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Think of water from a social perspective. A research project in Havana

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Abstract

The need to consider water from a social perspective has moved us to develop a cooperation project—funded by the AECID (Spanish Agency of International Cooperation for Development)—with Havana, Cuba. Through this initiative we intend to influence the daily habits of locals in order to minimize inappropriate uses of water within the family environment.

We begin with a diagnosis, from which we extract essential topics to work on in the community, in order to change water use in the homes within the municipality of Old Havana, particularly in the neighborhood of Jesús María. In this process of change, different activities are designed to be implemented at the municipal and group levels, since the Cuban society has an important organizational structure at both the community and individual levels. Thus, we highlight the role of women in the task of water management and consumption.

Through this project we design education strategies which—from a social, educational, and environmental analysis, as well as theoretical postulates—allow the transformation to become a reality in the participants’ territory.

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1. An experience of research in Havana

Access to improved water and sanitation has become a significant indicator which can be used to assess the welfare of the population living in a territory. The seventh Millennium Development Goal states the need to ensure

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environmental sustainability, and target 7.C. highlights the need to halve the proportion of people without sustainable access to safe drinking by 2015. The Human Development Report of 2006 published by the United Nations Development Programme (UNDP) offers a conceptual and methodological framework to evaluate the problems regarding water as a social issue that are still extant around the world, identify their causes and the extent to which people's different behaviors can outline the social development of countries and the material situation of different human groups. Access to water and sanitation is thoroughly tackled from the social and human perspectives, which widely exceeds the traditional monitoring of indicators for the analysis and assessment of the ongoing crisis. This issue is viewed as linked to poverty and social inequalities in that it arises from conditions of shrinking government budgets for the maintenance of the inner infrastructure of houses, necessary to guarantee a better quality in water access in a given area. Water access is also a contributing factor to the reproduction of precarious and unsanitary lifestyle conditions, giving way to an increase in preventable diseases that affect the health and quality of life of vulnerable groups, that is, women and children.

The unfair distribution of this essential resource leaves the poorest countries, and within them the most vulnerable groups, in precarious conditions. Many different approaches to the water issue have been made in relation to food, diseases, industrial development, social hygiene, climate change, technologies and policies.

One of the worst consequences of the world water crisis is gender inequalities, which keep women from taking part in the political decisions about water distribution. Thus, the main goal of this research is to generate a process of community awareness and equal participation around water in the neighborhood of Jesús María in Havana, Cuba.

1.1 Cuba and the access to drinking water and sanitation

In the aforementioned Report of 2006, it is stated that Cuba has achieved 98% sustainable sanitation coverage and 91% of its population have sustainable access to sources of improved water (UNDP, 2006:305). By 2008 these figures had shifted and 96.4% of the population had access to drinking water whereas 96.1% had access to sanitation (NAE, 2009).

Focusing our attention on the neighborhood mentioned above, we must point out that the Diagnosis about Gender Equality and Access to Drinking Water in Jesús María aims to show the gender inequalities in the access to improved water and sanitation here, in the municipality of Old Havana.

The results of this diagnosis are based on the analysis of the information gathered from a survey involving 166 families from that neighborhood—located in district 40— which, although not the worst as far as access to water and sanitation is concerned, shows a series of irregularities regarding the housing, occupation and age of its population.

1.2 Results of the research project

The first step was a diagnosis done in two stages:

- 1st stage: through a survey.
- 2nd stage: from the Wealth Map and Social Cartography.

The diagnosis describes the gender inequalities in the access to improved water and sanitation as shown in the following tables and figures.

Tables and figures

The population we study comprises about 10% more women than men. The occupations of the population are completely separated by sex, following gender stereotypes, as there are 72% of men who have management positions compared to only 30% of women having the same. Also, women have a 97% of the unpaid domestic jobs. The problems regarding the access to water are greater than those of sanitation.

In addition, there is a greater awareness of what being in charge of the tasks related to the supply and responsible use of water means among women, while men think this is a joint problem for both, as it is shown by 72% of the population polled. However, the figure shows that women take over more water-related tasks than men. 22% of men take over the task of carrying water, 11% of women do so, and both together represent 33% of the population; therefore, the responsibility of carrying water at least three times a week is more balanced. Women have the duty of raising water use awareness at home as well as exerting the physical effort involved in the reconciliation of their tasks at work, at home, and regarding the daily supply of water.

Public health programs focus on the control and evaluation of the public sources of water supply, but they do not interfere at the individual family level, as we can see in the graph. This shows that sanitation in the houses of 44% of the population is not in good condition, and 25% are not even connected to the water pipe system.

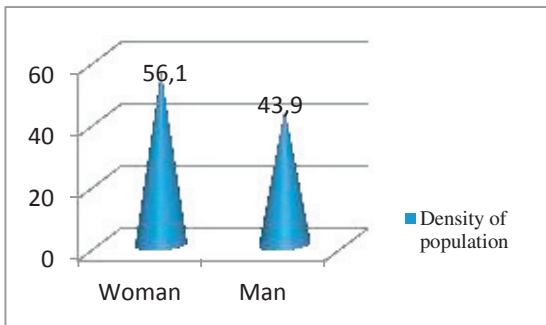


Fig. 1 Density of population according to sex

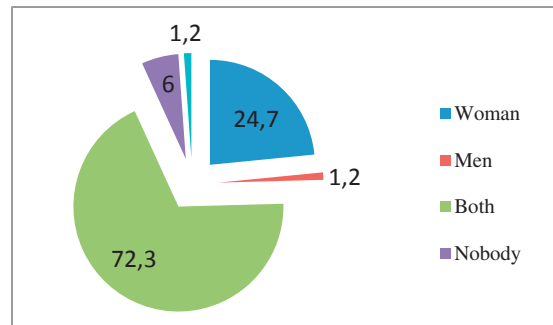


Fig. 2 Perception of a household suffering from water shortage according to sex

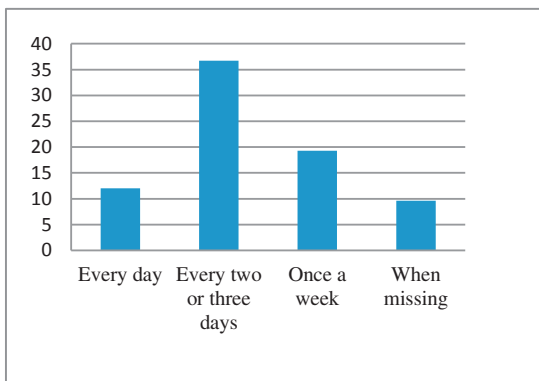


Fig. 3 Frequency with which the members of a household carry water

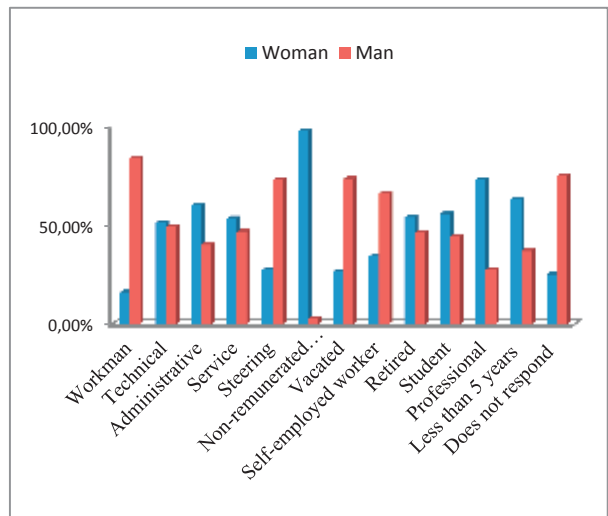


Fig. 4 Distribution of the population by sex and occupation

The use of the wealth map and cartography has brought about a change in diagnosis making. In this sense, we used it as a resource to keep the population informed and make them feel part of the community they live in. The participation of the neighbors in this project—as the main element in the cartography— facilitates the analysis of the immediate environment as far as the need to search for local mutual understanding and association among

neighbors is concerned, in order to specify measures for coexistence and habitability that, in turn, may expand the quality of the community's life.

Following Valderrama, (2012) we considered some steps to jointly map with the community:

- Each community must be unique and have a range of specific characteristics;
- A key question must be the guiding tool for building up common knowledge about the place;
- A sense of a place that is perceived as their own must be created.

When we design a map we find different places and spaces related to economy, culture, leisure or common resources. The resources could be defined as the buildings, associations, people or services that are available to the community that needs them. Other resources could be the roads, houses, medical centers (health posts, pharmacies, hospitals, clinics, etc.), schools, religious buildings or leaders, water wells, public baths, markets, factories, rivers, trees, midwives, social workers, teachers, doctors, etc.

Building upon these premises, we have started a process of community awareness and participation concerning water problems in the neighborhood of JesúsMaría, aided by social cartography. Different local participants from the neighborhood of JesúsMaría have been trained and given theoretical and methodological contents that will enable them to search for solutions and alternatives to the problems concerning water access and management which have been identified.

The women and men of JesúsMaría have acquired information and become more aware and involved as to the responsibility and management of solutions to the problems of water access and sanitation in the neighborhood. At the local level, a number of groups that are well organized and skilled in water management in the community have been established. The population's awareness of the extant gender differences found in the perception of water supply responsibility within the household has been raised. This information is being processed in Cabinet to develop a GIS (geographic information system) with the data of research, on the one hand the work of transformation of the neighborhood made by locals through the map (Valderrama 2013), as well as qualitative data that we present in this work.

2. Conclusions

The fact that generalities cannot be inferred from a case study does not diminish its value. This study shows that, as far as the access to water and sanitation is concerned, gender inequalities persist, and this is true even for Cuba, which occupies the 29th position out of 109 countries according to the Gender Empowerment Index, and has a 43% of its parliamentary seats occupied by women. The latter percentage is surpassed only by Sweden (UNDP, 2009).

Yet, it is important to work at the level of environmental studies in Cuba towards the integration of a gender approach, which makes it possible to explain the influence of cultural factors such as patriarchal culture and others on the relationship of men and women to the environment.

The study revealed the existence of gender inequalities in water access and sanitation in the neighborhood of JesúsMaría, -i.e. houses managed by women are the ones with the worst conditions of accessibility. This is due to the fact that gender stereotypes survive in all the activities related to water access and use. On the one hand, the role of caregiver is still assigned to women; on the other hand, there is a lack of knowledge about the effects that access has on women, as it involves carrying water every week and raising awareness of the importance of sustainable and ethical use within the household.

The country is investing in an improvement in the access of households to drinking water and sanitation, in order to counter the impact of droughts on the sustainability of such access. However, it is also necessary to invest in training since, according to the results of our research; the existing inequalities are related not only to the lack of resources, but also to their distribution and to gender issues.

We developed a training program for locals from both the family and gender perspectives with the aim of raising awareness of gender inequalities and problem solving. The training program involved not only the locals and the participants in the research project, but also the experts that designed the safe water programs. People of different ages and occupations participated in the program. Therefore, its results vary and correspond to the nature of such groups. However, there are some common characteristics between them. The achievements made with this teaching-learning tool can be outlined as follows:

- It has started a process of sensitization, awareness-raising and participation in the community around water-related problems.
- It has given the locals theoretical and methodological tools (such as wealth maps and social cartography), increasing their capacity to search for solutions and alternatives in order to face the problems within their living environment.
- It has sensitized and informed women and men, involving them in the management of solutions to water and sanitation access in the community.
- It has ensured institutional support to a number of training programs for the local agents and technicians in the community. Therefore, the autonomy of the participants after the end of the research project has been fostered.

The implementation of this research project has led us to consider the role that higher learning institutions can play in the development of communities. In this case, critical thinking has been fostered in order to create jointly designed alternatives which have posed solutions to the problems within a particular territory. In this sense, the interuniversity cooperation programs that Spain promotes through the PCI support and reinforce these processes, fostering the teaching of human resources, the carrying out of research and diagnosis, and the exchange of innovative experiences. Our research project has yielded significant results, among which we must highlight the human factor and the common implementation of interdisciplinary knowledge and working methodologies. We must emphasize the importance of the monitoring and evaluation of the project in order to assess the impact that the program has had on the participants and how they use the methodological tools and instruments acquired within their professional environment.

The impact of the research project on the local population must also be considered. A high number of men and women from JesúsMaría have been sensitized, informed and involved in the training programs so that they can become agents of change in their neighborhood. The participatory methodological approach, based on field study and training, poses the idea that people —through the involvement of technicians, experts, neighbors and citizens— can be agents of transformation and change within their own environment.

Finally, we would like to open the way to future action and projects. Those in charge of the water and sanitation access policies will be provided with the results of our diagnosis and made aware of the existence of gender differences, which may then lead to the search for solutions. A gender and family approach must be included in the programs that tackle the whole chain involved in water supply, and the locals must be involved so that programs integrate a human approach.

It is important to strengthen organized groups that are aware of their performance in the communal management of water and to ensure political commitment to the welfare of the population. It is essential to invest in resources to improve hygiene in the processes of carrying water and cleaning within those socially disadvantaged households. A prospective participative and inclusive approach will give priority to listening to the voices of women and men that live in the territories in which these programs are developed, and there will be a commitment of the four citizenships.

A whole set of tools and activities must encompass the use of methodological instruments, the transfer of technologies, and the systematization of experiences and good practices, which may be extrapolated to other contexts. The universities' support to the improvement in local structures or the Complete Transformation Workshop for the Neighbourhood of JesúsMaría trigger processes of self-management, in which the locals are involved in the design and maintenance of local initiatives that can satisfy their interest and needs.

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