

The Human Right to Water Under International Law: A Critical Analysis of General Comment No. 15 And Sustainable Development Goal 6

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ABSTRACT

Access to safe and sufficient water is essential for human survival, public health, and human dignity. Despite its fundamental importance, the right to water was not expressly recognised in the principal international human rights instruments and has largely evolved through treaty interpretation and normative developments. This study examines the recognition of the human right to water under international law, with particular emphasis on the legal significance of General Comment No. 15 of the Committee on Economic, Social and Cultural Rights (CESCR) and its relationship with Sustainable Development Goal 6 (SDG 6). Employing a qualitative doctrinal legal research methodology, the study analyses primary legal sources, including international human rights instruments, United Nations resolutions, and General Comment No. 15, together with relevant academic literature and policy documents. The findings reveal that although the Universal Declaration of Human Rights 1948, the International Covenant on Economic, Social and Cultural Rights 1966, and other major human rights instruments do not expressly recognise a standalone right to water, subsequent interpretations have established water as an indispensable component of the rights to life, health, human dignity, and an adequate standard of living. The study further finds that General Comment No. 15 serves as the principal normative foundation for recognising the human right to water and has significantly influenced international legal discourse and policy development. Furthermore, SDG 6 complements the human rights framework by providing measurable targets for the realisation of universal access to safe and affordable water. Nevertheless, challenges relating to privatisation, environmental degradation, governance deficiencies, and weak enforcement mechanisms continue to impede effective implementation. The study concludes that the human right to water has achieved substantial normative recognition under international law, although questions concerning its legal enforceability remain unresolved.

Keywords— Human Right to Water; General Comment No. 15; International Law; Sustainable Development Goal 6; Water Governance

INTRODUCTION

Water is an indispensable natural resource that sustains human life, health, dignity, and socio-economic development. As a fundamental requirement for drinking, sanitation, food production, and public health, access to safe and sufficient water is essential for the realization of numerous human rights and sustainable development objectives. Scientific and public health studies have consistently demonstrated that inadequate access to clean

water contributes to the spread of waterborne diseases, chronic health conditions, and reduced quality of life, particularly among vulnerable populations (Popkin, D'Anci, & Rosenberg, 2010; Salas-Salvadó et al., 2020). Consequently, water is no longer regarded merely as a natural resource but increasingly as a prerequisite for human survival and human dignity.

Despite technological advancement and global economic growth, water insecurity remains a major challenge across many parts of the world. Rapid population growth, urbanisation, climate change, environmental degradation, and unequal distribution of water resources have intensified concerns regarding access to safe drinking water and sanitation services. Recent studies indicate that substantial disparities continue to exist between and within countries, particularly affecting developing nations and marginalised communities (Pujol & Palom, 2022). These challenges have elevated water governance from a technical and environmental issue to a significant legal, social, and human rights concern.

The recognition of water as a human right has evolved gradually within international law. Early international instruments, including the Universal Declaration of Human Rights (UDHR) and the International Covenant on Economic, Social and Cultural Rights (ICESCR), do not expressly recognise a standalone right to water. Nevertheless, scholars and international bodies have increasingly interpreted existing rights, particularly the rights to life, health, and an adequate standard of living, as encompassing access to water (Ahmad, 2020; Alsaadi, Khalid, & Dahalan, 2020). The evolution of this interpretation reflects a broader understanding that many recognised human rights cannot be effectively realised without adequate access to safe and affordable water.

A significant milestone in this development was the adoption of General Comment No. 15 by the Committee on Economic, Social and Cultural Rights (CESCR) in 2002. General Comment No. 15 explicitly recognised water as a human right and defined it as the entitlement of everyone to sufficient, safe, acceptable, physically accessible, and affordable water for personal and domestic use. The General Comment further established that states have obligations to respect, protect, and fulfil the right to water, thereby strengthening the normative framework surrounding water governance and human rights protection (Singh, Kumar, & Singh, 2026). Subsequently, the recognition of water as a human right received further international support through the adoption of the United Nations General Assembly Resolution 64/292 in 2010, which formally acknowledged access to safe drinking water and sanitation as a human right essential for the full enjoyment of life and all other human rights.

The growing recognition of the human right to water has also become closely linked with the global sustainable development agenda. In 2015, the international community adopted the Sustainable Development Goal 6 (SDG 6), which seeks to ensure the availability and sustainable management of water and sanitation for all by 2030. SDG 6 reflects the increasing convergence between international human rights law and sustainable development policies by emphasising universal access, equity, affordability, and sustainability in water governance (Gupta & Bosch, 2022; Kasker, 2025). The incorporation of water-related targets within the Sustainable Development Goals demonstrates the recognition that access to water is not merely a development issue but also a matter of human rights protection.

Notwithstanding these developments, important legal and normative questions remain unresolved. One of the most significant debates concerns whether the right to water constitutes an autonomous human right under international law or merely an implied right derived from other recognised rights. While General Comment No. 15 and various United Nations resolutions provide substantial normative support, critics argue that such instruments lack the binding force of international treaties and therefore cannot create new legal obligations independently (Ahmad, 2020). Furthermore, tensions persist between viewing water as a public good and recognising it as an economic commodity, particularly in the context of water privatisation, commercialisation, and transboundary water governance (Agostinho, de Almeida Viana dos Santos, & Façanha, 2020). These debates raise important questions regarding the adequacy of existing international legal frameworks in protecting the right to water.

Existing scholarship has extensively discussed the evolution of the right to water and its relationship with sustainable development. However, there remains limited legal analysis concerning the normative status and practical implications of General Comment No. 15 as a foundation for recognising the human right to water

under international law. In addition, the relationship between the emerging right to water framework and the implementation of SDG 6 continues to require further examination. Addressing these gaps is important in assessing whether current international legal instruments provide sufficient protection for water rights and whether additional legal developments are necessary to strengthen implementation and accountability mechanisms.

Accordingly, this study aims to analyse the recognition of the human right to water within international human rights law, examine the legal significance of General Comment No. 15, and evaluate the adequacy of existing international legal frameworks in protecting access to water. The study further considers the relationship between the right to water and SDG 6, with a view to identifying contemporary legal challenges and proposing avenues for strengthening international legal protection of water rights.

LITERATURE REVIEW

The Evolution of the Human Right to Water in International Law

The recognition of water as a human right has developed gradually through the evolution of international human rights law and global water governance frameworks. Early international human rights instruments did not expressly recognise a standalone right to water. Nevertheless, scholars have argued that access to water was implicitly embedded within broader human rights guarantees relating to life, health, and an adequate standard of living (Singh et al., 2026). The emergence of the human right to water can be traced to international discussions on water governance during the latter half of the twentieth century.

A significant milestone was the United Nations Water Conference held in Mar del Plata in 1977, which declared that all peoples have the right to access drinking water in quantities and quality sufficient to meet their basic needs. Although the declaration was not legally binding, it represented the first formal international acknowledgement of water as an essential human entitlement. Subsequent developments, including the Dublin Statement on Water and Sustainable Development and the Rio Declaration on Environment and Development in 1992, further reinforced the importance of equitable and sustainable water management. These instruments contributed to the gradual emergence of a normative framework linking water governance with human well-being and sustainable development.

The adoption of General Comment No. 15 in 2002 marked a turning point in the evolution of the human right to water. According to Reiners (2021), the development of water rights was not a linear process but rather the result of extensive legal and political contestation among states, international organisations, and civil society actors. Despite differing perspectives regarding the legal basis of water rights, growing international consensus eventually led to the recognition of water as an indispensable component of human dignity and survival. Similarly, Singh et al. (2026) observe that the right to water evolved from an implied aspect of the right to life into an increasingly recognised human right within international legal discourse.

General Comment No. 15 and the Normative Foundation of the Right to Water

General Comment No. 15 issued by the Committee on Economic, Social and Cultural Rights (CESCR) is widely regarded as the most important normative instrument concerning the human right to water. The General Comment interprets Articles 11 and 12 of the International Covenant on Economic, Social and Cultural Rights (ICESCR) and explicitly recognises water as a human right indispensable for leading a life in human dignity (Quadri, 2020).

The General Comment establishes several normative elements of the right to water, namely availability, quality, accessibility, and affordability. According to the CESCR, water must be sufficient for personal and domestic use, safe for consumption, physically accessible, and economically affordable. Singh (2017) notes that these principles transformed water from a basic necessity into a legally relevant human rights entitlement. In addition, General Comment No. 15 clarifies that states have obligations to respect, protect, and fulfil the right to water, thereby providing a structured framework for evaluating state compliance.

Despite its significance, General Comment No. 15 remains the subject of scholarly debate. Langford (2006) argues that criticisms concerning the Committee's authority to derive a distinct right to water from the ICESCR overlook the dynamic nature of treaty interpretation within international human rights law. Conversely, some scholars contend that the General Comment extends beyond the original wording of the Covenant and therefore lacks a firm legal basis. Nevertheless, its influence on international discourse, policy development, and judicial reasoning has been substantial.

The Human Right to Water and Other International Human Rights

The literature consistently emphasises that the human right to water is closely linked to several recognised human rights. Water is essential for the enjoyment of the right to life, the right to health, the right to human dignity, and the right to an adequate standard of living. Singh et al. (2026) argue that without access to safe water, the practical enjoyment of these rights becomes impossible.

The legal basis for this relationship is often derived from Articles 11 and 12 of the ICESCR. Tignino (2014) observes that water serves as a foundational requirement for achieving a broad range of socio-economic rights and therefore occupies a unique position within the international human rights framework. Similarly, Winkler (2014) contends that water should not merely be viewed as a component of other rights but should be recognised as a distinct entitlement due to its indispensable role in sustaining human life and well-being.

The interdependence between water rights and other human rights has strengthened arguments for recognising water as an autonomous right. Nevertheless, scholarly disagreement persists regarding whether water should be treated as an independent right or as a derivative right arising from existing human rights protections.

Sustainable Development Goal 6 and Water Governance

The adoption of Sustainable Development Goal 6 (SDG 6) in 2015 further strengthened the international commitment to ensuring universal access to water and sanitation. SDG 6 seeks to guarantee the availability and sustainable management of water and sanitation for all by 2030. Scholars generally view SDG 6 as complementing the human right to water by translating normative principles into measurable development targets.

Tignino (2014) argues that the integration of water rights into broader development frameworks enhances the practical implementation of human rights obligations. Similarly, Palmer, Short and Auch (2018) observe that sustainable water governance requires balancing human rights considerations with environmental sustainability and resource management. Through its emphasis on universal access, affordability, and sustainability, SDG 6 reinforces many of the principles articulated in General Comment No. 15.

However, unlike human rights treaties, SDG 6 does not create legally binding obligations. Its implementation depends largely on political commitment and national capacity. Consequently, scholars continue to debate whether development frameworks alone are sufficient to ensure the effective realisation of water rights.

Contemporary Debates and Research Gap

The contemporary literature reveals several ongoing debates concerning the human right to water. One major debate concerns whether water should primarily be viewed as a human right or as an economic commodity. The increasing privatisation and commercialisation of water services have raised concerns regarding affordability and equitable access, particularly for vulnerable populations (Quadri, 2020).

A second debate concerns the legal status of General Comment No. 15. While many scholars regard it as an authoritative interpretation of the ICESCR, others question its ability to create new legal obligations beyond those expressly contained in the Covenant (Langford, 2006). This debate reflects broader tensions between soft law and hard law within international human rights governance.

A third debate relates to implementation. Although international recognition of water rights has expanded considerably, practical challenges remain due to weak governance structures, environmental degradation, climate

change, and resource constraints (Palmer et al., 2018). These challenges demonstrate that legal recognition alone does not necessarily translate into effective access to water.

Despite extensive scholarship on the evolution and significance of the human right to water, limited studies have critically examined the normative authority of General Comment No. 15 as the principal foundation for recognising the right to water under international law. Furthermore, existing literature often discusses water rights and SDG 6 separately, with insufficient attention given to the interaction between these frameworks. Accordingly, this study seeks to address these gaps by critically evaluating the legal status of General Comment No. 15 and assessing its contribution to the recognition and implementation of the human right to water within the broader context of SDG 6.

METHODOLOGY

This study adopts a qualitative doctrinal legal research approach to examine the recognition of the human right to water under international law and its relationship with Sustainable Development Goal 6 (SDG 6). Doctrinal legal research is appropriate as the study focuses on analysing legal principles, international legal instruments, and scholarly interpretations relating to the right to water (Hutchinson & Duncan, 2012).

The study relies on both primary and secondary sources. Primary sources include the Universal Declaration of Human Rights 1948 (UDHR), the International Covenant on Economic, Social and Cultural Rights 1966 (ICESCR), the International Covenant on Civil and Political Rights 1966 (ICCPR), General Comment No. 15 (2002), United Nations General Assembly Resolution 64/292, and other relevant international legal instruments. Secondary sources consist of Scopus-indexed journal articles, academic books, United Nations reports, and policy documents concerning water governance, human rights, and sustainable development (Ahmad, 2020; Alsaadi et al., 2020).

The study employs doctrinal analysis to examine the legal recognition and development of the right to water within international human rights law. This method is used to analyse treaty provisions, General Comment No. 15, and relevant United Nations resolutions in determining the legal status of the right to water (Ahmad, 2020). Content analysis is also utilised to identify major themes, scholarly debates, and contemporary issues relating to water rights, including state obligations, water governance, and sustainable development (Meier et al., 2014; Fanaian et al., 2025).

In addition, comparative legal analysis is conducted where relevant to examine developments in selected jurisdictions that have expressly recognised the right to water through constitutional or legislative measures. Such analysis assists in identifying emerging legal trends and best practices for strengthening the protection of water rights (Loen & Gloppen, 2021).

The chosen methodology is suitable because it enables a comprehensive examination of the legal foundations, normative developments, and contemporary challenges relating to the human right to water. It also facilitates an assessment of the significance of General Comment No. 15 and its contribution to the implementation of SDG 6 within the broader framework of international human rights law.

Recognition of the Right to Water under International Human Rights Law

The recognition of the human right to water under international law has evolved gradually through the interpretation of existing human rights instruments and the development of international normative frameworks. Although no universal human rights treaty expressly recognised the right to water at the time of their adoption, subsequent legal developments have increasingly acknowledged water as an essential prerequisite for the enjoyment of fundamental human rights, including the rights to life, health, dignity, and an adequate standard of living (Singh et al., 2026).

The earliest foundation for recognising water rights can be traced to the Universal Declaration of Human Rights (UDHR) 1948. While the UDHR does not explicitly mention water, Article 25 guarantees the right to an adequate standard of living necessary for health and well-being. Scholars have argued that access to safe and sufficient

water is inherently embedded within this provision because the fulfilment of basic human needs cannot be achieved without water (Singh et al., 2026). Nevertheless, the UDHR remains a declaratory instrument and does not impose legally binding obligations upon states. Consequently, its contribution lies primarily in establishing the normative basis upon which subsequent developments concerning water rights were built.

The International Covenant on Economic, Social and Cultural Rights (ICESCR) 1966 further strengthened the legal foundation for the recognition of water rights. Although the Covenant does not expressly refer to water, Articles 11 and 12 provide important legal grounds for its recognition. Article 11 guarantees the right to an adequate standard of living, while Article 12 recognises the right to the highest attainable standard of physical and mental health. These provisions have been widely interpreted as encompassing access to safe and sufficient water because water is indispensable for maintaining health and ensuring an adequate quality of life (Quadri, 2020). The significance of the ICESCR was substantially enhanced by General Comment No. 15, which clarified that the right to water is implicitly contained within Articles 11 and 12 and should be recognised as a distinct human right essential for human dignity and survival (Reiners, 2021).

In contrast, the International Covenant on Civil and Political Rights (ICCPR) 1966 does not specifically address water rights. However, Article 6, which protects the right to life, has frequently been invoked to support the recognition of access to water as a fundamental human necessity. Bluemel (2005) argues that the right to life would be rendered ineffective if individuals were deprived of access to safe drinking water. This interpretation reflects a broader understanding of the right to life that extends beyond mere survival and includes conditions necessary for sustaining human existence. Despite this connection, the absence of explicit references to water within the ICCPR limits its direct contribution to the development of an independent right to water.

Specific recognition of water-related rights can also be found in specialised human rights treaties. The Convention on the Rights of the Child (CRC) requires States Parties to combat disease and malnutrition through the provision of adequate nutritious food and clean drinking water. Similarly, the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) recognises the importance of access to water, particularly for rural women, within the broader context of adequate living conditions. These provisions demonstrate that water has long been recognised as an essential element for protecting vulnerable groups. However, neither treaty explicitly establishes a universal and autonomous right to water applicable to all individuals (Singh et al., 2026).

A major turning point occurred with the adoption of General Comment No. 15 by the Committee on Economic, Social and Cultural Rights in 2002. General Comment No. 15 explicitly recognised water as a human right and defined it as the entitlement of everyone to sufficient, safe, acceptable, physically accessible, and affordable water for personal and domestic use. The General Comment further established that States have obligations to respect, protect, and fulfil the right to water. Although General Comment No. 15 does not possess the binding force of a treaty, it is widely regarded as an authoritative interpretation of the ICESCR and has significantly influenced international legal discourse on water rights (Quadri, 2020; Reiners, 2021). Its importance lies in transforming water from an implied socio-economic entitlement into a clearly articulated human right within the international human rights framework.

The recognition of water rights was further reinforced through United Nations General Assembly Resolution 64/292 in 2010, which explicitly recognised the human right to water and sanitation as essential for the full enjoyment of life and all other human rights. The Resolution represented a significant political and normative milestone because it reflected broad international consensus regarding the importance of water as a human right (Brown et al., 2016). Furthermore, it encouraged States and international organisations to provide financial resources, capacity-building initiatives, and technology transfer to support universal access to safe drinking water and sanitation. Nevertheless, as a General Assembly resolution, it remains a non-binding instrument and therefore lacks direct enforcement mechanisms.

Despite these significant developments, important legal challenges remain. One of the most persistent debates concerns whether the right to water has attained the status of an independent and legally enforceable human right under international law. Proponents argue that the combined effect of General Comment No. 15, Resolution 64/292, and state practice has elevated the right to water into an emerging norm of international human rights

law (Winkler, 2014). Others contend that the absence of a dedicated treaty explicitly recognising water as a standalone right continues to create uncertainty regarding its legal status and enforceability (Ahmad, 2020). Moreover, implementation remains uneven across jurisdictions due to differences in legal systems, economic capacity, and political commitment.

Overall, the analysis demonstrates that the right to water has progressively evolved from an implied component of recognised human rights into a widely acknowledged human right within international legal discourse. While international instruments increasingly support its recognition, the right to water remains largely dependent upon interpretative developments, soft law instruments, and state practice. Consequently, although the right to water enjoys substantial normative legitimacy, questions concerning its precise legal status and enforceability continue to generate scholarly and legal debate within international human rights law.

Legal Status of General Comment No. 15

General Comment No. 15, adopted by the Committee on Economic, Social and Cultural Rights (CESCR) in 2002, represents a significant milestone in the evolution of the human right to water under international law. Prior to its adoption, international human rights instruments did not expressly recognise water as a standalone human right. Instead, access to water was generally understood as an implicit component of broader socio-economic rights. General Comment No. 15 addressed this gap by providing an authoritative interpretation of the International Covenant on Economic, Social and Cultural Rights (ICESCR) and explicitly recognising water as a fundamental human right essential for human dignity, health, and survival (Quadri, 2020; Singh et al., 2026).

The legal foundation of General Comment No. 15 is derived primarily from Articles 11 and 12 of the ICESCR. Article 11 recognises the right of everyone to an adequate standard of living, while Article 12 guarantees the right to the highest attainable standard of physical and mental health. Although neither provision expressly refers to water, the CESCR interpreted these rights broadly and concluded that access to adequate water is indispensable for the realisation of both provisions. According to the Committee, the right to water entitles every individual to sufficient, safe, acceptable, physically accessible, and affordable water for personal and domestic use (Singh, 2017; Tignino, 2014). This interpretation transformed water from an implied socio-economic necessity into a distinct normative entitlement within the international human rights framework.

A significant contribution of General Comment No. 15 lies in its clarification of state obligations regarding water rights. Consistent with the broader framework of economic, social and cultural rights, the Committee identified three categories of obligations: the duties to respect, protect, and fulfil. The obligation to respect requires states to refrain from interfering directly or indirectly with existing access to water. The obligation to protect requires states to prevent third parties, including private corporations and service providers, from compromising access to safe and affordable water. Meanwhile, the obligation to fulfil requires states to adopt legislative, administrative, financial, and policy measures to ensure universal access to water, particularly for disadvantaged and vulnerable groups (Klawitter, 2007; Grönwall & Danert, 2020). These obligations have become a widely accepted framework for evaluating state compliance with water-related human rights commitments.

Despite its importance, the legal status of General Comment No. 15 remains the subject of considerable scholarly debate. Unlike treaties, conventions, or customary international law, General Comments do not create legally binding obligations upon states. Rather, they are generally classified as instruments of soft law that provide interpretative guidance regarding treaty provisions (Quadri, 2020). Critics argue that the Committee exceeded its interpretative mandate by effectively creating a new human right that was not explicitly negotiated or incorporated within the text of the ICESCR. Langford (2006) notes that some scholars question whether treaty-monitoring bodies should possess the authority to expand treaty obligations beyond their original wording. From this perspective, General Comment No. 15 lacks the formal legal status necessary to establish an independent and enforceable right to water.

Nevertheless, supporters of General Comment No. 15 contend that its authority derives not from its binding nature but from its institutional legitimacy and interpretative function. As the official body responsible for monitoring the implementation of the ICESCR, the CESCR possesses specialised expertise in interpreting the Covenant's provisions. Consequently, its interpretations are often regarded as highly persuasive and authoritative

within international human rights law (Tignino, 2014). Furthermore, the influence of General Comment No. 15 is evident in subsequent legal and policy developments, including United Nations General Assembly Resolution 64/292, which explicitly recognised the human right to water and sanitation. Its principles have also influenced domestic constitutions, national legislation, judicial decisions, and international development policies (Palmer, Short, & Auch, 2018).

Another important debate concerns the effectiveness of General Comment No. 15 in practice. While the General Comment has strengthened the normative recognition of water rights, implementation remains uneven across jurisdictions. Challenges such as poverty, inadequate infrastructure, privatisation of water services, environmental degradation, and climate change continue to hinder the realisation of universal access to water (McIntyre, 2012). Moreover, the absence of enforcement mechanisms means that compliance largely depends on the political will, financial capacity, and institutional commitment of individual states. Consequently, the gap between normative recognition and practical implementation remains a significant concern within the literature.

From a critical perspective, General Comment No. 15 can be viewed as both a strength and a limitation within the development of international water rights. Its greatest strength lies in providing a coherent legal framework that defines the content of the right to water and clarifies state responsibilities. At the same time, its status as a soft law instrument limits its direct enforceability and leaves uncertainty regarding the precise legal status of the right to water under international law. Nevertheless, the widespread acceptance of its principles by international organisations, states, and scholars suggests that General Comment No. 15 has become the most influential normative source governing the human right to water.

Overall, General Comment No. 15 serves as an authoritative foundation for recognising the human right to water under international law. Although it does not possess the binding force of a treaty, its interpretation of Articles 11 and 12 of the ICESCR has significantly shaped international legal discourse and contributed to the emergence of water as a recognised human right. Accordingly, General Comment No. 15 should be understood as a highly persuasive and authoritative instrument that has played a central role in the progressive development of the human right to water, even though challenges concerning its legal enforceability and implementation continue to persist.

The Human Right to Water and Sustainable Development Goal 6

The adoption of the Sustainable Development Goals (SDGs) in 2015 marked a significant shift in global development governance by integrating human rights principles into sustainable development objectives. Among the seventeen goals, Sustainable Development Goal 6 (SDG 6) seeks to “ensure availability and sustainable management of water and sanitation for all” by 2030. Although SDG 6 is not legally binding, it has become one of the most important international frameworks guiding state action in relation to water access, sanitation, and water resource management. The growing convergence between SDG 6 and the human right to water reflects an increasing recognition that access to safe and affordable water is not merely a development objective but also a fundamental human rights concern.

The relationship between SDG 6 and the human right to water can be traced to the normative framework established by General Comment No. 15. The General Comment defines the right to water as entitling every individual to sufficient, safe, physically accessible, acceptable, and affordable water for personal and domestic use. These principles are reflected in the targets of SDG 6, particularly Target 6.1, which aims to achieve universal and equitable access to safe and affordable drinking water for all, and Target 6.2, which focuses on adequate and equitable sanitation and hygiene. Consequently, SDG 6 may be viewed as an operational mechanism that translates the normative principles of the human right to water into measurable development objectives and indicators.

Scholars have argued that the human right to water and SDG 6 are mutually reinforcing. Tignino (2014) observes that the recognition of water as a human right provides a legal and ethical foundation for international development initiatives concerning water governance. Similarly, Quadri (2020) notes that SDG 6 strengthens international efforts to realise water rights by establishing clear targets, timelines, and monitoring mechanisms. While the human right to water emphasises legal entitlements and state obligations, SDG 6 focuses on practical

implementation and measurable outcomes. Together, these frameworks promote a comprehensive approach that combines legal protection with sustainable development strategies.

A notable contribution of SDG 6 is its emphasis on universal access and inclusivity. Unlike traditional development approaches that primarily focused on infrastructure provision, SDG 6 incorporates principles of equity, affordability, and non-discrimination. These principles closely mirror the obligations identified in General Comment No. 15, particularly the requirement that states prioritise vulnerable and marginalised groups. As a result, SDG 6 contributes to strengthening the human rights-based approach to water governance by encouraging states to address disparities in access and ensure that no individual is left behind in the provision of water and sanitation services.

Despite these synergies, several challenges remain in aligning SDG 6 with the human right to water. First, SDG 6 is a political commitment rather than a legally binding obligation. Unlike international human rights treaties, states cannot be held legally accountable for failing to achieve SDG targets. This limitation has led some scholars to argue that SDG 6 lacks sufficient enforcement mechanisms to guarantee universal access to water. While states are encouraged to report their progress through voluntary review mechanisms, compliance ultimately depends on political will and national capacity rather than legal obligation.

Secondly, the implementation of SDG 6 continues to be affected by significant socio-economic and environmental challenges. Rapid urbanisation, population growth, inadequate infrastructure, and financial constraints have hindered efforts to expand access to safe drinking water in many regions. Furthermore, climate change has intensified water scarcity, droughts, and extreme weather events, creating additional barriers to achieving SDG 6. Palmer, Short and Auch (2018) argue that environmental pressures increasingly threaten the sustainability of water resources and may undermine the realisation of water rights if not addressed through comprehensive governance frameworks.

Another challenge concerns the tension between economic efficiency and human rights protection. In many jurisdictions, water services have been subjected to market-based reforms and privatisation initiatives aimed at improving efficiency and reducing public expenditure. While such measures may enhance service delivery in certain contexts, critics argue that excessive commercialisation risks transforming water into an economic commodity rather than a public good and human right. This concern is particularly relevant in situations where affordability becomes compromised, thereby restricting access for low-income communities and vulnerable populations.

Nevertheless, SDG 6 has significantly contributed to advancing the global recognition of the human right to water. By embedding water access within the broader sustainable development agenda, SDG 6 has encouraged governments, international organisations, and development agencies to prioritise investments in water infrastructure, sanitation services, and integrated water resource management. It has also strengthened data collection, monitoring systems, and international cooperation aimed at improving water governance and reducing inequalities in access to water resources.

Overall, SDG 6 represents an important mechanism for advancing the implementation of the human right to water at the global level. Although it does not create legally binding obligations, it reinforces the normative principles established by General Comment No. 15 and promotes their practical realisation through measurable development targets. Consequently, SDG 6 should be viewed not as a substitute for international human rights law but as a complementary framework that enhances efforts to achieve universal access to safe, affordable, and sustainable water for all.

Contemporary Challenges in the Realisation of the Human Right to Water

Despite the growing recognition of the human right to water within international law, significant challenges continue to hinder its effective implementation. While General Comment No. 15 and subsequent international developments have strengthened the normative status of water rights, the practical realisation of these rights remains uneven across jurisdictions. Contemporary challenges arise from competing economic interests, governance deficiencies, environmental pressures, and limitations in international enforcement mechanisms.

One of the most significant debates concerns the competing characterisations of water as a human right and as an economic commodity. From a human rights perspective, water is regarded as an indispensable resource necessary for life, health, and human dignity. Consequently, access to water should be guaranteed irrespective of an individual's economic status. However, market-oriented approaches increasingly view water as an economic good subject to pricing, privatisation, and commercial management. Quadri (2020) observes that the tension between these perspectives remains unresolved within international water governance. While economic approaches may improve efficiency and resource allocation, excessive commodification risks undermining equitable access to water, particularly among vulnerable and low-income populations.

Closely related to this debate is the issue of water privatisation. In many countries, governments have transferred water supply services to private entities in an effort to improve service quality and reduce public expenditure. While privatisation may generate investment and enhance operational efficiency, concerns have been raised regarding affordability, accountability, and social equity. Klawitter (2007) argues that access to water should not depend solely on market mechanisms because water constitutes a basic human necessity rather than an ordinary commercial product. Similarly, Fonseca and Vargas (2020) highlight that regulatory ambiguities and weak institutional oversight may create inequalities in access to water resources, particularly when profit considerations outweigh public welfare objectives. These concerns demonstrate the need for robust regulatory frameworks capable of balancing economic efficiency with human rights obligations.

Environmental degradation and climate change represent another major challenge to the realisation of the human right to water. Increasing temperatures, prolonged droughts, groundwater depletion, pollution, and extreme weather events have intensified pressure on global water resources. Palmer, Short and Auch (2018) note that environmental threats not only affect water availability but also compromise water quality and long-term sustainability. In many regions, climate-related disruptions have reduced access to safe drinking water and disproportionately affected vulnerable communities. McIntyre (2012) further argues that the protection of water rights cannot be separated from environmental protection, as the degradation of ecosystems directly undermines the ability of states to fulfil their obligations regarding water access.

The implementation of the human right to water is also constrained by governance and institutional challenges. Although General Comment No. 15 outlines clear state obligations to respect, protect, and fulfil water rights, many countries continue to face difficulties in translating these principles into effective domestic policies. Weak institutions, insufficient funding, inadequate infrastructure, and fragmented regulatory frameworks frequently impede implementation efforts. Grönwall and Danert (2020) observe that access to safe drinking water remains particularly problematic in rural and marginalised communities where public service delivery is limited. These governance shortcomings contribute to persistent disparities in water access despite growing international recognition of water rights.

Another challenge concerns the legal enforceability of the human right to water. Unlike many civil and political rights protected by binding treaties and adjudicative mechanisms, the right to water remains heavily dependent on soft law instruments such as General Comment No. 15 and United Nations resolutions. While these instruments provide valuable normative guidance, they do not create direct enforcement mechanisms capable of compelling state compliance. As a result, implementation often depends on political commitment rather than legal obligation. Singh, Kumar and Singh (2026) argue that this enforcement gap remains one of the principal weaknesses in the current international framework governing water rights.

In addressing these challenges, scholars increasingly advocate for a stronger integration of human rights principles into water governance and environmental policy. Greater recognition of the right to water within domestic constitutions and legislation may strengthen accountability and provide more effective remedies for rights violations. Furthermore, enhanced international cooperation, sustainable water management strategies, and climate adaptation measures are essential to ensuring long-term water security. The human rights-based approach promoted by General Comment No. 15 also offers a valuable framework for ensuring that policies prioritise equity, participation, transparency, and non-discrimination.

Overall, the contemporary challenges facing the human right to water demonstrate that normative recognition alone is insufficient to guarantee universal access. While substantial progress has been made in establishing

water as a recognised human right, significant obstacles relating to commodification, privatisation, environmental degradation, governance failures, and weak enforcement continue to limit its practical realisation. Addressing these challenges requires a coordinated legal, institutional, and policy response capable of balancing economic development, environmental sustainability, and human rights protection.

CONCLUSION

The recognition of the human right to water has undergone significant development within international law over the past several decades. Although early international human rights instruments such as the Universal Declaration of Human Rights 1948, the International Covenant on Economic, Social and Cultural Rights 1966, and the International Covenant on Civil and Political Rights 1966 did not expressly recognise water as a standalone right, subsequent legal interpretations and normative developments have progressively strengthened its status within the international human rights framework. The analysis demonstrates that access to water is closely connected to the enjoyment of other fundamental rights, particularly the rights to life, health, human dignity, and an adequate standard of living.

A central finding of this study is the pivotal role played by General Comment No. 15 in the development of the human right to water. Through its interpretation of Articles 11 and 12 of the ICESCR, the Committee on Economic, Social and Cultural Rights established a comprehensive framework that defines the content of the right to water and clarifies state obligations to respect, protect, and fulfil this right. Although General Comment No. 15 does not possess the binding force of a treaty, it has become the most influential normative instrument governing the international understanding of water rights and has significantly shaped subsequent legal, policy, and institutional developments.

The study also demonstrates that the adoption of Sustainable Development Goal 6 has reinforced global efforts to realise the human right to water. While SDG 6 is not legally binding, it provides measurable targets and implementation mechanisms that support the practical realisation of water rights. The convergence between SDG 6 and the principles articulated in General Comment No. 15 reflects an increasing integration of human rights and sustainable development approaches in contemporary water governance. Nevertheless, significant challenges remain in translating international commitments into effective national implementation.

Furthermore, the study identifies several contemporary obstacles affecting the realisation of the human right to water. These include the continuing tension between viewing water as a human right and as an economic commodity, the challenges associated with water privatisation, environmental degradation, climate change, governance deficiencies, and the limited enforceability of existing international instruments. These issues highlight the gap that often exists between normative recognition and practical implementation. Consequently, international recognition alone is insufficient to guarantee universal access to safe, affordable, and sustainable water.

Based on the findings, this study argues that the human right to water should be regarded as an emerging and increasingly recognised human right under international law. Although its legal foundation remains heavily dependent on interpretative instruments and soft law mechanisms, the cumulative effect of General Comment No. 15, United Nations resolutions, state practice, and international policy frameworks has substantially strengthened its normative legitimacy. The right to water can therefore be understood as an integral component of the broader international human rights system, even though questions concerning its precise legal status and enforceability continue to persist.

Accordingly, greater efforts are required to strengthen the protection and implementation of water rights at both international and domestic levels. States should incorporate the right to water within national legal frameworks, improve regulatory and governance mechanisms, and prioritise equitable access to water for vulnerable and marginalised communities. At the international level, stronger monitoring mechanisms and enhanced cooperation are necessary to ensure that commitments relating to water rights and SDG 6 are effectively translated into tangible outcomes. Ultimately, securing universal access to safe and affordable water is not only a development objective but also a fundamental human rights imperative essential for human dignity, social justice, and sustainable development.

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