Community based provision of water services through a human right to water lens

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Introduction

Some Economic Social and Cultural Rights (ESCRs) are intrinsically linked to the provision and access to certain basic services, such as health, education, water and sanitation. Human rights (HR) compliance has been traditionally based on a bilateral relationship between the State and the individual (United Nations, 2010). However, in the case of the Human Right to Water and Sanitation (HRWS), the supply of water and sanitation services has often been transferred to a non-State actor. This implies that human rights compliance no longer fells into the State but mainly into the hands of a third actor. A large body of literature has to some extent examined compliance with the principles of HR when this third actor is a private entity (Bakker, 2007; Prasad, 2006). However little has been investigated about the ability of community based organizations (CBOs) to comply with HR obligations, despite their relevant role in water and sanitation provision both in developed and developing countries.

The Human Right to Water (HRW) content is commonly divided into i) normative criteria: availability, quality/safety, physical accessibility, affordability and acceptability, and ii) crosscutting criteria: non-discrimination, participation and accountability. The HRW normative dimensions are starting to be used to enrich the definition of service level provision at international (Flores et al, 2015; Joint Monitoring Programme, 2014) and local level (Flores et al, 2015; Flores et al, 2013), to which the Water, Sanitation and Hygiene (WASH) sector brings its experience in monitoring these dimensions. However, measuring cross-cutting criteria at local level is less advanced. The international community has started to pay attention to non-discrimination issues (Joint Monitoring Programme, 2014) but individuals' participation along the design and service provision process, as well as accountability issues, lag behind the other criteria despite relevant research has already been conducted (Laban, 2007; Narayan, 1995; Prokopy, 2005). Elements such as participation and accountability have been also analysed in the collective action literature and linked to the success of community based management of natural resources (Madrigal et al, 2011; Ostrom, 2007). In this sense, the literature on collective action offers a complementary view to examine HRW compliance when the service provider is a community based organization.

Building on the WASH, HRs and collective action literatures, this study examines the link between collective action at community level and compliance with HRW from the perspective of users (as right-holders) of rural water systems in Nicaragua, where CBOs are responsible of service provision.

Case study

In Nicaragua, the Water Law (Government of Nicaragua, 2007) and the Law 722 (Government of Nicaragua, 2010) recognize water as a Human Right. Furthermore, the government promotes the formalization of collective action through drinking water and sanitation committees (CAPS) in rural areas. It is estimated that around 1.2 million out of 2.3 million rural people are supplied by these CBOs in the whole country.

In this study, we focus on communities of two micro-basins situated in Jinotega and Matagalpa departments in the North-Central region. There is a long tradition of CBOs managing water services in both regions, which are among the poorest in the country. Figure 1 identifies the location of both micro-basins considered in the case study and provides some basic spatial information.





Methods/Materials

Primary data on collective action for water supply and the HRW has been collected through 165 household surveys from a total of 854 households in 11 communities of the two microbasins in the North-Central region of Nicaragua. When populations are small, as it is the case of communities studied, different methodologies for the design of samples can be used. In this case we apply the method developed by Flores et al. (2015) which ensures an appropriate balance between the resources required for data collection and the accuracy of the results for decision making at the local level.

Table 1 summarizes the HRW indicators considered to assess CBOs compliance with the HRW obligations in the two micro-basins. All of these indicators are dummy variables with values 0 (no) or 1 (yes). With respect to cross-cutting indicators, the study focuses on participation and accountability. It should be noted that the indicators measuring participation have been disaggregated into the three hierarchies proposed by Prokopy (2005). The first group is about contribution on money, labour or materials, which is considered a very low form of participation. The second group considers elements that are associated with a higher involvement during project construction, including supervising and control and decision making about design and tariffs. The last hierarchy deals with participation during services provision stage, which is related to full control of the project. The level of participation is measured in the following way. Firstly, the 9 indicators reported in Table 1 are assessed for each household. If a household scores a value 1 in at least one of the indicators in each level of participation. In case a household falls in more than one level of participation, the highest participation level is assigned to the household.

From a human rights point of view, accountability is normaly divided into three relevant dimensions: responsibility, answerability and enforceability (Ely Yamin, 2008). In this study we focus on the relationship of accountability of the provider to the citizen-client (The World Bank, 2003).

Regarding normative criteria, the study uses typical indicators used to measure availability, physicial accesibility and affordability, as elaborated in Flores et al. (2013). All together, these criteria enable us to contextualized the level of service and governance issues.

Human right to water criteria			Indicator	Levels and scores	
				0	1
Cross-cutting criteria: Governance System	Participation	Low (Cash / Labour / Materials)	Cash / hired labour	No	
			Labour (construction / preparing meals)		
			Materials (terrain)		
		Middle (Supervision / Decisions during project execution stage)	Supervising/control (construction / personnel payroll)		
			Water system design (type of connections, etc) discussed and decided collectively		
			Tariff design discussed and decided collectively		Yes
		High (decisions during service delivery stage)	Investment on repairs discussed and decided collectively		
			New connections discussed and decided collectively		
			Disconnections discussed and decided collectively		
	Accountability		Families considering formal written operational rules exist	- - -	
			Families considering regular meetings occur		
			Families feeling informed about system operation		
Normative criteria: Level of service	Physical Accessibility (Improved)		Piped water on premises (higher level of access according to JMP water-ladder)		
	Availability (seasonality)		Improved access to safe water all the year round		
	Affordability (perception)		Families considering the tariff affordable		

Table 1. Cross-cutting and normative criteria: Indicators, levels and scores

Results and Discussion

First, the normative dimensions of the HRW show higher scores than the cross-cutting criteria in this case study. Overall, most households consider to have physical access to water at all times and at affordable rates, as it is shown in figure 2. However it is important to higlight that: i) there are communities where there is a percentage of families that express the necessity to use unimproved sources of water during some times of the year (Prendedizos is specially critical), which may likely result in negative health impacts (Hunter et al, 2009), ii) there are communities where some families have to fetch water from public taps while other households have piped drinking water supplied to their premises (as it is the case of Las Quiatas, Buena Vista, Las Trozas or La Bolsa), which may be related to some kind of intracommunity disparities and iii) the case of La Naranjita, where a high proportion of families consider that tariff is unaffordable. The water system in this latter community is the most modern of the area. Interestingly, the water tariff was designed paying special attention to financial sustainability issues which has resulted in tariffs significantly higher than other neighbouring communities.



Figure 2. Normative criteria of the Human Right to Water

Figure 3 shows that participation materializes mainly in indicators associated to the lowest level of participation. Most of the families have contributed on labour or even cash. However, only some show positive answers according to middle participation indicators, specifically in tariff design and supervising construction. Finally, only a few express that important decisions about operation of the system (investment on repairs, new connections and/or disconnections) were discussed and decided collectively.



Figure 3. Levels of participation.

By contrast, as it is shown in figure 4, results about accountability variables are significantly higher. More than 3 out of 4 families consider that formal operational rules exist, regular meetings occur and feel informed about systems operations. Nevertheless, just a few of them think that relevant decisions are discussed and decided together just as shown in figure 3.



Figure 4. Accountability of the provider to right holders'.

Conclusion

There is still a lot to be done in order to put the concept of Human Right to Water into practice. There is a knowledge gap about community based organizations ability to comply with Human Right to Water obligations as service providers. From a collective action point of view, participation and accountability are considered key elements for the sustainability of community based organizations. In addition, they are core components of the HRW. This study suggests and proves that participation and accountability criteria could be evaluated through individuals' perceptions as right-holders. It also shows that they are often the most disregarded aspects, which could help explaining the low performance of community based infrastructures in the long term and, therefore, the lack of compliance with the HRW. The study also raises an interesting dichotomy between financial sustainability and the capacity of users to hold and provide the HRW obligations.

This kind of analysis offers new insights into: i) reporting/monitoring human rights compliance at local level in a broad sense if they are combined with other indicators, ii) identifying priority actions for decision making of actors involved in interventions at decentralised level as it is evident that CBOs usually need support to fulfil their responsibilities.

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