Right in Nigeria

The interpretation of access to water as a human right in Nigeria is evolving within a complex judicial and policy framework that reflects both constitutional silence and environmental realities. Fagbohun (2002) highlights that Nigerian courts have increasingly invoked the right to life under Section 33 of the 1999 Constitution to address environmental harms, which indirectly incorporates access to clean water as a derivative right. This legal strategy arises from the absence of an explicit water rights clause, compelling litigants and judges to interpret related constitutional provisions broadly in the context of socio-economic and environmental justice as shown in Figure 4.

At the policy level, the recognition of water as a human right is embedded in Nigeria's alignment with international environmental treaties and national policy documents such as the National Water Policy. However, these instruments are largely declarative and lack binding legal effect, which limits their enforceability (Atapattu, 2016). Judicial interpretations have remained cautious, often avoiding outright declarations that access to water constitutes a standalone enforceable right. Nevertheless, a jurisprudential shift is emerging, as courts are beginning to consider the cumulative effect of environmental degradation and poor water access on constitutionally guaranteed rights to life and dignity. The current legal posture emphasizes the need for a more direct constitutional or legislative articulation of water rights to facilitate consistent judicial enforcement and informed policymaking.





Figure 4 outlines the layered and evolving landscape of legal and policy frameworks regarding water rights. At its foundation, the 1999 Nigerian Constitution lacks explicit recognition of water as a fundamental right, prompting courts to interpret access to clean water as implicit within the right to life under Section 33. This judicial workaround has emerged in environmental litigation, such as Gbemre v. Shell, where access to safe water was framed as essential to life and dignity. On the policy front, instruments like the National Water Policy and Nigeria's alignment with Sustainable Development Goal 6 acknowledge water's importance but lack binding legal status. Although Nigeria has ratified international treaties affirming water as a human right—such as the UN General Comment No. 15 and the African Charter—their provisions remain largely non-justiciable domestically. The figure also highlights the gap between soft law and enforceable legislation, with

courts exercising caution in the absence of clear constitutional mandates. However, an emerging jurisprudential trend suggests increasing willingness to treat access to water as a derivative right. The diagram concludes with reform recommendations, including constitutional amendments, stronger legislative articulation, and alignment between legal and policy tools to ensure enforceability and universal access to clean water.

5.4 Recommendations for Aligning Domestic Law with International Standards

To bridge the gap between Nigeria's domestic legal framework and international standards on the human right to water, a structured reform process is essential. Brown, CNeves-Silva, and Heller, (2016) recommends the constitutionalizing of the right to water as a necessary first step. This would establish enforceability and create a normative baseline for courts and lawmakers. By explicitly incorporating water rights into the Constitution or national legislation, Nigeria can align with global standards set by instruments such as the United Nations General Comment No. 15 and the Sustainable Development Goals (SDG 6).

Domestically, legal harmonization should be guided by environmental law principles, including the precautionary and polluter-pays principles, which Boisson de Chazournes, (2004) argues are critical to operationalizing rights in regulatory systems. These principles can be embedded in Nigeria's Environmental Impact Assessment laws and water management policies to ensure a rights-based approach to pollution control, water allocation, and sanitation infrastructure.

Moreover, establishing independent oversight bodies with legal authority to enforce water rights will improve accountability. Legal reforms must also clarify federal and state jurisdictions to avoid administrative overlap, while citizen access to legal remedies for water rights violations should be streamlined through dedicated environmental courts or tribunals. These reforms would not only align domestic practice with international norms but also ensure sustainable, equitable water access for all Nigerians.

6. CONCLUSION AND RECOMMENDATIONS

6.1 Summary of Key Findings on Pollution, Protection, and Preservation

The review reveals that water pollution in Nigeria is driven by a combination of industrial effluents, oil spills, agricultural runoff, and poor sanitation practices, particularly open defecation. These challenges are most pronounced in the Niger Delta region and urban slums, where regulatory oversight is weak or absent. The public health implications are severe, with increased cases of waterborne diseases such as cholera, typhoid, and diarrhea, especially among children. The socio-economic burden includes diminished productivity, high health care costs, and reduced agricultural output.

Efforts at water protection and preservation exist but remain fragmented. While traditional water conservation practices are still in use in rural communities, they are not systematically integrated into national frameworks. Technological interventions such as solar-powered boreholes and smart irrigation systems have shown promise but are limited by funding and infrastructural gaps. NGOs and civil society play a critical role in awareness, advocacy, and grassroots mobilization, yet they face capacity constraints.

Policy efforts have not sufficiently addressed the scale of the problem. The absence of an explicit constitutional right to water and weak enforcement of existing environmental regulations further exacerbate the crisis. Although Nigeria has made commitments under international human rights law,

these have not translated effectively into practice. Overall, a holistic, rights-based, and communitydriven approach is essential for meaningful progress.

6.2 Broader Implications for Water Governance and Human Rights in Nigeria

The findings highlight a troubling disconnect between Nigeria's water governance architecture and the fulfillment of basic human rights. The absence of an explicit legal right to water in national legislation leaves millions without legal recourse, exacerbating social inequality and undermining public trust. Institutional fragmentation—characterized by overlapping mandates between federal, state, and local agencies—limits the efficiency of water service delivery and enforcement.

The weak regulatory landscape allows polluters, particularly in the oil and industrial sectors, to act with impunity. This undermines not only environmental health but also the fundamental rights of citizens to live in dignity. Furthermore, the current governance structure marginalizes local voices, especially in rural and underserved communities, weakening participatory decision-making.

The failure to align domestic laws with international human rights standards on water and sanitation creates a compliance gap that affects Nigeria's global standing and development agenda. In the absence of effective accountability mechanisms, the burden of water insecurity disproportionately falls on women and children, who bear the brunt of collecting and managing household water.

Thus, water governance must be redefined as a cross-sectoral human rights issue that intersects with health, education, gender, and poverty reduction. Integrating water as a legal right into governance frameworks would offer a transformative step toward achieving equitable and sustainable access for all Nigerians.

6.3 Policy and Institutional Reforms Proposed for Short- and Mid-Term Implementation

To address Nigeria's water crisis, a series of policy and institutional reforms are essential for both short- and mid-term implementation. In the immediate term, there must be a harmonization of water governance roles across federal, state, and local levels. Clear jurisdictional boundaries and inter-agency coordination mechanisms are necessary to eliminate redundancy and ensure accountability.

Establishing a legal right to water through constitutional amendment or new legislation is vital. This would empower citizens to demand water services as a right rather than a privilege. In parallel, the Federal Ministry of Water Resources and the National Environmental Standards and Regulations Enforcement Agency (NESREA) must be adequately funded and given operational independence to enforce compliance.

On the policy front, new environmental protection laws should incorporate stronger penalties for water pollution, alongside incentives for industrial compliance and investment in cleaner technologies. Community-based water monitoring groups can serve as local accountability hubs, reporting violations and fostering public engagement.

Medium-term reforms should focus on institutionalizing environmental education across schools and community centers to promote water stewardship. Introducing decentralized water governance models—such as water user associations—can enhance transparency, especially in rural regions. A national water quality database must also be developed to guide evidence-based policymaking and track progress. Together, these reforms can build a resilient, rights-driven water governance system.

6.4 Directions for Future Research and Monitoring

Future research must adopt an interdisciplinary lens to holistically understand the drivers, impacts, and mitigation pathways related to water pollution in Nigeria. A critical area of inquiry involves

longitudinal studies on the health and economic impacts of contaminated water, particularly in vulnerable regions like the Niger Delta and densely populated urban slums. These studies should quantify the long-term costs of inaction and provide empirical data for advocacy and policy formulation.

There is also a pressing need to investigate traditional water conservation practices and assess their potential for integration with modern technologies. Research into the effectiveness of community-led initiatives, such as environmental education campaigns and local water committees, would provide insights into scalable grassroots models.

In terms of governance, scholars should explore the dynamics of federal versus state control in water management, especially how political decentralization affects policy coherence and resource allocation. Additionally, studies on judicial interpretations of water-related cases can help track the evolution of legal recognition for the right to water.

From a technological perspective, innovations such as low-cost water filtration systems, sensor-based monitoring, and digital platforms for citizen reporting require field testing and adaptation to Nigeria's socio-economic context. A centralized, publicly accessible monitoring system should be developed to consolidate data on water quality, pollution incidents, and legal enforcement outcomes. These research avenues are critical for achieving sustainable, inclusive, and human rights-aligned water governance.

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