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Articles

Institutional and legal framework for the implementation of the human right to the water in Ecuador El marco jurídico institucional para la implementación del derecho humano al agua en el Ecuador

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Abstract

The paper describes the institutional and legal framework of the human right

to water in Ecuador. The intention is to provide the qualitative basis to design

a methodology to measure its implementation. It analyzes the circumstances

that lead to the formal recognition of this right and the strategies required for

its efficient quarantee.

The research applies the Organization of American States report about

implementing the human right to water in Central American countries to the

Ecuadorian background and people in vulnerable conditions. Moreover, the

paper uses an exegetic focus and makes a historical description of the water

law protection in Ecuador. It identifies the congress people's real intention in

the records of the Constituent Assembly of 2008. The study results are

presented according to the variables defined by the Special Rapporteur on the

human rights to safe drinking water and sanitation.

The paper concludes that the normative recognition of the human right

to water is developed in different Ecuadorian laws. However, the country

presents institutional weakness, which negatively influences its effective

implementation.

Keywords: Human rights, right to water, water, implementation, Ecuador.

Resumen



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El presente artículo describe el marco jurídico institucional del reconocimiento del derecho humano al agua en el Ecuador, con el propósito de contar con el sustento cualitativo para el diseño de una metodología que permita medir la implementación de dicho derecho. Para ello, analiza las circunstancias que influyeron en su consagración y la manera en que las normas deberían emplearse a la hora de garantizar su contenido.

La investigación utiliza como base el informe de la Organización de los Estados Americanos sobre el abordaje del derecho humano al agua en algunos países de Centroamérica y lo adapta a la realidad ecuatoriana, así como otros en relación con la inclusión de la población vulnerable. Además, lleva a cabo un análisis exegético, haciendo un recorrido histórico de la protección del aqua en Ecuador a nivel constitucional y legal, así como un recuento de los diarios de debates de la Asamblea Constituyente de 2008. Los resultados del estudio se presentan en función de las variables diseñadas por el Relator Especial del Derecho Humano al Agua y al Saneamiento.

El trabajo concluye que si bien existe un reconocimiento normativo del derecho al agua, la debilidad institucional influye de manera negativa para su efectiva realización.

Palabras clave: derechos humanos, derecho al agua, agua, implementación, Ecuador.

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Introduction

The Organization of American States (OAS) has developed a baseline about the human right to water and sanitation, published by the Executive Secretariat for Integral Development. However, this document is mainly concentrated in America's central and northern regions (Costa Rica, Mexico, Honduras, and the Dominican Republic), so there is a gap in the southern part. In Ecuador, the human right to water was recognized in the Constitution in October 2008, and later it was regulated in 2014 by the Organic Law on Water Resources (LORHUAA). This study on the institutional and legal framework for implementing the human right to water in Ecuador constitutes the opportunity to fill the gap mentioned above.

The work is posed as research questions: What circumstances influenced the recognition of access to water as a human right in Ecuador? How can the legislation in Ecuador affect the effective implementation of this right?

The following hypothesis is applied to answer those inquiries. There is a path in the evolution of recognizing the access to water for domestic use as a human right, both internationally and nationally. Legally, this path is marked by the drive to achieve the right to health and other rights that are part of the catalog of Economic, Social, Cultural, and Environmental Rights,



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ESCR. Politically, counter-hegemonic processes converge. On the one hand, the criticized commodification of goods and services, led by activists such as Shiva (2014), and, on the other, social struggles (see the Water War in Cochabamba, Bolivia) in South America that influenced national constituent processes from the beginning of the century (Baer & Gerlak, 2015: 1530).

However, mere recognition as a human right may remain rhetoric if it is not accompanied by measures for its effective implementation (Baquero-Flores, Jiménez-Fdez.-de-Palencia, & Pérez-Foguet, 2016), through the five factors that outline the content of the human right to water: a) availability; b) accessibility; b) acceptability; d) affordability; and, e) quality (De-Albuquerque, 2014), as well as the respective planning, development, execution, and evaluation of public policies designed for the implementation of the right.

This work presents the following sections: materials and methods, contextualization and results at the international level (universal and inter-American system) and national regulations (constitutional and legal), the discussion, based on the different characteristics of the human right to water, and finally, the conclusions.

Materials and methods



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The work is developed within the research project: "Methodological proposal to measure the Human Right to Water. Pilot application in the canton of Cuenca", which aims to generate a methodological proposal to measure the human right to water.

This study applies the legal and institutional framework introduced by the Organization of American States (OAS) in its report on the "Implementation of the human right to water and sanitation through the Inter-American Sustainable Development Program" (OEA, 2019). This report analyzed Mexico in North America, Costa Rica and Honduras in Central America, and the Dominican Republic in the Caribbean.

In this way, the analysis variables focus on a brief diagnosis of the drinking water situation in the chosen country, describing the institutional and legal framework for water. The written norms that give constitutional and legal support to the human right to water are described. The plans, policies, and programs are highlighted, and the related regulations are selected considering element (dimension), legal regulations, and competent entity.

Millions of people who lack access to the service are usually excluded from the debate on the content and implementation of the human right to water. For instance, Ibáñez and Lazo (2018), in the Mexican case, due to the marginality of certain groups, the implementation solutions proposed by States and international organizations did not necessarily respond to the realities and precarious conditions. The Ecuadorian case is of particular interest both at the rural and peri-urban levels (INEC, 2019).

In the methodological proposal, the following dimensions and subdimensions were used: availability (sufficiency and continuity); accessibility



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(congestion, security, time, and distance); acceptability (facilities and water properties); affordability (degree of impact of water spending on the family budget, ability to pay, willingness to pay); quality (conditions for human consumption); institutional framework (resolution of conflicts, accountability, and transparency, participation, non-discrimination, technical management) (Aguilar, Sarmiento, Roldán, Martínez, & Cabrera, 2020).

Contextualization and results

According to data from the WHO / UNICEF Joint Monitoring Program for Water Supply, Sanitation, and Hygiene (JMP), in 2017, 74.3 % of the population in Latin America and the Caribbean had access to safe water, with a significant gap between urban (82.3 %) and rural areas (41.7 %) (JMP, 2019a). In the Ecuadorian case, the evolution in the coverage of the potable water and sanitation service in the last decades has been substantial since a significant change of nine points (66-75 %) of water coverage safely managed can be appreciated. This improvement is attributed both to the State's compliance with the commitments acquired in the Millennium Development Goals (2000-2015) and public investment (JMP, 2019a) (Figure 1).



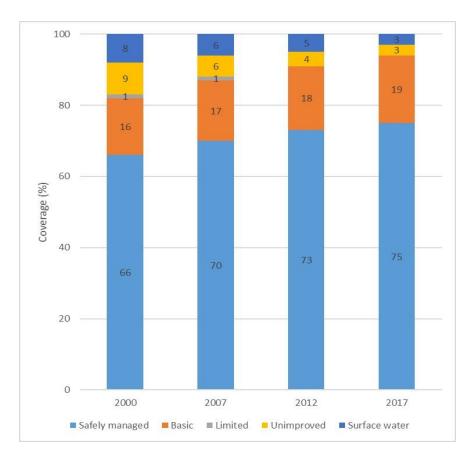


Figure 1. Evolution in access to water in Ecuador (2000-2017). Source: JMP (2017) and (2019b).

The importance of the data offered by the JMP (2019a) lies in the fact that it focuses on the fulfillment of the 2030 Agenda (ONU, 2015) regarding Objective No. 6, "Access to Safe Water for all". 7 out of 10 people in Ecuador drink water safely managed (INEC, 2019); however, there is a gap between coverage in the urban (85 %) and rural (58 %) areas, which is mainly caused by the two following elements:



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1. Population dispersion in the rural area limits the quality of drinking water services, especially in the case of the municipal authority.

2. In the places where the municipal public provider does not reach, the community systems fulfill this task. Although they provide an essential service, due to their lack of financial sustainability, infrastructure, and technical problems, they cannot meet the parameters established in the quality standard.

The international perspective of the human right to water

In the Ecuadorian case, although the Constitution is the supreme norm, international human rights instruments are of particular importance due to the privileged hierarchy that the Constitution itself grants them. To the extent that if international instruments recognize rights in a more favorable way than the Constitution, they may even prevail over it and any other norm (Article 427). Proof of this is the importance that the Constitutional Court itself has given to international instruments, for example, in the case of equal marriage (Sentencing No. 11- 18-CN and 10-18-CN), in which the Advisory Opinion OC-17/24 was directly applied (CorteIDH, 2017b).

Hence, a review of the normative and institutional framework for protecting the right to water at the international level is relevant to



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understanding how Ecuadorian constitutional law has been receptive to these standards.

Within the framework of the United Nations, the water right has been developed both at the level of international treaties and Declarations, Resolutions, General Observations, and other human rights instruments, as reflected in Table 1.

Table 1. Evolution of the recognition of the human right to water at the international level

Year	Qualification	Contents
1977	Plan of Action of the United	Everyone has the right to water in
	Nations Conference on	quantity and quality according to
	Water	their needs.
1979	Convention on the	Rural women's right to water
	Elimination of All Forms of	supply.
	Discrimination against	
	Women	
1989	Convention of Children's	The connection between water
	Rights	and the right to the highest
		possible level of health.
1992	International Conference on	Water is a fundamental right of
	Water and Sustainable	every human being and a socio-
	Development (Dublin)	economic good.



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1992	Rio Declaration Plan of	A first multilateral approach to	
	Action	sustainable development.	
1996	International Conference of	The right to an adequate standard	
	the United Nations	of living, including water and	
	Organization on Population	sanitation.	
	and Development (Cairo)		
2000	Resolution of the General	To realize the right to	
	Assembly of the United	development, the fundamental	
	Nations Organization on the	human right to clean water must	
	"Right to Development"	be guaranteed.	
2002	Declaration of the World	Access to drinking water is an	
	Summit on Sustainable	essential service and emphasizes	
	Development	the value of access to public	
	(Johannesburg)	information and participation in	
		water resources planning.	
2002	General Observation No.15,	It expressly recognizes the human	
	Committee on Economic,	right to water (availability,	
	Social and Cultural Rights	quality, safety, acceptability),	
		acceptability, accessibility, and	
		affordability.	
2007	Convention on the Rights of	Right to access to drinking water	
	Persons with Disabilities	under equal conditions and at an	
		affordable price.	



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	2010	Resolution 64/292, General	Recognition of water and	
Assembly of the United		Assembly of the United	sanitation as human rights.	
		Nations Organization		

Source: Own elaboration based on international instruments.

At the beginning of this century, the Human Right to Water and Sanitation was considered in connection to the Millennium Development Goals, through two dimensions: 1) a substantial one, composed of a quantitative perspective regarding the access of the population to the service, and a qualitative one that took into account its availability, quality, accessibility, affordability, and acceptability; as well as a 2) procedural dimension, composed of accountability, even about the sustainability of infrastructures and services (Justo, 2013).

Office of the Special Rapporteur on the human right to water

From the perspective of *soft law*, the UN counts on unique bodies to ensure the protection of the rights to water and sanitation, such is the case of the Special Rapporteur on Water and Sanitation. Three key moments and actors are highlighted: El Hadji Guissé (2002-2008), appointed as Special



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Rapporteur for the United Nations Economic and Social Council; Catarina de Albuquerque (2008-2014), first United Nations Special Rapporteur on the right to safe drinking water and sanitation; and Léo Heller (2014-2020), Special Rapporteur until the second semester of 2021 (Figure 2). During whose mandates, each of the Rapporteurs has had a direct influence on the content and implementation of the law, the parameters of which are considered in the discussion of this work.

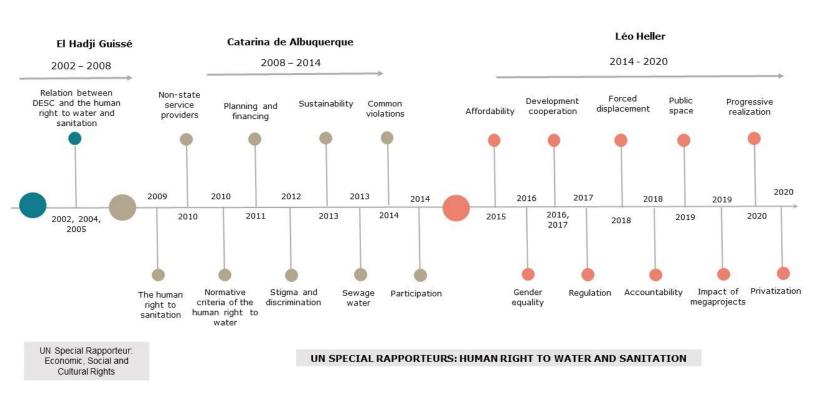


Figure 2. The evolution of the Office of the Special Rapporteur on the human right to water. Source: Own elaboration based on the documents of the UN Special Rapporteurs.



The human right to water in the jurisprudence of the Inter-American Court of Human Rights

At the regional level, the Inter-American Human Rights System (Commission and Court), and its derivative instruments, provide the main parameters for the interpretation and content of rights. Although the American Convention on Human Rights and its Additional Protocol on Economic, Social, and Cultural Rights, also known as the Protocol of San Salvador, do not expressly mention the right to water, the jurisprudence of the Inter-American Court has developed it in its interrelation with other rights, such as the right to decent living conditions.

Thus, the jurisprudence of the Inter-American Court has contemplated access to water for human consumption and personal hygiene as part of the States' duty to guarantee, for example, prison conditions so it could ensure the human dignity and integrity of people in jail. The judgments mentioned below refer to how people deprived of liberty have faced a lack of access to sufficient and safe water to guarantee them a dignified life:

- Case of Pacheco Teruel et al. vs. Honduras (2012) (CorteIDH, 2012).
- Case of Vélez Loor vs. Panama (2010) (CorteIDH, 2010b).
- Case of Yvon Neptune vs. Haiti (2008) (CorteIDH, 2008).



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- Case of López Alvarez vs. Honduras (CorteIDH, 2006a).

On the other hand, the Inter-American Court has proposed an innovative jurisprudential development on indigenous peoples and the interdependence between the rights to a healthy environment, adequate food, water, and cultural identity. The Inter-American Court considers that the right to collective property is linked to the protection and access to natural resources, including water, necessary for the survival and continuity of the indigenous peoples' lifestyle.

According to the Inter-American Court, as part of their obligation of respect, the States Parties must refrain from: a) any practice or activity that prevents or restricts access, under conditions of equality, to requirements for a dignified life, such as water and food; and b) illegally polluting the environment, especially the bodies of water. Additionally, the Court has indicated that the States must adopt positive measures for disseminating information on the use and protection of water and adequate food sources, as well as guarantee an essential minimum of water and food. In this regard, the following pronouncements of the Court should be reviewed:

- Case of indigenous communities of the Lhaka Honhat Association (Our Land) vs. Argentina (2020) (CorteIDH, 2020).
- Advisory opinion OC-23/17 The environment and Human Rights, requested by the Republic of Colombia (2017) (CorteIDH, 2017a).
- Xákmok Kásek Indigenous Community vs. Paraguay (2010) (CorteIDH, 2010a).
- Yakye Axa Indigenous Community vs. Paraguay (2005) (CorteIDH, 2005).



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- Sawhoyamaxa Indigenous Community vs. Paraguay (2006) (CorteIDH, 2006b).
- Pueblo Saramaka vs. Suriname (2007) (CorteIDH, 2007).

In Lhaka Honhat vs. Argentina, the Inter-American Court (CorteIDH, 2020) establishes and emphasizes that the right to water includes consumption, sanitation, laundry, food preparation, personal and domestic hygiene, sufficient and accessible for individuals and groups (vulnerable), and additional water resources due to their health, climate and working conditions.

The legal situation of water in Ecuador

Figure 3 shows the evolution of constitutional water regulations since the return to democracy.



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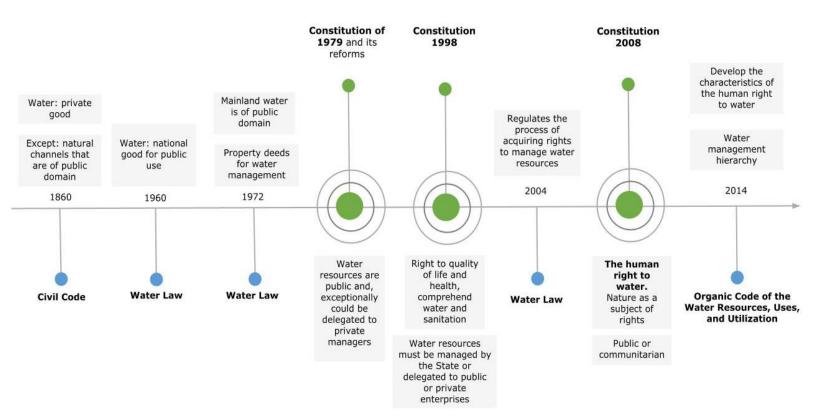


Figure 3. Timeline of water law in Ecuador. Source: Own elaboration based on historical legislation of the Republic of Ecuador.

Constituent Assembly 2007-2008

The 2008 Constitution incorporated, among others, the following innovations (Constitución, 2008): 1) the *Sumak kawsay*, or good living, as an alternative to the development model under the Andean worldview; 2) the recognition of



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nature as a subject of rights (Bustamante, 2018; Acosta & Martínez, 2009), a debate that divided society and Ecuadorian lawyers, respectively (Ávila-Santamaría, 2019; Simon, 2017: 235); and 3) the division of five functions of the State, incorporating the Rousseau classic, the Electoral function, and the Transparency and Social Control one (Martínez-Moscoso, 2014).

The recognition of water as a human and fundamental right (Martínez-Moscoso, 2019) was another of the axes on which both *Sumak kawsay* and the rights of nature are based.

To rescue the spirit of the constituent assembly members, this research analyzed the diary of debates of the National Constituent Assembly of Ecuador (2007-2008). From a universe of 86 minutes, which correspond to the daily discussions of the National Assembly, it was verified that, in eight (40, 58, 70, 73, 76, 78, 81, and 85), the Constituent Assembly members debated the regime of natural resources, and particularly of water.

In Acts No. 40 and 58, aspects related to nature as a subject of rights were discussed as a first debate. Starting with Act No. 76, the second debate on this proposal was conducted (Act 81, 2008, pp. 245-251) (Secretaría de la Asamblea Nacional Constituyente, 2008b).

In (Minute 70, 2008), which corresponds to June 27, 2008 (Secretaría de la Asamblea Nacional Constituyente, 2008a), the Assemblymen debated the natural resources and water report approved by the majority in discussion Table No. 5. The discourse intended to institutionalize social movements demands, change water allocation structure for agriculture and other uses for indigenous peoples, overcome neoliberalism (Hoogesteger, 2016), and



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manage community systems to achieve inclusive water management for rural landowners.

In the opinion of the President of discussion Table No. 5, Mónica Chuji, the proposals that were discussed were not inappropriate but responded to what a plural sector of the population demanded: "... it is not the right of a few against that of the most part, it is not development and progress against barbarism, it is not the position of a few environmentalists, "indios" (indigenous people) or leftists (...)" (Act 81, 2008, p. 106) (Secretaría de la Asamblea Nacional Constituyente, 2008b). Besides, Chuji criticized the way through which water resources were managed because from her perspective the government owed favors to the agro-industrial sector, "... the agro-export monopoly that not only produces labor exploitation but produces hoarding of the water resource operates under the protection of an administration that grants concessions for the use of dubious legitimacy, favoring agricultural export interests that unfortunately do not benefit, as it should be, the generality of Ecuadorians ... "(Act 81, 2008, pp. 106-108) (Secretaría de la Asamblea Nacional Constituyente, 2008b).

Throughout the debate, in each of the interventions of the Constituent Assembly members, an ideological bias was evidenced that was adapted to the counter-hegemonic (allusions against the neoliberal State), vindictive about the rights of indigenous peoples, as well as the incorporation of religious discourses (references to the Bible, to the creation, etc.); such was the case of Assemblyman Mario Jativa (Act 81, 2008, page 115) (Secretaría de la Asamblea Nacional Constituyente, 2008b).



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In the discourse and practice, the human right to water has counted internationally with counter-narratives about the policies and governance of water resources, including those associated with neoliberal agendas (Harris, Rodina, & Morinville, 2015). Among the substantive aspects regarding recognizing water as a human and fundamental right, the following stood out:

a) whether it was necessary to recognize water as a right itself, or b) if the right was for individuals to access water. Although the minutes of the debates do not make a particular reference to the reasons why the constituent endowed the category of the fundamental right to water, it is essential to note that it is the only one in the constitutional text that is characterized as fundamental (Act 81, 2008) (Acta 81, 2008, p. 113) (Secretaría de la Asamblea Nacional Constituyente, 2008b).

From the point of view of the Assembly members (Manuel Mendoza, among others) of the ruling party, the approval of the human and fundamental right to water would help prevent "... the long and sad neoliberal night from continuing..." (Act 81, 2008, p. 114) (Secretaría de la Asamblea Nacional Constituyente, 2008b).

On July 10, 2008, the Constituent Assembly heard in a second debate (Act 81, 2008) (Secretaría de la Asamblea Nacional Constituyente, 2008b) the majority report presented in discussion Table No. 5. In the minutes, it can be verified that the spirit of the Water regulation in Ecuador not only sought to recognize water as a human and fundamental right but also to compromise the State to the conservation, recovery, and integral management of water resources, including the ecological flow. The constituent was concerned about establishing the legal priority uses of the resource and its quantity and quality.



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The debate insisted on not letting the contradictions pass between whether "water is a fundamental human right," or whether "access to water ensures the fundamental human right," opting for the first alternative, at the suggestion of the assembly member Mario Jativa (Acta 81, 2008, p. 84) (Secretaría de la Asamblea Nacional Constituyente, 2008b).

The main concerns of the Assembly members were related to the quality of the water, the governance of water resources, and its contamination through chemical substances. In this sense, the presentation of problems related to aquifers' contamination with pesticides and fertilizers (e.g., Tumbaco, Guayaquil, Riobamba, Sucumbios) was persistent.

The Constituent Assembly presented the draft of the Constitution of Ecuador on July 25, 2008, which was approved through a constitutional referendum on September 28 of the same year, with close to 63% of votes in favor (Trujillo, 2013).

Constitution of 2008

Since the adoption of the constitutional text, on October 20, 2008, the aspects regarding water were divided into three main sections, which we will analyze below: a) water as a human and fundamental right and its relationship with the *Sumak kwsay*; b) water as a strategic sector and its regime; and c) water as a public service and its institutional framework.



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First, one of the most representative aspects of the Ecuadorian constitutional text is the recognition of the human right to water, which is endowed with an additional characteristic: it is a fundamental right (art. 12).

In addition, the Constitution defines water as a strategic national patrimony, grants it the characteristics of public use (with an express prohibition of its privatization), and repeats what is established in the Civil Code about inalienability, imprescriptibly, and non-seizure; the Constitution also defines water as essential for life.

Art. 3 of the Constitution defines the primary duties of the State, among which is, in the first place, water provision. Like other ESCR, it will be protected from what is recognized in the constitutional charter itself and the international instruments.

In the same way, the constituent uses the same formula of the Constitution (1998), noting that, to ensure a dignified life for people, the right to drinking water and environmental sanitation is recognized (art 66, number 1). And it concludes by specifying that the guarantee of the right to health will only be possible if the State recognizes other rights, including, the right to water (art. 32).

Second, the constitutional norm of 2008 configured a hyper-presidential scheme (Salazar-Marín, 2015), which could be justified by the lack of governance that the Executive had in past decades, causing instability in the face of a reinforced Legislative (Ortiz-Ortiz, 2018). It could also have been the result of the political movement proposed by the Constituent Assembly, which wanted to change the State model to develop the self-styled "Citizen Revolution" (Guerrero-Salgado, 2018).



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This characteristic was reflected in the control of strategic sectors, "... those that, due to their importance and magnitude, have a decisive economic, social, political or environmental influence, and should be oriented towards the full development of rights and social interest" (Constitución, 2008, art. 313), among which is water.

Thus, the State reserved for itself: a) the administration; b) regulation; c) control; and d) the management of strategic sectors, exercised by the central government, through the Executive. This was visible in the structure designed by the President, through coordinating Ministries (e.g., of Strategic Sectors), Ministries, Secretariats, Regulatory and Control Agencies, among other organizations that generated not only a bureaucratic burden but permeated a notion of control by the highest representative of the central government, throughout the national territory.

The Constitution (2008) determined greater State participation in the economy; for instance, the responsibility of the State to provide public services, including drinking water and sanitation (art. 314).

Third. This section's substantial elements are configured through the water as a public service, the integral management of water resources, and its corresponding institutional framework in charge of a responsible State entity.

One of the political slogans that were embodied in the constitutional text was the prohibition of the privatization of water in Ecuador; for this purpose, the vital liquid was established as a strategic national heritage (strategic sectors), for public use, inalienable domain (it cannot be in the market) and



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imprescriptible (the domain acquisition prescription do not apply) (Hoogesteger, 2016).

From the perspective of the Ecuadorian economic model of a social and solidarity economy, it is explained how water can only be managed publicly (through the different levels of government) and by communities (a tradition that has organized indigenous peoples to satisfy their needs) (Acosta & Martínez, 2010).

Particular reference deserves the issue related to the management and operation of community initiatives, both for the management and for the provision of public services, since the constituent highlighted the ancestral practice of indigenous peoples regarding water management. Proof of this is of the that one last water secretaries in Ecuador was a former indigenous Kichwa leader of the water boards in the center of the country, Humberto Cholango (Agua, 2018).

Finally, the institutional aspect of water was regulated through a single water authority (it was born as SENAGUA, it became the National Water Secretariat, and currently, it is merged with the National Environmental Authority, under the Ministry of the Environment and Water), in charge of planning, regulating, controlling, and managing water resources. The authority is responsible for ensuring that, in the case of water resources, the use hierarchy is compiled: human consumption, irrigation for food sovereignty, ecological flow, and productive purposes (Constitución, 2008, art. 412; LORHUAA, 2014, art. 86).



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The legal regulation of water in Ecuador

The regulation on water management distinguishes at least two marked models: a) one that allows the administration to be carried out from a private property perspective (water markets); and b) one in which water is in the public domain and is managed by the State (Martínez-Moscoso, 2019).

Organic Code of the Water Resources, Uses, and Utilization

One of the transitory norms of the 2008 Constitution established the audit of the drinking water and sanitation service delegations carried out by private companies and the regulatory development of the water right. After the constitutional charter was approved, the constituent gave the Legislature 360 days to issue the correspondent law

Even though it was a constitutional norm, the legislator fulfilled his mission six years later, with the issuance of the Organic Code of Water Resources, Uses, and Utilization, (LORHUAA) on August 6, 2014 (Official Report, Second Supplement No. 305) (LORHUAA, 2014). This norm was opposed, especially by the indigenous movement. Moreover, it was the first in Ecuador submitted to Pre-legislative Consultation (a figure that aims to



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establish an additional participation mechanism in favor of indigenous, Afro-Ecuadorians, and Montubios communities when the legislative develops a regulation that may affect the collective rights of the groups mentioned above, art. 57, #15) (Martínez-Moscoso & Aguilar-Feijó, 2015).

The purpose of LORHUAA was to guarantee the human right to water; regulate, control the authorization, management, preservation, conservation, restoration of water resources, as well as the use and exploitation of water, to guarantee the *Sumak kawsay*, following the rights of nature (art. 3). The law defines water as a strategic national heritage for public use, inalienable, imprescriptible, unattachable, and essential for life.

Discussion

Categories of the human right to water in Ecuadorian legislation

The human right to water has diverse sources: soft law, international human rights law, based on international instruments, and the jurisprudence



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developed by international treaty supervisory bodies until its recognition in the constitutional sphere in 2008 and its respective regulation in 2014.

McIntyre (2012) proposes that the diversity of normative sources of the human right to water could generate uncertainties. Therefore, it is convenient to accompany their analysis from a perspective of support by administrative law due to its procedure, management of actors, and requirements to quarantee this right.

At the international level, the recognition of the human rights to water and sanitation managed to harmonize the concepts of availability, accessibility, acceptability, affordability, quality, and sustainability of resources. Some standards and statements revolve around these variables with the purpose that access to water in the 2030 sustainable Agenda allows reaching a true alliance to fight against inequities at the global level, and the materialization of world governance in terms of water resources management (Meier, 2014).

At the national level, implementation (guarantee) of the human right to water and sanitation corresponds to the State, as stated by the General Assembly and the United Nations Human Rights Council. In this sense, the States, no matter how much they delegate the responsibility to a third party (concessionaire, private operator, among others), keep having international obligations. Internal regulations must be adapted to international standards to establish a clear policy concerning financing and supporting the implementation of the right, transparency, and accountability (Meier, 2014).

This research took the five criteria established by the Human Right to Water and Sanitation Special Rapporteur (De-Albuquerque, 2014). While



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drafting a methodology to measure the right above, it was considered pertinent to add the criterion of institutionality, understood as the ability to solve problems and conflicts; accountability and transparency; participation; non-discrimination; and technical management (Table 2).

Table 2. The implementation of the human right to water in the Ecuadorian Law.

Criteria from	Regulatory bodies			
the human right to water rapporteur ship office (De- Albuquerque, 2014)	Constitution	CODA	LORHUAA	Regulation of the LORHUAA
Availability	Art. 264.4 Art. 282 Art.314 Art.326.15 Art.411		Art.14 Art. 57 Art. 59 Art.83.b Art.84.b Art.84.d	Art.41.ab ; art. 119; art. 111
Acceptability			Art.57 Art. 71 Art.72 Art.74 Art.84.b	Art. 82
Accessibility	Art. 314 Art. 375.6		Art.57	Art. 53 and 54



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Affordability	Art. 314		Art.57 Art.135 Art.136 Art.139 Art.140	Art. 116 121-122
Quality and safety	Art. 276.4 Art. 314 Art.411 Art.413	Art.191	Art.14 Art. 57 Art. 62 Art.79 Art.80 Art.81 Art.83.b Art.84.d	Art. 117
Institutionality	Art. 314, 315, 318		Art. 23 At. 36. Art. 50-51	Art. 34, 35, and 36

Source: Own elaboration based on current regulations.

* CODA: Organic Code of the Environment (CODA, 2017); LORHUAA: Organic Code of Water Resources, Uses and Utilization

Availability

Defined as the quantity of sufficient water, it is crucial to keep in mind that each country must set a minimum to guarantee the right (vital minimum). This is a minimum numerical standard, guided by the international parameters of the WHO, acceptable to meet the basic needs of the individual (Cahill, 2005).



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In the case of Ecuador, this was defined in 200 liters/inhabitant/day by the Ministry of Water, through Ministerial Agreements No. 2017-1522 (amended by Agreement No. 2017-0010) and 2017-1523, respectively.

According to De-Albuquerque (2014), availability requires that water and sanitation facilities be consistent with people's needs, both now and in the future. The water supply must be sufficient and continuous for personal and domestic uses, including consumption, sanitation, food preparation, and personal and household hygiene. There must be an adequate number of sanitation facilities to ensure that all people's needs are met.

At the normative level, the Constitution of 2008, in its art. 264, grants water the competence of the provision of drinking service to municipal governments, under the principle of a unitary state with a decentralized administration. Despite this, it corresponds to the State (art. 314) the provision of the service, with the respective guarantee of certain principles that guide the provision of all public service, such as the obligation, generality, uniformity, efficiency, responsibility, universality, accessibility, regularity, continuity and quality. Regarding continuity, it should be noted that although the Constitution indeed recognizes the right to strike, there is an express prohibition of paralyzing public services, including potable water and sewerage (art. 326, # 15).

The availability cannot be possible except through the sustainability of the ecosystems, and especially of the sources and water recharge zones. For this reason, the Constitution indicates that the State will have this responsibility, and the priority use will be both to maintain ecosystems and for human consumption (art. 411).



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LORHUAA (2014) refers to the availability of changes in land use and the State's role in regulating all those activities that may affect the quantity and quality of water. In addition, the legislator considered the availability of art. 57 of the aforementioned legal body when defining the human right to water, based on the provision of clean, sufficient, healthy, acceptable, accessible, and affordable water, for personal and domestic use, in quantity, quality, continuity, and coverage.

The Bylaw of the LORHUAA (2015) regulates resource availability in water planning to satisfy the water demand and increase its availability, considering the protection of its quality, efficacy, and rationality in consumption. According to the Bylaw, to avoid the hoarding of water, the Water Authority may redistribute and reallocate water in each Hydrographic Demarcation. The availability in the area will be taken into account. The balance should tend to guarantee the human right to water and irrigation for food sovereignty.

Acceptability

Water facilities must be acceptable. They will not be used if they do not meet the social or cultural standards of the people for whom they are intended. The water must have an acceptable odor, taste, and color for all personal and



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household uses. Water facilities must be adequate for their intended use, especially when it comes to personal hygiene (De-Albuquerque, 2014).

At the international level (Mexico), it has been shown how inequality persists in large cities since the variables of acceptability and quality are considered in statistics with broad coverage. Many users do not meet the derived standards of quality and acceptability. They receive safe liquid but with a chemical quality unsuitable for human consumption (heavy metals or bioaccumulative chemical elements such as fluorine or arsenic). As well as other elements that have a direct influence, such as the salinization of soils and groundwater derived from agricultural activity (Jacobo-Marín, 2013).

From the definition of the human right to water, the Ecuadorian legislator considered in the LORHUAA that water must be acceptable (article 57) as a parameter to guarantee the right, while art. 71 considered the relationship between water and collective rights, with particular attention to the cosmovision and the traditional use of indigenous, Afro-Ecuadorian, and Montubio. These groups, as provided in art. 72, have the right to participate jointly with the State, and articulate policies and programs for the conservation, protection, and preservation of the water that flows through their lands and territories.

In this sense, a unique element refers to the guarantee of the traditional forms of management of the hydrological cycle. A situation that is framed in its conditions, uses, and customs for the distribution of authorized flows over water, is desirable, but which still awaits its implementation, since it is one of the intangible elements for the good governance of natural resources (art. 74).



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In addition to this, under the principle of environmental prevention (when there is scientific certainty about the environmental impact or damage), the State, through its different levels of government, and under joint responsibility with citizens, must reduce and reverse water pollution (art. 84).

Accessibility

This component comprises four dimensions: physical, economic (affordability, which is treated independently in the next section), non-discrimination, and access to information. These principles are not part of the legal content of the human right to water and sanitation, autonomously. Physical accessibility places its emphasis on security, access to water for people in conflict zones (military or occupation), and the possibility that facilities are provided and that the service is available to all (Cahill, 2005).

The infrastructure of the services must be located and built in such a way that it is genuinely accessible to people with priority attention: a) design of facilities; b) time and distance; c) physical security (De-Albuquerque, 2014).

As determined by the constitutional norm (art. 314), the State must guarantee compliance with the principle of accessibility in providing public services, including domestic and irrigation water and sanitation. Similarly, the



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State must guarantee the right to housing and dignified life, concerning service physical accessibility. The provision of drinking water services must be uninterrupted, and special attention is paid to schools and the sanitary system infrastructure (art. 375).

Affordability

It refers to the capacity of paying the cost of water and sanitation services and related hygiene. Price should not in any way limit people's ability to acquire other essential goods and services, such as food, housing, health, and education, guaranteed through other human rights (De Albuquerque, 2014).

The condition of dignity is coupled with the realization of other human rights. Water is decisive because it is associated with other rights such as life, health, a healthy environment, food, housing, property, and development (Ibáñez & Lazo, 2018).

The regulatory aspects (legal framework) also have a decisive influence on the expectations associated with what is considered acceptable in terms of access to water for all, primarily focused on the possibility of payment. An interconnection is sought between those who have the opportunity of assuming the costs and those who may have difficulties paying the connection



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to the service or the monthly bills derived from the use and their respective cost recovery (Harris *et al.*, 2015).

In most cases, the implementation of the law by the State is risky due to the weak institutional capacity of subnational governments, which generate conflicts between service providers and consumers under the premise of decentralization, by not having clear policies to reconcile the ability to pay with the sustainability of the system. National governments provide an initial subsidy for water (construction and expansion of infrastructure), but local governments must take responsibility for operations (Meier, 2014).

At the constitutional level, affordability is reflected in its art. 314, in which one of the conditions to guarantee public services, including drinking water and sanitation, refers to the rates that must be charged for them, which must be equitable. For this, control and regulation are established (through the Water Authority, as well as by the Water Regulation and Control Agency).

For its part, LORHUAA (2014), in addition to contemplating affordability in the definition of the human right to water (art. 57), established the general criteria for water rates (art. 135). This distinguished between rates by authorization of use and exploitation of water, which are defined by the Water Authority; and the rates for the provision of drinking water, sanitation, irrigation, and drainage services, determined respectively by public and community providers.

Finally, the Bylaw of the LORHUAA (2015) considers that to set rates and promote efficient use of water, disincentive mechanisms for excessive consumption, waste, and operating losses must be applied (art.



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116). Likewise, it defines the four principles that must be used to establish the rates (art. 117): solidarity, equity, sustainability, and periodicity.

Quality and safety

Water safety and cleanliness parameters must ensure equal access from a physical and economic perspective. It is not only required that there is enough water (availability) to guarantee accessibility, but it must also be safe. It must not be contaminated (free of microorganisms, chemical substances, or radiological risks) (Cahill, 2005).

In this sense, the priority of the provision of safe drinking water finds its justification from the perspective of public health, on the basis that it represents a need for all, especially for children. Therefore, poor quality of drinking water and sanitation results in diarrhea, cholera, dysentery, and other associated diseases that increase mortality and morbidity rates in developing countries (Hall, Von Koppen, & Van Houweling, 2014).

The quality and safety of services must be guaranteed to protect the health of users and the general public. The water must be safe for human consumption (for drinking and preparing food) and personal and domestic hygiene. Sanitation facilities must be secure to use and effectively prevent human, animal, and insect contact with human excreta.



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In the Ecuadorian case, the intention of the legislator with the creation of the Agency for the Regulation and Control of Water, ARCA (art. 21, LORHUAA), was to have a technical or administrative body in charge of regulating and controlling integral water resources management. Above all, it is in charge of controlling the quantity and quality of water, a situation that was delegated to local governments, with low levels of efficiency (Rojas-Ortuste, 2014).

However, the ARCA was not created as an independent entity; in fact, its management is directly linked to the Water Authority; all this added to the limited resources and installed capacity of the Agency to request information from service providers (municipal governments or their public companies), without a continuous process of contrasting the information sent by the providers (see: Public Water Registry). The political situation seems to be more important (concerning the relationship between the Water Authority and local governments), with no discernible effects of this water institution being able to be verified to date.

At the constitutional level, water quality, in connection with air and soil, is part of the development regime (art. 276), which seeks to ensure the realization of the Good Living or *Sumak kawsay*. This regime is described in the National Development Plan (a four-year instrument, of joint construction between the different levels of government and society). At the same time, the State is responsible for providing quality services (drinking water, irrigation, and sanitation, art. 314). The guarantee, conservation, recovery, and integral management of water resources, hydrographic basins, and ecological flows, are connected with recharge



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processes and, consequently, with the quality and quantity of the resource, supervised by the Water Authority.

The Organic Code of the Environment (CODA, 2017) refers to one of the most relevant aspects regarding the quality and contamination of water resources: urban and rural wastewater treatment, a responsibility of municipal governments, which not only must have the proper infrastructure, but the standard includes the concept of the circular economy because it encourages the treatment of wastewater for reuse purposes (art. 196).

From a particular point of view, the LORHUAA (2014) emphasizes the quality and quantity of water regarding the land-use change (art. 14) and includes it as a variable of the concept of the human right to water (art. 57).

Institutionality

The authors developed this variable (Aguilar *et al.*, 2020) to define the methodology to measure the human right to water, which is composed of sub-indicators of problem-solving and/or conflict, accountability and transparency, participation, non-discrimination, and management.

Regarding the first of the sub-indicators above, it should be specified that Ecuador recognizes in favor of its inhabitants the right to a culture of peace, within which there are alternative means of conflict resolution



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(arbitration, mediation, and other alternative procedures for the conflict resolution) (art. 3) (Constitution, 2008).

The LORHUAA (2014) designated a special section for the resolution of conflicts and controversies that may arise between authorization holders (users and consumers) (art. 133-134). In this way, conflict resolution can be made through arbitration and mediation or at the administrative headquarters (Water Authority). Therefore, any solution obtained through alternative methods for conflict resolution must be registered in the public water registry. The final heading of art. 134 suggests that both administrative and peaceful dispute resolution should be used, and if the conflict persists, it can be submitted to jurisdictional channels.

The LORHUAA determines that the Intercultural and Plurinational Water Council (art. 20) should contribute to resolving controversies and conflicts that may arise among its users, as this is one of its responsibilities.

The second element refers to the principle of *accountability*, a "(...) set of modalities, controls, counterweights, and supervision, of public and private agents that manage governmental resources, executed by social actors, State agents... to improve the performance and results and guarantee all citizens access to rights (...)" (Hernández-Quiñones & Florez-Herrera, 2014: 4).

The LORHUAA (2014) establishes responsibilities for both: The communitarian Drinking Water and Irrigation Committees (art. 41; art. 49); they must inform the Water Authority of their respective geographical boundaries, and an annual report on management (annual budget and its execution, built infrastructure, financing, rate system, and financial



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statements). Additionally, the Water Regulation and Control Agency may request information to verify the organization's compliance.

One of the biggest problems that arise around the effective fulfillment of the human right to water in favor of citizens occurs in the internal regulations of the Drinking Water and Irrigation Committees, which allow the imposition of fines, and even the suspension of the service, due to disciplinary, administrative or non-payment reasons. In this context, the work carried out by the Constitutional Court of Ecuador is interesting, because as the highest control body in terms of the interpretation and administration of justice in constitutional matters, can issue legally binding jurisprudence. The Court selected the case 41-19-JP, October 21, 2019, including process 1438-11-JP, from 2011 (Corte Constitucional del Ecuador, 2019) to analyze the suspension of the drinking water service to a citizen, for administrative reasons, a situation that can affect the content of the human right to water, being then an opportunity to develop its content. The judgment of the Court is pending.

As a plurinational and intercultural country, Ecuador recognizes and guarantees the collective rights of indigenous communities (art. 57), including their participation in the use, usufruct, administration, and conservation of renewable natural resources (water), in programs to ensure the preservation and sustainable use of biodiversity (art. 72, LORHUAA), as well as the right to be consulted before the adoption of a legislative measure that may affect their collective rights (for example, what happened with the LORHUAA and the Organic Environmental Code).

For its part, the LORHUUA dedicates a specific chapter (IV), in its Title III, to regulate the rights of users, consumers, and citizen participation (arts.



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68-70). At least three aspects are differentiated: first, the consultation (prior, free, informed, mandatory, and within a reasonable period) to users by the Water Authority, in case of decisions affect the integrated management of water resources; second, the strengthening of consumer and user organizations, through training; and, finally, the social oversight mechanism (under the regulation of the Organic Law on Citizen Participation and Social Control, art. 84) (Ley Orgánica de Participación Ciudadana y Control Social, 2010).

Another of the variables analyzed in this parameter is non-discrimination, which is recognized by the State, through its Constitution, as the right of inhabitants to enjoy formal and material equality, (art. 66, # 4), since no one could be discriminated against based on "(...) ethnicity, place of birth, age, sex, gender identity, cultural identity, marital status, language, religion, ideology, political affiliation, judicial past, social status -economic, migratory status, sexual orientation, health status, carrying HIV, disability, physical difference; nor by any other distinction, personal or collective, temporary or permanent, whose purpose or result is to impair or nullify the recognition, enjoyment or exercise of rights (...)" (art . 11). In addition, the State must create the conditions for the comprehensive protection of its enablers to ensure their rights under the premise of equality in diversity and non-discrimination (art. 341).

The human right to water and sanitation is based on the general principles of equality and non-discrimination. The first is understood as the obligation that States must guarantee that all people can enjoy their rights equally. While the second refers to the prohibition of any distinction,



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exclusion, or restriction that can limit the recognition, enjoyment, or exercise, under equal conditions, of all human rights and freedom.

The LORHUAA (art. 61 and 62) states that the human right to water must be applied under conditions of equality, without discrimination, granting a fundamental role to women in communitarian participation activities due to their important historical and cultural role.

The last element proposed for the institutional framework is technical management, under the concept of an administration based on compliance with quality parameters and not on political patronage.

In the provision of drinking water and sanitation (art. 314 and 315), the constitutional norm recognizes that principles related to public services, control, and regulation must be applied effectively (art. 318).

In this context, the LORHUAA created the Regulation and Control Agency (ARCA). According to its competencies, it must dictate, establish and control compliance with technical standards (art. 23). The law establishes its obligation to use technical and quality parameters to comply with the integrated management of water resources (art. 36). To this end, according to this law, the State, through the different levels of government, will seek to strengthen and support the improvement of service provision (art. 50) in the technical, administrative, environmental, and economic spheres. And, in the event of non-compliance with the technical parameters established by the ARCA (art. 51), the Communitarian Water Committees may be intervened.



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Conclusions

After developing the answers to the research questions posed in this work, it can be concluded that the circumstances that influenced the recognition of the access to water for personal and domestic use as a human right in Ecuador were:

- a) The historical evolution in the recognition of ESCR, among which the right to health and a healthy environment stands out, created favorable conditions for water and sanitation to be considered a human right.
- b) The counter-hegemonic tendencies articulated by various social movements and left-wing political parties, influenced the National Constituent Assembly's decisions both legally and politically.
- c) International instruments because although the United Nations recognized water and sanitation as human rights two years after Ecuador, through hard and soft law, the various international organizations and human rights high courts have generated variables and indicators to guarantee these rights.

On the other hand, regarding implementation at the national level, the research does not reveal a problem associated with a lack of regulation. On the contrary, the Ecuadorian legislator has emphasized the normative development of the rights to water and sanitation through a specialized and organic law (LORHUAA, 2014).



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In the same way, according to the coverage of the service, it is verified that there is an improvement in access to safe water (from 66% to 75%), due to the international commitment that the Ecuadorian State has had, first with the MDGs, and then with the SDGs, which has influenced the infrastructure level, as well as the strengthening of regulations and public policies. However, at the level of access, inequalities persist, especially in peri-urban and rural areas of Ecuador.

The problem is that although there are legal principles recognized the installed technical capacity is limited for accomplishing them. It is evident the lack of institutional entities associated with the management of water resources; it was clear in the case of the minimum vital amount of water.

The weak institutional framework has been exacerbated with the merger of the Environmental and the Water Authorities, which, although it is within the Executive's power, creates a new scenario for the future:

- a) A process of reforms and regulatory adjustments must be carried out, both at the Organic Environmental Code level and the LORHUUA, including their bylaws.
- b) The integrated management of water resources faces a setback due to the administrative (bureaucratic dependent on the provinces) division of the territories, leaving out the technical vision of water basins.
- c) The merger implies fewer resources, both human and material, a situation that will generate longer waiting times in the attention to citizens, in procedures of environmental quality, authorization, and control, among others.



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The interdisciplinary approach proposed by this research project seeks to build a methodology to measure the right to water, which is concentrated in four stages: definition of dimensions and sub-dimensions (results are measured: availability, accessibility, acceptability, and affordability), and (processes are measured: quality and institutionality); construction of indicators (six dimensions, 16 subdimensions, and approximately 26 indicators); survey, glossary and interviewer guide; and, sampling.

A comprehensive assessment of the human right to water content is not limited only to measuring coverage, as it is done to date. Therefore, from the qualitative point of view, this work generates a baseline on the evolution and regulatory status of the human right to water and sanitation, which comes to fill a doctrinal gap, and which can become an instrument and input for justice operators, public and community water managers, and lawyers.

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