


Article

Citizen and Educational Initiatives to Support Sustainable Development Goal 6: Clean Water and Sanitation for All

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Abstract: Sustainable Development Goal 6 affirms the need to “ensure water availability, sustainable water management and sanitation for all” and thereby highlights a current problem in Spain caused by climate dynamics in the south and southeast of the peninsula and the islands. This study is based on a non-probabilistic online survey with 455 participants ($n = 455$) carried out to identify citizens’ views across the Autonomous Communities and detect good and bad practices, including efficiency gains and specific problems, derived from water management. Differences in perceptions were found regarding place of residence, gender, and education level, which were all especially significant in relation to territory. Generally, people who live in areas with greater water abundance are less aware of the need to make good use of it. There are no major differences in terms of gender, although there is a greater awareness among women about the effects of climate change and the need for good water management. It is argued that education should employ innovative materials and pedagogically motivating resources from school to university levels.

Keywords: water; sustainable development goals; geographical education

1. Introduction

The sustainable development goals (SDGs) are among the most ambitious UN targets and indicators to be established in recent decades and are detailed in Agenda 2030 [1]. For SDG 6, targets are [2] (pp. 10–11) “6.1 By 2030, achieve universal and equitable access to safe and affordable drinking water for all; 6.2 By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations; 6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally; 6.4 By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity; 6.5 By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate; 6.6 By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes; 6.a By 2030, expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities and programs, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies; 6.b Support and strengthen the participation of local communities in improving water and sanitation management.” Indicators related to these targets are not always been monitoring (Figure 1).

They aim to address the main socio-economic and environmental problems facing humanity today so that future generations can inherit a planet with living conditions suitable for development, based on respect for our common home [6]. In this context, water might be thought of as the ‘nerve centre’ of sustainable development [7,8], as it meets the basic needs of human beings [9] (p. 127), and impacts on the eradication of poverty (SDG1) and hunger (SDG2), as well as health and well-being (SDG3). Without water, there is no life, and its scarcity is one of the greatest challenges of the 21st century [9] (p. 129). This challenge is not only being addressed by politicians [10], but also by public-private partnerships (PPPs), which play a vital role in the supply of drinking water [11], and universities, which promote research that contributes to the debate on the organization of strategies to achieve Goal 6. This water shortage is not only aggravated by the effects of climate change [12,13], which is the cause of most natural disasters, but also by the (mis-)management of water around the world.

UN initiatives such as the International Decade for Action on Water for Sustainable Development, 2018–2028 [14], World Water Day (22 March), and World Toilet Day (19 November) raise awareness of the water and sanitation crises and exert public pressure for change [15,16]. Will efforts be sufficient to achieve SDG 6 by 2030? Will the human right to drinking water and sanitation be universally realized? To what extent will people be motivated by evidence, and to what extent will they be able to contribute to good practice?

The targets established for this objective appear to be based on political decisions and governance. However, the water footprint [17] is a global problem, and initiatives to address it also need to be taken by water-conscious citizens [18], which is an important aim for target 6b.

It is known that the unequal distribution of rain on Earth means that some areas lack this element while others have a surplus, which—together with climate change, the distribution and misuse of water, and the appropriation of water derived from land grabbing—means that just shy of half of the world’s population suffers from water access problems. Consequently, conflicts occur, as has been found, for example, in the case of Africa [19]. The sustainability of the different uses of water spaces or landscapes requires concerted management and agreements with the social agents involved in those territories [20] (p. 90).

This paper focuses on Spaniards’ views toward water use, in a context of extreme north–south differences with respect to rainfall [21] (pp. 467–468), which is the main source of water supply. The population’s engagement is conditioned by their own perception [22] and use of water, as well as behavioural and emotional aspects, which can lead to better knowledge and awareness of the problem. The research was undertaken through an online survey, which includes information on specific citizen initiatives underway, and possible suggestions for future collaboration towards SDG 6.

The work also aims to be an educational resource to extend knowledge of and interest in water and its problems, by suggesting enjoyable ways to incorporate it into teaching activities. The aim of the article is not to go through what textbooks explain about water issues, but to present an innovative way in realizing specific water problems using a story map after a survey analysis making people think about their own perception and use of water. Thus, the methodology will be described first and then the results will be presented, followed by a discussion and conclusions.

2. Materials and Methods

The two methodological pillars of this study are: on the one hand, the population’s perception of water use, an essential element that will condition the degree of citizen involvement in this objective, which will be carried out by means of an online survey to residents across the Spanish Autonomous Communities (ACs); and on the other, education, as a transfer not only of knowledge but also of attitudes and values that motivate behaviour, which will be addressed in a different way that textbooks do, using an educational resource in ‘Story Map’ format, which can be extrapolated to other aspects of SDG 6, thus completing textbooks aims.

It is important for those who have the data, such as government agencies and scientists, to monitor progress and develop new methods of gathering information. These open up new areas for research

and partnerships and offer opportunities to find solutions to complex development challenges [5] (p. 2) as well as the use and re-use of public data produced by the responsible bodies.

It is clear that public bodies, responsible for the data, [should] update them periodically, filtering and selecting those that can be published and are free of charge, without infringing security laws and complying with European regulations. [23] (p. 15)

Data from the Spanish National Institute of Statistics (INE) have been employed in this way in this work. SDG information on its website [24] is increasing which should raise the goal's profile, as well as help address one of the criticisms made of many of the SDGs' indicators [25,26]. Some of them, such as water price, have been used in Figure 7.

2.1. Online Survey

The survey, which was designed and evaluated by experts, analyses the public's perception of water use in Spain and includes specific initiatives currently being carried out, by predominantly focusing on individual and collective action. Consequently, 'good citizen practice' and potential improvements to water use are identified, leading to a list of recommendations for the authorities. Evidence indicators, using the Likert scale and qualitative information, have also been collected in the online survey. Likert scale has been used for its simplicity [27] and reliability. It can be easily constructed, modified, and the numerical measurement results can be directly used for statistical inference [28].

The survey was responded to by 445 people: 42.5% male (n = 189) and 57.5% female (n = 256), 38% live in an Autonomous Community with a Gross Domestic Product per capita above the mean of Spain (€25,727 in 2018) [29], and only around 32% has not studied at university, some because of their age (79%). All respondents were resident in the 17 Autonomous Communities (ACs) of Spain and had a wide range of ages, with the median being 37 years old for men, and 34 for women (Figure 3). Of these, only 15% had previously lived in another Spanish Autonomous Community or abroad. Here, 15.5% of the respondents are doctors; 52.13% have received university education and have a degree, a bachelor's degree or a master's degree, or are studying for one; and 32.36% have followed primary, secondary, high school or vocational training (that is, they have). The survey was launched on social media and to Universidad Nacional de Educación a Distancia (UNED) students and teachers from September to December 2019, after a short pilot period in July. There was not a previous selection of respondents, which is the reason that not all ACs has the same number of replies and thus the final number is not proportional to the population. Some marginalised communities were also manually selected. Respondents required access to a smartphone in order to participate. All respondents were volunteers with at least five minutes of availability to respond.

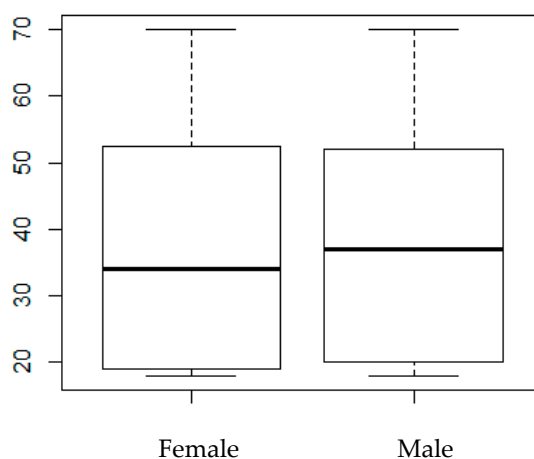


Figure 3. Gender and age of survey respondents. The box shows all the case rank, and the stress line is the median of age.

These data were treated with R data pre-processing in order to obtain the main statistical parameters so that the graphics provided by the Google application could be analysed in greater depth.

2.2. The Story Map—An Educational Resource to Raise Awareness

Conveying water issues to students involves designing activities that are attractive to them, and which also highlight the reality they face. To this end, a ‘Story Map’ was created using the ESRI’s Story Map® (Environmental Systems Research Institute, California, United States) tool. This tool allows text, graphics, images and other data to be integrated, and is also interactive, since it has the capacity through the ‘Survey123’ system to collect geodata in real time, which are simultaneously located on a map. In this way, the display of these data on a map facilitates both reflection and the drawing of new conclusions.

This method makes it possible to work toward the goal of supporting and strengthening the participation of local communities in improving water and sanitation management. The choice of an educational resource that was participatory in design and that enabled the world’s water access problems to be specified, such as the hoarding of water derived from land appropriation, is an example to be exported to other water-related issues. This resource has been employed in the classroom by the paper’s authors to encourage critical thinking derived from managing different sources of information and systemic reflection [30], which leads to the involvement of citizens through collaborative decision making and a sense of responsibility toward present and future generations.

3. Results

3.1. Spaniards’ Perception of Water Use

The key result of the survey (questions asked are in Appendix A, Figures A1–A6)) indicates that the majority of the population is aware of the need to improve water use efficiency, think that climate change may affect water use, and are conscious of the fact that drinking water is a scarce good. However, most do not consider that water in their place of residence is well managed, nor do they claim to be aware of SDG 6. It is argued that this lack of awareness may lead to less involvement in achieving this specific goal. To a lesser extent, respondents believed that the water facility that supplies their homes to be acceptable; but not all affirm that they have received and read information on water efficiency (Figure 4 and Table 1). Many of the cloud words are on survey (mainly those focused on management and sanitation).

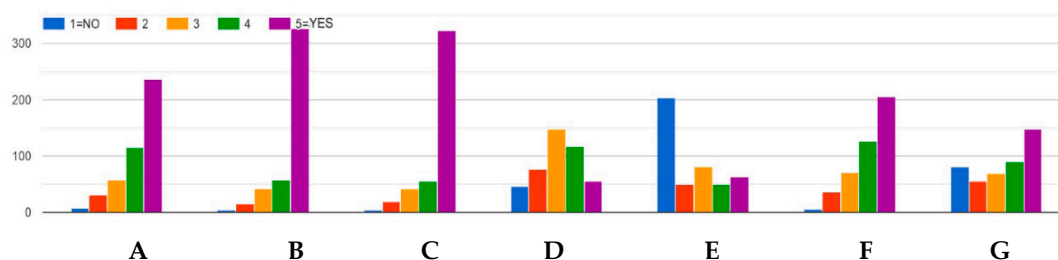


Figure 4. Google graphs on replies using the Likert scale about agreement or disagreement on every item (1 = No, I completely disagree –blue-, 2 = I partly disagree –red-, 3 = I am not sure –orange-, 4 = I partly agree –green-, 5 = Yes, I fully agree –purple-). Items used: **A**, I am aware about water use efficiency; **B**, I think climate change may affect water use; **C**, I am aware that drinking water is a scarce good; **D**, I believe that the water in my place of residence is well managed; **E**, I am aware of SDG 6: “ensure availability and sustainable management of water and sanitation for all”; **F**, The water facility that supplies my home is acceptable; **G**, I have received and read information about efficient water use.

Table 1. Main statistics on the answers obtained in the online survey.

Perception (n = 445)	Mean	Median	Q1	Q2
I am aware about water use efficiency	4.22	5.00	4	5
I think climate change may affect water use	4.54	5.00	4	5
I am aware that drinking water is a scarce good	4.52	5.00	4	5
I believe that the water in my place of residence is well managed	3.14	3.00	2	4
I am aware of SDG 6: “ensure availability and sustainable management of water and sanitation for all”	2.37	2.00	1	4
The water facility that supplies my home is acceptable	4.10	4.00	3	5
I have received and read information about efficient water use	3.38	4.00	2	5
I have had any problem with the water (bad taste, or a disease like <i>Helicobacter pylori</i>)	2.03	1.00	1	3
I am aware of any initiatives to raise awareness and “oblige the good use of water”	2.054	1.00	1	3

One result of the survey is a consensus demonstrated no differences on the median by gender or by the respondents' Autonomous Community. The statistical indicators corroborate the results obtained.

Cronbach's alpha is 0.65, which confirms the reliability of the medium/high data, as the maximum value would be the equivalent of 1.

Regarding whether the respondents encountered any problem with the water, such as a bad taste or a particular disease, such as *Helicobacter pylori*, the majority state that they have not encountered such, as seen in Figure 5. While more than half responded 'No' to this question, 40.4% state that they have had some problem with the water, on a range of 2–4. *Helicobacter pylori* infects approximately 50% of the Spanish population [31,32].

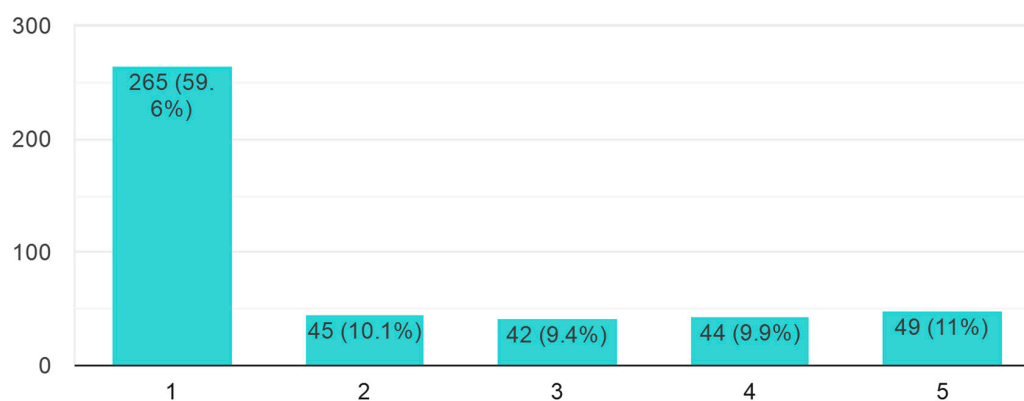


Figure 5. Answers to the question, ‘I have had any problem with the water (bad taste, or diseases, such as *Helicobacter pylori*)?’ using the Likert scale about agreement or disagreement on every item (1 = No, I completely disagree; 2 = I partly disagree; 3 = I am not sure; 4 = I partly agree; 5 = Yes, I fully agree).

Most respondents answered 'No' (57.1%) to the question about whether they were conscious of any particular initiative to raise awareness or “to oblige the proper use of water”, which indicates a poor level of knowledge about any action or plan aimed at preserving water quality and its efficient use (Figure 6). However, 42.9% did cite a specific initiative, as seen below.

Citizen behaviour in relation to water has been investigated by asking whether solid waste, oil, other pollutants or other products have been thrown down the drains at home (sinks, toilets, etc.) or in holiday resorts (hotels or residences). Although most respondents state that they do not throw any waste down the drain (Figure 7), over a hundred, which represents around a quarter of the sample, do throw away oil and other solid wastes, such as cotton ear buds, food, and cleaning residues. The latter two being predominantly discarded by women, who also flush away intimate hygiene items.

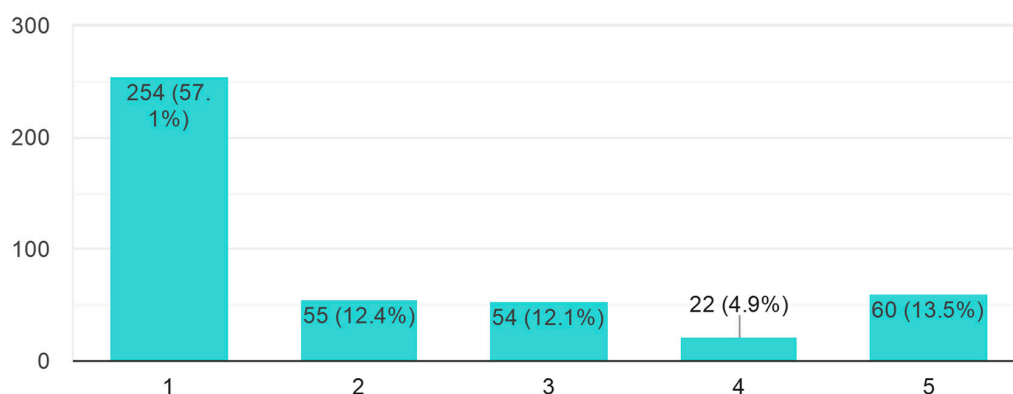


Figure 6. Answers to the question, “I am aware of any initiatives to raise awareness and oblige the good use of water” using Likert scale about agreement or disagreement on every item (1 = No, I completely disagree; 2 = I partly disagree; 3 = I am not sure; 4 = I partly agree; 5 = Yes, I fully agree).

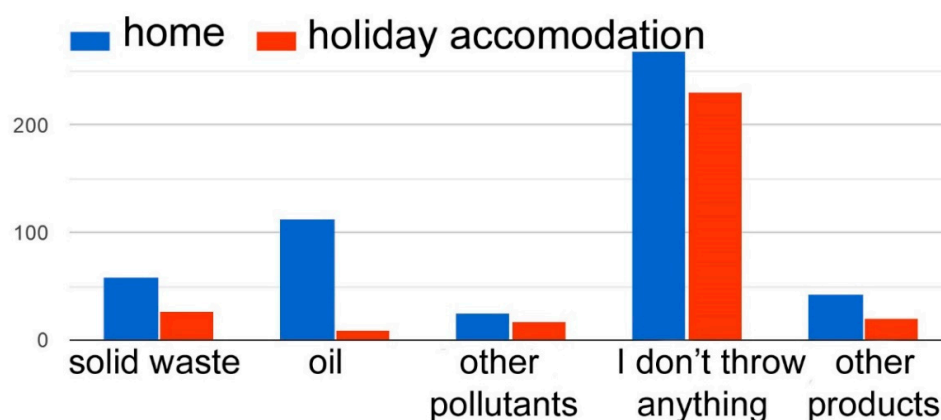


Figure 7. Answer to the question, “Do you flush solid waste, oil, other pollutants or other products down the drains (sink, WC, etc.) of your home or holiday accommodation, such as hotels or residences?” Number of people who do so at dwelling (**blue**) or in holidays (**red**).

3.1.1. Differences by Gender

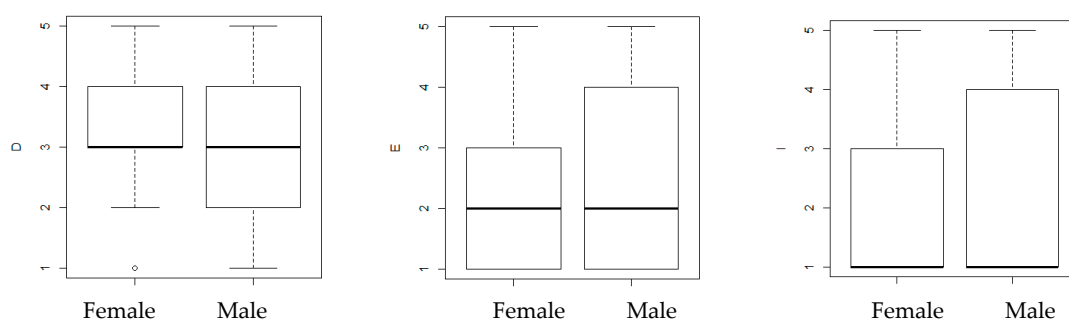
In addition to those differences already mentioned, there are a number of others, as we can see from the results in Tables 2 and 3. Although the gender variation does not seem very large, the box diagrams placed them into three specific items (Figure 8).

Table 2. Main statistics on the answers obtained in the online survey by gender (women). The median is not given because there is no difference between women and men.

Women (n = 256)	Mean	Standard Deviation	Trim-med	Skew	Kurtosis	Standard Error
I am aware about water use efficiency	4.20	1.00	4.37	-1.17	0.61	0.06
I think climate change may affect water use	4.56	0.82	4.74	-1.85	2.69	0.05
I am aware that drinking water is a scarce good	4.51	0.91	4.71	-1.86	2.71	0.06
I believe that the water in my place of residence is well managed	3.20	1.11	3.23	0.17	0.52	0.07
I am aware of SDG 6: “ensure availability and sustainable management of water and sanitation for all”	2.27	1.42	2.10	0.68	-0.91	0.09
The water facility that supplies my home is acceptable	4.09	1.03	4.25	-0.92	-0.11	0.06
I have received and read information about efficient water use	3.24	1.51	3.30	-0.28	-1.39	0.09
I have had any problem with the water (bad taste, or a disease like <i>Helicobacter pylori</i>)	1.95	1.43	1.69	1.14	-0.29	0.09
I am aware of any initiatives to raise awareness and “oblige the good use of water”	1.84	1.26	1.59	1.34	0.56	0.08

Table 3. Main statistics on the answers obtained in the online survey by gender (men). The median is not given because there is no difference between the two genders.

Men (n = 189)	Mean	Standard Deviation	Trim-med	Skew	Kurtosis	Standard Error
I am aware about water use efficiency	4.25	1.02	4.43	−1.25	0.64	0.07
I think climate change may affect water use	4.52	0.93	4.83	−1.94	2.98	0.07
I am aware that drinking water is a scarce good	4.53	0.89	4.73	−1.82	2.3	0.06
I believe that the water in my place of residence is well managed	3.05	1.23	3.06	−0.16	−0.97	0.09
I am aware of SDG 6: “ensure availability and sustainable management of water and sanitation for all”	2.49	1.58	2.37	0.45	−1.4	0.12
The water facility that supplies my home is acceptable	4.11	1.02	4.26	−0.96	0.11	0.07
I have received and read information about efficient water use	3.56	1.47	3.69	−0.55	−1.13	0.11
I have had any problem with the water (bad taste, or a disease like <i>Helicobacter pylori</i>)	2.13	1.45	1.93	0.90	−0.73	0.11
I am aware of any initiatives to raise awareness and “oblige the good use of water”	2.34	1.63	2.19	0.70	−1.19	0.12



(a) Question D: I believe that the water in my place of residence is well managed (b) Question E: I am aware of SDG 6: “ensure availability and sustainable management of water and sanitation for all” (c) Question I: I have received and read information about efficient water use

Figure 8. The diagrams in the box illustrate differences in questions D (a), E (b), and I (c).

Women believe more strongly than men that climate change may affect water use, so the average of both varies, but not the median. Women also feel that water in their residential location is well managed or at least have a more positive and united view of it compared to men (Figure 8a). The fact that there are three items in quantitative terms (a,b,c) makes one think about the need to better educate the population, especially women, in relation to the SDG if better knowledge and active collaboration toward the Goal is to be achieved. Spain is a country with a Human Development Index (HDI) that, in 2019, was 25th in the world and ranks 20th in terms of gender equality [15] but also requires active participation to improve the efficient use of water.

Although women state that they have encountered fewer water problems (1.95 mean on the Likert scale, in contrast to 2.13 for men), they have participated more actively in suggesting items, by contributing 66 (26% of the total number of women), while only 55 men (29% of the total number of men) identified a water problem in their written reply. According to the results of the Likert scale, men stated that they received more information about the efficient use of water; while women felt they received less.

Almost a quarter of the respondents (111) cited water problems, which included far more men (almost 30%) than women (less than a quarter). Men specifically mentioned the poor taste of the water, turbidity and colouring, bad smell, and excess lime, nitrates or chlorine. Only two claimed to have known a relative with a disease (*Helicobacter pylori*). However, in the women’s responses, health care concerns predominate beyond *Helicobacter pylori* itself (which is cited three times more by women than by men), as they add specific health problems—such as kidney colic, flaky skin, itchy skin, gastroenteritis, etc.—or talk about the consequences of tap water having lime and leading to long-term kidney disease.

The survey results found that men know more than women about current initiatives to boost water efficiency and are more likely to regard drinking water as a scarce commodity. Women specified fewer initiatives to raise awareness and “oblige the good use of water”, and they therefore appear to be less knowledgeable, as can be seen from the results (with 22% of the responses from men and 10% from women identifying specific known actions).

3.1.2. Differences by Autonomous Communities

Spain does not have an equal distribution of water, as noted above, and this is reflected, for example, in its price, which in areas of great abundance is symbolic, while in others, like Murcia, it is more expensive than in all the ACs except Catalonia (Figure 9). This is because of the unequal distribution of rainfall across the territory and its use for differing requirements. Furthermore, according to data from the INE, the unit cost of water in Spain in m^3/Euros has tripled since the year 2000. However, the perceptions of water “I believe that the water in my place of residence is well managed” (Figure 10c) and “The water facility that supplies my home is acceptable” (Figure 10d) does not fits with the real price of water (Figure 9).

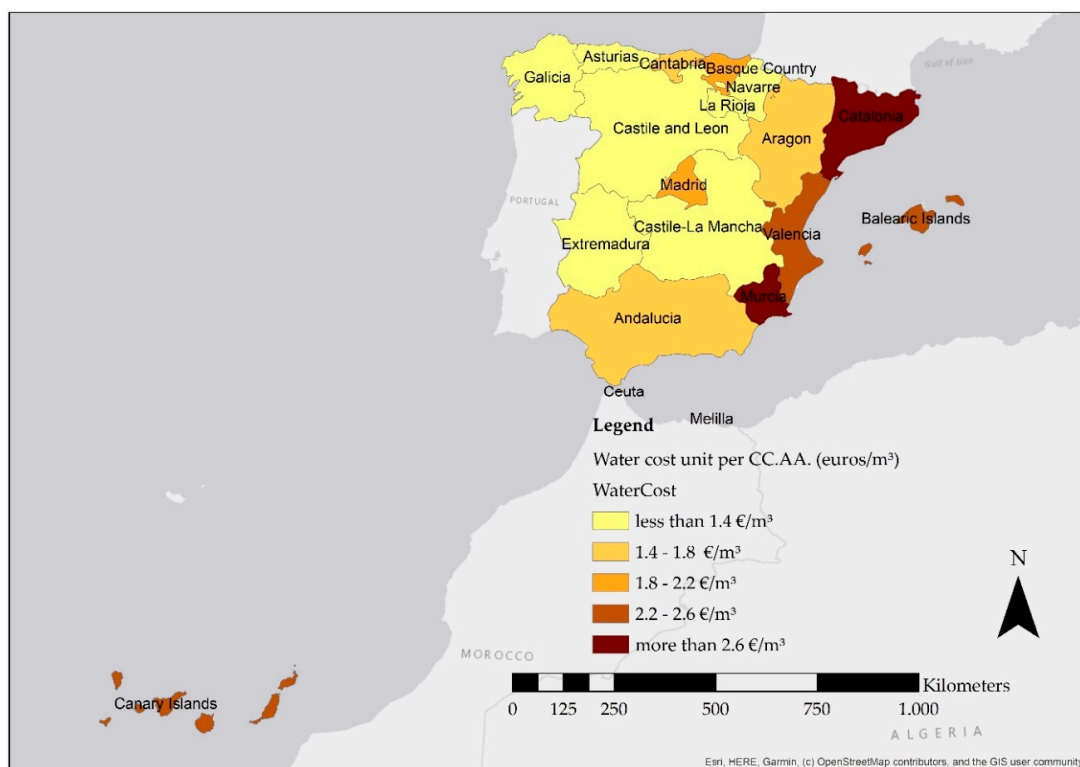


Figure 9. Unit Cost of Water in 2016 by Autonomous Communities. Source: INE.

Some of the results might have been qualified with a larger sample pool, as is the case with the Autonomous Community (AC) of Navarre which, with only four participants in the questionnaire, produced very different data in contrast to the other ACs. Navarre has a high agricultural income, a fairly generalized use of precision agriculture, and very efficient water consumption, and, furthermore, does not have serious supply problems. This view varies by region so, for example, in Murcia, which is an area with serious water problems, respondents suggested that instead of wasting so much water, it should be sent to other places that are short of it. In the island regions, on the other hand, it was suggested that desalination plants should be promoted. We can see differences in the box diagrams, according to the questionnaire’s indicators, for each of the Autonomous Regions (Figure 11).

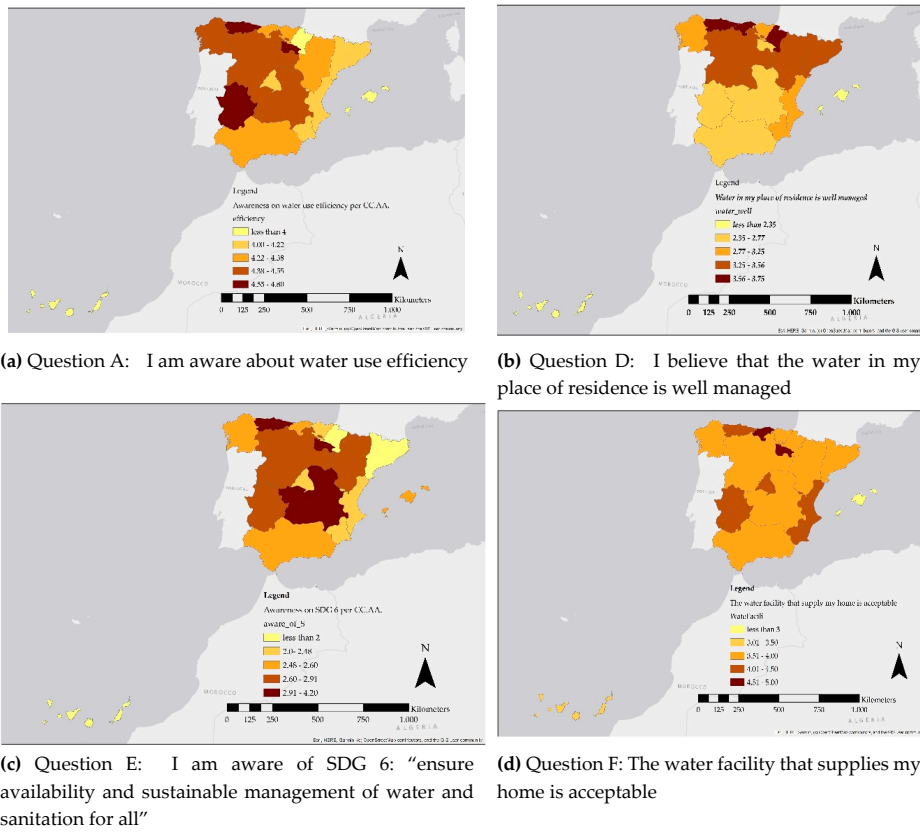


Figure 10. Maps on questions A (a), D (b), E (c) and F (d), survey results using the mean of Likert scale 1 = No, I completely disagree; 2 = I partly disagree; 3 = I am not sure; 4 = I partly agree; 5 = Yes, I fully agree).

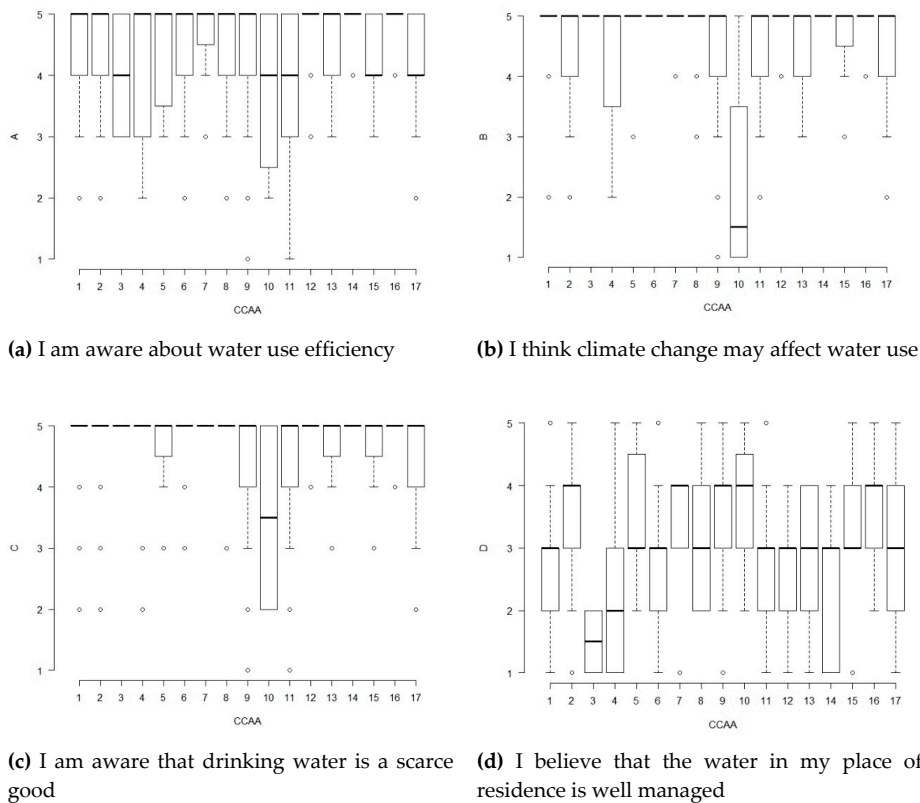
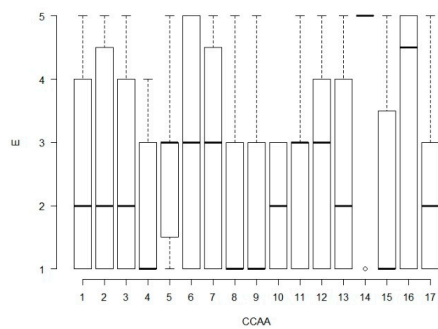
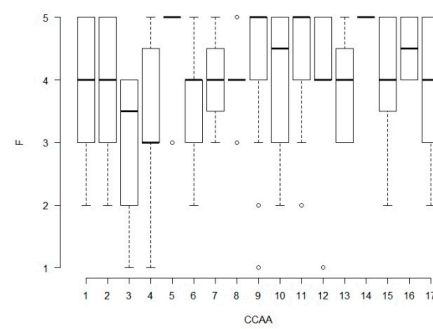


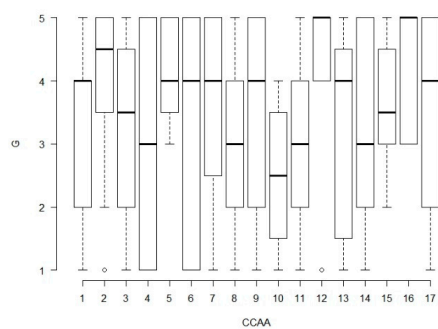
Figure 11. Cont.



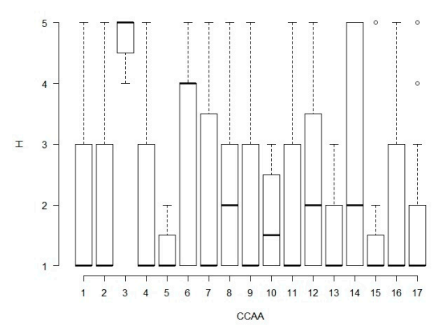
(e) I am aware of SDG 6: “ensure availability and sustainable management of water and sanitation for all”



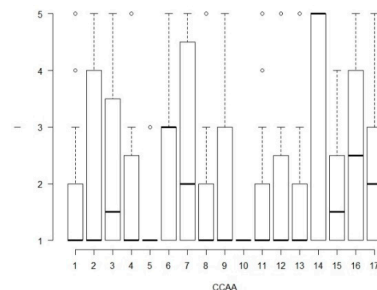
(f) The water facility that supplies my home is acceptable



(g) I have received and read information about efficient water use



(h) I have had any problem with the water (bad taste, or a disease like *Helicobacter pylori*)



(i) I am aware of any initiatives to raise awareness and “oblige the good use of water”

Figure 11. Respondents by NUT2 (Autonomous Communities). Note: Likert scale about agreement or disagreement on every item (1 = No, I completely disagree; 2 = I partly disagree; 3 = I am not sure; 4 = I partly agree; 5 = Yes, I fully agree) is on the vertical scale; ACs are on horizontal scale: 1. Andalusia (n = 30); 2. Aragon (n = 16); 3. Balearic Islands (n = 4); 4. Canary Islands (n = 23); 5. Cantabria (n = 7); 6. Castile-La Mancha (n = 13); 7. Castile and Leon (n = 11); 8. Catalonia (n = 9); 9. Community of Madrid (n = 124); 10. Navarre (n = 4); 11. Valencia (n = 81); 12. Extremadura (n = 15); 13. Galicia (n = 7); 14. La Rioja (n = 5); 15. Basque Country (n = 8); 16. Principality of Asturias (n = 10); 17. Murcia (n = 78).

Although the majority of those surveyed were aware of the need for efficient water use (Figure 11a), at between 4 and 5 on the Likert scale, there are four ACs in which a section of the respondents do not agree that water is used efficiently—specifically on the island ACs (Balearic and Canary Islands) and that of Navarra and Valencia, which are all at least two-tenths below the national average (4.22).

There is great unanimity in the belief that climate change may affect water use (Figure 11b), which is reflected by a score of 5 on the Likert scale, with the exception of Navarre—which is “incredulous about

climate change”—and the ACs of Aragon, the Canary Islands, Valencia, Galicia, Madrid, and Murcia, which are all at 4 and are all below the national average (4.54), although the latter two are at less than a 10th of a point.

The awareness that drinking water is a scarce good (Figure 11c) is shown as an ‘agreed statement’, with the exceptions of the Community of Madrid, Navarre, Valencia, and Murcia, which also have an average slightly below the national average (4.55), indicating that some of their inhabitants do not perceive water to be a scarce good. This is understandable in Madrid and Navarre, but in Valencia and Murcia, the explanation can be found in the large number of non-university respondents, as it is known that this group has a lower level of awareness of these problems.

Not all consider that water in their place of residence is well managed (Figure 11d). The data show greatest dissatisfaction with management in the island ACs (Balearic and Canary Islands), Andalusia, Castile-La Mancha, Valencia, Extremadura, Galicia, and La Rioja, all of which have averages below the national average (3.14) on this item, and the majority have water scarcity problems. The regions most satisfied with water management, without any of them being ‘fully satisfied’, are Aragon, Cantabria, Castile and León, Catalonia, Madrid, Navarre, the Basque Country, the Principality of Asturias and Murcia, although Murcia, Galicia and Catalonia have a greater dispersion of responses.

The generalized lack of knowledge of SDG 6: ‘ensure availability and sustainable management of water and sanitation for all (Figure 11e) stands out, with an average of 2.37 and a median of 2 (the third worst valued item) for the total of those surveyed. This fact is especially notable in the Canary Islands, Catalonia, the Community of Madrid, Navarre, the Basque Country, and Murcia, with an average below the national average. Many of these communities are among the most industrialized in the country. It would be necessary to study in greater depth the training in sustainability offered in schools and the fact that the SDG period begins in 2015 (2015–2030 period) and most people have not heard of it, as before those years, there was no education for sustainability as we now understand it. There is a great dispersion in the responses in several Communities (Castile-La Mancha and the Principality of Asturias, with responses in the range of 5 on the Likert scale, and 4.5 in Aragon and Castile and León).

The figures on the Likert scale in relation to the acceptability of the water installation that supplies the home (Figure 11f) offer almost all scores above 3, which means a favourable perception, with the Communities of the Balearic and Canary Islands once again being the most dissatisfied. Respondents in Castile-La Mancha, the Community of Madrid, Extremadura, and La Rioja were very satisfied with the water supplied to their homes, followed at some distance by the Community of Valencia and the Principality of Asturias.

The statement “I have received and read information on the efficient use of water” (Figure 11g), produced the greatest dispersion in responses. The Communities where respondents stated they received a lot of this type of information were Extremadura, followed by the Principality of Asturias, and then Aragon. The lowest overall ratings for this item, that is, those with the least information, were found to be those in Navarra, followed by Catalonia, the Valencian Community, Canarias, Galicia, and La Rioja, which were at least 0.2 below the total average (3.38). The Balearic Islands, Andalusia and Madrid were also found to be below this average, but less than two-tenths.

In eight ACs (Andalusia, Cantabria, Madrid, Navarre, Galicia, the Basque Country, the Principality of Asturias, and Murcia), hardly any water problems were identified (such as bad taste, or diseases like *Helicobacter pylori*) (Figure 11h), and they are accordingly below the total average of the problems found (2.03). According to respondents, water is highly problematic in the Balearic and Canary Islands, where it is known that on some of these islands it is not possible to drink tap water due to the resulting health problems. Castile-La Mancha respondents also expressed their concern about water quality, followed by Catalonia, Extremadura and Valencia, but at a considerable distance.

The Communities where respondents feel they know most about ‘awareness-raising initiatives’ to oblige the good use of water—in order of greatest to least known actions are (Figure 11i) La Rioja, Castile and León, Castile-La Mancha, the Principality of Asturias, Murcia, Balearic Islands, and Aragon, which are all above the total average of this item (2.054). On the other hand, the ACs that have

the greatest lack of knowledge of these initiatives are those of Cantabria and Navarra, followed by Andalusia, Catalonia, Valencia, the Basque Country, Galicia, Canary Islands, Extremadura, and Madrid, although the latter is quite close to the total average.

This reflects the fact that the Communities of the Balearic and Canary Islands are those that show the greatest concern for water problems, reflecting their greater vulnerability to them. The regions that have traditionally been the driving force behind industrial development and are densely populated (Catalonia, Madrid, and the Basque Country) appear to have a fairly uneven perception of water problems, which is usually around the total average.

3.1.3. Differences by Level of Education

Most respondents have a high level of education (Table 4)—15.5% of the respondents are doctors; 52.13% have received university education and have a degree, a bachelor's degree or a master's degree, or are studying for one; and 32.36% have followed primary, secondary, high school, or vocational training (that is, they have not studied at university, some because of their age, which explains a lower average age in this group of respondents). An important nuance observed in Table 4 is the fact that the population has a greater awareness and knowledge of water problems according to their level of education, as can be deduced from the data of the mean and median; therefore, doctors show greater knowledge and concern, followed by those who have a university degree or are in the process of obtaining it. The non-university education group shows results with less awareness of these problems.

Table 4. Results of the survey by level of education.

Items	Doctorate (Ph.D) (n = 69) 55% Male/45% Female			University Education (n = 232) 40% Male/60% Female			Non-University Education (n = 144) 41% Male/59% Female		
	Mean	Standard Deviation	Median	Mean	Standard Deviation	Median	Mean	Standard Deviation	Median
A	4.57	0.92	5	4.25	1.01	5	4.01	1.01	4
B	4.49	1.01	5	4.6	0.82	5	4.47	0.88	5
C	4.77	0.67	5	4.57	0.88	5	4.31	0.99	5
D	3.33	1.18	4	3.14	1.10	3	3.03	1.23	3
E	2.97	1.73	3	2.32	1.50	2	2.15	1.28	2
F	4.28	0.95	5	4.11	1.02	4	4	1.07	4
G	3.77	1.36	4	3.34	1.51	4	3.24	1.52	3.5
H	2.1	1.52	1	2.08	1.51	1	1.9	1.29	1
I	2.14	1.55	1	1.97	1.41	1	2.14	1.48	1
Age	48.19	13.33	50	39.54	15.45	39.5	29.33	16.73	19

A = I am aware about water use efficiency; B = I think climate change may affect water use; C = I am aware that drinking water is a scarce good; D = I believe that the water in my place of residence is well managed; E = I am aware of SDG 6: "ensure availability and sustainable management of water and sanitation for all"; F = The water facility that supplies my home is acceptable; G = I have received and read information about efficient water use; H = I have had any problem with the water (bad taste, or a disease like *Helicobacter pylori*...); I = I am aware of any initiatives to raise awareness and "oblige the good use of water"; Age = is the mean, standard deviation and median of the age of the three groups of respondents by level of education.

Figure 12 shows the same items, according to educational level and gender. It is clear that doctors (Ph.D), which include fewer women than men, are more aware about water use efficiency (A), and more women (Dr.Female) than men (Dr.Male) are aware about it, while women without university studies (NoUniv.Female) are the least aware. Males (NoUniv.Male), on the other hand, are least aware that drinking water is a scarce good (C). In the perception that climate change can affect water (B), there are no major differences either by gender or by level of education, and all groups are well aware of this fact.

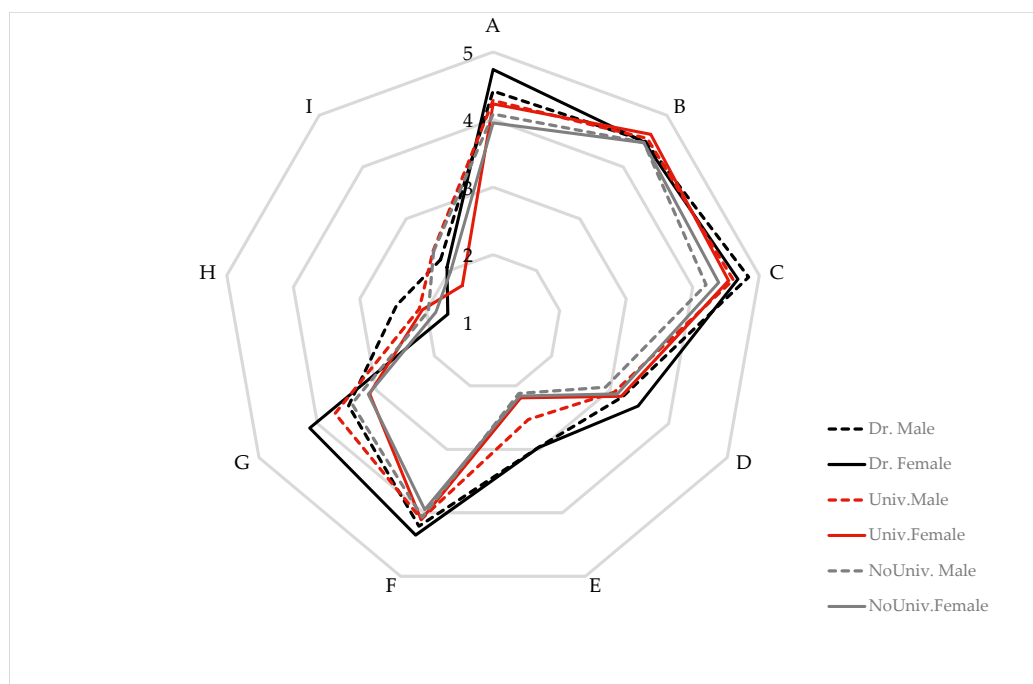


Figure 12. Spider diagram of the population’s perception of water problems and management by educational level and gender using the items in the survey. Note: **A**=I am aware about water use efficiency; **B**=I think climate change may affect water use; **C**=I am aware that drinking water is a scarce good; **D**= I believe that the water in my place of residence is well managed; **E**=I am aware of SDG 6: “ensure availability and sustainable management of water and sanitation for all”; **F**=The water facility that supplies my home is acceptable; **G**=I have received and read information about efficient water use; **H** = I have had any problem with the water (bad taste, or a disease like *Helicobacter pylori*...); **I** = I am aware of any initiatives to raise awareness and “oblige the good use of water”.

The female doctors (Dr.Female) highlighted in items D = I think water in my place of residence is well managed; E = I am aware of SDG 6: “ensure availability and sustainable management of water and sanitation for all”; F = The water facility that supplies my home is acceptable, and G = I have received and read information on water efficiency, followed by male doctors, except in item G, where university males claim to have received and read information on water efficiency followed by men from the other groups. Women here are left far behind, as in items H and I. Items G and I could be interpreted, as previously mentioned, as a need to promote environmental culture not only to the population in general, but especially to the female population. On the other hand, H might be understood in different terms, perhaps because the majority of these female doctors belong to ACs in which the water is of excellent quality, such as Madrid (61.3 % of respondents), thus they perhaps don’t need to be so aware about water quality.

3.2. Some Measures Proposed to Improve Water Efficiency

In addition to those already cited in The International Decade for Action on Water for Sustainable Development, 2018–2028, World Water Day (22 March), and World Toilet Day (19 November) to raise awareness about water and the sanitation crises and exert public pressure for change are those cited by Borderías in the Guía Prado [9] (i. In relation to waste, do not flush toxic substances down rivers or down the toilet; ii. In relation to distribution, to repair water leaks; iii. In relation to saving, to turn off the taps if water is not used; iv. In relation to organization, strong management in freshwater ecosystems; v. awareness campaigns and alliances). It is pointed out that water management should be undertaken by public organizations, which are well managed and audited, so as to ensure water quality and access for all citizens.

Those surveyed provided specific recommendations, ranging from the local environment to global scale:

- Domestic—in the home, the following actions are cited: use less water and do not leave the tap running while brushing your teeth; have a quick shower; place a weight in the tank to reduce the volume of water during filling; be efficient when dishwashing; use short washing machine cycles on eco mode; use tap water rather than bottled water; and reuse water: for example, use dirty shower water for the WC.
- Local advertising campaigns undertaken by town councils of municipalities and/or metropolitan areas: Malaga (EMASA), Barcelona (Moviment per l'Aigua Pública i Democràtica), Valladolid, Saragossa (Water Pollution Tax, ICA), Sustainable Water Management Plan from Mao. Actions: treat and reuse water, study and monitor the efficient use of water.
- Regional: Community of Madrid (Canal de Isabel II, such as the 'Matilda' campaign with stickers in the bathrooms of public buildings), Region of Murcia (Sermubeniél SA), calls for tourists' responsible use of water on touristic locations, such as the Namib government did, the 'Insular Hydrological Plan of the Canary Islands', La Palma Renewable, cleaning up of the watersheds by the Government of La Rioja, educational initiatives to raise awareness.
- World institutional initiatives or campaigns run by the United Nations (UN), Food and Agriculture Organization (FAO), GreenPeace, Ecologists in Action, or companies such as iAgua, Estrella Damm (with the song "Another Way of Living").
- Other awareness campaigns: local, regional and global on TV and other media, schools, posters, on the subway, and public buildings. Monitor consumption and generate recommendations accordingly.

Recommendations on how those involved in education, training and research can contribute to bringing about SDG 6. Better teacher training on the topic in order to help students to [33] (UN, 2019):

- Monitor more and improve data [34];
- Understand the importance of water for the development of life and human activities;
- Employ evidence (using maps, graphs, and research) about water problems both in the near environment and in a global context;
- Promote small solidarity initiatives in relation to water and the use of smart technologies;
- Trigger a change in attitudes.

In education: implement initiatives such as the Spanish School 21Agenda, which focused on improving water infrastructures; the Foundation for Environmental Education Eco-Schools programme; and, of course, include the theme of water on the educational curriculum as a priority, using a transdisciplinary approach.

Truly effective advertising is considered to be rare. More school-based awareness campaigns are proposed within a framework of education to meet the Sustainable Development Goals. It is within this context that the Story Map resource was created.

3.3. A Fun Educational Resource: Story Map on Global Water Grabbing or Water Appropriation

A Story Map is a storytelling technique that is recognized as a valid and important method of communicating information and knowledge. It can include storytelling and, in addition to text, other ways of visualizing data, such as maps or graphs, images, or other innovative geographic design tools. Journalists use them regularly. It is possible to add a location to most facts, which can help to better understand the territory. Story mapping employs digital tools using Story Maps, making it a geovisual art [35] and a new way of expressing facts. Essential elements to consider when designing a Story Map include how to express the essence of a digital narrative—identify the main point and focus of your story, start it with an expressive image or video, use location-based learning strategies, process relevant data to extract value from it by communicating meaningful results using varied resources that

give rhythm to the story (which must be short and clear), apply geographic skills using interactive maps of the appropriate scale, and make ‘a call to action’ [36].

In this case, an attempt has been made to create a collaborative map using ESRI’s Story Map® tool with the places where there is ‘water hoarding’ using different sources (Internet, scientific articles, press, other media, social networks...). To do this, it has been necessary to contextualize the resources to be used, starting with the definition of what is meant by ‘water hoarding’ or ‘water grabbing’ [37], which is a situation in which local communities are deprived of the water they need to survive and which is being taken from their ecosystem by external investors who employ this water in a wide range of locations [38] and activities [39], such as intensive food monocultures, generation of hydroelectricity, the corporate takeover of water resources (for example, for bottling or for the extractive industry), etc. In this way, water is transformed from an available resource into a good whose access depends on the ability to pay. It is often associated with land grabbing [40], which is controlled by international laws on foreign investment and trade; thus, globalisation has accentuated its practice.

The student, in view of the example provided [41] (Figure 13), should enrich the resource by researching another place where this same phenomenon occurs and locate a geopoint where this happens, providing the most reliable source of all those used to investigate the problem in that location, its year, and a brief explanation of the problem detected.

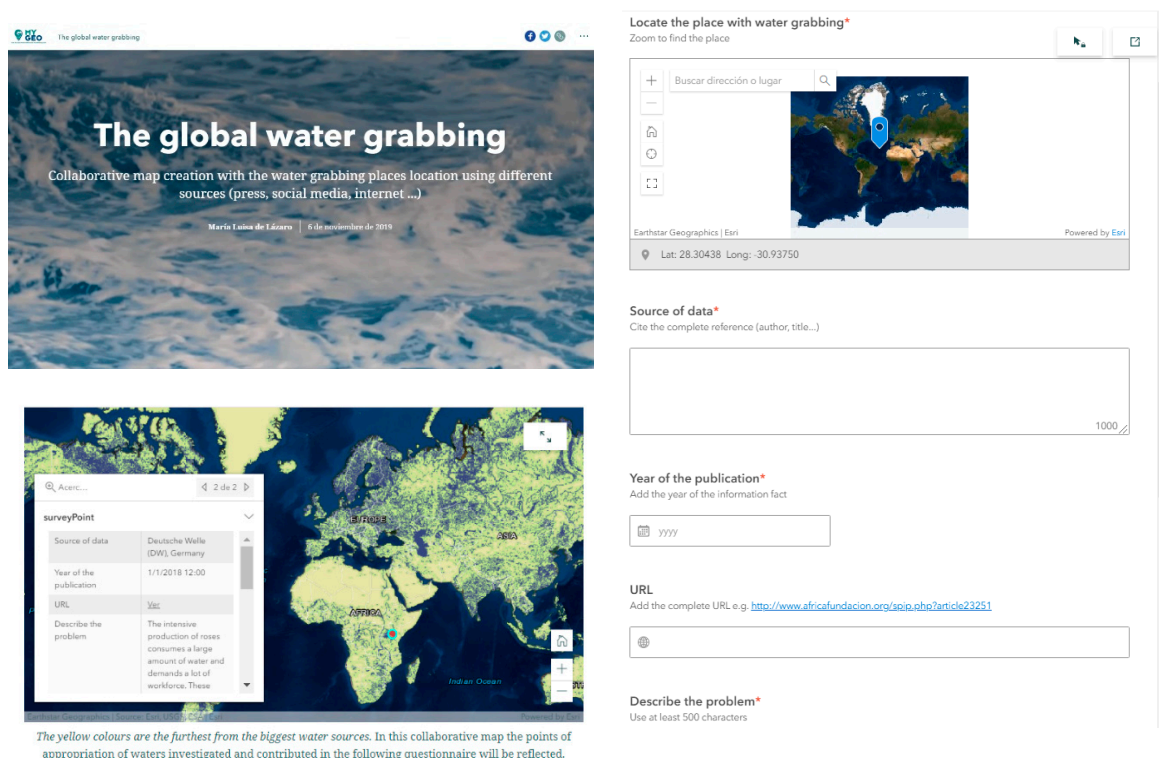


Figure 13. Global water grabbing story map explaining how the appropriation of water works in some places of the world. M.L. Lázaro own work using ArcGIS Online, Survey123, and Story Map (ESRI).

The use of cartography has been one of the main ‘languages’ used, as it is possible to define the spatial scope of a phenomenon and the necessary actions to address it, which may include a list of recommendations for the authorities. In order to do this work, it is essential to carry out prior research that integrates the competencies defined as being appropriate for confronting the problems addressed in the objectives of sustainable development. To this end, the adaptation of the competencies proposed by UNESCO by Professor Murga-Menoyo is very useful—critical analysis, systemic reflection, making collaborative decisions, and a sense of responsibility toward current and future generations [42].

4. Discussion

The results of the questionnaire led some people to say that “they have never received information on water management in their community” and that “there are no campaigns for the rational use of water”, which should constitute the basis for immediate action. Respondents also claimed to observe in the public, of any gender, and even of a certain cultural-intellectual level, little awareness about the sustainable consumption of water, as frequently it is not addressed as a key issue of the SDGs due to ignorance of the water cycle (in urban areas), the cost of purification and potabilization, or real availability according to rainfall, etc. Other respondents pointed out that “the type of dwelling (single-family, collective) has an impact on water consumption”. If we add to this the differences observed by reason of cultural level and gender, this leads us to the need to improve education, especially that of women who appeared to have a slightly lower cultural level in this study, as the most important way to collaborate in meeting the equity in gender (SDG 5) and in the water sector.

Regarding water service level of satisfaction in Extremadura [43] is 3.7/7 which, in a scale of 5 means 2.64/5. Curiously, there is the same figure for the same area in our study, considering the management of the water.

Educational initiatives in both official and extracurricular programmes is a key element in achieving greater awareness and unity of action to address one of the main challenges facing humanity today, namely the proper use of water resources and planning so that distribution reaches all territories in an equitable manner. In the case of Spain, imbalance due to climate change requires the creation of distribution infrastructures that are vital for socio-economic and environmental development.

Thus, education should be considered to be a fundamental step towards active citizenship, and has led us to develop a range of resources that could be useful for other issues and in other territorial universes: specifically the proposal of active methodologies in schools such as story mapping, field trips, management of Geographic Information Systems (GIS) or other ‘awareness actions’, which are vital in the formation of new generations who see their future compromised by environmental challenges, such as climate change, the integral conservation of the planet and particularly the conservation and efficient distribution of water.

Regarding the limitations of the study, we are aware that a larger universe of responses and their application to other countries in the world would offer a more global and contrasting panorama from the territorial point of view and also if more rural areas were included, and therefore, a greater richness in the conclusions. Also, a wider social group and important target groups of the ODS such as retired or marginalised communities. Other interesting question that complete the item satisfaction on drinking water is if they drink water from the tap, used in other previous studies [43]. An interesting study about Spain [44] has the mean of 2.759/4 with a standard deviation of 0.802 for the general satisfaction of the tap water quality this specific topic (3.45/5). However, this item was not included in this study. Instead, this study asked directly if there was any problem with the tap water, with the global result of a mean of 2.03/5 and a standard deviation slightly over 1.4. The topic of tap water quality has an increased importance, as demonstrated by a similar study in Italy [45].

Despite this, interesting differences have been detected between men and women, depending on cultural level, and even between those who have responded from different ACs; therefore, the territorial factor is decisive in the responses given, corroborating the image that when the resource is close, abundant and economically not very burdensome, there is a lack of awareness in saving and good use than when the opposite occurs.

5. Conclusions

It is argued that the success of Agenda 2030 depends on responsible individual and collective action and the environmental education of citizens in general, and we reiterate that with this study—the analysis of the data obtained shows that it is even more necessary in the case of women than men.

In this study, problems perceived by the Spanish population according to their gender, the territorial unit in which they reside—in this case their Autonomous Community (NUTS2)—and their cultural level have been highlighted and have identified imbalances that might shed light on relevant problems in water availability and distribution. All management aimed at initiatives to improve savings and efficiency in the use of water will be very useful in the case of SDG 6 in Spain, especially in the areas most vulnerable to water shortages, which are located in the southern half of the country and on island territories, but should also be taken into account across the whole country. The tabulation of the questionnaires that have served as the basis for this research suggest that we must continue with education projects that promote water efficiency as well as support solidarity initiatives. Simultaneously initiatives such as Agenda 21 should be implemented along with an improvement in the school curriculum and transdisciplinary university programmes related to the subject of water. The decision-making role of our leaders is beyond doubt in this, although it is essential to involve society as a whole through small, local, domestic, and everyday actions as a means of advancing toward a more sustainable world and a future on a planet that deserves our respect and care.

Author Contributions: F.J.M.Y., coordinated the team and conducted the research. F.J.M.Y., P.B.U., and M.L.d.L.T. designed, executed, and analysed the results of the survey. All developed and agreed on the existing literature on the SDG 6. All authors have read and agreed to the published version of the manuscript.

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Appendix A

Survey on the perception and use of water (English translation, the Spanish original is in the figures below the translation). The purpose of the questionnaire is to detect citizen actions for the achievement of SDG 6 “Ensure water availability, sustainable water management and sanitation for all”. Estimated response time 5’.

1. Choose if you agree or disagree about these items on a scale of 1-5: 1= No, I completely disagree; 2 = I partly disagree; 3 = I am not sure; 4= I partly agree; 5= Yes, I fully agree
 - A. I am aware about water use efficiency;
 - B. I think climate change may affect water use;
 - C. I am aware that drinking water is a scarce good;
 - D. I believe that the water in my place of residence is well managed;
 - E. I am aware of SDG 6: “ensure availability and sustainable management of water and sanitation for all”;
 - F. The water facility that supplies my home is acceptable;
 - G. I have received and read information about efficient water use.

1. Valora el grado de acuerdo o desacuerdo con las afirmaciones siguientes, considerando: 1= en total desacuerdo (equivalente a un NO); 2= en parte en desacuerdo; 3= ni de acuerdo ni en desacuerdo; 4= parcialmente de acuerdo; 5= de acuerdo (equivaldría a un SI).

	1=NO	2	3	4	5=SI
A. Estoy concienciado sobre la eficiencia en el uso del agua	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B. Creo que el "cambio climático" puede afectar al uso del agua	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C. Soy consciente de que el agua potable es un bien escaso	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
D. Considero que el agua en mi ciudad está bien gestionada	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
E. ¿Conoce el ODS6: Garantizar la disponibilidad de agua y su gestión sostenible y el saneamiento para todos?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
F. La instalación de agua que abastece mi hogar es aceptable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
G. He recibido y leído alguna información sobre el uso eficiente del agua	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Figure A1. First question of the survey.

2. Have you had any problem with the water (bad taste, or a disease like Helicobacter pylori)?

2. ¿Ha encontrado algún problema con el agua (mal sabor, enfermedad como el "helicobacter pylori"...)?

	1	2	3	4	5
1 = NO	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
					5 = SI

En caso afirmativo ¿Cuál o cuáles?

Long-answer text

Figure A2. Second question of the survey.

3. Do you flush solid waste, oil, other pollutants or other products down the drains (sink, WC) of your home or holiday accommodation, such as hotels or residences?

3. ¿Arroja por los desagües del hogar (fregadero, WC...) alguna de estas sustancias? ¿Y en los establecimientos hoteleros u otras residencias cuando va de vacaciones?

	En el hogar	En vacaciones (hoteles y otras residencias)
Residuos sólidos	<input type="checkbox"/>	<input type="checkbox"/>
Aceite	<input type="checkbox"/>	<input type="checkbox"/>
Otros productos contaminantes	<input type="checkbox"/>	<input type="checkbox"/>
No arrojo residuos por los desagües	<input type="checkbox"/>	<input type="checkbox"/>
Otros (especificar)	<input type="checkbox"/>	<input type="checkbox"/>

Figure A3. Third question of the survey.

4. I am aware of any initiatives to raise awareness and “oblige the good use of water”

Choose if you agree or disagree on a scale of 1-5: 1= No, I completely disagree; 2 = I partly disagree; 3 = I am not sure; 4= I partly agree; 5= Yes, I fully agree

If you know of any initiative, write it down.

4. ¿Conoce alguna acción o plan que se esté llevando a cabo para concienciar y obligar al buen uso del agua?

1 2 3 4 5

= NO ○ ○ ○ ○ ○ = SI

En caso afirmativo ¿Cuál o cuáles?

Long-answer text

Figure A4. Fourth question of the survey.

Data to facilitate results grouping by age, gender, level of education (primary, secondary school, VET, and other non-university education; university education; doctorate studies), main work sector, and way of living. The last two questions were not considered relevant for the study. Thus, they were not used.

Relevant data on location: Autonomous Community of current residence with the choose option of the 17 ACs and a question asking if they have lived in another place before (again the 17 ACs as a choose option, but also Europe, South American, and other places. An open question for any other suggestions was included at the end.

Datos para las estadísticas

Edad *

Choose

Ocupación principal *

Choose

Género *

Choose

En el caso de que haya respondido otra, especificar...

Your answer

Nivel de instrucción (si han sido varios indique el último realizado) *

Choose

¿Cómo vive? *

Choose

Figure A5. Necessary questions to make statistics.

¿En qué Comunidad Autónoma reside? *

Choose

¿Vivió anteriormente en algún otro lugar? Si no ha cambiado de residencia y no trabaja en una comunidad distinta a su residencia no responda a esta cuestión.

Choose

Si hay alguna otra observación o sugerencia que nos quiera dejar constar, puede escribirla aquí

Your answer

Figure A6. Necessary questions to make statistics based on geolocation.

References

1. UN. Transforming Our World: The 2030 Agenda for Sustainable Development. Resolution Adopted by the General Assembly on 25 September 2015 [without Reference to a Main Committee (A/70/L.1)]. Available online: https://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E (accessed on 13 January 2020).
2. UN. Resolution Adopted by the General Assembly on 6 July 2017 [without Reference to a Main Committee (A/71/L.75)] 71/313. Work of the Statistical Commission Pertaining to the 2030 Agenda for Sustainable Development. Available online: <https://undocs.org/A/RES/71/313> (accessed on 13 January 2020).
3. Summary Report Global Workshop for Integrated Monitoring of Sustainable Development Goal 6 on Water and Sanitation. Available online: <http://www.unwater.org/publications/summary-report-global-workshop-for-integrated-monitoring-of-sustainable-development-goal-6-on-water-and-sanitation/> (accessed on 13 January 2020).

4. United Nations. *Sustainable Development Goal 6: Synthesis Report 2018 on Water and Sanitation*; United Nations: New York, NY, USA, 2018. Available online: https://www.unglobalcompact.org/docs/publications/SDG6_SR2018.pdf (accessed on 3 March 2020).
5. Ortigara, A.; Kay, M.; Uhlenbrook, S. A review of the SDG 6 synthesis report 2018 from an education, training, and research perspective. *Water* **2018**, *10*, 1353. [CrossRef]
6. Encyclical Letter *Laudato Si'* of the Holy Father Francis on Care for Our Common Home. Available online: http://www.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco_20150524_enciclica-laudato-si.html (accessed on 13 January 2020).
7. Ait Kadi, M. Water for Development and Development for Water: Realizing the Sustainable Development Goals (SDGs) Vision. *Aquat. Procedia* **2016**, *6*, 106–110. [CrossRef]
8. Sadoff, C.W.; Hall, J.W.; Grey, D.; Aerts, J.C.J.H.; Ait-Kadi, M.; Brown, C.; Cox, A.; Dadson, S.; Garrick, D.; Kelman, J.; et al. *Securing Water, Sustaining Growth*. In *Report of the GWP/OECD Task Force on Water Security and Sustainable Growth*; University of Oxford: Oxford, UK, 2015.
9. Murga-Menoyo, M.A.; Bautista-Cerro, M.J. *Guía PRADO. Sostenibilizar el Currículo de la Enseñanza Secundaria*; UNED: Madrid, Spain, 2019. [CrossRef]
10. Raszkowski, A.; Bartniczak, B. On the Road to Sustainability: Implementation of the 2030 Agenda Sustainable Development Goals (SDG) in Poland. *Sustainability* **2019**, *11*, 366. [CrossRef]
11. Jama, A.A.; Mourad, K.A. Water Services Sustainability: Institutional Arrangements and Shared responsibilities. *Sustainability* **2019**, *11*, 916. [CrossRef]
12. Villanueva, L.H.; García, M.D.M.H. El agua como derecho humano: Retos y limitaciones. *Boletín IEEE* **2016**, *4*, 329–352.
13. Gosling, S.N.; Arnell, N.W. A global assessment of the impact of climate change on water scarcity. *Clim. Chang.* **2016**, *134*, 371–385. [CrossRef]
14. United Nations. *The International Decade for Action on Water for Sustainable Development, 2018–2028*. 2018. Available online: <https://www.un.org/en/events/waterdecade/> (accessed on 13 January 2020).
15. United Nations Synthesis Report on Water and Sanitation. 2018. Available online: https://www.unwater.org/publication_categories/sdg-6-synthesis-report-2018-on-water-and-sanitation/ (accessed on 3 March 2020).
16. United Nations Water Annual Report. 2018. Available online: <https://www.unwater.org/publications/un-water-annual-report-2018/> (accessed on 3 March 2020).
17. Hoekstra, A.Y.; Chapagain, A.K.; Van Oel, P.R. Progress in Water Footprint Assessment: Towards Collective Action in Water Governance. *Water* **2019**, *11*, 1070. [CrossRef]
18. Dean, A.J.; Lindsay, J.; Fielding, K.S.; Smith, L.D. Fostering water sensitive citizenship—Community profiles of engagement in water-related issues. *Environ. Sci. Policy* **2016**, *55*, 238–247. [CrossRef]
19. Guariso, A.; Rogall, T. *Rainfall Inequality, Political Power, and Ethnic Conflict in Africa*; LICOS Discussion Paper Series No. 391/2017; Faculty of Economics And Business: Leuven, Belgium, 2017. Available online: https://papers.ssrn.com/Sol3/papers.cfm?abstract_id=2961694 (accessed on 3 March 2020).
20. Pueyo-Ros, J.; Fraguell, R.M.; Ribas, A. Propuesta metodológica para valorar la calidad escénica de los paisajes del agua y su potencial como recurso turístico. *Invest. Geogr. Alicante* **2017**, *68*, 79–94. [CrossRef]
21. Maurel, J.B. El agua como recurso escaso y sus problemas en la España actual. *Estud. Geogr.* **2018**, *69*, 453–493.
22. Morales Yago, F.J.; Lázaro Torres, M.L.; de Gómez Ruiz, M.L. University students' perceptions of the inner cities of Murcia and Valencia. *Quaest. Geogr.* **2018**, *37*, 75–85. [CrossRef]
23. Álvarez Otero, J.; De Lázaro, M.L. Las infraestructuras de datos espaciales: Un reto y una oportunidad en la docencia de la Geografía. *Bol. Asoc. Geógr. Esp.* **2019**, *82*. [CrossRef]
24. Instituto Nacional de Estadística (INE) for SDG. Available online: <https://www.ine.es/dynt3/ODS/es/objetivo.htm?id=5003> (accessed on 3 March 2020).
25. Fritz, S.; See, L.; Carlson, T.; Haklay, M.M.; Oliver, J.L.; Fraisl, D.; Wehn, U. Citizen science and the United Nations Sustainable Development Goals. *Nat. Sustain.* **2019**, *2*, 922–930. [CrossRef]
26. Breuer, A.; Janetschek, H.; Malerba, D. Translating Sustainable Development Goal (SDG) Interdependencies into Policy Advice. *Sustainability* **2019**, *11*, 2092. [CrossRef]
27. Corbeta, P. *Metodología y Técnicas de Investigación Social*; McGrawHill: Madrid, Spain, 2003.
28. Li, Q. A novel Likert scale based on fuzzy sets theory. *Expert Syst. Appl.* **2013**, *40*, 1609–1618. [CrossRef]
29. INE PIB. Available online: https://www.ine.es/dyngs/INEbase/es/operacion.htm?c=Estadistica_C&cid=1254736167628&menu=ultiDatos&idp=1254735576581 (accessed on 13 January 2020).

30. Murga-Menoyo, M. La Formación de la Ciudadanía en el Marco de la Agenda 2030 y la Justicia Ambiental. Proyecto EDU2015-66591-R financiado por el Ministerio de Economía, Industria y Competitividad del Gobierno de España. *Rev. Int. Educ. Justicia Soc. RIEJS* **2018**. [CrossRef]
31. Gisbert, J.P.; Molina-Infante, J.; Amador, J.; Bermejo, F.; Bujanda, L.; Calvet, X.; Gomollon, F. IV Spanish Consensus Conference on Helicobacter pylori infection treatment. *Gastroenterol. Hepatol. (Engl. Ed.)* **2016**, *39*, 697–721. [CrossRef]
32. Víquez, M.J.; Castillo, A.R.; Zumbado, M.J.B.; San Juan-San, Á.D.S.; Diego-Concepción, S.J.; Rica, C. Prevención del cáncer gástrico y erradicación de Helicobacter pylori. *Rev. Médica Sinerg.* **2019**, *4*, e293. [CrossRef]
33. United Nations Development Programme (UNDP). “Human Development Report 2019” New York. 2019. Available online: <http://report.hdr.undp.org/> (accessed on 3 March 2020).
34. World Health Organisation. UN-Water Global Analysis and Assessment of Sanitation and Drinking-Water (GLAAS) The Next GLAAS Report will be Published in 2019. Available online: http://www.unwater.org/publication_categories/glaas/ (accessed on 3 March 2020).
35. Wilber, H. The Anatomy of a Story. An ArcGIS StoryMaps Cheat Sheet. 2019. Available online: <https://storymaps.arcgis.com/stories/a9a3b76c2d3d4b6bb0d822706e31b33c> (accessed on 3 March 2020).
36. Carroll, A. Nine Steps to Great Storytelling. 2019. Available online: <https://storymaps.arcgis.com/stories/429bc4eed5f145109e603c9711a33407> (accessed on 3 March 2020).
37. Mehta, L.; Veldwisch, G.J.; Franco, J. Special Issue: ‘Water grabbing? Focus on the (re)appropriation of finite water resources’. *Water Altern.* **2012**, *5*, 193–542.
38. Pérez, A.I.M. Acaparamiento de territorios marinos y costeros: Dos casos de estudio en el Caribe colombiano. *Rev. Colomb. Antropol.* **2019**, *55*, 119–152. [CrossRef]
39. Mena-Vásquez, P.; Vos, J.; Van Ommen, P.; Boelens, R. Flores, Acaparamiento del Agua y Responsabilidad Empresarial Social: Certificación de la producción de rosas y reclamos por la justicia ambiental en el Ecuador. *Cuad. Geogr. Univ. València* **2018**, *101*, 189–214. [CrossRef]
40. Franco, J.; Mehta, L.; Veldwisch, G.J. The Global Politics of Water Grabbing. *Third World Q.* **2013**, *34*, 1651–1675. [CrossRef]
41. Lázaro Torres, M.L. The Global Water Grabbing or Appropriation. Available online: <https://storymaps.arcgis.com/stories/6bcdef88a5a34496ba93eef6113dc8c9> (accessed on 13 January 2020).
42. Murga-Menoyo, M.Á. Competencias para el desarrollo sostenible: Las capacidades, actitudes y valores meta de la educación en el marco de la Agenda global post-2015. *Foro Educ.* **2015**, *13*, 55–83. [CrossRef]
43. Pulido, M.; Barrera-González, J.; Alfonso-Torreño, A.; Robina-Ramírez, R.; Keesstra, S. The Problem of Water Use in Rural Areas of Southwestern Spain: A Local Perspective. *Water* **2019**, *11*, 1311. [CrossRef]
44. García-Rubio, M.A.; Tortajada, C.; González-Gómez, F. Privatising water utilities and user perception of tap water quality: Evidence from Spanish urban water services. *Water Resour. Manag.* **2016**, *30*, 315–329. [CrossRef]
45. Romano, G.; Masserini, L. Factors affecting customers’ satisfaction with tap water quality: Does privatisation matter in Italy? *J. Clean. Prod.* **2020**, 120593. [CrossRef]



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