E-ISSN: 1116 - 3240 P-ISSN: 3026-9334
MPRI-JAIMR | INTERNATIONAL JOURNAL OF AFRICAN INNOVATION & MULTIDSCIPLINARY RES.
VOL. 11 NO. 2 – JANUARY, 2026

WATER AND GLOBAL SECURITY: THE IMPERATIVE FOR COLLECTIVE ACTION

NOSAKHARE UGBO, PhD
Combat Communications Department, Nigerian Army School of Signals, Apapa, Lagos State
Corresponding Author: nosaugbo@gmail.com
DOI: https://doi.org/10.70382/mejaimr.v11i2.097

Abstract

Historically, water management was confined to civil engineering and local governance. However, in the contemporary era, water has undergone securitisation. The volatility of water supply, characterised by both acute scarcity and catastrophic abundance, now functions as a fundamental driver of systemic risk. This paper explores the nexus between hydrological stability and the maintenance of international peace and security, and argues that as the global hydrological cycle undergoes unprecedented disruption from anthropogenic climate change and demographic expansion, this nexus is being strained. Water has transitioned from a resource management challenge to a primary global security imperative. This paper analyses the 'threat multiplier' effect of water scarcity or abundance, its impact on transboundary geopolitics, and the necessity of integrated hydro-solidarity. The paper thus argues that traditional Westphalian approaches to water sovereignty are insufficient to address the current crisis and proposes a multi-scalar framework for collective action grounded in data transparency, benefit-sharing, and institutional resilience.

Keywords: Water Security, Global Governance, Climate Change, Conflict, Collective Action, Sustainable Development

Introduction

Most Most conflicts in the world can invariably be traced to the struggle for limited resources by the contending parties. History is replete with disputes arising from struggles to control and utilise finite natural resources by man and other creatures (Doro et al., 2020). Water, being a naturally occurring resource, is

EDITOR-IN-CHIEF
Prof. A.I. Mteiye [MALAWI]

essential for sustaining life on Earth (Kilic, 2020). Although about 71 per cent of the Earth's surface is covered by water, freshwater resources account for just 2.5 per cent of this volume (UN WWAP (World Water Assessment Programme), 2020; UN WWAP, 2021). According to the United Nations Environment Programme (UNEP), only about 0.3% of Earth's Freshwater is available for human consumption and activities (UNEP, 2023). Based on these statistics and to avoid conflicts, there is a need for the regulated, well-planned use of global freshwater resources.

It may therefore be asserted that 'water-wise', the world is in a state of crisis. This is because water is vital to human survival and the effective development of societies. Indeed, the UN estimates that more people die and suffer from the lack of access to safe drinking water and basic sanitation than from wars/conflicts (UN WWAP, 2021). The World Health Organisation (WHO) estimated in 2023 that over 2 billion people live in water-stressed countries, exacerbated by climate change, while at least 1.7 billion people drink water from contaminated sources, resulting in severe health issues; the situation has not improved (WHO, 2023). Beyond its importance to living creatures for drinking, water can affect all natural and human systems, with cumulative effects on socioeconomic development. Water is linked to the crises of climate change, energy and food supplies, prices, transportation, and financial markets (UN WWAP, 2020). To mitigate the effects of these crises linked to the water crisis, stakeholders at local, national, and international levels need to implement measures to address the underlying issues (UN WWAP, 2021; Maestu, 2017).

The consequences of failing to address and effectively manage water-related issues include the escalation of local water crises and the convergence of a global water crisis, which would invariably lead to conflicts that could trigger political insecurity and ultimately hinder socioeconomic development worldwide. In recognition of these possibilities, the UN recommends innovative approaches to manage water resources to effectively avert crises caused by unregulated water use (UN WWAP, 2021). In fact, most of the UN Sustainable Development Goals (SDGs) can be linked to the availability and effective management of water resources (UN SDGs, 2025). Specifically, one of the SDGs (SDG 6) sets targets for equitable access, improved water quality and increased efficiency to ensure availability and sustainable management of water and sanitation for all (UN SDGs, 2025). This was also the case with the Millennium Development Goals (MDGs), which were a precursor to the SDGs (Maestu, 2017). While most developed countries have established mechanisms to achieve SDGs targets and avert catastrophic outcomes in water resources management, many developing nations still struggle to implement policies and laws that promote efficient water resources management (UN SDGs, 2025). The consequences of inefficiency affect the quality, quantity, and availability of water

resources, compromising their capacity to provide socioeconomic benefits to all and potentially leading to conflicts that are detrimental to development.

Another important consideration is the pluralistic nature of human society and our inability to agree on issues of collective importance, which often leads to internal conflicts and external disputes that may threaten global security and development (Masara, 2021). These conflicts, which take different forms, durations, scales, and intensities, are triggered by a combination of factors. Some of the factors often attributed as remote and immediate causes of the perennial conflicts are linked to the complexities of contemporary geopolitics (Ugbo, 2025). Although there is substantial evidence on the history of conflicts and their devastating effects worldwide, most studies attribute these conflicts to factors other than water resources (Masara, 2021; Ugbo, 2025). The inability of communities and nations to utilise water and other resources sustainably is significant and could result in crises/conflicts of grave proportions (WHO, 2021). Unsustainable water use directly affects food security, energy security, economic security, population security, physical security, and other ecosystem-related issues (Doro et al., 2020).

This study will provide practical strategies to ensure effective management of water resources for the benefit of mankind, thereby minimising conflicts associated with the lack, inadequacy, or abundance of water. The study outcome would therefore assist stakeholders in developing workable frameworks to efficiently manage, control, and distribute water resources within their domains in a sustainable manner. Because water resources are often shared and water is essential to national development and to the well-being of humans, other living creatures, and the environment, the findings of this study could advance global development and security. It is instructive to note that this study employs qualitative content analysis of multilateral frameworks and policy documents for its discussions and recommendations.

STATEMENT OF THE PROBLEM

The consequences of failing to address and effectively manage water-related issues include the escalation of local water crises and the convergence of a global water crisis, which would invariably lead to conflicts that could trigger political insecurity and ultimately hinder socioeconomic development worldwide. In recognition of these possibilities, the UN recommends innovative approaches to manage water resources to effectively avert crises caused by unregulated water use (UN WWAP, 2021). In fact, most of the UN Sustainable Development Goals (SDGs) can be linked to the availability and effective management of water resources (UN SDGs, 2025). Specifically, one of the SDGs (SDG 6) sets targets for equitable access, improved water quality and increased efficiency to ensure availability and sustainable management of water and sanitation for all (UN SDGs, 2025). This was also the case with the Millennium Development Goals (MDGs),

which were a precursor to the SDGs (Maestu, 2017). While most developed countries have established mechanisms to achieve SDGs targets and avert catastrophic outcomes in water resources management, many developing nations still struggle to implement policies and laws that promote efficient water resources management (UN SDGs, 2025). The consequences of inefficiency affect the quality, quantity, and availability of water resources, compromising their capacity to provide socioeconomic benefits to all and potentially leading to conflicts that are detrimental to development.

Another important consideration is the pluralistic nature of human society and our inability to agree on issues of collective importance, which often leads to internal conflicts and external disputes that may threaten global security and development (Masara, 2021). These conflicts, which take different forms, durations, scales, and intensities, are triggered by a combination of factors. Some of the factors often attributed as remote and immediate causes of the perennial conflicts are linked to the complexities of contemporary geopolitics (Ugbo, 2025). Although there is substantial evidence on the history of conflicts and their devastating effects worldwide, most studies attribute these conflicts to factors other than water resources (Masara, 2021; Ugbo, 2025). The inability of communities and nations to utilise water and other resources sustainably is significant and could result in crises/conflicts of grave proportions (WHO, 2021). Unsustainable water use has a direct bearing on food security, energy security, economic security, population security, physical security, and other ecosystem-related issues (Doro et al., 2020).

AIM AND OBJECTIVES

This study will provide practical strategies to ensure effective management of water resources for the benefit of mankind, thereby minimising conflicts associated with the lack, inadequacy, or abundance of water. The study outcome would therefore assist stakeholders in developing workable frameworks to efficiently manage, control, and distribute water resources within their domains in a sustainable manner. Because water resources are often shared and water is essential to national development and to the well-being of humans, other living creatures, and the environment, the findings of this study could advance global development and security.

CONCEPTUAL CLARIFICATIONS

The properties of water and its imperative for the development and survival of life on Earth make effective water management essential to avoid conflicts arising from non-availability, scarcity, or surplus. These attributes include the imperative that freshwater is vital to sustaining life and the recognition that, although water is a renewable resource, it is practically finite and a fugitive resource (i.e., no boundaries) (Andriof & McIntosh, 2017). Therefore, the vital nature of water gives it characteristics of a public good, and its finite

nature confers onto it the properties of a private good, as it can be privately appropriated and enjoyed. In contrast, the fugitive nature of water endows it with the characteristics of a common-pool resource (UN WWAP, 2021). Hence, its lack, abundance and mismanagement would be sources of conflict, and these conflicts negatively impact socio-economic development. In this regard, key definitions and concepts relevant to water resources management and conflict will be clarified to deepen understanding.

The vital importance of water has made it an ever-evolving phenomenon that affects almost all facets of livelihood; as a result, numerous concepts have emerged to reflect changes in human affairs. Indeed, the water world is today saturated with concepts such as water governance, water security, water resources management, water development, water planning, virtual water, green water, and so forth. These concepts and many others are relevant to human and global survival, just as water is essential to humanity's continued survival on Earth. Although these emerging concepts could provide insights to improve responses to the world's water challenges, their practical use may become confusing when compared with the flow of innovative ideas from new studies on the sustainability of water use. Therefore, to ensure focus, only key concepts considered relevant to this study will be discussed and conceptualised.

WATER RESOURCES

According to the World Bank, water resources are multidimensional, encompassing qualitative, quantitative, environmental, and socio-economic dimensions (World Bank, 2025). Indeed, water is one of the most fundamental requirements of life and a basic necessity for the survival of humanity, the preservation of ecosystems, and biodiversity (Kilic, 2020). Water's central role underscores its importance in the SDGs and the need to ensure adequate quantity and quality to meet human and ecological needs amid growing competition among domestic, industrial, commercial, agricultural, and environmental uses (World Bank, 2025). Indeed, former UN Secretary General Ban Ki-moon asserted that "water resources, and the essential services they provide, are among the keys to achieving poverty reduction, inclusive growth, public health, food security, lives of dignity for all and long-lasting harmony with Earth's essential ecosystems" (UN WWAP Report, 2020).

Water occurs naturally on Earth in different forms and locations: in the air, on the surface, below ground, and in the oceans. As previously stated, freshwater accounts for only about 2.5% of the Earth's water, with over two-thirds of it frozen in glaciers and icecaps, while the remaining is mainly found as groundwater, with the balance fraction forming the rivers, lakes, and other surface water bodies other than oceans and saltwater bodies (UN WWAP Report, 2021; World Bank, 2025). There is also a fraction of freshwater in the air. The processes of water's rebirth in Earth's hydrologic cycle ensure the continuous

availability of this critical resource and the survival of life and other ecosystems on the planet. Hence, the centrality of water resources to human survival and environmental preservation establishes a complex linkage to critical areas, including human health, food and energy security, urbanisation, industrial growth, and climate change (World Bank, 2025). These linkages and other factors relevant to human existence underscore the crucial roles that water resources play in maintaining global peace and security, avoiding conflict, and fostering meaningful socioeconomic development.

WATER SECURITY

It has been agreed that achieving most SDG benchmarks is inextricably linked to the availability of water at affordable, sustainable prices (UN WWAP Report, 2021). Ensuring the provision and availability of affordable, sustainable water of appropriate quality and quantity for humans and the environment requires establishing an effective water management and governance structure. In the 2021 UN WWAP Report, the UN envisioned a water-secure world by 2050. The vision is premised on the expectation that by Year 2050, the world will have attained water security. Water security is crucial to achieving meaningful, sustainable, and comprehensive socio-economic and political development. A water-secure world harnesses the productive power of water and mitigates its destructive impacts, ensuring that people have access to safe, affordable, clean water for their livelihoods.

Several definitions of water security have been proposed by organisations, scholars, and stakeholders in the water field. However, the UN's definition is considered more far-reaching and comprehensive. The UN defines water security as "the capacity of a population to safeguard sustainable access to adequate quantities of water with acceptable quality necessary for sustaining livelihoods, human well-being, socio-economic development, ensuring protection against water- related disasters, and for preserving ecosystems in a climate of peace and political stability" (UNEP, 2023). The ideals espoused in the UN definition of water security are all-encompassing but quite utopic. It envisioned a situation in which communities are protected from floods, droughts, landslides, erosion, waterborne diseases, and other disasters related to water scarcity or abundance. Water security would ensure that water is well managed and that environmental protection and social justice are addressed in water use, reliability, availability, quality, and cost.

The concept of water security can help address conflicts arising from water disputes, given indications of increasing water stress driven by climate change. The concept, if actualised, will unify most stakeholder concerns in water resources management by effectively coordinating the various aspects of water management, setting goals, and exploring actions to achieve these goals (Mishra et al., 2021). These are lofty expectations,

and their realisation is almost impossible given the divergent dynamics of issues involved and the complexities of national, regional, and international politics. The natural survival quest of humans and other living creatures would also impede the realisation of these expectations. However, it is expected that international organisations, national governments, and other stakeholders working towards the attainment of the UN SDGs will redouble their efforts to achieve water security for everyone and environmental protection. The efforts of the different stakeholders would invariably be affected by their values, attitudes, preferences, and capacities.

WATER RESOURCES MANAGEMENT

Evidence abounds that Earth's freshwater is sufficient to meet current and foreseeable future demands; however, the challenge is ensuring availability when and where it is needed (UN WWAP Report, 2021; World Bank, 2025). The unavailability of freshwater resources when and where they are needed constrains socioeconomic development, degrades ecosystems, and negatively affects biodiversity. These impacts, coupled with climate change, pollution, and related factors, affect freshwater availability, quantity, and quality, and necessitate the development of approaches to sustainably manage water resources (World Bank, 2025). Therefore, nations and appropriate stakeholders need to manage water resources by reconciling their attributes to ensure the continued existence and functioning of society. Water resources management is a systematic process to ensure sustainable development, allocation, and monitoring of water resources use in the context of social, economic, and environmental objectives through the implementation of well-articulated polices, high-tech structures, and efficient planning to accommodate the interests of stakeholders (World Bank, 2025; UN WWAP Report, 2020). The SDGs, including water policies in several countries, state that water development and management should be based on a participatory approach that involves users, planners, and policymakers at all levels (UN WWAP Report, 2020). However, many countries, especially developing ones, face challenges of mismanagement of water resources, attributed to limited technical expertise, resulting in deficient water resources development and planning (WHO, 2023).

Water resources mismanagement leads to water-supply issues that can result in conflicts with socioeconomic and political implications at communal, subnational, national, and regional levels (Mishra et al., 2021). Issues arising from poor water resources management lead to environmental and socioeconomic concerns, including pollution of surface waters, periods of drought and declining river flows. These issues are also attributable to various climatic developments and to the costs and benefits associated with groundwater exploration and extraction (World Bank, 2025). The effectiveness of the water resources management regime ensures sustainable use and the integration of essential

stakeholders, thereby enabling a coordinated, multidisciplinary approach for the common good (Mishra et al., 2021; Ugbo, 2025). This study, therefore, defines water resources management as the coordinated processes for managing water resources to benefit humanity and the environment and to achieve global peace and security.

WATER ACCESS

Access to sufficient water for daily use is essential to human health, security, and prosperity. It has been established that adequate daily water intake replenishes human body fluids and facilitates physiological processes (Howard et al., 2020). Daily access to water improves household and individual hygiene, enhances workplace productivity, and general well-being in society, thereby contributing to national development. Scholars assert that communities and households with readily accessible, functional water sources are generally healthier, happier, and more productive, as sufficient domestic water availability is associated with better health through improved hygiene and sanitation (Howard et al., 2020; World Bank, 2025; UN SDGs, 2025). Inevitably, such communities would be hardly prone to water-related conflicts and crises.

Access to water is directly influenced by the distance from the point of use to the water source and the time required to reach it (UN SDGs, 2025; Howard et al., 2020). These imperatives would determine the cost of water (that is, pricing), water availability, and the reliability of the source. The UN and its water-related agencies have established thresholds that guide policies, plans, and regulations on water quantity, quality, and access (Howard et al., 2020; UN SDGs, 2025; UN WWAP Report, 2021). Accordingly, the recommended minimum daily water intake for a person is 5.3 litres, which is the volume for lactating women engaged in moderate activity at moderately high temperatures (Howard et al., 2020). Lactating women are considered to have the highest physiological needs, and, as such, 5.3 litres of water are calculated to be adequate to maintain hydration during moderate activity at moderate temperatures (WHO, 2025). This recommendation is only a guide, as the amount of water a person requires daily varies with several factors, including climatic conditions (particularly temperature), gender, activity level, and other peripheral factors.

CONFLICT

Conflict is difficult to define because it occurs in many different settings, and its essence appears to be disagreement, contradiction, or incompatibility. Several social researchers and theorists have concluded that conflict is inevitable in human affairs and typically takes different forms, such as military or non-military, and interstate or state versus organisation (Mishra et al., 2021; Ugbo, 2025). Indeed, Ugbo (2025) posited that conflict

has been a recurring feature of human history since its beginning and will likely remain so; thus, humanity must continually evolve mechanisms to address conflicts as they evolve.
It is convenient to state that conflict is a disagreement, expressed (whether violently or otherwise), between two or more parties arising from perceived differences in ideas, values, or perceptions, or in the interpretation of a situation that affects the parties (Eyo & Francis, 2017; Ugbo, 2025). Violent conflict, including interstate and civil wars, as well as those waged by non-state actors, is characterised by a coercive, forceful mode of confrontation among adversaries and results in personal loss and societal destruction (Ugbo, 2025). Some conflicts do not involve violence but still pose a threat to the peaceful coexistence of persons. Nonviolent forms of struggle are prevalent in the pursuit of diverse values and scarce resources, especially in the early stages (Eyo & Francis, 2017). In bringing about important social change and gaining a competitive advantage, conflict may neither become necessary nor inevitable; thus, conflict is a recurring decimal in the affairs of man. What is important is how conflict is resolved. This study will therefore focus on conflicts arising from water availability, scarcity, and abundance, and on the need for proper management of water resources.

WATER-SECURITY NEXUS

The relationship between water and security is non-linear and multidimensional. This is as the water-security nexus elucidates the complex, interdependent links among water, energy, food, and human/national security, and how these linkages contribute to or enhance global survival, peace, and security (Rafaai & Nur, 2024). Understanding this nexus is key to managing this unique resource, which is essential to human existence, and it provides a holistic view in which a change in one sector creates a ripple effect across others. At the heart of the nexus are dependencies concerning the importance and imperatives of water for food and energy, and their relevance to human survival, ecosystems, biodiversity, and development. Some critical aspects of the water-security linkages are discussed below.

THE FRAGILITY-SCARCITY LOOP

Humans require water for daily survival; therefore, they strive to meet daily needs regardless of challenges and ethical constraints (Howard et al., 2020). Thus, in states with weak institutional capacity, water scarcity undermines the social contract, resulting in socioeconomic and, at times, security breaches. Water insecurity acts as a 'threat multiplier' and could escalate the possibility of conflict in water-scarce areas. It does not merely create thirst; it erodes the foundations of the state. When water becomes scarce or its distribution remains inequitable, it triggers a cascade of failures; agricultural collapse leads to food insecurity, which in turn fuels social unrest, mass migration, and the

potential for interstate friction (UN WWAP, 2021; Rafaai & Nur, 2024). When the state fails to provide basic water services, a power vacuum can be exploited because water is essential for daily survival. In several countries where water scarcity persists, citizens drill boreholes to access groundwater, with adverse consequences when withdrawals are unregulated (UN WWAP, 2021). In some instances, non-state actors use water as a tool for political legitimacy or coercion in the context of state failure.

THE MIGRATION-SECURITY LINKAGE

There is empirical, incontrovertible evidence of a correlation between prolonged drought and involuntary displacement (UN WWAP, 2020). Indeed, history is replete with instances of migration patterns in which populated areas disappear when water sources dry up (Eyo & Francis, 2017; UN WWAP, 2021). Studies indicate that by 2030, nearly half of the global population will live in areas of high-water stress (UNEP, 2023). This scarcity is a direct driver of climate-based migration, as communities are forced to move when their lands can no longer sustain life. Such movements place immense pressure on urban centres and border stability. Unlike sudden-onset disasters, water stress leads to permanent shifts in population density, straining urban infrastructure and potentially triggering communal conflicts in receiving regions. These conflicts could be minimised by implementing effective measures for water use and management by state authorities.

TRANSBOUNDARY HYDRO-POLITICS

Studies have shown that there are about 263 international river basins worldwide, and the potential for "zero-sum" resource competition is high (Kilic, 2020). This represents over 60 per cent of the world's freshwater, and they are becoming strategic flashpoints that could threaten global peace and security (Mishra et al., 2021). Across the world, in cross-national waters and transboundary basins, the threats of conflict and disagreement are ever-present. Mainly, when upland nations undertake unilateral infrastructure projects, such as dams and other water infrastructure, that threaten to disrupt regional balances of power, they turn shared resources into sources of international conflict (Ugbo, 2025). To avert these conflicts, there must be effective mechanisms for peaceful coexistence among the affected countries. Hence, the absence of robust legal frameworks in basins such as the Nile, Helmand, and Mekong poses a direct threat to regional geopolitical equilibrium.

CLIMATE CHANGE IMPACT ON WATER

Human activities, particularly since the Industrial Age, such as the use of fossil fuels and land use, have increased atmospheric greenhouse gas concentrations, thereby obstructing Earth's energy balance and driving rapid ecosystem changes (UN WWAP,

2020). Indeed, global water resources are affected in multiple ways by climate change, including complex spatiotemporal patterns, feedback effects, and interactions between physical and human processes, which have grave consequences for the sustainable management of water resources and global peace and security (Howard et al., 2020; UN WWAP Report, 2021). The results include high climate variability and extreme weather events, as well as reduced availability, quality, and quantity of water for basic human needs across several regions of the world. Other climate change-associated challenges are soil erosion, flooding, higher ambient temperatures, variable precipitation patterns, and desertification, which, in turn, may threaten livelihoods in riparian and coastal cities. Extreme weather events, including excessive heat, hurricanes, flooding, drought, and famine, are drivers of global conflict (World Bank, 2025).

GLOBAL IMPERATIVES AND A ROADMAP TO COLLECTIVE ACTION

The global nature of the water cycle means that no nation can achieve water security in isolation. Therefore, to ensure water security and enhance peaceful coexistence, nation-states are enjoined to avoid measures that heighten competition for water resources and embrace solidarity in water management and use. In this regard, collective action must have global appeal, free from traditional Westphalian approaches to water sovereignty. The most impactful global collective actions are those that recognise that security and sustainability are two sides of the same coin. Stakeholders need to embrace these noble initiatives and focus on environmental protection and peaceful coexistence, because the idea that managing natural resources cooperatively is a potent tool for preventing war. This would enhance a peaceful and harmonious water or 'hydro-happiness' in the global geopolitics. Global hydro-happiness calls for collective action by all stakeholders and is rooted in a shared understanding and vision within a multi-scalar framework, grounded in data transparency, benefit-sharing, and institutional resilience. These actions are guided by strategic reasoning and a determination to achieve sustainable development and global peace. Some of the strategic directions for the collective are discussed subsequently.

STRENGTHENING HYDRO-DIPLOMACY

Given that water transcends national and communal borders, diplomacy is required for effective water management. Thus, in transboundary water cases, the highest levels of the diplomatic agenda must be applied, as there is no life without water (World Bank, 2025). This includes expanding transboundary water treaties and empowering joint river basin organisations. Diplomacy in water management should move beyond 'sharing litres' to 'sharing benefits', where nations co-invest in hydroelectricity dams, irrigation projects, and flood protection as a unified bloc. The benefits of such arrangements are multifaceted

and can enhance peace and security in affected areas, reduce tensions arising from unhealthy competition for resources, and advance humanity's quest for sustainable development and a better quality of life.

RADICAL DATA TRANSPARENCY

Conflict is often fed by suspicion and poor data (Ugbo, 2025). In contemporary times, technology has significantly enhanced humanity's capabilities for information gathering and sharing, thereby reducing suspicion and disagreement (Ugbo, 2025). It is therefore imperative for humanity to leverage the advantages of emerging technologies, such as satellite monitoring, AI, and open-source hydrological modelling, to create a 'Single Version of the Truth.' When all stakeholders have access to real-time data on water levels and quality, the room for political manipulation and misinformation shrinks. This situation would ultimately ensure that disagreements are minimised and that nations live harmoniously, peacefully, and sustainably.

SCALING CIRCULAR WATER ECONOMIES

Water remains an indispensable resource for human survival, and its availability has been central to the development of several civilisations. Globally, water is adjudged plentiful (World Bank, 2025). However, freshwater, which is essential for most human needs, is constrained by rapidly growing demand for several reasons, including population growth, climate change and its impacts, lifestyle changes, and environmental degradation (Kilic, 2020). The result of these factors is water insecurity and competition over the commodity, which may lead to conflict and, at times, violence. Researchers widely acknowledge that the lack of water rarely fuels conflict; rather, it is its governance and management that do (Kilic, 2020; Masara, 2021; UN WWAP, 2021). To reduce pressure on natural water resources, collective investment must be directed toward water technologies such as desalination, high-efficiency wastewater recycling, and precision agriculture. These initiatives must be treated as global public goods. Sharing these technologies with developing and water-stressed nations is not merely an act of aid; it is a strategic investment in international stability and in the sustainability of this generation and future generations.

INCLUSIVE GOVERNANCE AND EQUITY

Security is only sustainable if it is inclusive (Ugbo, 2025). Collective action must ensure that marginalised voices, including women, indigenous populations, and rural farmers, are at the decision-making table. History shows that social unrest over water resources often begins when local communities perceive that their water is being diverted for distant industrial or national interests (Kilic, 2020). These scenarios typically occur in communities

where water is considered scarce or where drought is occurring (UNEP, 2023). Thus, ensuring an inclusive governance structure that considers stakeholders' interests would reduce disagreements and conflicts. Such inclusive and equitable governance/administrative structure needs to be practised in international agencies and organisations that regulate and manage the interests of various nations and individuals in riparian states. This would reduce tensions and foster cooperative, collaborative agendas for global peace and sustainable development.

APPLYING THE CONCEPT OF UN RESPONSIBILITY TO PROTECT

The application of the UN Concept of Responsibility to Protect (R2P) is particularly relevant when water becomes disputed and is used to harm disadvantaged persons by powerful entities, both state and non-state actors (Ugbo, 2025). These scenarios could result during conflict or when contending parties apply genocidal methods. For instance, when water supply to a section of a community is disrupted or stopped or when water is poisoned, thereby harming innocent persons and systematically disrupting the socioeconomic activities of affected communities or nations, the R2P concept could be applied to protect vulnerable populations. It is expected in these instances that the UN and other responsible actors could collectively institute relevant mechanisms to avert the catastrophic effects of mass murder, poisoning and disruption of socioeconomic activities. The mechanism to be adopted must serve the interests of the majority, with appropriate enforcement protocols that would enhance global peace, security, and sustainable development.

GLOBAL COLLECTIVE ACTION RELATING TO WATER RESOURCES

The importance of water to all living things has remained inalienable. Water plays a variety of roles in reducing poverty, creating opportunities for new business growth, and improving people's physical well-being, thereby increasing their productivity. Many governmental and non-governmental organisations and agencies have conducted extensive research on water and its sustainable management for the benefit of humanity and the Earth. Indeed, several UN agencies conduct studies on water-related issues worldwide. Other governmental and non-governmental agencies also conduct extensive research on the importance of water. These studies have led to the formation of various initiatives for global collective action on water management and its peaceful use, as well as on the peaceful coexistence of people in affected communities. Some notable collective action mechanisms for water with global appeal will be discussed below.

THE PACT FOR THE FUTURE

The UN Summit of the Future **a**dopted the 'Pact for the Future' by consensus on 22 September 2024 (UN, 2025). The 'Pact for the Future' is a comprehensive agreement that calls for significant collective diplomatic action for a global digital compact and a declaration on future generations (UN, 2025). The Pact covers a broad range of themes, including peace and security, sustainable development, climate change, digital cooperation, human rights, gender, youth and future generations, and the transformation of global governance. It aims to reboot global geopolitics from unilateralism to multilateralism for the 21st century. The Pact includes 56 specific actions that link the SDGs directly to international peace and security, focusing on reforming the global financial architecture to enable developing nations to fund climate adaptation without falling into debt traps and to avert national instability, while promoting global peace and security (UN, 2025). It is expected that the Pact's noble aims and objectives will elicit global support for the benefit of humanity.

THE WATER, PEACE AND SECURITY (WPS) PARTNERSHIP

As water scarcity intensifies, this collective action (a collaboration among the Netherlands, the UN, and NGOs such as the World Resources Institute) employs technology to prevent 'water wars' (WPS, 2025). The WPS partners have deployed AI-driven Global Early Warning Tools that predict water-related conflict up to a year in advance (WPS, 2025). The tools and services used in WPS help stakeholders identify and understand water-related security risks and undertake timely, informed, and inclusive action to prevent and mitigate conflict. The adoption of innovative technological tools by WPS partners as gamechangers in the monitoring and management of water and the prevention of conflict globally. However, success in the partnership requires cooperation and genuine sincerity from all stakeholders. Its ultimate goals are commendable and would ensure the sustainable use, management and development of water resources globally for the benefit of mankind.

THE INTERNATIONAL YEAR OF GLACIERS' PRESERVATION

The UN has designated 2025 as a year of collective focus on the cryosphere (the world's ice) and affirmed that the 21st of March each year should be proclaimed as the World Day for Glaciers (UN, 2025). This is because glaciers are crucial for regulating the global climate and providing freshwater, essential for billions of people. However, due to climate change and other environmentally damaging activities by humans and other organisms, these vital resources are rapidly degrading. The goal of the declaration is to address the rapid melting of glaciers, which are the 'water towers' for billions of people (UN, 2025). It is essential to note that melting glaciers drive sea-level rise and alter river flows, threatening

the survival of nations from the Himalayas to the Andes. Collective action here involves massive reforestation of upstream regions and international agreements on meltwater management to prevent cross-border disputes.

THE GLOBAL OCEAN TREATY

The Global Ocean Treaty, also known as the 'High Seas' Treaty, is the first-ever collective legal framework to protect international waters (Greenpeace, 2025). The Treaty advances ocean sustainability through its '30x30' goal, which aims to designate 30% of the world's oceans as protected areas by 2030 (Greenpeace, 2025). The importance of the Global Ocean Treaty lies in its overarching objective of promoting global peace, security, and sustainable development by establishing clear rules governing deep-sea mining and fishing in international waters. This would prevent chaotic scenarios in which powerful nations compete over marine resources for economic gain, thereby reducing the risk of naval skirmishes. Again, the success of this Treaty, as in other collective actions, rests on stakeholders' desire to respect its letter and, through cooperation and collaboration, uphold its aims and objectives.

CONCLUSION AND RECOMMENDATIONS

The vital importance of water to humanity and to Earth's sustainability demands that its security be of great and collective concern to all of mankind. The traditional pursuit of water security as a competitive national advantage is selfish and could have grave consequences for humanity and other species on Earth. Therefore, collective action, facilitated by radical data transparency and strengthened transboundary institutions, represents a viable pathway to preventing water-induced ecosystem collapse and human collapse. It must be noted that contemporary security demands that nations consider the full range of factors necessary for their stability, including the management of their water resources for sustainable development and peaceful coexistence with neighbouring countries. Our globalised world has shown that a drought in one country can affect the socioeconomic well-being of other nations. Thus, collective actions and initiatives must be embraced to ensure that we all stay alive, well and happy. Given that water connects our climate, our economies, and our security, we, as humans, must not allow water to remain a catalyst for conflict. Therefore, efforts are needed to transform water into a catalyst for cooperation, collaboration, and coordinated action for peace, security, and sustainable development. Thus, the paper calls for all nations and other stakeholders to:

1. Embrace collective action for the sustainability of this generation and future generations.
2. Recognise the shared vulnerabilities of the world and emplace mechanisms to deal with them collectively.

EDITOR-IN-CHIEF
Prof. A.I. Mteiye [MALAWI]

3. Remember that the concept of sovereignty and nationalism must be reappraised in the face of contemporary security challenges.
4. Treat water management issues as global security priorities.

REFERENCES

Andriof, J., & McIntosh, M. (2017). *Perspectives on corporate citizenship.* London: Routledge. doi:https://doi.org/10.4324/9781351282369

Doro, K., Ehosioke, S., & Aizebeokhai, A. (2020). Sustainable Soil and Water Resources Management in Nigeria: The Need for a Data-Driven Policy Approach. *Sustainability, 12(10), 4204.* doi:10.3390/su12104204

Eyo, E., & Francis, D. I. (2017). A Colloquy on Violence and Non-Violence: Towards A Complementary Conflict Resolution. *American Journal of Social Issues and Humanities Vol. 7 Issue 2*, 137–150.

Greenpeace. (2025, November 23). *Global Ocean Treaty*. From www.greenpeace.org.au: https://www.greenpeace.org.au/our-work/oceans/global-ocean-treaty/

Howard, G., Bartam, J., Williams, A., Overbo, A., Fuente, D., & Geere, J. A. (2020). *Domestic Water Quantity, Service Level and Health, Second Edition.* Geneva: World Health Organisation; 2020. Licence: CC BY-NC-SA 3.0 IGO.

Kilic, Z. (2020). The Importance of Water and Conscious Use of Water. *International Journal of Hydro 2020 4 (5)*, 239 – 241. doi:10.15406/ijh.2020.04.00250

Maestu, J. (2017). Water Trading and Global Water Scarcity - *International Experiences (First Edition ed., Vol. ISBN 9781138573109). Oxford: Routledge*.

Masara, W. (2021). Environment-Conflict Nexus: The Relevance of Thomas Homer-Dixon's Environmental Conflict Theory in Africa. *African Journal of Empirical Research, 2(2), ,* 170–175. doi:doi:10.51867/ajer.v2i2.42

Minko, A. E. (2025, February 17). *Exploring resilience strategies in the Lake Chad Basin amid climate change, natural disasters and conflict.* From odihpn.org: https://odihpn.org/en/publication/exploring-resilience-strategies-in-the-lake-chad-basin-amid-climate-change-natural-disasters-and-conflict/

Mishra, B., Kumar, P., Saraswat, C., Chakraborty, S., & Gautam, A. (2021). Water Security in a Changing Environment: Concept, Challenges and Solutions. *Water 2021, 13, 490*, 1–21. doi: https://doi.org/10.3390/w13040490

Rafaai, N. H., & Nur, K. (2024). Reconciling and contextualising multi-dimensional aspects for consolidated water security index: A synthesis. *Journal of Environmental Management Vol 359*. doi:https://doi.org/10.1016/j.jenvman.2024.121067

Rai, C. (2025, November 17). *MRC endorses new Strategic Plan 2026-2030, marking a shift toward impact-focused basin management.* From www.mrcmekong.org: https://www.mrcmekong.org/media-releases/pr-29nov2025

Serey, S., & Sopheak, M. P. (2023). The Mekong regional integration: What roles does the Mekong River Commission play? In *River basins and international relations: Cooperation, conflict and sub-regional approaches 1st Edition* (p. Chapter: 6). Routledge. doi:10.4324/97810032434-8

Ugbo, N. (2025). An Appraisal of the United Nations' Concept of Responsibility to Protect. *International Journal of Humanities Literature and Art Research Vol 8*. doi:https://doi.org/10.70382/mejhlar.v8i6.034

Ugbo, N. (2025). Contemporary Geopolitical Dynamics and Global Security: Projections for Sustainable Development. *International Journal of Multidisciplinary Research and Analysis*. doi:: https://doi.org/10.47191/ijmra/v8-i09-51

Ugbo, N. (2025). The Critical Role of Cyberspace Activities In Enhancing Global Security. *International Journal of Science Research and Technology*. doi:10.70382/tijsrat.v08i9.054

UN. (2025, October 14). *Pact for the Future*. From www.un.org: https://www.un.org/pact-for-the-future/en

UN SDGs. (2025, October 22). *The 17 Goals*. From sdgs.un.org: https://sdgs.un.org/goals

UN WWAP Report. (2020). *Water and Climate Change.* Paris: UNESCO.

UN WWAP Report. (2021). *The United Nations World Water Development Report 2021: Valuing Water.* Paris: UNESCO.

UNEP. (2023). *UNEP Annual Report 2022.* UNEP. From https://wedocs.unep.org/handle/20.500.11822/41679

WHO. (2021, September 22). *Water Factsheet*. From www.afro.who.int: https://www.afro.who.int/health-topics/water

WHO. (2023, September 13). *Key Facts on Drinking Water.* From www.who.in: https://www.who.int/news-room/fact-sheets/detail/drinking-water

World Bank. (2025, October 12). *Water for Planet.* From www.worldbank.org: https://www.worldbank.org/en/topic/waterresourcesmanagement

WPS. (2025, October 18). *About Water Peace and Security*. From waterpeacesecurity.org: https://waterpeacesecurity.org/