

## EVALUATING THE HUMAN RIGHT TO WATER AND SANITATION: THE USE OF PARTICIPATORY DIAGNOSIS TOOLS AT A LOCAL LEVEL

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### Abstract

Participatory analysis frameworks can help realize the Human Right to Water and Sanitation (HRtWS) by helping stakeholders self-assess how equitable is access to water and sanitation services, achieving a better understanding of the rights to water and sanitation and their principles, and raising awareness. This article presents the experiences of Castelló (Spain), Lima (Peru) and Barcelona (Spain) in using the “Equitable Access Score-card” to analyze the equity of access to safe drinking water and sanitation in these three cities. The aim is to compare and discuss the three different ways in which the diagnosis tool was applied. Results show that, although all three approaches served as a first-assessment and overview of the HRtWS by sector stakeholders at local level, developing an effective inter-stakeholder collaboration was pivotal for these participatory diagnosis tools to have significant impact.

**Keywords:** Human Right to Water and Sanitation, Participatory Diagnosis, Equitable Access

### 1. Introduction

On July 2010, an important milestone in the road towards improving the global water supply and sanitation situation was reached when the General Assembly of the United Nations (UN) recognized access to clean water and sanitation as a human right (UN 2010a). The resolution acknowledged the pivotal role of equitable access to water and sanitation in realizing all human rights, and called on States and international organizations to provide financial resources, capacity-building and technology transfer to scale up efforts to provide safe, clean, accessible and affordable drinking water and sanitation for all. This recognition was later affirmed by the UN Human Rights Council in April 2011 (UN 2011), which stressed the importance of adopting a human rights-based approach to water and sanitation. In September 2015, with the declaration of the 2030 Agenda for Sustainable Development, the UN explicitly reaffirmed its commitment regarding the human right to safe water and sanitation (UN 2015).

The Human Right to Water and Sanitation (HRtWS) entitles everyone to water and sanitation services that are available, accessible, safe, acceptable and affordable (UN 2010b). Therefore, the HRtWS enshrines the principles of equality and non-discrimination in access to water and sanitation. As explained in the Manual on the Right to Water and Sanitation (COHRE et al. 2007), non-discrimination must go beyond avoiding active discrimination to also including proactive measures addressing the particular needs of the most vulnerable and marginalized sections of the population. Furthermore, as in other human rights, the HRtWS intertwines with the right to participate in decision-making (UN 2010b). Access to water and sanitation “for all” also implies that “all” are involved in preparing and planning water and sanitation policies and projects.

The realization of HRtWS is central to the fulfillment of the Sustainable Development Goals (SDGs). SDG 6 on clean water and sanitation explicitly calls for achieving universal access to safe and affordable drinking water and sanitation for all, together with supporting the participation of local communities in water and sanitation management. The concepts of equity and inclusiveness inherent to the HRtWS are also relevant to other SDGs related to poverty reduction (by promoting equal access to safe water and sanitation for all, in particular the poorest and most vulnerable), gender equality (by curtailing the discrimination based on gender in the access to water and sanitation services), inequalities reduction (by ensuring equal access to water and sanitation services) and inclusive societies (by promoting participatory decision-making at all levels), amongst others.

However, realizing the HRtWS is not without its challenges. The UN Economic Commission for Europe (UNECE) has identified three key obstacles in achieving equitable access to water and sanitation: i) geographical disparities in the services provided, ii) discrimination or exclusion in access by vulnerable and marginalized groups, and iii) financial affordability of users (UNECE/WHO 2012). Several efforts have been devoted to addressing these inequalities, from supporting consumer-managed water supply associations to ensure access to water in remote rural areas (Pietilä et al. 2008) to adopting social tariffs for water in order to facilitate access to water for poor households (Smets 2009).

Notwithstanding the progress made, experience shows that countries often lack a clear understanding of the gaps in access to water and sanitation (JMP 2017). This is because the identification of vulnerable and marginalized groups remains a challenge, data on their access to water and sanitation services is usually missing, and their participation in decision-making is nearly negligible (Demilecamps 2017). Therefore, more needs to be done in terms of assessing the existing gaps in the equity of access to water and sanitation and involving all stakeholders in the analysis and solution. In this sense, developing participatory and inclusive mechanisms for equity evaluation can greatly contribute to the promotion and operationalization of equitable access to water and sanitation.

Participatory diagnosis tools like the “Equitable Access Score-card” (UNECE 2013a) can help countries self-assess their equality strategies in terms of access, identify priorities and translate them into actions to address the equity gaps. Experiences from its application reveal the importance of measuring the equity of access to water and sanitation. For instance, in Portugal, the use of the “Equitable Access Score-card” highlighted the lack of coordination between water and sanitation services providers and social protection services on social tariffs (UNECE 2013b); in Ukraine, it underscored the data void on vulnerable and marginalized groups (UNECE 2013c); and in the Republic of Moldova, it brought to light the huge gaps related to poor/rich and rural/urban households (UNECE 2014).

The present article aims to present the use of participatory evaluation in assessing the equity in access to water and sanitation at a local level. It discusses the experiences of Castelló (Spain), Lima (Peru) and Barcelona (Spain), where we have applied the “Equitable Access Score-card” through different participatory analysis tools. In Methods, an overview of the scorecard is given, followed by a description of the methodology followed in the three participatory diagnosis exercises. In Results and Discussion, the main outcomes of the diagnoses are examined.

## 2. Methods

### 2.1. The Equitable Access Score-card

The “Equitable Access Score-card” was designed by UNECE (2013a) to support Governments and other stakeholders in establishing a baseline measure of the equity of access through a self-assessment process, identifying related priorities, discussing further actions to be taken in order to address equity gaps and evaluating progress towards equitable access. It is meant to be used for various objectives, mainly to help evidence-based policymaking, but also to achieve a better understanding of the situation and raise awareness among stakeholders of the HRtWS.

The scorecard is structured in four thematic sections: i) governance, focusing on the “equity blindness” of existing governance frameworks; ii) geographical disparities, tackling the access and price gaps between geographical areas; iii) vulnerable and marginalized groups, addressing the needs of these populations; and iv) affordability, reviewing the tariff and social protection measures in place. These four sections are further divided into “Areas of Action” concentrating on the actions taken to improve equitable access and progress under each Area is measured through a set of qualitative questions. The structure of the “Equitable Access Score-card” can be found elsewhere (UNECE, 2013a).

### 2.2. Application of the participatory diagnosis at a local level

All three exercises of participatory diagnosis were based on the “Equitable Access Score-card” and followed the same methodology, consisting of:

- Definition of the diagnosis objective: the objectives of the evaluations were identified to inform the design of the exercises.
- Selection of the diagnosis partners: in order to undertake the evaluation exercises, a “core team” was set up by partnering with other organizations.
- Identification of stakeholders for the diagnosis: potential stakeholders for the evaluation were identified and invited to be involved in the exercises, ensuring that there was a comprehensive representation of diverse perspectives on the issue.
- Preparation of workshops: a number of workshops was planned to gather stakeholders and complete the diagnosis exercises, ensuring the involvement of all organizations in the assessment.
- Adaptation of the scorecard to the diagnosis objectives: the “Equitable Access Score-card” was tailored to the needs of the exercises.
- Application of the scorecard for data collection: the scorecards were used to gather, organize and evaluate existing information on the equity of access and complete the diagnosis exercise.
- Presentation of diagnosis outcomes: results from the scorecards were summarized to provide a situational analysis and disseminate them.

#### 2.2.1. Castelló (Spain)

The diagnosis was part of a “University-City Council collaboration” between the “Engineering Sciences and Global Development” research group of the Universitat Politècnica de

Catalunya (UPC), the “Community Psychology and Cooperation for Development” research group of University Jaume I (UJI) and the city council of Castelló de la Plana, in 2016. The aim was to raise awareness and knowledge about HRtWS approach in local organizations and actors involved in the water cycle and social services. We particularly invited local stakeholders from different background (social work professionals, service providers, scholars from different field and local politicians) to be part of the analysis. A total of 15 voluntary experts and local stakeholders agreed to participate, and included: workers of the organizations Cáritas Interparroquial, Creu Roja (Red Cross) Castelló and Medicus Mundi; researchers in the areas of psycho-social, economic and technical architecture at the UJI; researchers in the field of civil and environmental engineering and sustainability of the UPC; representatives of the water utility (FACSA); and the city council with the participation of the Councilor of participation, equality and housing. The diagnosis was based on the questions raised in the “Equitable Access Score-card”, and it included two working sessions. The first session (April 2016) introduced the SDGs and the international framework of HRtWS, after which the two first parts of the score-card (governance, access and geographical disparities) were worked. The second session (May 2016) started with a short summary of results achieved during the first workshop, then the other two parts of the score-card (vulnerable groups and affordability) were analyzed.

### 2.2.2. Lima (Peru)

The diagnosis started as a “Interuniversity collaboration” between the Universitat Politècnica de Catalunya (UPC) and the Pontificia Universidad Católica del Perú (PUCP) in 2015, which had the goal of defining strategies to increase equity in the provision of water and sanitation services in peri-urban areas of large cities, through the characterization and inclusion of vulnerable groups in the decision, planning and management schemes. The work started with a sector diagnosis, in order to comprehend the operation of the sector from the HRtWS approach. 13 in-depth bilateral interviews were carried out with different actors of the sector (e.g. Ministry of Housing, Construction and Sanitation; Ministry of Women and Vulnerable Groups, Ministry of Health; National Water Authority; SEDAPAL, Lima’s water utility; NGO “Fomento de la Vida”, etc.). The “Equitable Access Score-card” questionnaire was used as a tool to assess the compliance with the HRtWS in Lima Metropolitan Area, but also to explain the meaning of HRtWS and provoke discussions around the sectors. In parallel, a detailed diagnosis of the peri-urban region of Collique was completed, and consisted in the identification, together with the population, of the existing problems and conception on the HRtWS, and the prioritization of its dimensions. For this, two type of workshops formats were prepared: (i) colloquia, with the objective of raising awareness about the HRtWS; and (ii) focus groups, where, through images, cartoons and anecdotes, the HRtWS dimensions were conceptualized and discussed amongst the participants. 10 workshops were organized, with different age population groups (children, young adults and women), and a total of 59 participants assisted.

### 2.2.3. Barcelona (Spain)

The diagnosis was done by a self-managed group of students of the UPC. The goal was to offer a global vision of the HRtWS in relation to vulnerable groups of the Barcelona Metropolitan Area. It took place from September 2015 to June 2016, and resulted in a

diagnosis of the reality of vulnerable groups regarding their water and sanitation services. The diagnosis began with the identification of the vulnerable groups to be assessed, which was done following the “Equitable Access Score-card”. Then, it addressed the definition of qualitative questions to characterize the access to water and sanitation of the vulnerable groups identified, and the search for answers for each question. Different social entities and local organizations most related to these vulnerable groups were contacted to contrast the answers achieved. The diagnosis resulted in a list of structural, process and outcome indicators for each vulnerable group, and highlighted the legislative framework behind the HRtWS in Barcelona.

### **3. Results and Discussion**

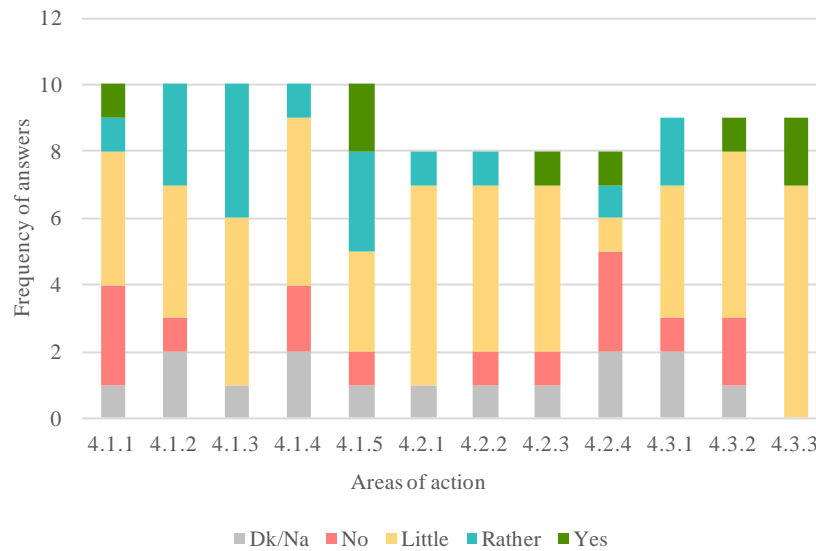
#### **3.1. Main outcomes of the participatory analyses**

From a methodological outlook, all three participatory analysis exercises served as a first-assessment and overview of the HRtWS by sector stakeholders at a local level. The major outcome was the raise of awareness on equity of access to water and sanitation, as well as the development of contacts between the different stakeholders involved in the sector. The particular results obtained in each application are provided bellow.

##### **3.1.1. Castelló (Spain)**

The two-day workshop allowed for in-depth discussions on the city’s service delivery from the HRtWS perspective. The diagnosis resulted in the evaluation of the different sections and areas of action included in the “Equitable Access Score-card”. For instance, for “Section 4: Keeping water and sanitation affordable for all”, evaluations are shown in Figure 1. Shortcomings and challenges of equitable access to water and sanitation were also identified. For example, in terms of affordability, participants recognized the willingness of Castello’s City Council to promote policies that ensured affordable water and sanitation services for all, but highlighted the lack of public information and knowledge about the implementation of tariff and social protection measures.

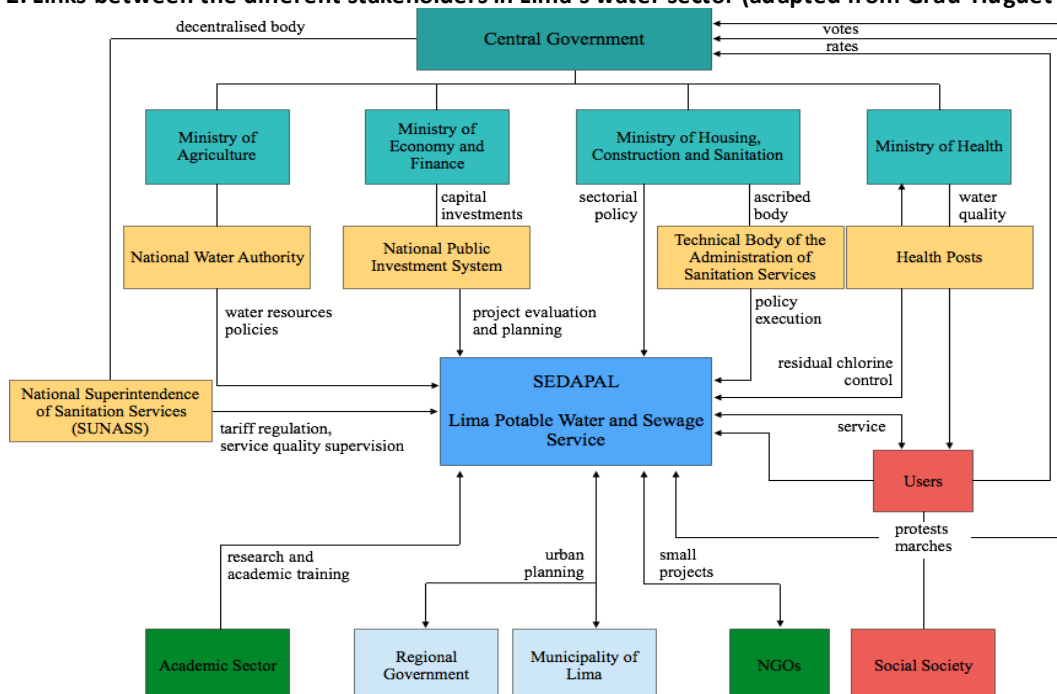
**Figure 1. Results for the “Equitable Access Score-card” section 4 in Castelló’s participatory diagnosis (adapted from Pérez-Foguet et al. 2016).**



### 3.1.2. Lima (Peru)

The bilateral interviews with the different stakeholders allowed the comprehension of the sector’s operation from the HRtWS perspective. The contacts made with the broad range of stakeholders involved in the water and sanitation sector enriched the assessment, and helped identify the links between them (Figure 2). The sector diagnosis also resulted in a score analysis of all four sections of the “Equitable Access Score-card”.

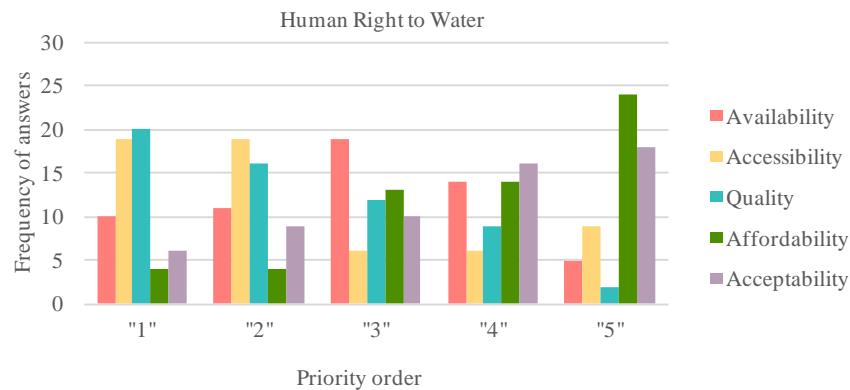
**Figure 2. Links between the different stakeholders in Lima’s water sector (adapted from Grau-Huguet 2017).**



On the other hand, the participative workshops organized in the Collique zone revealed the reality and needs of the population in regards to the five dimensions of the HRtWS (i.e. availability, accessibility, quality, affordability and acceptability). The detailed diagnosis

contributed to the prioritization of the dimensions, as illustrated in Figure 3. The histograms represented the number of participants giving the position from 1 (most important) to 5 (least important) for each of dimension. The subsequent prioritisation order allowed the construction of a multi-dimensional composite index for the HRtWS.

**Figure 3. Results of the prioritization of the HRtWS dimension in Lima's participatory diagnosis (adapted from Grau-Huguet 2017).**



### 3.1.3. Barcelona (Spain)

The diagnosis resulted in a list of structural, process and outcome indicators whose objective was to reflect the HRtWS regulatory framework. Structural indicators addressed whether or not legislative structures necessary for the realization of the HRtWS were in place; process indicators measured programmes, interventions and activities and outcome indicators evaluated the impact of those programmes, intervention and activities on water and sanitation related issues. Answers to these indicators were obtained for each of the 10 vulnerable groups identified, which provided an overview of the degree of normative and institutional focus on vulnerable groups' access.

## 3.2. Comparative analysis of impacts

### 3.2.1. Sectorial impact

The experience of Castelló (Spain) in using the participatory analysis tool was included by UNECE as an example of projects carried out to develop situation analysis of the equity of access to water and sanitation services (UNECE 2017). Castelló's example was also discussed in the "4<sup>th</sup> meeting of the expert group on equitable access to water and sanitation under the Protocol on Water and Health" (13-14<sup>th</sup> September 2017, Budapest), which exchanged different experiences in carrying out self-assessment of the equity of access to water and sanitation and identified lessons learned in organizing them (UNECE 2017).

In the case of Lima (Peru), results of the participatory analysis of water and sanitation services were presented to the consultation undertaken by UN's Special Rapporteur on human rights to safe drinking water and sanitation, Leo Heller, on "service regulation and human rights to water and sanitation" (link). As part of the consultation process, all interested stakeholders (e.g. academia, intergovernmental organizations, human rights institutions, etc.) were invited to contribute their views and experiences on the challenges

and barriers to the full realization of the HRtWS, as well as good practices and enabling factors. The outcome was the Report of the Special Rapporteur on the human rights to safe drinking water and sanitation (OHCHR 2017).

Both cases of Castelló and Lima were submitted to the OECD Water Governance Initiative (OECD 2017), which aims to develop an online database of water governance “stories” that can inspire stakeholders and governments to “move from vision to action”. The two experiences were also presented in the “Water Governance Webinar: The new role of cities in urban water governance” (1st November 2017), organised by Flanders Knowledge Centre and supported technically by the OECD Secretariat, in which lessons learned from tackling water-related issues in cities were discussed (OECD 2017).

### 3.2.2. Academic impact

Castelló’s experience in undertaking the participatory diagnosis contributed to the definition of a new line of academic work to increase the understanding of water-related poverty issues in the Spanish urban context. Led by the research group on “Water, Territory and Sustainability” (GRATS) of the Universitat Autònoma de Barcelona, a network of academics and researchers from various universities has been created and has been formally recognized by the Ministry of Economy and Business, as a “network of excellence” within the National Programme for Fostering Excellence in Scientific and Technical Research.

On the other hand, the experience in Lima translated into a Master’s degree in Sustainability Science and Technology (Universitat Politècnica de Catalunya) thesis, “Conceptual framework for the monitoring of drinking water and sanitation services in metropolitan areas from a human rights perspective. Application to Lima (Peru)”. The thesis, developed by Grau-Huguet (2017), was defended in January 2017 and was presented in the “VII Congress University and Development Cooperation” (30<sup>th</sup> March 2017, Madrid).

## 4. Conclusions

In 2010, the United Nations General Assembly declared the Human Right to Water and Sanitation (HRtWS), recognizing the “right to safe and clean drinking water and sanitation as a human right that is essential for the full enjoyment of life and all human rights”. The HRtWS entitles everyone to water and sanitation that is available, accessible, acceptable, affordable and safe, and compels States parties to guarantee that is enjoyed without discrimination. Whereas HRtWS applies to everyone, States parties are also required to give special attention to those vulnerable or marginalized individuals and groups that have been traditionally discriminated or excluded in access to water and sanitation services. Therefore, to achieve equality of water and sanitation service provision, countries must explicitly focus on those vulnerable populations; otherwise, disparities in access to water and sanitation will likely intensify. Yet, existing water governance frameworks, both national and local, often fail to deliver equitable access to water and sanitation. Amongst the reasons for this is the “equity blindness” of current governance frameworks, which inadvertently overlook the access challenges faced by particular territories or populations groups in the sector policy development and implementation process. An “equity access lens” needs to be adopted in the decision making process to ensure that all members of the population, including



vulnerable and marginalized groups, are considered. In this sense, participatory analysis frameworks, like the “Equitable Access Score-card” developed by UNECE, can help realize the HRtWS by helping stakeholders self-assess their equity of access to water and sanitation, achieving a better understanding of the human right and raising awareness.

This article presents the experiences of Castelló (Spain), Lima (Peru) and Barcelona (Spain) in using the “Equitable Access Score-card” to analyse the equity of access to safe drinking water and sanitation in these three cities. The aim is to compare the three different ways in which the diagnosis tool was applied, and discuss the features and differences between their impacts. From a methodological outlook, all three participatory analysis approaches served as a first-assessment and overview of the HRtWS by sector stakeholders at local level. The common outcome was the raise of awareness on equity of access to water and sanitation, as well as the development of contacts between the different stakeholders involved in the sector. However, the impacts were significantly different: i) Castelló’s experience, which started as a University-City Council collaboration, had an important sectorial and academic impact; ii) the same happened with Lima’s case, an interuniversity collaboration; iii) Barcelona’s experience, on the contrary, which began as a self-managed student group initiative, lacked any important impact. Participatory diagnosis tools as the “Equitable Access Score-card” are essential to evaluate the HRtWS and allow its implementation and realization. However, experiences from its application in Castelló, Lima and Barcelona show that developing effective inter-stakeholder collaboration is pivotal for these participatory diagnosis tools to have significant impact.

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