Title
Water Resources Management and Legal Pluralism in Guatemala

Author & Affiliation
Ariella D’Andrea
Development Law Service
Food and Agriculture Organization of the United Nations

Abstract
The paper focuses on legal pluralism in Guatemala and the recognition of customary water-related rights and regulations in statutory water resources management legislation. In Guatemala, a water law is long due, not only since the 1985 Constitution defined water as a public good, but also because the country is naturally exposed to drought and tropical storms, which affect water availability and access. The existing legal framework for water resources management is obsolete, inconsistent and not enforced. To bridge the gap, many indigenous and non-indigenous communities, present throughout the country, successfully regulate water use through oral or written bylaws. After highlighting the main international obligations subscribed by the government on indigenous rights and natural resources management, the paper classifies the rules and practices adopted by local communities in order to define their scope. Hence, options are anticipated to recognize customary water rights under the current legal regime and in future statutory legislation, consistently with the public interest.

Keywords
Water legislation; customary rights; indigenous people

Introduction
According to official data, in Guatemala, half the rural population – most of which indigenous –, is not connected to a water supply system. Despite their clear mandate in relation to basic services, local governments do not manage to offer full coverage of the rural areas, and subsidized urban services often lack chlorination or sewerage connection. On the environmental side, pollution levels in rivers, lakes and aquifers, as well as deforestation rates, are alarming.

Despite the 1985 constitutional reform, whereby all waters are public, the lack of a water law to regulate the transition to a modern water-rights system thrust a veil of legal uncertainty over indigenous land tenure rights, considering their intimate connection to the use of water and other natural resources. In addition, existing sectoral legislation only complicates the matter by creating and regulating a myriad of institutions having competencies related to water resources management, without ensuring an effective coordination mechanism.

Against this background, the urgent need for water has lead to a proliferation of community-based water committees, often created or revived for the management and operation water supply or irrigation infrastructure. Since the 2002 decentralization reform, most of them are now operating under the Rural Development Councils System, which aims at incorporating rural communities in the national planning system. Their relations are generally ruled by customs and practices that cover a whole range of provisions.

Being of civil law tradition, the national legal system subordinates customary law to statutory or formal legislation. Domestic legislation ratifies international conventions on human rights and establishes the state obligation to guarantee indigenous rights on natural resources, including water, and to recognize their customary arrangements, within the boundaries of the legal system. Several authors and judges have been investigating the concept of legal pluralism and have tried to use it for the recognition of indigenous rights, as a means of ensuring their social, cultural and economic survival.

Would the recognition of community-based water committees and of their traditional water management system, under current legal arrangements, be sufficient to realize the rights of indigenous people on water or would it be necessary to introduce a form of legal pluralism in the statutory system? If so, would that be
possible? The following pages are an attempt to define the interface between formal and ancestral rights on water according to international human rights law, while identifying the scope of local customary water regulations. A review of the compliance status of Guatemala with international standards, then allows proposing possible solutions to be developed within the legal order.

METHODS

This investigation responds to a government request made to the Food and Agriculture Organization (FAO) of the United Nations (UN) during the implementation of a legal assistance project on water management in Central America. The information presented in the article is based on project experts’ reports, in particular on the detailed research carried out by Guatemalan lawyer, Gloria Aragón, as well as on the review of relevant literature and primary sources, such as treaties, legislation and court decisions. Also, field missions to rural communities were organized in different regions of the country, with interviews to relevant actors.

FINDINGS AND DISCUSSION

1. Highlights on customary water law and legal pluralism

Customs determine the spontaneous creation of a right whereas legislation represents its codified form, so that customs are historically the first source of law (Caponera, 1992). In contrast with formal or statutory law, customary law is typically oral and based on two main elements which must concur in order to create a customary right, that is the widespread and long-standing practice – objective requirement – and a sense of obligation to comply – subjective requirement.

The traditional organization of community authorities allows customary law to evolve smoothly as new regulations are adopted in agreement with all community members, based on ancestral principles. Because regulations are internalized and accepted, customary legal systems have a high rate of compliance compared to formal ones (Tiú López et al., 2002; IUCN, 2007; IUCN, 2009). Internalization comes from the very concept of customs, a reiterated practice that becomes a rule by constant application. Therefore, we might say that compliance by the community legitimates the authority of customary practices and transforms them into customary law. The question is, what is the role of customs in an existing legal system?

A legal system has been defined as a community organized for the achievement of a common goal and may be identified by three elements: people, norms and organization (Romano, 1917). The Latin saying *ubi societas, ibi ius* (where there is society, there is law) effectively summarizes the concept. The legitimacy of the legal system is given by the social pact that the community makes in order to obtain collective benefits, the final goal being the sound management of resources for the common good. The reasoning leads to regarding the terms institution and legal system as synonyms (Romano, 1917) because an institution will always need norms or rules to define its own functioning.

In contrast with Hans Kelsen’s Pure Legal Theory – called normativism because of the strictly hierarchical distribution of norms in the construction of the legal system – this branch of legal theory studies is named institutionalism because of the central role human societies play in the production of law. Whereas normativism praises a complete separation between legal science and other disciplines, institutionalism is concerned with closing the gap between law and reality by including social and other non-legal aspects in the analysis. This latter approach seems to fit perfectly with the concept of a legal pluralism as defined by anthropologist Leopold Pospisil, that is “a situation where one or more legal systems coexist in the same social field” (Ochoa García, 2002).

As a subset of customary law, indigenous law has been defined in Guatemalan literature as “the system of norms, procedures and authorities that regulate the social life of indigenous communities and people and allow them to resolve conflicts according to their values, worldview, needs and interests. These systems also include norms that establish how to legitimately change or create norms, authorities and procedure.” (Yrigoyen, 1999) Indigenous law may then be defined as a legal system created by constant practices of indigenous communities over time. What kind of legitimacy does this customary legal system have within the formal one?

For the purpose of this paper, the focus will be on customary water management law, which is defined as a “group of non-formal norms and behaviours [regulating water use] that are accepted by the community, and that have endured over time in the society” (IUCN, 2009). The objective of water management policies – in the formal system – is to optimize advantages deriving from rational management of the available resources
This is achieved through appropriate legislation regulating the different uses of water in an integrated fashion, without forgetting environmental, social and cultural aspects. Indeed, peaceful cooperation and resource sharing are regarded as the main achievements of a good water law (FAO, 2009). In order to prevent conflicts, a law should effectively define water rights and provide for their protection.

In this regard, it is important to distinguish between the right to own water and the right to use of it (Caponera, 1992). Modern water rights worldwide are increasingly based on the principle of public trust or public ownership of the resource, which – in civil law countries – means that property on waters rests “under the scope of the government’s allocative authority” (FAO, 2002). Water laws must then provide for a permit and concession system to authorize the use of public waters and provide for the regularization of existing uses. However, new water legislation often meets resistance among indigenous communities, precisely because the state is appropriating all waters without considering that “[c]ustomary water rights are frequently rooted in customary land law” (Burchi, 2005), thus violating the unity of their traditional territories.

Customary and formal water rights interact in four main moments in time (Burchi, 2005). First, during the planning and drafting process of new water legislation, water-right holders may be consulted or may participate in the process. Second, after the adoption of the law and during its transitional phase, the rights of existing users may be recognized in two main forms: en bloc recognition, which legitimates all existing uses at once, with or without conditions; and conversion of titles, which requires existing users to apply for a permit within a limited time to obtain recognition. Apart from possibly overwhelming the water administration with applications, the latter form also ‘freezes’ customary rights by codifying and integrating them in the formal legal system, thereby changing their oral and flexible nature. En bloc recognition, on the other hand, requires the delimitation of customary water rights and generally provides for some autonomy in the management of those rights (Craig, 2009).

The third moment of intersection occurs after the transitional phase of the law, before granting new titles. The law may allow existing water users to claim their rights by providing for a public consultation process and by establish criteria for the granting of new titles requiring the water authority to consider those users. Finally, the fourth moment of interaction is after the granting of a title and during the exercise of the new formal water right, when a conflict arises. The law should provide for effective mechanisms to deal with water disputes, giving special attention to more vulnerable groups.

It must be said that the lack of regularization or recognition of customary water rights produces a situation of legal insecurity, whereby ancestral users may lose their access rights. International human rights jurisprudence has consistently recognized land rights to indigenous people based on customary law. Knowing that ancestral land and natural resources are intertwined, modern water legislation should provide legal space for their full recognition, in the best interest of the nation.

2. Main international human rights obligations

Before analysing the Guatemalan context and its compliance with human rights standards, it is useful to briefly review the relevant international treaties Guatemala has ratified on the right to water and on the right of indigenous people to their natural resources. The 1948 Universal Declaration of Human Rights (UDHR) does not expressly recognize any of these rights. It does, however, state over the right to life (article 3) and claim observance of its provisions “both among the peoples of Member States themselves and among the peoples of territories under their jurisdiction.”

Also, it recognizes the right to own property “alone or in association with others”, which, according to the 1988 UN General Assembly Resolution on Respect for the right of everyone to own property alone as well as in association with others (A/RES/43/123), possibly includes collective or communal property. As we will see further, collective property is an option for delimiting customary water rights and recognize them, within the existing legal system. Although non binding, the Declaration prompted the adoption of further instruments that allowed for the recognition of both the right to water and the right of indigenous people to their identity and livelihoods.

(a) Right to water

The human right to safe and clean drinking water and sanitation ‘is essential for the full enjoyment of life and all human rights’, as recognized in the 2010 UN General Assembly Resolution (A/RES/64/292). The resolution renders human rights’ compliance mechanisms applicable for its realization, although the right is not specifically established in an international treaty. General Comment No. 15 (GC15) of the Committee on Economic, Social and Cultural Rights gives the official interpretation of the International Covenant of the same name (ICESCR, 1966) from which the right to water was drawn. Water must be “sufficient, safe,
The right to water interpretation is based on the rights to food and health (articles 11 and 12, ICESCR), as well as on the right to life and on the right to equality and non-discrimination (articles 3 and 4, UDHR). It does, however, pay due attention to vulnerable social groups and environmental aspects, by adopting a comprehensive view of the role of water for peace and development. In fact, despite the restriction to personal and domestic uses, GC15 argues that states “should ensure adequate access to water for subsistence farming and for securing the livelihoods of indigenous peoples”. The argument is based on the principle that a people may not be deprived of its means of subsistence, as part of the right to self-determination (article 1(2), ICESCR).

Concerning obligations to ensure the exercise of the right to water, states and local governments must guarantee universal coverage of its population with a continuous water supply service. They also must provide safe and acceptable water, as well as control water pollution for the public benefit. Moreover, the right to water must be guaranteed without discriminations and taking into account the special needs of disfavoured groups such as indigenous people and marginalized men and women farmers. In this regard, the Convention on the Elimination of All Forms of Discrimination against Women (1979), which recognizes the essential role of rural women for the survival of their families and grants them the right “[t]o enjoy adequate living conditions, particularly in relation to […] sanitation […] and water supply.” In particular, states should guarantee physical and economical access to water resources pertaining to ancestral lands of indigenous communities.

All these rights have different levels of exercise or implementation, in line with the principle of progressive realization of the human rights. These levels are marked by the three main state obligations that concern all human rights, i.e. respect (avoid interference), protect (against third parties) and fulfill. This latter obligation unfolds into three subgroups, i.e. facilitate (adopt measures), promote (inform) and guarantee (realize) that should complete the human rights implementation process at the national level. In particular the obligation to facilitate the exercise of the right to water may be violated by the lack of adoption of political, legal or planning measures. The referred measure should prioritize domestic, as well as irrigation use when it is necessary to avoid starvation and diseases, over productive uses.

To this date, only one case on the right to water appears to have been reviewed by the Inter-American Court of Human Rights. It involved the right to safe water of Mapuche communities in Argentina (Comunidades Mapuche Paynemil y Kaxipayiñ, Case No. 12.010). In that case, however, the state had not complied with a national court decision that had ordered to provide clean water to the affected communities. An agreement was reached where the state accorded to build a treatment and potabilization plant, that shall be monitored by members of the affected communities. International human rights jurisprudence on indigenous land tenure and on the rights to their natural resources will be discussed under the next heading.

(b) Right of indigenous people on natural resources

A set of international instruments details specific rights for the indigenous people. The first treaties to establish the right of self-determination of all peoples are the International Covenants on Human Rights (UN, 1966). In order to exercise this right, they “may, for their own ends, freely dispose of their natural wealth and resources”. The provision then goes on specifying that “[i]n case may a people be deprived of its own means of subsistence.” The International Labour Organization (ILO) Convention concerning Indigenous and Tribal Peoples in Independent Countries (C169, 1989) develops these rights further, delineating a set of rights that specifically concern their relationship with land and natural resources. The Convention recognizes the discrimination these people suffer the world over, the erosion of “their laws values, customs and perspectives” and their “distinctive contributions […] to the cultural diversity and social and ecological harmony of humankind”. The three texts have been ratified by Guatemala, respectively in 2000, 1988 and 1996, and are given priority over domestic law under article 46 of the Constitution.

The most relevant provision of the C169 concerning natural resources, including water, is article 15 that defines the right of the indigenous people to the natural resources pertaining to their lands, which includes participating in their use, management and conservation. The Convention also stipulates that the government, in cooperation with the indigenous people, shall take measures to preserve the environment of the territories they inhabit (article 7). Concerning water, this right only features access to the resource and does not include property on it, as it explicitly features the possibility for the state to retain ownership over the resources pertaining to their lands. In that case, before authorizing any exploration or exploitation activity, the people who may be affected must be consulted so as to benefit from such activities or receive
compensation for damages. According to international human rights case law, consultation is defined as “a process of dialogue conducted in good faith between the State and the indigenous peoples” (Anaya, 2010), which should aim at obtaining the free, prior and informed consent of those people, as established in the 2007 UN Declaration on the Rights of Indigenous Peoples (DRIP, article 19).

Another important element is that the relationship of indigenous people to their ancestral land, the tenure of which is guaranteed under article 14 of the C169, that recognizes the “rights of ownership and possession of the indigenous people over the lands which they traditionally occupy”. On the other hand, article 17 states that the procedures established by the indigenous people for the transmission of land rights among members of these people shall be respected. It is specified that the term land includes the concept of territories, which cover the total environment of the areas, somehow recognizing the close links between all natural elements in the indigenous world view. As seen above, this does not mean that water ownership is guaranteed to indigenous people under international law once the domestic land title is obtained. However, it does include access to water – both under the general right to water and under the indigenous right to land —, hence the regularization of land rights may help in the delimitation of water rights of indigenous communities.

With regard to customary rights, article 8 of C169 establishes the right to retain their own customs and institutions, where these are not incompatible with the national legal system and international human rights. Also, the following article requires that the customary methods for dealing with offences committed by their members be respected. Considering that a legal system exists where a community has its own authorities and regulations, we may say that international law legitimates indigenous customary legal systems, operating within the limits established by formal legislation. In this regard, the DRIP recognizes the right of indigenous people to maintain and promote their “juridical systems or customs”, “in the cases where they exist” (article 34). This last clause keeps the door open for states to put the burden of proof of customary law on the indigenous people, in case of conflict with the formal system.

Willing to fully recognize the livelihoods of indigenous people, the latter Declaration also provides that a participative process must give “due recognition to indigenous peoples’ laws, traditions, customs and land tenure systems, to recognize and adjudicate the rights of indigenous peoples pertaining to their lands, territories and resources, including those which were traditionally owned or otherwise occupied or used” (article 27). The Declaration also reaffirms the collective rights that are indispensable for their existence, well-being and integral development as peoples (considerando 22, articles 1, 7 (2) and 40), which, given the importance of water for life, may suggest the recognition of collective water rights attached to the titling of collective land tenure, in order to comply with the general right to water. This is particularly relevant for Guatemala where the geography of indigenous peoples’ territories indicates that their lands often comprise a water source, being generally located on the Western mountains, in the Altiplano region, due to historical reasons (Ziegler, 2006).

It is indeed arguable that international human rights law is promoting a form of legal pluralism within domestic legal orders, moving a step forward from the evolutionist approach of the previous Convention, C107, that assumed an ongoing “process of social, economic and cultural integration into the national community” [emphasis added] (C107, 1957). In fact, the Inter-American Court of Human Rights (ICHR) has recognized the right to legal personality of indigenous peoples as such, thus legitimating the existence and legal force of another juridical system – of customary origin – within the formal one. In the Case of the Saramaka People v. Suriname, the Court argued a right of the Saramaka people – a tribal group inhabiting the rural area of Northern Suriname – to collective entitlements on their traditional territories, including the “the lands and natural resources necessary for their social, cultural and economic survival”, as well as the right to “manage, distribute, and effectively control such territory, in accordance with their customary laws and traditional collective land tenure system.” (ICHR, 2007) The decision was based on the right to legal personality of individuals established in article 3 of the 1969 Pact of San José (American Convention on Human Rights), also ratified by Guatemala.

As a result, the Court ordered the state to adopt domestic measures to “delimitate, demarcate and grant collective title over the territory of the members of the Saramaka people, in accordance with their customary laws, and through previous, effective and fully informed consultations”, as well as to “recognize the collective juridical capacity”, in order to guarantee the actual exercise of their collective rights on land and natural resources. The Court also required the government of Suriname to guarantee access to formal justice as a community, “in accordance with their communal system, customary laws, and traditions” and to effectively consult or otherwise seek the favourable opinion of indigenous communities concerning development projects affecting their territories. Under the reparations, the state is required to create a community development fund for water supply, housing, education and other development projects (ICHR, 2007).
In order to understand how these provisions apply to indigenous people in Guatemala, the following pages briefly introduce the national context and offer a review of existing provisions that tend to the recognition of the rights of these people on their natural resources.

3. The Guatemalan context

“The recognition of the identity and rights of indigenous people is essential for the construction of a nation of national unity, multiethnic, pluricultural and multilingual. The respect and exercise of the political, cultural, economic and spiritual rights of all Guatemalans, is the base of a new coexistence that reflects the diversity of its nation.” (Peace Agreement, 1996) The Guatemalan population comprises four groups: the Mayas, the Garífuna, the Xinca and the non-indigenous (includes ladinos and mestizos), but only the Mayas are recognized in the Constitution (article 66), as the other two minorities only appear in ordinary legislation (see Trilogy of Laws below). Over 40 percent of the population identifies itself as indigenous according to the 2002 census, most of which are of Mayan descent (INE, 2003), although some sources report 60 percent (Stavenhagen, 2003).

If one looks into the diversity of the indigenous people – with more than 20 Mayan groups and two other minorities, the Garífuna Afro-Descendants from the Caribbean and the Xinca group of Nahua-Mexican origins –, it is obvious that Guatemala has been a pluricultural, multiethnic and multilingual country long before the Conquista, which implanted a monist model of state-nation based on Roman civil law (Yrigoyen Fajardo, 1999). The state has been then seeking to legally and institutionally maintain a homogenous social group through an integrationist strategy, that is one people, one culture, one language and thus one legal system, including public administration and justice, ignoring the characteristics of the native people and their ancestral law. The situation has barely changed since (Ziegler, 2006) and discrimination against indigenous groups still “permeates the Guatemalan society and characterizes the political and economic regime”, at the legal, institutional and structural levels (Stavenhagen, 2003) [unofficial translation].

Like in other parts of the colonial world, uniform application of European legislation was never fully achieved and indigenous people were systematically unaccounted for (COSPE, 2005; Hodgson, 2004). Often, instead of regularizing titles, land tenure reforms and declaration of state property only resulted in the formalization of land usurpation (Martínez Peláez, 1994). From 1944, with the Guatemalan Revolution that dismissed the last dictator Jorge Ubico, the country started to open up to the international human rights movement and, in the early ’50s, started implementing the long-awaited Agrarian Reform, which lead to a crisis and culminated with the 1954 coup that forced leftist president Jacobo Arbenz to resign in favour of Carlos Castillo, more reverent with certain large land owners (Pérez Brignoli, 2000). As a consequence, the land redistribution and land recognition process was interrupted, thus maintaining in a status of legal uncertainty not only the land tenure of the indigenous people but also the rights over the natural resources pertaining to those lands.

It is not until the 1985 Constitution that the rights of indigenous people on their land are formally recognized, along with their lifestyle, customs, traditions, and social organization, and collective tenure receives special protection (articles 66 and 67). In this regard, the 1993 reform to the Law of the Judicial Organ (Decree 2-89) establishes that statutory legislation is the source of law in the Guatemalan legal system and may be complemented by jurisprudence. Obsolescence and contrary customs or uses are not admitted. Customs are only recognized by statutory delegation or in the absence of applicable legislation. They must be proven and may not go against moral or public order.

On the other hand, water and natural resources of the indigenous people are not expressly mentioned in the Constitution. The ownership of all waters is vested in the state, therefore introducing an important principle of modern water management that overrules the previous water regime under which waters could be private as well as public. The task of regulating water use – and recognizing existing ones – is then delegated to a specific law (articles 121 and 127). To date, none of these provisions have been implemented. Several water bills have been presented since, but none has been approved because of great opposition among civil society and the private sector, as well as the lack of institutional leadership at the government level.

Water management in Guatemala is shared among more than 20 authorities, 5 of which may be considered the leading sectoral ministries – Environment, Agriculture, Health, Infrastructure and External Affairs for shared waters. In addition, sectoral legislation affecting water resources – over 50 texts – does not effectively recognize indigenous rights (Aragón, 2010). These laws were tailored on the water use they regulate, thus reflecting the viewpoint of the ministry responsible for its implementation. The institutional fragmentation found at the central level, is multiplied at the local level, by 333 municipalities that are responsible for water supply and sanitation services within their territory, as well as for environmental and forestry services. As explained under the next heading, municipal authorities typically provide a subsidized service in urban areas, but do not reach the rural area. Government efforts to ensure institutional
coordination through a Water Cabinet have lead to a few joint initiatives, but have not changed the general situation.

The obligations of the state towards indigenous people are eventually defined under the Peace Agreements of 1996 that were signed after the 36-year conflict, during which those communities suffered atrocities defined as genocide by Historical Clarification Commission (CEH, 1999) (section 1257). In particular, the Agreements on Identity and Rights of Indigenous People (AIRP) and on Socioeconomic Aspects and Agrarian Situation (ASAS) provide on the rights of those people, in line with the Constitution and the C169 and spells out three basic rights, among others: the right to apply customary law for internal conflict resolution; the right to secure their land tenure; and the rights on their natural resources. The AIRP formally recognizes the role of community authorities, “in accordance with their customary norms” but “within the municipal autonomy” (section IV). The Peace Agreements do not expressly declare the right to water, but the ASAS includes provisions on the development of water and sanitation infrastructure in the rural area.

To comply with the Peace Agreements, a decentralization reform was adopted through the so-called Trilogy of Laws – Decentralization Law, Municipal Code and Law on the Urban and Rural Development Councils. The laws recognize the three indigenous groups of Guatemala: Maya, Garífuna and Xinca and creates an institutional opening to indigenous communities. According to the Municipal Code, they now may acquire legal personality through inscription at the local municipal register (article 20) and hence interact and coordinate with the local government through the Community and Municipal Rural Development Councils, which are part of the participatory planning mechanism the Urban and Rural Development Councils System. The Municipal Code also recognizes that the internal organization of such communities is regulated by their own norms, values and procedures and carried out by traditional authorities recognized by the state. It then legitimates the way relationships between indigenous communities are regulated, i.e. “according to traditional norms and criteria or to the dynamics they generate” [unofficial translation].

Since their ratification by the Guatemalan Congress in 2005 (Decree 52-2005), the Peace Agreements have acquired legal force as pending state obligations. Given the focus of this article, we shall only review the status of compliance of obligations concerning natural resources, as well as the right to water, with particular attention to customary water rights and bearing in mind that no specific regulations have yet been adopted to fully implement any of the referred rights (Anaya, 2010). However, in order to understand the strong drive for a pluralistic legal system, it is worth reminding that a Referendum was proposed in 1999 to reform the Constitution with provisions recognizing indigenous customary rights and legal system, including internal conflict resolution, within the boundaries set by the national legal system, but the proposal was not approved (Ochoa García, 2002).

4. Compliance status in domestic legislation

(a) Right to water

In Guatemala, official data indicate that, in 2002, over 60 percent of the population was connected to a domestic water system, the rest having access to either a shared system or a natural water sources, but if we look at the rural area, coverage lowers to about half of the population. Concerning sanitation, only 40 percent of the population was connected to a sewerage system, with areas reaching to 2 percent (LENTINI, 2010). According to other sources, 64 percent of the indigenous population does not have access to a water supply system and 80 percent is not connected to a sewerage system (Stavenhagen, 2003). On the other hand, only 4 percent of the municipal systems are reported to offer purified or treated water for human consumption (Ziegler, 2006). Despite this situation, domestic law does not fully recognize the right to water.

The Constitution, as we know, declares that all waters are public goods, but does not establish the priority of water use for domestic purposes over other uses. The Law of Agrarian Transformation (Decree 1551-1962) provides on the matter, although the status of application of its provisions is unknown. Out of six water uses considered, the law places human consumption at number five in the priority order, after flood control, agrarian development zone, irrigation and energy production, and only preceding navigation and other uses (article 258). On the other hand, it allows modification of water rights on public waters, in case such waters are needed for domestic use or public services (article 256), and the allocation of public waters and excess private waters to irrigation, domestic use and forestry, among others (article 249). A later decree on agricultural servitudes (Decree 49-72) declares of public utility the establishment of servitudes for water systems for collective benefit, even beyond domestic use. Reportedly, municipalities in the interior have been able to build drinking-water supply systems based on this text (Aragón, 2010).

Concerning water availability, the Health Code (Decree 90-97) recognizes the rights to health and food, promotes universal coverage and obliges the municipalities to provide communities within their jurisdiction
with drinking water, in accordance with the Municipal Code (Decree 12-2002, as amended in 2010). Knowing however the reality of the rural areas, it also promotes community-based management of drinking-water systems to guarantee sustainable water management (articles 78 and 79). Communities may also benefit from the declaration of public utility of water sources that the Ministry of Health can adopt in order to satisfy the water demand of urban and rural populations. The Health Code is implemented by a number of regulations on water quality, the main competence of the concerned ministry in this field. A ministerial decree (Acuerdo 293-82) was issued in 1982 to regulate the rural water-supply systems by transferring their administration, operation and maintenance to community-based water committees but it has not been possible to determine whether it is in force or has ever been applied (Tiu López et al., 2002).

The creation of the first rural water committees in Guatemala started in the ’70s. It is estimated that there are currently over 10 000 community-managed water systems in the rural area, that are built, operated and maintained by local Water Committees at the community level, mainly for human consumption. Some of them are linked to the municipality through the Rural Development Councils System and some are not, but most of them are managed according to customary rules or agreed internal regulations. Occasionally, irrigation water users have adopted similar solutions, but the use of water for irrigation is not as common among indigenous people, given the priority of securing access to a clean water source for domestic purposes. Under different names, community-based water committees are a common feature in Central America where the lack of public services in remote rural areas has obliged communities to act for themselves, often with the help of local governments and non-governmental organizations, in order to provide drinking water to their families (FANCA, 2006).

Under the Municipal Code, the population may require the municipality to provide public services, including water supply. The municipal authority may decide to offer the service directly or to grant a concession (article 73). It is worth noting that municipal governments subsidize water supply in urban areas, but generally do not reach rural communities, who therefore manage their own water systems (Colom, 2005). This de facto situation creates inequalities as to the water charges applied in each community, thus violating the right to water of indigenous people, as expressly defined by the Committee on Economic, Social and Cultural Rights.

(b) Rights on natural resources, including water

Concerning the state of water resources at the national level, official estimates of 2006 indicate that only 5 percent of collected wastewaters actually receive treatment before being discharged into water bodies (LENTINI, 2010). Deforestation rates are higher in Guatemala than Brazil or Mexico, which threatens water sources, in quality and quantity (IARNA, 2006). On the other hand, despite sporadic efforts to improve the situation, the institutional weakness of the main authorities involved in the protection of water resources – Ministry of Environment and National Institute of Seismology, Vulcanology, Meteorology and Hydrology – does not allow to develop the proper scientific basis for sound water management at the national level (Aragón, 2010).

On the social side, UN Special Rapporteurs on Indigenous Rights have reviewed in the past few years the situation of natural resources rights. Only seven years ago, numerous conflicts were reported between national and traditional authorities on local conflict resolution and on the control of and access to communal goods, typically waters and forests, and (Stavenhagen, 2003). To date, the rights to access and consultation are not respected and a high degree of social insecurity is reported as a consequence. Particular attention is given to the lack of public consultations before the implementation of mining and other extractive activities, alleged to contaminate rivers and dry up wells (Anaya, 2010).

Under the Peace Agreements, the rights of indigenous people on natural resources pertaining to their land, including water, comprise four rights: (i) the right to access, including the enjoyment of collective and individual property rights, as well as servitude rights to reach water springs or other resources they have traditionally used for subsistence or spiritual uses; (ii) the right to participate in their use, management and conservation; (iii) the right to consultation prior to authorizing development projects and equitable compensation in case of damage; and (iv) the right to environmental protection.

These rights should cover the traditional relationship that those people maintain with their environment, that is their own worldview, recognizing the contribution of indigenous people to environmental preservation (IUCN, 2007). Although it is clear that no specific legislation has been adopted since then to secure indigenous rights on natural resources, it is worth mentioning a few dispersed provisions that do affect their exercise.
(i) With regard to access rights, as we know, the Constitution nationalizes water resources by declaring public domain over all waters and establishes that water use shall be authorized according to the social interest. It then creates the duty upon water users to facilitate access routes, which refers to the exercise of legitimate servitudes, including rights of way. Due to the lack of a water law defining a modern water-rights system, access to water is still regulated by the Civil Code of Roman legal tradition.

Under the 1963 Civil Code, water may be public or private, and water rights are ancillary to the property rights of the landowner. Private waters may include water springs, rainwater, small lakes and groundwater extracted by artificial means, when these resources pertain to private land. Public waters are defined in the 1933 Civil Code and include navigable rivers, those that delimit the country borders and waters that pertain to public land. They may belong to the nation or to municipal governments. The Code does not itself regulate the use of public waters, but guarantees general access to the population by providing that “all inhabitants” have a common use right on public domain goods, including public waters.

The separation of water rights from land tenure operated by the Constitution does not, however, take into account the traditional use of water by indigenous communities and its close relationship to land. The lack of a permit system, and of the authority to operate it, generates legal insecurity on existing water rights, in particular those that were acquired after the entry into force of the Constitution. In fact, since 1986, all purchase of land comprising a water source or the drilling of new wells in private estates may be declared unconstitutional. Nonetheless, the “purchase of water sources”, meaning of the land to which a given source pertains, is a current practice among rural communities who wish to put a water supply system in place (IUCN, 2007). In order to obtain credit for infrastructure, this seems to be the sole means of obtaining a secure title to access the water source and minimize investment risks. As a consequence indigenous communal rights on water resources are either untitled (Colom, 2005) or protected by private property on land and other land tenure rights, under the Civil Code regime (RIC, 2007).

Appropriate provisions in a future water law should recognize existing de facto and titled uses, so as to avoid conflict as much as possible, especially between industrial and subsistence users. It must be said that the historical reasons of the precarious and unequal land tenure situation of indigenous communities (Ziegler, 2006) contributes to the difficulty of carrying out negotiations to accurately identify the limits of traditional land and natural resources. The last Water Bill (No. 3702) proposed in 2007 was strongly opposed by the population, and in particular by some indigenous groups, among which the community association of the so-called 48 Cantons of the Department of Totonicapán. A communication titled “Memorial delivered by the mayors of the 48 of Totonicapán”, dated 26 November 2008, was addressed to the Congress in order to “categorically reject” any present or future water bill and, conscious of the effectiveness of ancestral norms on water and natural resources management, to require that their “ancestral customs” be respected. Delimitation of ancestral water access rights is indeed essential in order to draft appropriate provisions that recognize them and guarantee their exercise.

(ii) The right to participation in use, management and conservation may be exercised through a number of provisions, not specifically designed for indigenous people. With a general provision, the Law of the Executive Organ (Decree 114-97, as amended in 2000) – that distributes competencies amongst ministries and other government entities –, establishes that the Ministry of Environment shall promote and facilitate the equitable participation of men and women from indigenous and local communities in the sustainable use and management of natural resources, including water.

In this regard, the government recently approved a national Plan for the water and environmental sector (Plan Sectorial Multianual de Ambiente y Agua, 2010), and is now trying to involve municipalities and civil society in the planning process. As a sign of good will, the Ministry of Environment has published a guide for the implementation of Environmental Management Units at the municipal level, which takes into account the participation of “traditional organizations” and indigenous communities (UGAM – Cambio climático: Guía para la creación y/o el fortalecimiento de la Unidad de Gestion Ambiental Municipal para adaptación al cambio climatico, 2010).

Among environmental legislation, the Law on Protected Areas (Decree 4-89) creates a programme, the Subsystem for the Conservation of Rain Forests, under which private owners may administer protected areas. As it requires a property title, this specific programme would not apply for those communities that occupy the land without a title or with a title issued under previous laws and were not converted or recognized under the present land tenure system. An interesting initiative, from this viewpoint, is the reforestation programme of the National Forests Institute aimed at small land possessors that do not have a property or other land tenure title (PINPEP – Programa de incentivos para pequeños poseedores de tierras de vocación forestal o agroforestal). Also to mention, the Forestry Law (Decree 101-96) that provides for
forestry concessions for the management of state owned forests and promotes the participation of rural communities in forestry management.

Public participation in national and local planning is possible in theory through the Development Councils System, similarly to what is done in the water and sanitation sector, by linking community-level committees to municipal environmental services, where they exist. Then again, the general planning provisions of the Municipal Code only establish a Municipal Planning Office and do not mention the participation of indigenous communities to local planning processes (articles 96 and 96). Possibly, the recent initiatives of the Ministry of Environment shall gradually lead to full participation of indigenous people in environmental matters.

(iii) As seen above, the right of indigenous people to consultation – a highly conflictive issue – applies when a construction or natural resources development project is to be authorized in their territories. It includes the right to equitable compensation in case of violation of their rights by third parties. In this regard, the unresolved case of the communities affected by the construction of the Chixoy hydroelectric plant initiated in 1975 is emblematic. On that date, the civil war was ongoing and no prior consultations were carried out: 444 people were killed, 3,500 people were displaced and 6,000 families lost their land and means of subsistence (Arrojo, 2009). Negotiations, carried out with the mediation of the Organization of American States, have culminated in the Political Agreement between the Government of Guatemala and the Representatives of the Affected Communities in the 2009. Its implementation however might be a challenge.

The Peace Agreements require the “favourable opinion” of indigenous communities before initiating a natural resources development project in their territories, thus formally complying with international human rights standards. Among sectoral legislation, the General Electricity Law (Decree 93-96) and the Mining Law (Decree 48-97) only mention general obligations to use water rationally and respect the environment and the people, but they do not establish any specific duty to consult affected communities before initiating the project. The latter law, in particular, has been criticised for the preferential treatment it grants to mining companies, by providing for tax exemptions and the use of water free of charge (De Schutter, 2009). On the other hand, the 2007 Regulations on environmental impact assessment (Reglamento de evaluación, control y seguimiento ambiental) put on the applicant the burden to consult the population during the elaboration of the project documentation, but do not make any specific provision on how to consult affected parties nor on the consultation of indigenous communities (article 50).

In February this year, the Ministry of Labour issued Draft Regulations for the Consultation Process of Convention 169 but the population rejected it because they had not been involved in the drafting process and the text did not reflect their own consultation procedures. Also, the UN Special Rapporteur on Indigenous Rights said it does not respond to international standards (Anaya, 2011). In any case, the lack of regulations establishing a formal consultation process does not exempt from the obligation to consult (Anaya, 2010). In fact, as argued by the UN Rapporteur, the good-faith consultations organized by indigenous communities according to their ancestral rules, under the Municipal Code, “are considered valid and relevant [under international law] inasmuch as they reflect the legitimate aspirations of the indigenous communities”, despite the opinion expressed by the Constitutional Court that they such consultations are not binding since municipalities are not competent to deal with mining issues.

(iv) Finally, with regard to the right to environmental protection, the Constitution makes a general statement, providing that the state, the municipalities and all citizens must cooperate to prevent pollution, maintain the ecological balance and protect natural resources in general. It then creates upon water users the duty to reforest the riverside and protect the riverbed. According to the Municipal Code, municipalities have the mandate to promote and manage parks, gardens and recreational areas, and to develop tree nurseries for reforestation and preservation of watersheds, rivers and lakes.

The Law on the Protection and Improvement of Environment (Decree 68-86) makes provisions on pollution control, environmental impact assessment and the defence of diffuse interests to no contamination through a form of collective action, but it does not mention water use and indigenous communities participation in natural resources management. Two sets of regulations implement the Guatemalan environmental law, the referred Regulations on environmental impact assessment and the Regulation on wastewater discharge and reuse (Reglamento para las descargas y reuso de aguas residuales, 2006) and. Although these texts are potentially useful for pollution control, they have not yet shown their potential considering the high level of impunity, not only for environmental crimes, registered in the country (UNHCHR, 2010).

5. Classification of customary water rights and duties

Four basic principles have been identified as the main foundations of the Mayan lifestyle and its customary legal system: respect, trust, credibility and dignity. Concerning conflict resolution, three principles apply:
“flexibility” or mediation to reach an agreement, “dynamic” or participation of all affected parties, and “circulation” or compliance in order to avoid conflict. These general principles, in particular the principle of respect, are applied in all activities related with the use of water and natural resources, and the results of this management system account for 50 percent of the forest coverage of the country. They also apply in the management of community water funds and in the payment of respective dues. For instance, as the main task of the water-committee treasurer is to be trusted, honesty is the selection criterion for his appointment. (IUCN, 2007)

Being of oral tradition, customary law is not easy to freeze or codify and, as generally recognized, may vary greatly even between villages in the same region (FAO, 2009). Research on legal pluralism has shown the complexity of customary legal systems that are often result from a mix of the formal legal system and the specific historical relations (Durand Alcántara et al., 2000). With an estimated population of over 14 million people (INE, 2011), the question is even more complex in Guatemala because of the diversity of traditional regimes that are found amongst the 23 recognized indigenous groups (IUCN, 2007). The revision of primary and secondary sources, however, allows to identify some common types of norms that regulate: (i) access to water and other natural resources; (ii) water use and protection; and (iii) indigenous authorities and their functioning. (Sources of customary regulations: CALAS, 2002 etc.; FANCA, 2006; EcoLogic, 2010; IUCN, 2007; Gamboa et al., 2008; Tíu López et al., 2002).

(i) With regard to access regulations, water is considered a communal good, meaning it is of collective use, just like the land to which it pertains. As mentioned earlier, the right of access to water derives from the traditional possession and use of the land where that water flows, which means that indigenous water use rights, as well as those on other natural resources, are deeply rooted in the land tenure system and interconnected, according to the Mayan world view. No one owns the water and the sale of water sources, i.e. of the land to which they pertain, is forbidden (CALAS, 2002). The elders say “water is the blood of the earth” (EcoLogic, 2010). They also say “the health of mother earth is known by the greenery of its apparel” (FANCA, 2006). The water cycle is understood and respected, even worshipped at the end of the dry season through rain ceremonies that may greatly differ according to the region and the Maya group, e.g. Ritual Maya Chortí, Rogatoria Mam en la Laguna de Chicabal, Rogatoria Quiché al dios Chac (López García, 2010; ASAECO, 2009; IUCN, 2007).

(ii) Indigenous regulations on water use and protection generally comprise four main water uses: domestic uses (washing, drinking, bathing); agricultural uses (irrigation and watering of animals); construction uses (houses and other subsistence infrastructure); and cultural and conservation uses (craftwork, spiritual and environmental uses). The infrastructure needed may vary between: water tanks for rainwater harvesting or to deposit water that is manually collected from the source; communal sinks and basins for drinking or washing; private and public wells; and puddles excavated in the rock to collect running water during the wet season.

In the Mayan world view, water is the origin of life. According to the Popol Vuh, the 16th-century sacred book of the Maya Quiché, at the beginning there was nothing, only sky and ocean waters. Then the gods conferred together and created the earth. “Then they called forth the mountains from the water. Straightaway the great mountains came to be. It was merely their spirit essence, their miraculous power, that brought about the conception of the mountains and the valleys” (Christenson, 2007). Mountains are generally respected and protected by indigenous people because of their role in freshwater production: water, trees and mountains are seen as a unity that controls the life cycle (EcoLogic, 2010).

For this reason, customary provisions regulating the use and protection of water are often integrated with those concerning other natural resources. For instance, a sacred, thus restricted, area may be a forest protecting a water source or a lake that regulates local humidity. On the other hand, human beings are part of nature and shall not disturb its course more than needed. Therefore, norms typically dictate prohibitions or obligations aiming at an equitable and just water use, in order to minimize human impact on the environment and to ensure water quality for all. Occasionally, in particular when a water-supply system exists, regulations also provide for water charges in order to maintain and operate the infrastructure and ensure water quality. Sanctioning measures are also provided in case of violation of the agreed rules.

Some examples of prohibitions are: buying or selling water sources; cutting trees around water sources; pasturing around water sources; using communal sink water for irrigation or watering of animals; using water for irrigation when the water level is low; polluting water sources voluntarily; or wasting water. Examples of obligations are: marking borders of water sources with trees and guard the area; reforesting areas around water sources; washing water tanks every three months; cleaning and maintaining the wells; keeping animals away from water sources and infrastructure; teaching proper water use to children; respect water as an essential element of life; paying established dues or carrying out agreed tasks. It must be noted that, given the sacredness of water and the fact that it may not be privately owned, charging for its use is not
easily accepted in many indigenous communities. In others, elderly or poor people may be exempted from the established water charges. Finally, in case of infringement, sanctions are established for each offence, often providing a warning before actual enforcement. Examples are verbal sanctions, reprimand or admonition, fine or even cut of water supply.

(iii) Institutional arrangements for water management in indigenous communities include indigenous steering committees for natural resources (juntas directivas de los recursos naturales), members of the water committees (comités de agua, comités de operación y mantenimiento), system operators (fontaneros), forest rangers (guardabosques) and, reportedly, water judges (jueces de agua), mainly for irrigation conflicts. On the latter authority, it has not been possible to gather enough information so as to consider it a distinctive figure within the indigenous justice system referred to in the previous pages. Other authorities, such as the elders (ancianos), community mayors (alcaldes comunitarios), spiritual guides (sacerdotes), sheriffs (alguaciles) and midwives (comadronas) exist but are not specifically related to water or natural resources management.

Regarding the functioning of indigenous authorities, tasks are often carried out pro bono or compensated with access to the resource. For instance, people who participate in the construction or maintenance of the system may be exempted from their dues for a certain time. Also, decision-making mechanisms may include voting by majority or consensus, and generally provide for a thorough consultation process. Before applying a sanction, a period of mediation and dialogue. In that sense, authorities are perceived as people who work to bring harmony and peace in the community (IUCN, 2007).

As a last point, the role of women in water management is extensive in rural communities, being in charge of the housework and other domestic tasks related to food and hygiene. They are the ones providing water to the family when the house is not connected to a water supply system. For this reason, as seen earlier, international law on women’s rights was the first to provide for the right to water. On the other hand, the Mayan tradition says that the water lord (ajaw) is the feathered snake called Chiccan or Kukulcán in the Tzolkín Maya calendar and Quetzalcóatl by the Aztecs (Calleman, 2007). In order to ensure positive relations with the water ajaw who is a female, in some communities, women must ask permission to the elders before accepting responsibilities in a water committee. It is not known, however, whether this is a common practice among indigenous groups.

CONCLUSION

As generally recognized, the traditional management systems indigenous communities adopt to ensure clean water to their families are generally respectful of the environment. Water sources are usually protected and reforested and ancestral authorities apply common rules to ensure an equitable use of the resource within the community. Moreover, the need for a clear distribution of competences among responsible institutions and for the amendment of the panoply of sectoral laws that affect water use deserve the undivided attention of national authorities. Appropriate provisions in the future water law should recognize existing de facto and titled uses, so as to avoid conflict as much as possible, especially between industrial and subsistence users.

In a country where water administration is fragmented, legislation dispersed and rural areas abandoned, good water governance seems to be coming from the customary legal system of indigenous people: forests and water sources protected, families having access to clean water for their daily use, good practices in water use adopted, integrated water management implemented, regulations enforced and respected. Nature is seen as a unit: as poetically described in the Popol Vuh, indigenous people have interiorized the watershed concept long before modern science. This micromanagement however generates inequality by violating the affordability principle of the right to water. In addition, it is not sufficient for proper water management, which requires a larger watershed vision in order to ensure sustainable use.

Under current legislation, indigenous communities may legitimize their existence through the municipal registry and manage their water supply systems, mainly in the rural area where the municipal service does not reach. However, municipal registries are not always in place. On the other hand, the only way for indigenous communities to protect their access and use rights on natural resources is by purchasing the land. In practice, in the absence of a water law and of the recognition of collective land property rights, the right to private property becomes the preferred instrument to realize and protect the right to water and the rights on natural resources of indigenous people. Where no water system exists, women and children carrying water directly from the source or washing clothes on the riverside – a common site in rural Guatemala – are arguably protected, under the Civil Code regime, by the general right to the common use of
public waters. Conversely, the formal recognition of a right of way is required when crossing a private estate, as concerned landowner often bar access to those resources alleging lack of legitimate servitude rights.

The first *considerando* of the 1963 Civil Code underscores “the urgent necessity to reform civil legislation, in order to adapt it to […] the natural evolution of customs and other social relations regulated by this branch of law”. Although, the legislator’s intention might not have been to recognize indigenous rights, the pluralism of cultures in Guatemala in a fact and the traditional legal systems of indigenous communities are arguably part of the national customs and should be recognized as such. This interpretation seems to be in line with international human rights law and jurisprudence, thus justifying further investigation in order to sketch guidelines for the recognition of customary water management systems, within the boundaries of domestic statutory law. In fact, the high level of autonomy and effectiveness shown by indigenous communities in natural resources management suggests that collective water rights be recognized *en bloc*, as well as traditional authorities. The new water law should include provisions defining the legal form of community-based water committees and delimitate ancestral water rights for their full recognition.

In the interim, several options are offered by the current legal framework to initiate dialogue for the delimitation of existing water rights, despite longstanding discrimination against indigenous people limiting the exercise of ancestral rights. The implementation of municipal registries and existing participation mechanisms could be a starting point to allow further negotiation on how to fully recognize the collective legal personality and tenure rights that are enshrined in indigenous culture. The decentralization process commenced in 2002 should be further developed, to allow municipalities to fulfil their mandate. Municipal governments could establish an efficient concession system for the supply of basic services in the territories under their jurisdiction, thus allowing indigenous communities to formalize their rights under the current regime, while discussing a water law.

Guatemala is undeniably a pluricultural society and international human rights law opens the door to legal pluralism within the existing legal system. The legal space for full recognition of customary water law is not yet defined and requires further investigation. Hopefully, soon enough technical capacity and political will shall coincide so as to make the change happen.

REFERENCES

Asociación de Agricultores Ecológicos La Laguna de Chikabal (ASAECO), *Toj Qtxu A’ Chkab’al, En nuestra madre agua Chikabal*, Aporte para la Descentralización Cultural (ADASCA), Quetzaltenango, 2009


Anaya, James, *Carta al Sr. Ricardo Cajas Mejía, Director Ejecutivo del Consejo de Organizaciones Mayas de Guatemala, con Comentarios del Relator Especial sobre los derechos de los pueblos indígenas en relación con el borrador preliminar de reglamento para el proceso de consulta del convenio 169 (Guatemala)*, 2011


CALAS (Centro de Acción Legal y Social de Guatemala), *Normas Indígenas sobre el uso del agua, el bosque y la vida Silvestre, Comunidades del área lingüística K'iche’,* Programa de derecho indígena ambiental, 1ª edición, Guatemala, 2002

CALAS, *Normas Indígenas sobre el uso del agua, el bosque y la vida silvestre Q’eqchi’,* Programa de derecho indígena ambiental, 1ª edición, Guatemala, 2003
CALAS, Normas Indígenas sobre el uso del agua, el bosque y la vida silvestre Comunidad del Área Lingüística Maya Ixil, Área de derechos colectivos ambientales de Pueblos Indígenas, 1ª edición, Serviprensa, 2006

CALAS, Principios de derecho indígena maya K’iché sobre el uso del agua, el bosque y la vida silvestre, El caso de San Vicente Buenabaj, Momostenango, Totonicapán, Guatemala, Área de derechos colectivos ambientales de Pueblos Indígenas, 1ª edición, Maya Na’oj, 2008

Calleman, Carl Johan, El Calendario maya y la transformación de la consciencia, Inner Traditions en Español, Rochester - Vermont, 2007

Caponera, Dante, Principles of Water Law and Administration National and International, A.A. BALKENA, Rotterdam, 1992


Colom de Morán, Elisa, Estudio de los Cambios Legales en el Marco de la Privatización del Agua en Guatemala, Brot für die Welt, Guatemala, 2005

COSPE, El Derecho perfecto de las tierras indígenas Sutiabas, Abangasca Sur-Nicaragua, 2005


De Schutter, Olivier, Report of the Special Rapporteur on the right to food, Addendum, Mission to Guatemala, A/HRC/13/33/Add.4, UN General Assembly, 2009

Durand Alcántara, Carlos and Monzalvo, Alejandro Santiago, Los Sistemas de derecho indio en México (una propuesta de análisis), in XII Congreso Internacional, Derecho consuetudinario y pluralismo legal: Desafíos en el tercer milenio, Comisión Derecho Consuetudinario y Pluralismo Legal, Arica - Chile, 2000

EcoLogic and Junta Directiva de Alcaldes Comunales de los 48 Cantones de Totonicapán, Recopilación de conocimientos ancestrales sobre el manejo de los recursos naturales en Totonicapán: la montaña, el bosque y el agua, versión técnica, Sincronía, Guatemala, 2010

Freshwater Action Network Central America (FANCA), Las Juntas de agua en Centroamérica, Valoración de la gestión local del recurso hídrico, Estudio comparado, San Josè, 2006


Gamboa, Gonzalo; García, Rocío; González, Diego; Mendoza, Juan; Recanjo, Fernando; Sánchez, Geisselle, Esto no es un castigo de Dios, Gestión local del agua en Guatemala: el caso de los municipios de Chiantla y Huehuetenango, FLACSO, Guatemala, 2008

Global Water Partnership (GWP), El Fenómeno de la pluriculturalidad y gestión integrada del agua en el contexto de la modernidad pluricultural de Guatemala, GWP-Guatemala, 2010


Instituto de Agricultura, Recursos Naturales y Ambiente (IARNA), Perfil Ambiental de Guatemala, Tendencias y reflexiones sobre la gestión ambiental, Universidad Rafael Landivar, Guatemala, 2006


Instituto Nacional de Estadística (INE), *Censo Nacional XI de población y VI de habitación del 2002 del Instituto Nacional de Estadística, Guatemala, 2003*


IUCN, *Prácticas ancestrales y derecho de aguas: de la tensión a la coexistencia*, Editors Marta Brunilda Rovere and Alejandro Iza, Bonn, 2007


Lentini, Emilio, *Servicios de agua potable y saneamiento en Guatemala: beneficios potenciales y determinantes de éxito*, CEPAL, Santiago - Chile, 2010

López García, Julián, *Kumix, La Lluvia en la mitología y en el ritual Maya Ch’orti’*, Guatemala, 2010

Martínez Peláez, Severo, *La Patria del criollo*, EEM, Guatemala, 1994

Ochoa García, Carlos, *Derecho consuetudinario y pluralismo jurídico*, Cholsamaj, Guatemala, 2002


Romano, Santi, *L’Ordinamento giuridico*, 1917


Tíu López, Romeo and García Hierro, Pedro, *Los Bosques comunales de Totonicapán*, FLACSO, MINUGUA, CONTIERRAS, Guatemala, 2002

Tran, Tran, *Valuing water in law: How can indigenous cultural values be reconciled with Australias’s water law in order to strengthen indigenous water rights?*, in *The Journal of Water Law*, Vol. 20, Issues 2/3, UNESCO, University of Dundee, 2009

UN General Assembly, *Respect for the right of everyone to own property alone as well as in association with others and its contribution to the economic and social development of Member States: Resolution, 8 December 1988, A/RES/43/123*, available at [www.unhcr.org/refworld/docid/3b00eff65c.html](http://www.unhcr.org/refworld/docid/3b00eff65c.html)

