Purpose and Objective:

The general aim of the study is to examine the causes and impacts of water shortages in low-income urban areas and suggests options for improved water supply in the area. The specific objectives of the study are to:

I. evaluate gap between water supply and demand
II. examine women and children vulnerability to water supply
III. access the effect of water supply on children health and school attendance
IV. access the effect of water supply on women economic productivity

Summary of main achieved activities

Inadequate access to water was reported by 74% of the respondents with 44.1% stating household access to water is poor. 28% attributed water scarcity to seasonal factor such as lack of rainfall during dry season while 38.2% attributed it to over population. Regular water sources were found to be well at 81.5% and 57.9% indicated usual dryness of water. Investigation showed that duration of dryness could be as long two months at 29.1%. Per persons, maximum quantity of water needed was found to be 220 litres and minimum quantity to be 80 litres. 50 litres and 160 litres are the lowest and highest quantity obtainable. Taking 1% probability level, Pearson correlation coefficient, r, is 0.948, and that is statistically significant (p=0.000). This implies that quantity of water needed is not usually met as there is significant difference between individual water demand per day and quantity available. Domestic waste disposal practices were reported to be the highest sources of contamination at 61.4% followed by human waste at 29.5%. Efforts by community leaders showed no hope as 91.7% reported nothing has been done.

Assessments of women and children’ vulnerability to water supply showed that 74.4% of respondent stated children and teenagers under 18 years of age are tasked with responsibility of getting water. About 74% reported having to carry water had resulted in physical deformity. About 81.9% reported the best time to get water to be in the morning and low occurrence of using transportation means was recorded at 10.2%.

Looking that the number of times children have missed school, a maximum of 9 times was obtained of which 6 of it can be attributed to water supply. Taking 1% probability level, Pearson correlation coefficient, r, is 0.636, is statistically significant (p=0.000). This implies that there is significant difference between number of times children have missed school and how many of these can be attributed to water supply.

Also, all the respondents reported either their wife or mother to be working. Of these, 35.4% were artisans, 10.2% were teachers and 36.2% were traders. 90.2% reported water availability to be crucial to their job productivity while 65.1% reported inadequate water supply have prevented them from working before.

On designing water supply blueprint for area, high level of optimism was observed as 90.2% of the respondents believed the community and their household water supply challenges can be solved. About 79.9% perceived public water supply and social program on water as the solution because it will be cheap and have easy access even though 79.5% perceived Government being the best in providing solution and 61.4% want government to be more responsible. Maximum number of water sources was found to be 5 and 1 for minimum number of water sources. It was obtained that some do not have any water sources and some have as high as 3. Taking 1% probability level, Pearson correlation coefficient, r, is 0.176, is statistically significant (p=0.005). This implies that there is significant difference between number of water sources needed household and the number of sources they currently have.
Conclusion:
From the survey, it was evident that Agbowo community does not have adequate access to water as many rated their household access to water to be poor. The study showed that effect of rainfall on water availability cannot be underestimated and making water available will not record high success if the water isn’t of good quality. The study showed the need to address the effect of domestic waste and human waste pollution. The study further enumerated that women and children are most vulnerable to water supply issues are they are the one tasked with responsibility of obtaining water for their household. Effect of water supply challenges on children’s health further shows why children are vulnerable as most develop illnesses such as malaria, typhoid, cholera and diarrhea. Majority of the respondent believed in public water supply, social program on water as some of the best ways to tackle this menace.

Recommandations and future considérations:
Need for reliable water sources to serve the community is necessary, just as work need to done to examine soil constituents before drilling. There is need to balance the quantity needed and quantity obtainable. The solution need to go beyond quantity to quality, assist those most vulnerable. There is need to state a case for responsibility not only at community levels, but at all levels. Mapping of houses in Agbowo community and examination of water contents in soil is essential before implementing

This project is implemented by

Tosin Gbagedesin
Post-graduate Student
Centre for Sustainable Development (CESDEV),
University of Ibadan, Nigeria

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An African Water Association (AFWA) Initiative
Côte d'Ivoire, Abidjan Riviera
Palmerie, Rond-Point de la Renaissance, Immeuble de la SODECI
2e étage - 25 BP 1174 Abj 25
Tél : (+225) 22 49 96 11 / 22 49 96 13
Fax : (+225) 22 49 23 30
Email : contact@afwa-hq.org

African Water Association