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WOMEN EMPOWERMENT: A VERITABLE TOOL FOR SUSTAINABLE URBAN WATER DEVELOPMENT

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ABSTRACT: *Women are mostly hit by environmental issues, especially water scarcity. This is because the responsibility of sourcing for water for family use is on the women folks and they use the water most at home for cooking, bathing, washing and other household chores. This study therefore selected Agbadagbudu Community in Ibadan for the study. This community is in the core of Ibadan city and is characterized by water scarcity as the Water Corporation of Oyo Service (WCOS) does not service the area regularly, hence there is inadequate water supply in the community. The coordinate of the water project site was established with the use of Global Positioning System (GPS) which was located on the Google Earth Map of Ibadan. 500 meter radius was taken around it and the number of buildings within the 500 meter radius was counted, given 1,999. 5% of the building, that is 100 buildings, were randomly selected as the sample size for the study. Findings among others revealed that the women cherished the water project in the community. This makes them to take good care of the project as it eased the stress of scouting around for water.*

KEYWORDS*:* Community, water scarcity, water supply and women

INTRODUCTION

Water is one of the most important natural resources and its effective management is essential given its scarcity (Aladuwaka & Momsen, 2010). The issue of management of resources is the genesis of environmental conservation which makes it an essential ingredient for sustainable development, such that, the present needs are met without jeopardizing future requirements.

Due to different tasks involved in water such as provision, transportation and storage of water for cooking, cleaning and washing dishes and clothes, bathing children, household hygiene among others, women have different priorities, demand and knowledge on water management compared with men. However, women are not as widely consulted on issues relating to water supply and women's priorities and requirements are not given as much attention due to different power relations between women and men (Intallance & Porter, 2010). One of the reasons for the limited consultation of women relates to women's limited control and access to land and water. Control over and access to resources is a determining factor for decision-making over the resource while land ownership is often linked to water access. Women's control over natural resources is limited

because of societal values and practices which dictate that men are the 'guardians' of property, the 'heads of the household' and the decision-makers in the public sphere. Control over resources further depends on factors such as ethnicity and socio-economic class, despite realizing that control over natural resources is limited for basically all women worldwide. As a result of women's limited participation in decision-making, valuable knowledge and expertise are lost and decision-making processes may result in failure of policies and programmes (Okoko, 1998). This non-involvement of women operates in Ibadan and most cities both in and outside Nigeria.

The World Health Organization & Nations Children Education Fund (WHO & UNICEF, 2010) noted that water-related issues affect women 2 to 3 times more than men, and children are also particularly susceptible. Obando (2003) stated that for indigenous and local women, a lack of access to water is particularly difficult, as they are the ones who are traditionally tasked in most developing countries with searching for water. It is estimated that women and girls use more than 8 hours a day travelling to get 10 to 15 litres of water in each trip. The average distance that women in Africa and Asia walk to collect water is 6 km a day and the weight that they carry on their heads averages 20kg (Obando, 2003).

The volume of water available to Ibadan residents is not adequate to meet their required volume of water as documented by Tokun and Adeloye (2005). However, Ibadan both its urban and the rural settings is well-endowed with water resources in terms of existence of numerous natural springs that could be developed to provide potable water and even construction of deep wells and boreholes for community use (Agboola, 1996). This is necessary as a way of augmenting the shortage of potable water being supplied by Water Corporation of Oyo State (WCOS) whose supply could not serve even a quarter of the population of Ibadan City (Tokun and Adeloye, 2005).

The recent call for women participation in decision-making at various levels in the society is justified by the general acceptance of the world opinion that women as a disadvantaged group should enjoy their basic human rights and therefore, should not be subjected to any discrimination vis-à-vis men or any other group (Kanshahu, 2000). Furthermore, the fact that women constitute about 50 percent of the world population should accord them a fundamental focus in decision-making activities.

Gender needs and interest, according to Peter (2006) are influenced to a great extent by gender roles and relationships since men and women play different roles in a given social group or system. Gender sensitivity means being sensitive to the needs of women and men, boys and girls. The ultimate goal is to achieve equity or equality. Gender sensitivity entails searching, considering and accommodating social relations between women and men in their context, in any analysis of policy, planning and programming. Kanshahu (2000) reported that culture and society are the determinants of gender roles.

As documented by Mitchell (2002), women's work usually involves three components.
i. *Reproductive* work which relates to child-bearing and raising, as well as nurturing all family members to ensure their health and well-being. Such reproductive work extends beyond biological reproduction to include those domestic tasks necessary to maintain and reproduce the labour force for a society. While child-bearing is a biological function unique to women, there is no particular

reason or logic as to why child-rearing and nurturing, and caring for the family should be uniquely women's work.

ii. *Productive* work, which involves activity by both women and men, for payment in cash or in kind. Such work can be "market-based production" which results in earning of money or, it can be subsistence or home production which generates an in-kind rather than a monetary value. Much of the productive work of women, especially in rural areas, generates in-kind returns which are essential for the well-being of their families. However, because there is no exchange value, such activity is normally invisible in the regional or national economy and therefore, does not get the same recognition as market-based activity. As with most aspects of reproductive work, there is no reason why there should be such a gender division of labour. However, those involved in market-based activity tend to have more power because of their income-earning capacity.

iii. *Community management* involves time allocated to participating in activities within the local community to help further the welfare of its members. In many ways, this kind of activity is an extension of the *reproductive* role. The focus here normally is to ensure both provision and maintenance of facilities for collective needs, such as water, health-care and education. The *community management* work usually is voluntary and is done in "free time" after reproductive and productive tasks have been attended to. In contrast, men tend to allocate their time to *community politics*, which involves participation at the formal political level. Their community work often is paid, either directly or indirectly, by earning wages or by achieving enhanced status and power. There is no good reason why women should concentrate with *community management*, and men upon *community politics*, but traditional gender divisions often result in this split.

The implications of the multiple roles of women are significant regarding issues of empowerment, social justice and equity. First, the triple role for women in many Third World countries means that they are the first to begin working during the day and often the last to finish at the end of the day. As a result, little time is available either for self-improvement or to pursue interests of their own. Second, much of their *productive* and *community management* activities are invisible in any economic accounting, and thus, their contribution to the household, community, region and country is often under-valued by family members and political leaders. Third, the reduced opportunity to earn monetary income contributes to reduced overall status and power in the household and community. Fourth, the lack of involvement in *community politics* reinforces a gender bias in many decisions and helps contribute to the maintenance of a *status quo* in which the role of, and opportunities for, women are significantly less than for their male counterparts. All of these implications have fundamental ramifications for resource and environmental management.

Blackden and Wodon (2006) observed that women do most of the work of collecting water in Kenya, as elsewhere in Africa, including Ibadan, Nigeria. Research on women's time allocation in sub-Saharan Africa, where Nigeria lies, has identified "Time Poverty" as a constraint to development, with "women working especially long hours due in part to a lack of access to basic infrastructural services such as water and electricity, but also due to the rising demands of the 'care economy'" (Blackden *et al*, 2006). Time poverty is the idea that individuals do not have enough time for rest after completing their work tasks. Several studies have shown that women work

longer hours than men (Ilahi, 2000). A key outcome of access to piped water in the homestead may be that women are liberated from the time-consuming work of collecting water. Therefore, the study aimed at assessing the level of women involvement in the provision of water in the community with a view to making them do more to achieve sustainable urban development.

THE STUDY AREA

Ibadan is the largest indigenous city in tropical Africa (Onibokun, 1994). It is the capital city of Oyo State which is one of the 36 States of the Federal Republic of Nigeria (see Figure 1). The metropolis is made up of eleven LGAs (see Figure 2). Five of these are in the inner city, viz Ibadan North-West, Ibadan North, Ibadan North-East, Ibadan South-West and Ibadan South-East. These inner city LGAs are surrounded by the six LGAs of Akinyele, Lagelu, Egbeda, Ona-Ara, Oluyole and Ido. Agbadagbudu, which is the study area for this study is within the Ibadan North Local Government Area (see Figure 3).

The present day Ibadan is a product of the Yoruba civil wars that took place between 1810 and 1893. It was established in 1829 as a refugee and war-camp for dissidents from Oyo and Ile-Ife areas of Yorubaland. It is located on the fringe of the forest zone. The location of Ibadan was defined as the area extending for about 55 kilometres from Asejire in the East to Agemo in the West, and for about 70 kilometres from Iroko in the North to Mamu in the South (Akintola, 1963).

Since 1893, the planning of Ibadan has been characterized by both planned and unplanned growth. The unplanned sector of the city is mainly its Southeastern part which is predominantly inhabited by the indigenes of the city and constitutes about 40 percent of its spatial coverage. The non-indigenous sector is a mixture of planned and unplanned areas, and makes up about 60 percent of the spatial coverage of Ibadan. The so-called planned areas have experienced varied degrees of haphazard growth. Thus, the growth of the city has been by both planned and unplanned accretion. Its land use structure is "jig-saw" affair which has not been coordinated within the framework of either an overall outline or comprehensive plan (Onibokun, 1994).

Ibadan, especially the inner LGAs, have come under serious pressure of rapid urbanization. About 70% of the population crowd themselves up in the 30% of the land area of these LGAs (Agboola, 1996). This poses great environmental problems, including an over-stretch of the available water supply to the communities by the government.

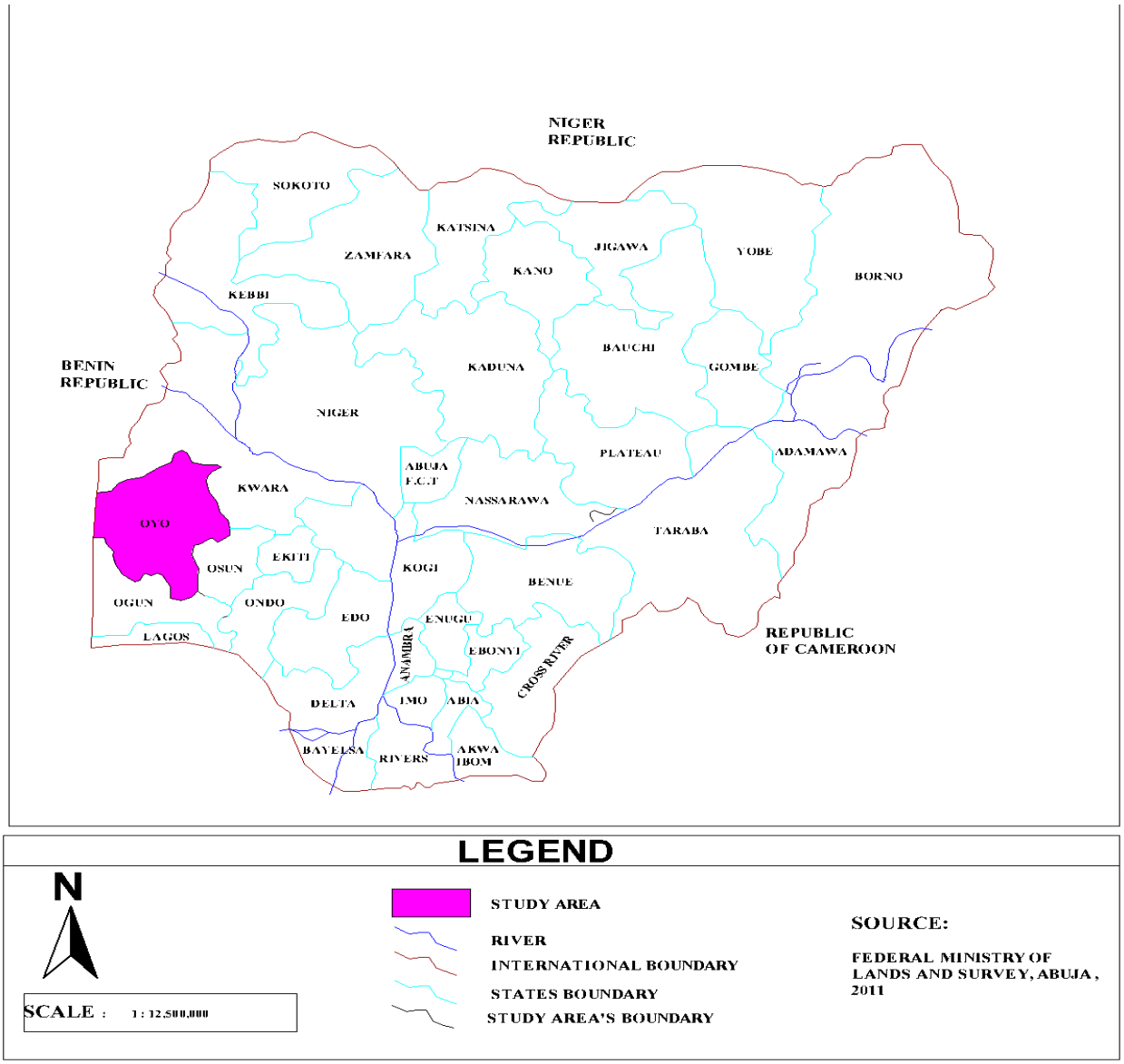

Figure 1: Map of Nigeria showing Oyo State

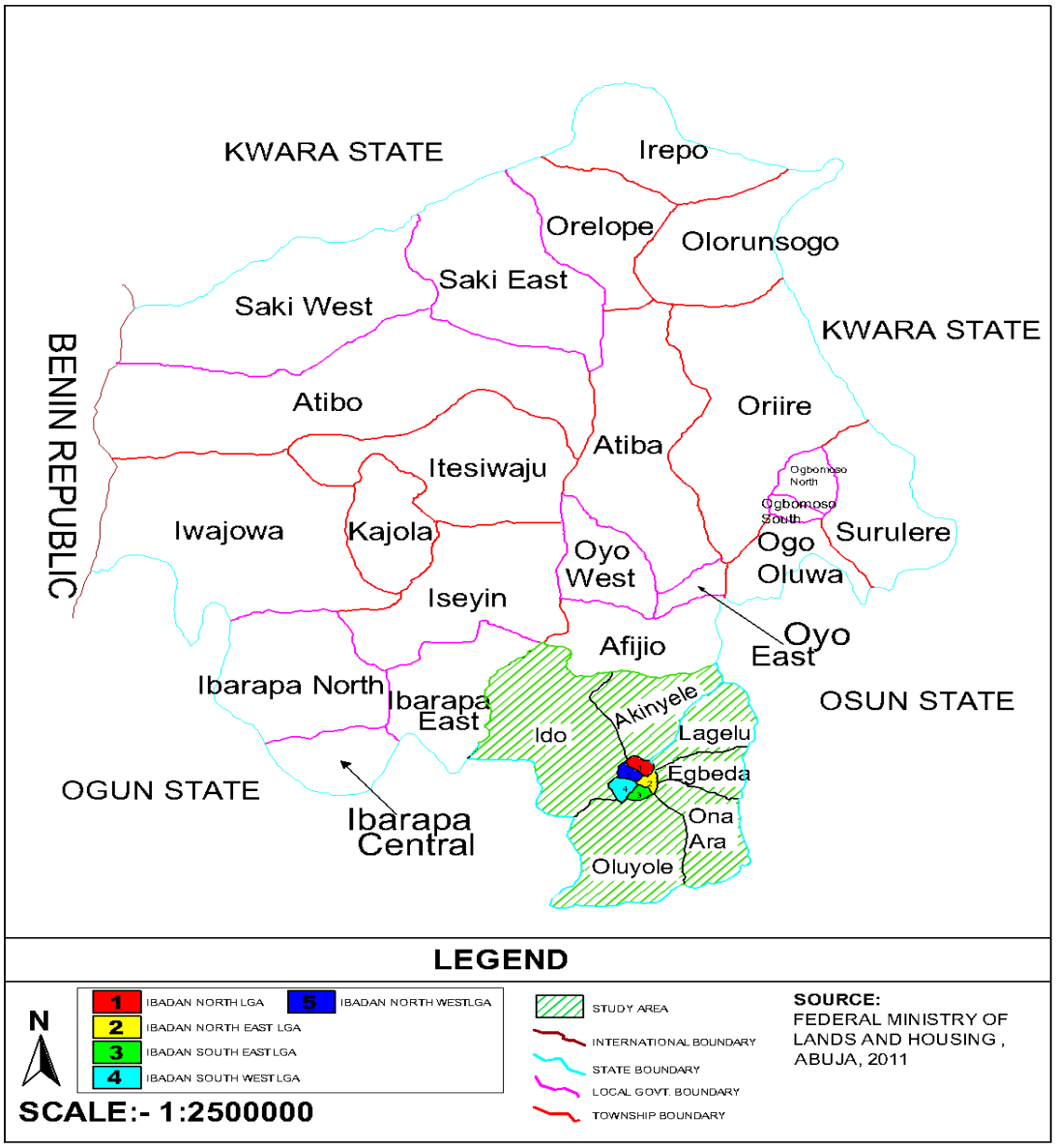

Figure 2: Map of Oyo State showing Ibadan

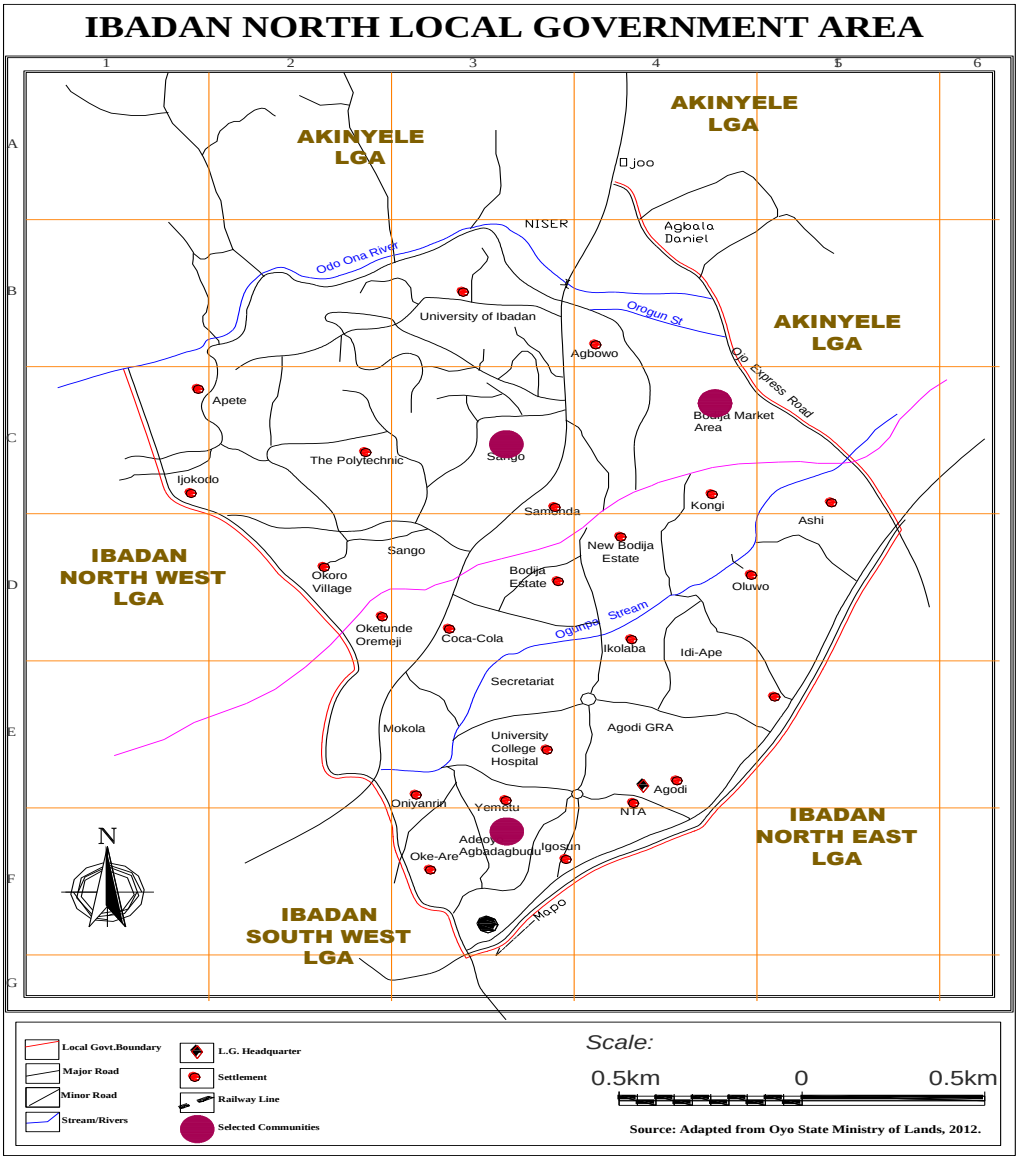

Figure 3: Map of Ibadan North Local Government Area showing the SIP Water Project Sites

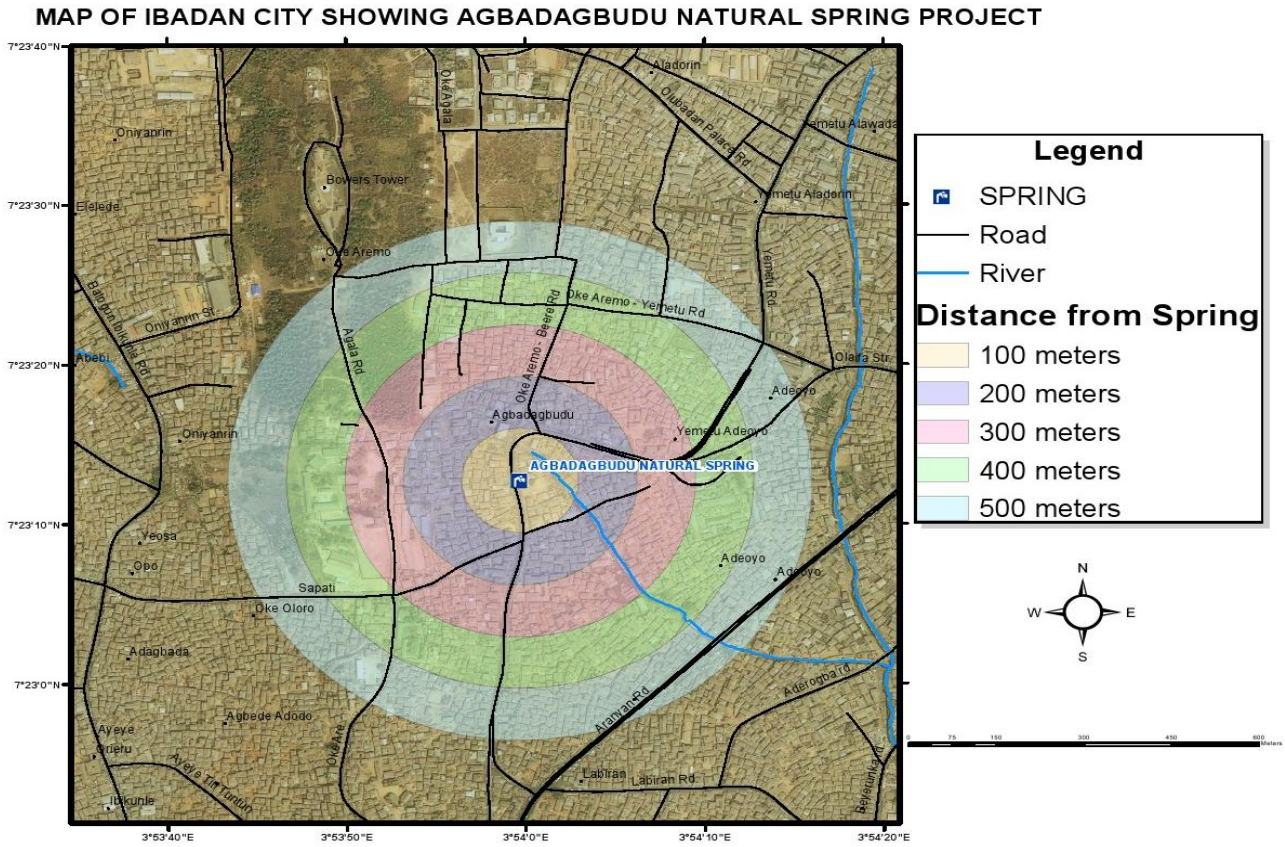

Figure 4: Map of Agbadagbudu Natural Spring Project Showing the 500-meter radius round the Project Site

Source: Adapted from Google Earth Map (2019)

METHODOLOGY

Agbadagbudu community in Ibadan North Local Government was selected for this study because it hosts a community water project. Though the project was facilitated by Sustainable Ibadan Project (SIP) – a UNHABITAT sponsored project, the community was actively involved in the various stages of the project.

In an attempt to generate the sample size for the study, the coordinates of the project site was established with the use of Global Positioning System (GPS). This was located on the google earth map. 500-metre radius was taken around the project location. This was because the United Nations considered only water gotten within 500-metre radius as safe water. (WHO & UNICEF, 2010; WHO & UNICEF, 2012).

The number of buildings within the 500m radius was counted with the use of the of proximity analysis tool in ArcGIS software. This gave 1,999 buildings. 5% of the buildings, which is approximately 100 buildings were selected as sample size for the study. Questionnaires were administered on one person in each of the 100 randomly selected buildings in the study area which gave a total of 100 persons that were sampled.The data gotten from the questionnaire were analyzed with the use of statistical package for social sciences (SPSS) and results were presented in Tables.

RESEARCH FINDINGS

The research findings are presented in cross-tabulation format to enhance understanding of the findings as presented by each gender, that is, male and female. The variables are cross-tabulated with sex of the respondents.

Socio-Economic Characteristics of Respondents.

One hundred samples were taken for the study. 60% are male while 40% are female. Occupation and income of the respondents were other characteristics isolated for this study as they are considered more relevant. It was found that the women are either employed by private sector or self-employed, none of the female respondents are employed by the government like the male counterpart as presented in Table 1.

The community is low income community of Ibadan basically because it is in the core area where you find elderly and people with little or no education but the women are more hit with this low income as none of the female respondents earn above N60,000 in a month (see Table 2).

Table 1: Sex and Occupation of the Respondents

	Occupation			
Sex	**Government employed**	**Private sector employed**	**Self employed**	**Total**
Male	20	0	40	**60**
Female	0	20	20	**40**
	20	**20**	**60**	**100**

Source: Authors' Fieldwork, 2019

Table 2: Sex and Income of the Respondents

	Monthly Income (₦)				
Sex	**Less than 20,000**	**20,001-40,000**	**40,001 – 60,000**	**Above 60,000**	**Total**
Male	0	20	25	15	**60**
Female	20	15	5	0	**40**
	20	**35**	**30**	**15**	**100**

Source: Authors' Fieldwork, 2019

Water Supply to the Community by Water Corporation of Oyo State

Water Corporation of Oyo State (WCOS) is the government agency that has the responsibility of providing water for the residents of Ibadan and environs. The respondents all submitted that WCOS service the community but the supply is either once or twice a week and the volume supplied was not adequate for the family use (Table 3). This makes them usually seek for water from other sources like well, stream, springs to complement what is supplied by WCOS. They added that they normally travel some distance to get the water, even the water from WCOS because most of them do not have the water point in their compound. They go to queue for the water when and where it is available. This act may even make the water in the community unsafe as the distance usually travel to get the water is farther than the 500-meter distance recommended.

Table 3: Sex and Regularity of Water Supply to the Community

	Regularity of Water supply to the Community		
Sex	**Once a week**	**Twice a week**	**Total**
Male	40	20	**60**
Female	0	40	**40**
	40	**60**	**100**

Source: Authors' Fieldwork, 2019

Community Water Project

The epileptic water supply by the WCOS made the community to contact the Sustainable Ibadan Project (SIP) to assist them in facilitating water project in Agbadagbudu community to ease the stress of having to scout around for water. There exists a natural spring in the community over a hundred years ago, the community take water from there but the initial style of taking water was crude as everyone come with different containers to take water from the source for different uses. With the assistance of SIP, the natural spring was developed like hand-pump well which is safe and easier to fetch and tested to be appropriate for even drinking. Various stakeholders contributed to the development of the project including the community. They contributed both in cash and kind. Each building in the community was levied ₦100 and in kind, the community contributed the sand used for the concrete work and labor.

The women folks too were involved in the initiation of the project as gotten from the field work. But they were not involved at the planning and design stages of the project. This is because it was assumed that they do not have money and technical knowledge that is required at these stages. They were properly involved at the implementation and maintenance/management stages. They were well involved at these stages because it was believed that the activities here are majorly for women and children. The implementation stage require much labour such as carrying brick/blocks, concrete mix, water and other things while the maintenance/management stages involve washing and cleaning of the project site and its surroundings. Washing is one of the roles that is taken as responsibility of women among the Yorubas, which is the predominant cultural group in Agbadagbudu community in Ibadan.

The community women took the responsibility of maintenance of the project and its environs seriously as it is beneficial to them in the sense that they know they have ready source of safe water in their community and the problem of having to travel long distance to scout for water or having to wait for WCOS to supply water, which may not be available is eradicated. It should be noted that men are also involved in the maintenance of the project but majorly when there is technical faulty or need to replace some parts of the project. Fund is readily available to do this because a user-charge of ₦10 is charged to fetch water with any container with a maximum of 20 litres.

Majorly, due to the involvement of women, this water project is believed by the community members to be well maintained and managed. The proper maintenance of the project will make it sustainable and last longer unlike project that is not properly maintained.

Plate 1: Residents of Agbadagbudu Community Fetching Water

Source: Authors' Fieldwork, 2019

CONCLUSION AND RECOMMENDATION

Women stay more at home and understand the use of urban facilities and services better than men. These women have their expectations from these projects but are not often adequately involved in the development of the projects as much as men despite that they are more hit by the absence or inadequacy of these facilities especially water as revealed in this study. The study therefore recommends that women should be more empowered and involved more in development of urban facilities in order to achieve sustainable development. This is because if women have more money and education, they will not be sidetracked in making decisions that have relevance to them and the environment.

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