

## Urban Water – Castelló de la Plana: Participatory diagnosis on the Human Right to Water and Sanitation in small towns

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## Introduction

This report presents the results of the participatory diagnosis *Urban Water – Castelló de la Plana*, led by the research group Engineering Sciences & Global Development (<http://www.engscgdev.cat/>) from the Universitat Politècnica de Catalunya (UPC, <http://www.upc.edu>) and conducted in collaboration with the research group Community Psychology and Cooperation for Development from Universitat Jaume I (UJI, <http://www.uji.es>) and of the city council of Castelló de la Plana. The diagnosis was carried out between April and June 2016.

The diagnosis has a twofold objective: first, to gain knowledge about the technical specific conditions in relation to the provision of water and sanitation services from a human rights perspective in a Mediterranean context; second, to test a methodology based on the participatory analysis with voluntary experts and local stakeholders from different backgrounds.

Two working sessions were held to involve, in total, 15 voluntary experts from different fields (social work professionals, the service provision sector, scholars from different fields, and local politicians). Participants have validated a draft document with preliminary results and conclusions. The signatories however assume full responsibility for potential mistakes, misleading messages or any deficiency of the present report. It is organised as follows: It begins with a brief presentation of the methodology used. Then, achieved results are discussed. Finally, main conclusions and recommendations extracted from the diagnosis are presented to conclude the study.

## Methodology

The backbone of the diagnosis is based on the questions raised in the document "The Equitable Access Score-Card" (UNECE & WHO, 2013). All sections and areas referred to in this report as well as the numbering of the graphs coincide with this document. It covers in four main sections aspects of Governance, Access and geographical disparities, Access and vulnerable groups, and Affordability. The dimensions of the human right to water and sanitation (HRtWS, for its acronym in English) relating to access, availability, quality and acceptability are not distinctly contemplated. These four criteria are integrated into the regulatory definition of access, being affordability the only one adopting a distinct category in the analysis. For this reason, the questions raised in the document have been complemented with a specific valuation activity on the relative importance of the different normative dimensions for water and sanitation, and for different vulnerable groups.

The diagnosis was carried out in two different days (8 April and 6 May 2016) in the facilities of the Llotja del Cànem in the centre of Castelló de la Plana. The number of participants was 12 and 15, respectively, with a large representation of different local actors: workers of the organizations Càritas Interparroquial, Creu Roja (Red Cross) Castelló and Medicus Mundi; researchers in the field of psycho-social, economic and technical architecture at the Universitat Jaume I of Castelló; researchers in the areas 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 Councillor of participation, equality and housing.

Each of the sessions lasted approximately four hours. The first session began with an introductory presentation about the Sustainable Development Goals (SDG) and the international framework of Human Rights to Water and Sanitation. Then, the first two parts of the protocol (Governance, Access and geographical disparities) were worked. For each part, the participants were divided into two subgroups where the questions were individually assessed on a four points Likert scale, and the matches or differences of opinion were commented and complemented in subgroup discussions. Results and initial conclusions were later socialized with the participants via email. The second working day started with a short summary of achieved results during the first workshop. Then, affordability and normative components of the HRTWS were analysed in two subgroups. Results, evaluations and conclusions were later provided to the participants in order to receive feedback to complement the information gathered. The whole process has been developed with support documentation submitted in Catalan language (translation of the protocol, basic definitions, writing and evaluation of results).

## Results

### **Governance frameworks to deliver equitable access to safe drinking water and sanitation**

Section 1 of the protocol is composed of three areas. The results are presented in Figure 1. In the first area, known as "Strategic framework for achieving equitable access," we find that the answers lie mostly in the "No" and "DK / NA", that is to say, participants consider that either there is not a clear strategic framework or its existence is unknown by them. We also see that there is not a broad consensus, with many questions with very different answers. The results show that most of the workshop participants considered that there are no targets, no responsibilities or coordination mechanisms between authorities in order to achieve equitable access to water and sanitation. However, most participants also believe that to some extent there is a strategic plan to ensure equitable access. The urban plan of the municipality is specifically mentioned, which includes issues of equality in all geographical areas designated urban, and agricultural legislation, including issues of access to water. Neither includes specific objectives. There is no consensus on whether any kind of assessment of equitable access to water and sanitation has been carried out.

In the second area, "Financial sector policies," the degree of dispersion is similar to the previous one, although there is some general assessment between "No" and "Little". Most participants think that the amount of financial resources needed to achieve equitable access has been estimated to some extent, while there is a difference of opinion on issues of identification of funding sources and financial strategies. Most of them also think that there are few mechanisms to induce suppliers to implement equitable investment plans and that the administration is transparent in the distribution of financial resources. The perception is that international support is not equitable. As proven data, the fact that any person living on urban land has the right to access to water and sanitation for an activation of the service fee not exceeding € 1,400 has been contrasted. The situation in relation to access in non-urban areas of the municipality is unknown.

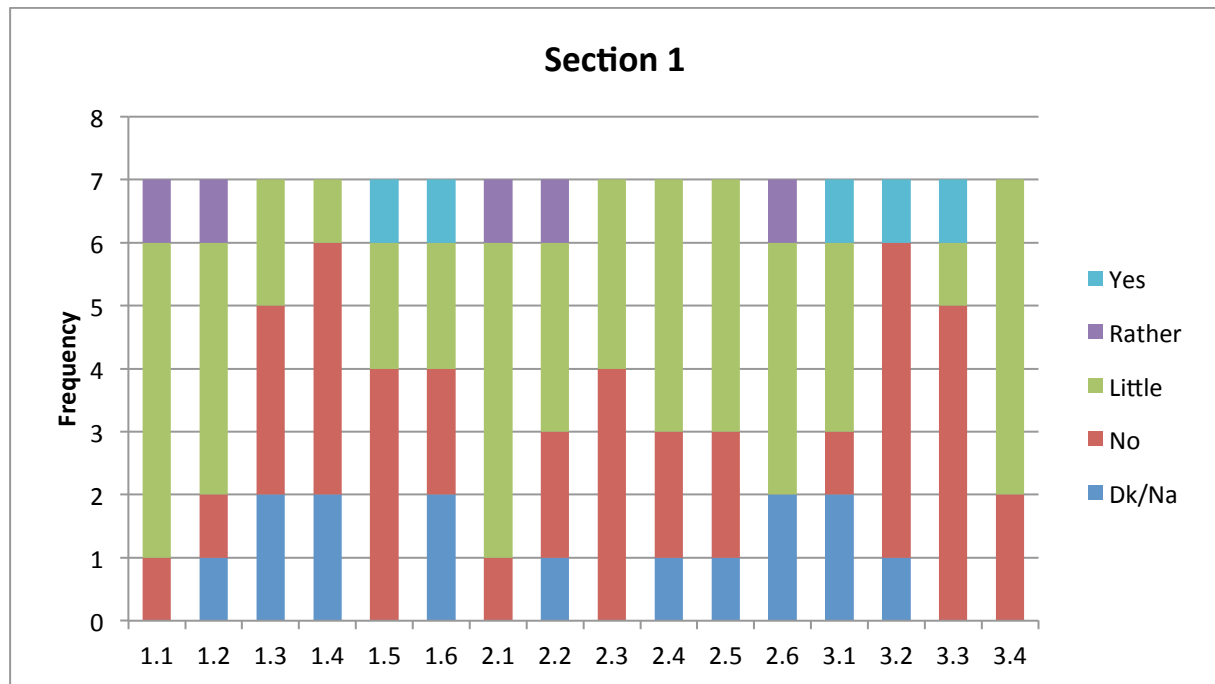


Fig.1 Results Section 1 of "The Equitable Access Score-Card".

The third area is entitled "Rights and duties of users and other rights holders." The results show a certain lack of knowledge about the mechanisms that have the right holders to access relevant information. There is consensus in affirming that participatory mechanisms for right holders or mechanisms to redress risk situations are non-existent. And most of the participants think that there are few mechanisms to ensure the accountability of the competent authorities on water and sanitation. Specifically, there is an office for suggestions and complaints from the city council that has a dynamic use by citizens. Regarding the knowledge of relevant information, there is a service provider's (FACSA) office in the centre of town. A significant fact is related to the quality of the water network. All participants consider that the water quality is not good, and there is a certain consensus in looking for alternatives. A common choice is to purchase bottled water. In this sense, even the service provider, FACSA, has installed in the municipality decentralized treatment plants (reverse osmosis) that provide water with a better quality than that distributed through the main network. Being a completely free option for users, many people opt for this type of provision to meet the needs of water quality for drinking and cooking.

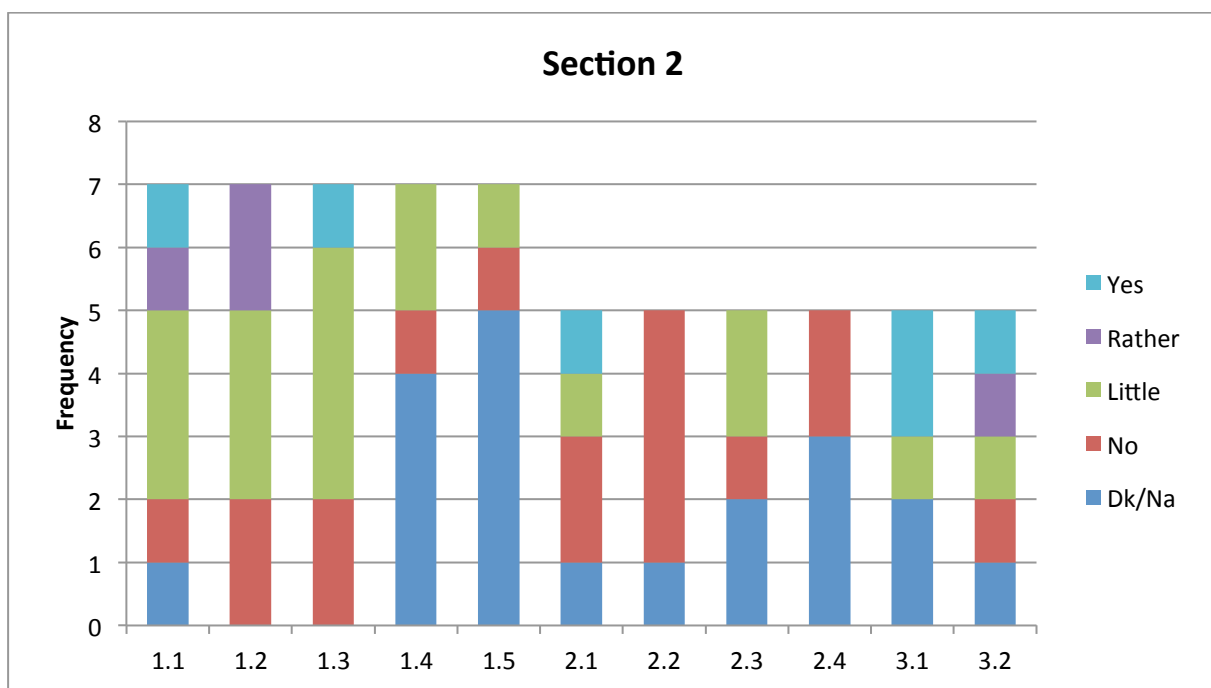
### Reducing geographical disparities

The second section, about geographical disparities, also consists of three areas. The results are presented in Figure 2. The first area is "Public policies to reduce disparities in access between geographical areas." Despite the lack of consensus, the workshop participants say that there are few public policies to reduce disparities between urban areas, peri-urban and rural areas. However, the results also indicate that to some extent there is an integrated approach, as well as appropriate technical mechanisms to support the provision of water and sanitation services in rural areas or

settlements. Moreover, one can observe a widespread lack of knowledge about the mechanisms of self-provision and sector policies to reduce geographical disparities. It was noticed that between the authorities and the service provider exists an awareness to reduce disparities between urban and rural areas, but the reality of irregular settlements is ignored. A map of the municipality with the pre-identification of areas with presence of socially vulnerable groups / homeless / irregular settlements... is shown in Annex 1.

The second area is entitled "Public policies to reduce price disparities between geographic areas." The results show that the participants of the workshop rarely know details about this area. The few responses deny the existence of any tool, subsidy or organization to reduce geographical disparities within the water sector. The service provider does not fix prices. They are proposed by the City Council and approved by the Autonomous Community.

The lack of knowledge of the participants about the third area, "Geographical distribution of foreign aid for the sector" is also high. However, the answers assert that there is identification by authorities of the less developed areas and there is international financial support to redress this situation.



**Fig.2** Results Section 2 of "The Equitable Access Score-Card".

### Access for vulnerable and marginalized groups

This section is firstly composed by a quantification of vulnerable groups existing in the area of the municipality, then a generic area about policies aimed at vulnerable groups in the field of water and sanitation. Finally, the section includes 10 specific areas dedicated to each of the vulnerable groups established in the document "The Equitable Access Score-Card" (see Table 1 for the list of vulnerable groups and their numbering).

**Table 1** Vulnerable groups, numbering and matching with the document “No one left behind”

AREAS OF ACTION	RELEVANT SECTION IN THE NO ONE LEFT BEHIND PUBLICATION
3.1 Public policies to address the needs of vulnerable and marginalized groups	Section 5.1
3.2 Persons with special physical needs	Section 5.2
3.3 Users of health care facilities	Section 5.3
3.4 Users of educational facilities	Section 5.3
3.5 Users of retirement homes	Section 5.3
3.6 Prisoners	Section 5.3
3.7 Refugees living in refugee camps and centres	Section 5.3
3.8 Homeless people	Section 5.4
3.9 Travellers and nomadic communities	Section 5.4
3.10 Persons living in housing without water and sanitation	Section 5.5
3.11 Persons without access to safe drinking water and sanitation in their workplaces	Not discussed

Table 2 shows the quantification of access to water and sanitation by vulnerable groups expressed in the workshop. It is surprising the low perception of the respondents about access to water and sanitation between the quintile with less economic resources. Moreover, we can also see that the overall assessment of the access among users of public centres and prisons is assessed very positive.

**Table 2** Quantification vulnerable groups in Castelló de la Plana

	Minimum value	Mean	Maximum value
% of people with access to safe drinking water in town	80,00%	85,00%	90,00%
% of people with access to safe drinking water by the poorest fifth of the population	10,00%	35,00%	60,00%
% of people with access to sanitation in town	70,00%	81,00%	90,00%
% of people with access to sanitation by the poorest fifth of the population	10,00%	26,00%	50,00%
% of health care centers that have sufficient and adequate water and sanitation services	90,00%	95,00%	100,00%
% of education centers that have sufficient and adequate water and sanitation services	90,00%	94,00%	100,00%
% of prisons that have sufficient and adequate water and sanitation services	80,00%	88,75%	95,00%

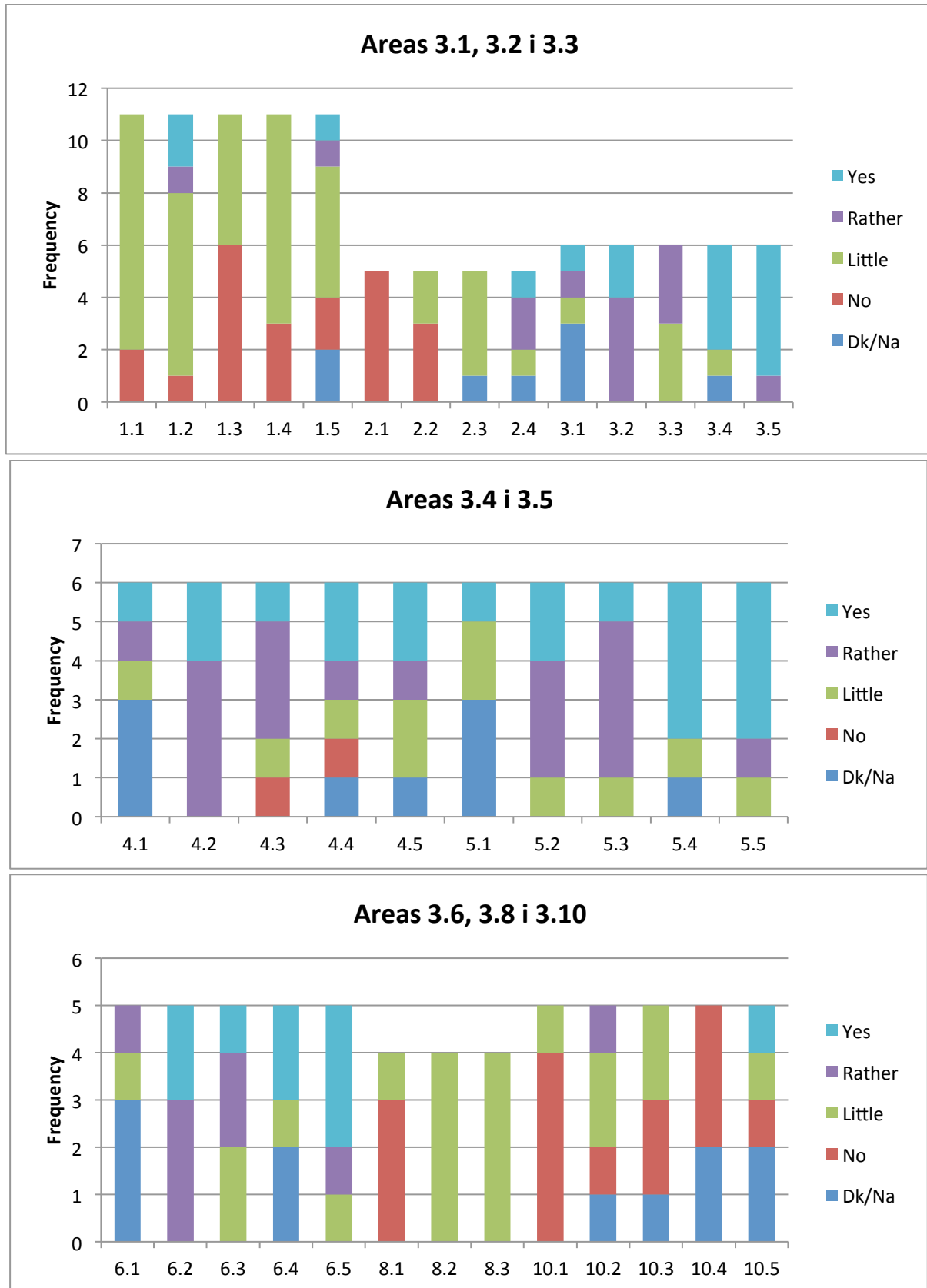


Fig.3 Results Section 3, areas 1 to 6, 8 and 10 of “The Equitable Access Score-Card”.

Figure 3 presents the results for the eight areas worked in the workshop. In the first area, dedicated to public policies to address the needs of vulnerable groups, the answers lie mostly in the "Little" and "No", with very few responses of positive nature. Thus, participants consider that the presence of vulnerable groups in public policies is scarce or even non-existent. In fact, although the City of Castelló last year signed an agreement with FACSA to address supply needs of households with fewer resources, the scope of this is limited, since social organizations claim that they often end up paying bills for those affected.

As shown in bar charts, the perception of access to water and sanitation within the block *service users* (areas 3.3 to 3.6) is very positive, with answers mainly lying in "Yes" and "Rather." However, there is a widespread lack of knowledge about the existence of access data on different services, as well as a slight unknown about complaint mechanisms available to users / prisoners. Although the participants in the workshop had no information on access in the workplace, it was clear in the discussion of the results that there is a systematic failure of access to water and sanitation among farmworkers. Participants attributed this problem to the nature of work and the seasonality of the same, with large flows of workers at time of collection.

The results obtained in the block of people with special physical needs (area 3.2) and housing shortcomings (areas 3.8 and 3.10) are significantly more negative, with an absolute predominance of the options "No" and "Little", and in some cases a significant lack of knowledge. In the first case there is a general consideration that there is a technical regulation that guarantees access, but the perception of the policies implemented is very negative. About homeless people, there is a lack of quantification of access to water and sanitation, although it seems that to some extent there is political and public funds that support this group. There is also a lack of quantification of households without access to water and sanitation and, despite programs such as the agreement between the City and FACSA mentioned above. The general perception is negative in terms of diagnosis of the problem and public policies thereon.

### **Affordability and other normative components of HRtWS**

First, the last workshop focused on Affordability issues (i.e. section 4 of the protocol). The section is divided into two blocks. In first block public policies are assessed to promote affordable water and sanitation services. Second block focuses on tariff measures. Finally, specific block included social protection measures.

As shown in Figure 4, the participants in the workshop considered that policies to ensure affordability of the service are by and large in place. However, the perception of the participants is that there is no data about the affordability of water and sanitation services, or these data is not easy to access. Another negative aspect is the affordability of those users who practice self-provisioning. Although it is publicly known that a considerable portion of the population of the municipality uses



its own well either as a single source of supply or mixed form with the network, most of these wells are unregulated or non-considered when formulating policies in the sector.

In Figure 4 you can also observe the perception of the participants in the workshop on tariff measures and social measures to address the problem of affordability of the service. The general opinion is that there is a lack of analysis of the measures by the authorities, and that some measures have been considered and implemented but timidly. It is also evident that from the point of view of the participants in the workshop, the applied tariff measures to improve affordability do not contribute to the financial sustainability of the system. Therefore, the overall consensus is that affordability has been little treated through tariff and social protection measures, and in both cases without much success.

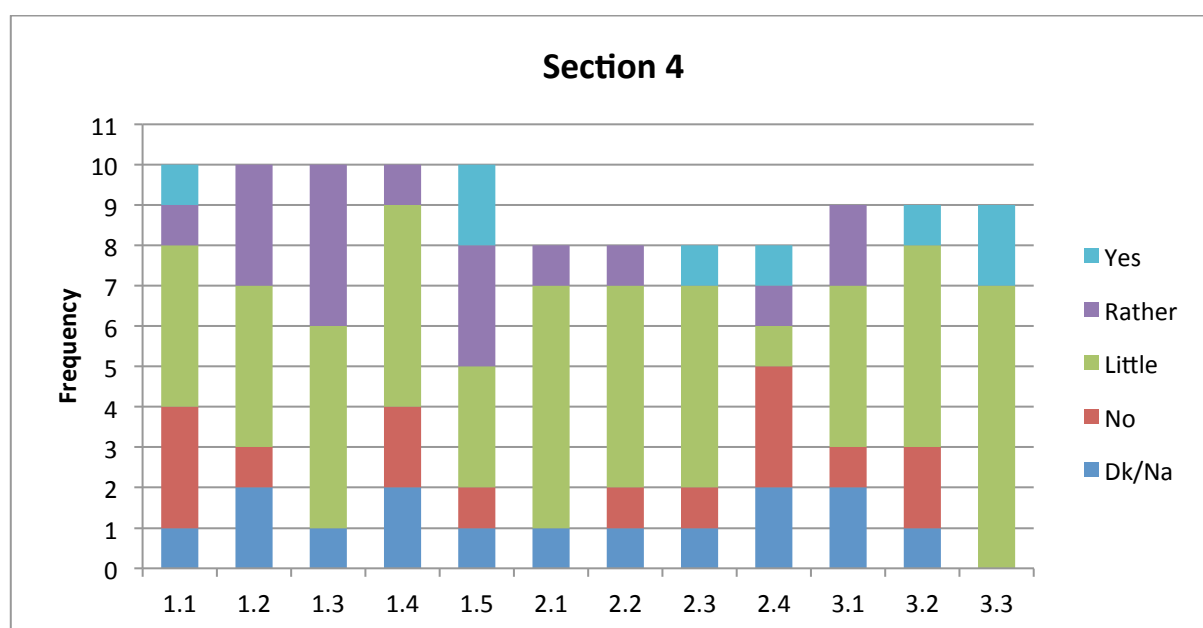


Fig.4 Results Section 4 of “The Equitable Access Score-Card”.

In the second part of this latest workshop the relative importance of the different dimensions of the Human Right to Water and Sanitation (separately) were evaluated, and also for the different vulnerable groups.

As shown in Table 3, in the case of access to water the priority dimension for the groups with housing shortcomings seems to be availability, while for people with special physical needs is physical access, and for service users is quality. Note that this result could be due to the general discomfort that exists in the municipality with the organoleptic properties of water. Water hardness is above liking of the users. Moreover, the less priority dimension seems to be affordability, except for the case of households without access water and sanitation.

In the case of sanitation results are very polarized, indicating the existence of two top priority dimensions, physical accessibility and availability; and three less priority dimensions, acceptability,

affordability and quality. In the case of households without access to water and sanitation, affordability is clearly the priority dimension.

**Table 3** Prioritizing the normative dimensions of HRtWS for each vulnerable group.

Vulnerable group	Number of responses	Mean				
		Availability	Physical accessibility	Quality	Acceptability	Affordability
<b>HR WATER</b>						
1. Special physical needs	5	<b>3,8</b>	<b>4,8</b>	3,4	1,8	1,2
2. Health care centers	6	2,7	<b>3,3</b>	<b>4,5</b>	2,5	2,0
3. Educational centers	6	2,7	<b>3,3</b>	<b>4,2</b>	3,0	1,8
4. Retirement homes	5	<b>3,2</b>	<b>3,2</b>	<b>4,2</b>	2,6	1,8
5. Prisoners	5	<b>3,6</b>	3,2	<b>3,8</b>	2,6	1,8
7. Homeless people	4	<b>5,0</b>	<b>3,8</b>	2,3	2,0	2,0
8. Travellers and nomads	2	<b>5,0</b>	3,0	<b>3,5</b>	2,0	1,5
9. Houses without water and sanitation	5	<b>4,4</b>	2,2	2,2	2,6	<b>3,6</b>
10. Workplaces	7	<b>3,6</b>	<b>3,9</b>	3,1	2,6	1,9
<b>HR SANITATION</b>						
1. Special physical needs	4	<b>3,5</b>	<b>5,0</b>	2,8	2,0	1,8
2. Health care centers	5	3,2	<b>3,6</b>	<b>4,0</b>	2,4	1,8
3. Educational centers	4	<b>3,3</b>	<b>4,0</b>	2,5	2,5	2,8
4. Retirement homes	4	<b>3,5</b>	<b>3,8</b>	2,5	2,5	2,8
5. Prisoners	5	<b>4,0</b>	<b>3,6</b>	2,6	2,4	2,4
7. Homeless people	4	<b>3,8</b>	<b>4,0</b>	3,3	2,0	2,0
8. Travellers and nomads	2	<b>4,0</b>	<b>3,5</b>	2,0	2,0	2,5
9. Houses without water and sanitation	2	2,5	2,5	2,0	<b>3,0</b>	<b>5,0</b>
10. Workplaces	4	<b>4,3</b>	<b>3,3</b>	3,0	2,5	2,0

## Conclusions and recommendations

- There is great unawareness among the population, and even between the authorities and organizations working in the social field, on the principles and approaches included in the human right to water and sanitation. The legal framework and the integration of regulatory safeguard to ensure that equal access, both economically and geographically, are vague and in some cases, non-existent.
- For a more in-depth diagnosis, specific information should be obtained, both legal / regulatory, and quantitative, general and disaggregated by region and vulnerable groups. The creation of an integrated space for discussion is proposed, at least for professionals in the fields of social work, urban planning and technicians of the local administration to assess, complement and work on that information. A first goal may be to define actions for information / training. Actions designed could be general or specific, for example, for school groups, users of public services, or social groups.

- In the same direction it is recommended to make publicly available the contractual arrangements between the local administration and the service provider in order to raise awareness among the population of the rights and duties of the parties involved. If necessary, the agreements should be revised in order to introduce aspects that improve service delivery from the perspective of HRtWS. The process can be coordinated in a participatory manner in the areas listed above.
- Regarding the focus on vulnerable groups from the point of view of HRtWS, it is noticed that users value very positively the access to water and sanitation in the public services centres, but admit a lack of information about the mechanisms of complaint about the level of service that these centres should provide.
- Homeless people and households without access to water and sanitation should be first targeted and approached differently from other vulnerable groups. The general perception is that these groups are in a very vulnerable situation with regard to access to these services. At the same time, nonetheless, there is a high lack of knowledge about the number of people affected and the actual conditions of access to services.
- With regard to access to water and sanitation in the workplace, despite the lack of information, it is likely an uncontrolled provision of access to water and sanitation between agricultural workers, especially among seasonal workers living in collection areas.
- In relation to the normative components of the HRtWS, it is noticed that although the sanitary quality of drinking water is guaranteed by disinfection, consumers value negatively their organoleptic characteristics; the acceptability of drinking water is clearly low. Information about drinking water quality (bacteriological parameters, physico-chemical and organoleptic) is difficult to access or requires little known procedures. (They are available to subscribers on demand, and within central government information systems).
- There is a lack of public information and knowledge about the technical characteristics of the water production and supply system, of the differences of quality in terms of sanitary disinfection and acceptability, and even of alternatives to improve the quality of drinking water. A wide range of training / information actions can be devised to overcome these deficiencies.
- In relation to the quality / acceptability, stands as positive the existence of decentralised treatment plants based on reverse osmosis, which are distributed in the city, fuelling public sources and which serve water with organoleptic qualities highly valued by people for free. This model of service delivery could be extended and prioritize those users from vulnerable groups.
- The other normative component to emphasize is affordability, particularly in the case of households without access to water and sanitation. It is perceived the willingness by the City Council to promote policies that ensure the affordability of water and sanitation services to all

subscribers and all services. The tariff system could not be analysed in detail, but it seems more affordable than in other cities of the Mediterranean. However, the study and implementation of tariff measures and social protection measures is perceived as an unexplored path. It seems that in general, the little progressivity of the current system could be used for financing any action or changes in the services' policies listed above.

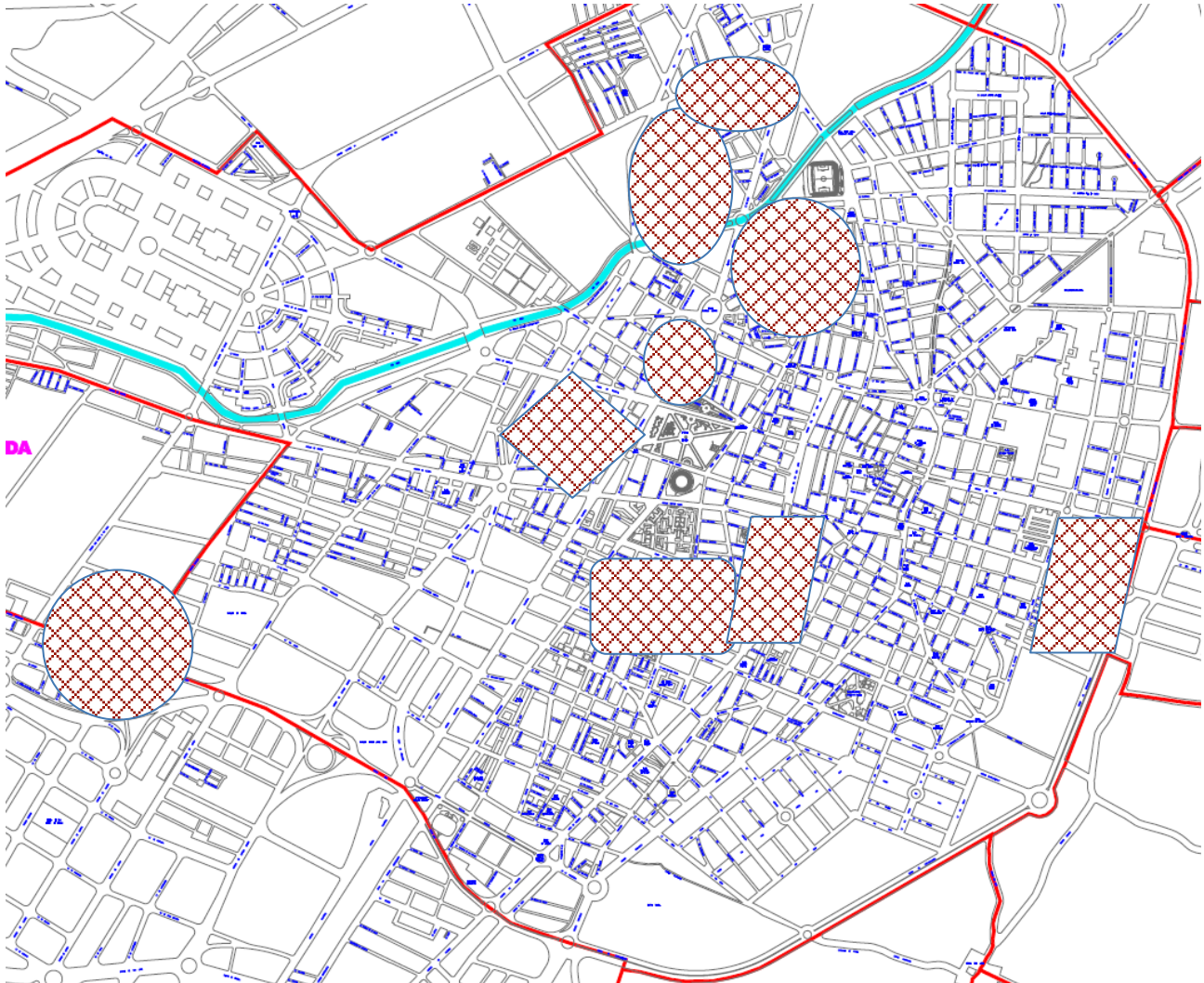
- From a methodological perspective, the diagnosis tools devised have proved to be efficient to promote a first contact and a certain appropriation of the rights concept by sector stakeholders. It can be considered as a first step towards the definition of a specific common working space between different sectors' professionals at the local level. Having said this, it is still soon to see if there are any significant impact in the strategies of the municipality and other actors involved.

## References

- United Nations Economic Commission for Europe, World Health Organization Regional Office for Europe. (2012). No one left behind. Good practices to ensure equitable access to water and sanitation in the Pan-European region. (United Nations Publication Sales No. E.12.II.E.5). Geneva, Switzerland.
- United Nations Economic Commission for Europe, World Health Organization Regional Office for Europe. (2013). The Equitable Access Score-Card. Supporting policy processes to achieve the human right to water and sanitation. Geneva, Switzerland.
- United Nations General Assembly, 2012. Report of the Special Rapporteur on the human right to safe drinking water and sanitation: Integrating non-discrimination and equality into the post-2015 development agenda for water, sanitation and hygiene. Resolution A/67/270.
- United Nations General Assembly, 2010a. Human rights and access to safe drinking water and sanitation. Resolution A/HRC/RES/15/9.
- United Nations General Assembly, 2010b. The human right to water and sanitation. Resolution A/RES/64/292.
- United Nations General Assembly, 2010c. Report of the independent expert on the issue of human rights obligations related to access to safe drinking water and sanitation, Catarina de Albuquerque. Resolution A/HRC/15/31/Add.1. New York.
- United Nations General Assembly, 2009. Report of the independent expert on the issue of human rights obligations related to access to safe drinking water and sanitation, Catarina de Albuquerque. Resolution A/HRC/12/24.
- United Nations Human Rights Council, 2011. The human right to safe drinking water and sanitation. Resolution A/HRC/RES/16/2.

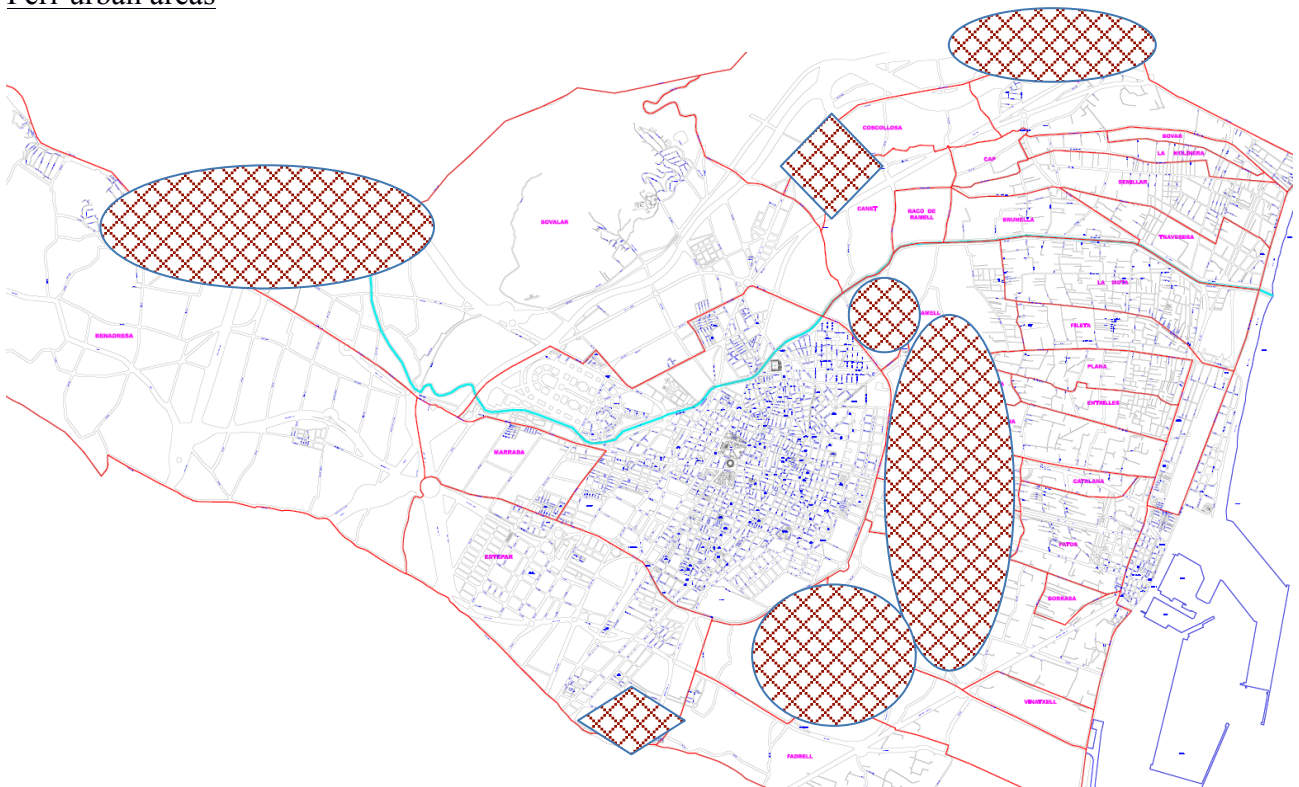
## Annex I. Areas with potential geographical disparity or presence of vulnerable groups

### Town centre



**Fig. 5** Areas from the town centre with potential presence of vulnerable groups or geographical disparity

Peri-urban areas



**Fig. 6** Peri-urban areas with potential presence of vulnerable groups or geographical disparity.