MILLENNIUM DEVELOPMENT GOALS (MDGs) AND URBAN WATER SUPPLY CHALLENGES IN MEDIUM-SIZE TOWNS: CASE STUDY OF ILARO, OGUN STATE.

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ABSTRACT

In September 2000, World Leaders from 189 countries met and declared their resolve to free the entire human race from poverty and want. One of the goals which emanated from the meeting known as the Millennium Development (Goals (MDGs) targets the reduction by half of people without sustainable access to safe drinking water and sanitation by 2015 (Ibrahim, 2006). This study examines the possibility of meeting this target in the medium size settlements in Nigeria which hardly get the attention of concerned authority. The survey of existing water sources and their capacity was conducted using questionnaire and personal observation methods. The result reveals gross inadequate supply and over reliance on unsafe sources of water for domestic use and significant incidence of water related diseases in the study area.

1.0 INTRODUCTION

The importance of water' to the sustenance of life cannot be overemphasized Apart from being a vital part of the food we eat which is the most basic need of man, water is also central to the success of almost all human endeavours Hence, its uses cut across domestic industrial, commercial and agricultural activities to mention just a few Therefore, as a settlement grows and human activities became diversified so the need and demand for water increase This perhaps explains the reason why many cities across the' world find it difficult to meet the need of their citizenry in term of adequate water supply.

According to a survey, in arid regions of North Africa (Nigeria, Morocco, Tunisia etc.) and central Asia, the amount of water available per person has dropped to a tent of what it was in 1950 (Awake, 2001). The problem is not limited to arid regions alone as United Nations has also raised alarmed about the increasing depletion of urban water supplies across the world, from Mexico City (the world second largest metropolis) to Beijing in China where one third of the existing wells have dried up due to increasing depth of water table.

Although about a quarter of the world inhabitants were said to be lacking this essential commodity in the late 80s (UNDP, 1990), today over 2 billion people out of the estimated 6 billion inhabitants of this planet were dying of it (UNEP, 2003). This indicates that the problem is far from abating despite the efforts of national governments and many international agencies at expanding the scope of fresh water supply around the world. In fact, UNESCO in its World Water Development Report (2003) painted a gloomy picture of what to expect in the nearest future as it predicted that in 20 years time the quality of water available to everyone would decrease by 30%. The question to ask here is where does this leave Nigeria? a country that has been finding it increasingly difficult to meet the basic needs of her citizenry. According to UN World Population Projection (1980) Nigeria is among the developing nations whose rate of urbanization is very high thus aggravating the problem of inadequate municipal services and public utilities such as water.

This is not to say that governments at all levels in the country have been folding their arms and left the situation unattended to. But their efforts had been largely cosmetic,

ad-hoc and devoid of seriousness which the present crisis situation of water supply (especially in the urban centres) demand. For instance, nearly three decades of the establishment of River Basin Development Authorities in the country with the aim of ensuring optimum and functional utilization of the nation water resources for domestic, industrial, agricultural (through irrigation) and hydro-electric power generation no appreciable gain has been recorded from that venture over the years. This is inspite of abundant water resources in the country and billions of naira sunk in the project since its inception in 1979.

2.0 PROBLEM STATEMENT

There is no gain saying the fact that water supply in Nigeria has not been able to keep pace with the demand. The fact that Nigerians were grossly undeserved in respect of this important utility aptly described as "common goods" by the UN was confirmed by the outcome of 1991 population census which revealed that only 26.55 percent of city dwellers in Nigeria have access to adequate fresh water (NPC, 1991). According to Odunaro (2000), water supply situation in Nigeria has become so critical and crucial that it determines the success or otherwise of any administration in the country. Unfortunately, most of the researches in this area concentrate on shortages experienced in the large cities/urban centres and the rural areas where the problem is largely qualitative rather than quantitative with the situation in the smaller towns left untouched or tangentially discussed. The small towns or emerging urban centres have a peculiarity that cannot be overlooked in term of water supply situation. Many of them are either linked with the existing urban water supply scheme which hardly meet the need of the originally intended beneficiary (not to talk of the adjoining settlements) or rely on mini water works characterized by epileptic performance, thereby leaving their inhabitants with the option of sourcing water from other sources many of which are of questionable quality.

3.0 THE STUDY AREA

A medium size town can be described as an emerging urban centre with relatively smaller population and land area compared with large cities. Ilaro is a medium size town of about 60,000 inhabitants based on the projection from National Census and occupies a land area of 9.5 square metres. The town is ranked among the third

hierarchy of urban settlements in Ogun State (BUPP, 2001). Ilaro had been a regional centre since colonial era and became the headquarter of Egbado Local Government Area upon the creation of Ogun State in 1976. The town became the seat of Yewa South Local Government after the splitting of the former Egbado Council into four local government areas. As a nodal town and an important administrative centre, the town has attracted a lot of physical and infrastructural development which contribute significantly to upsurge in population in recent time. It has a Federal Polytechnic, a School of Nursing, two High Courts, Federal Prison yard, Police Zonal Command among others as well as numerous commercial and industrial establishments like banks, agro allied industries etc.

4.0 METHODOLOGY

Data for this study were obtained from the suppliers and consumers of water in the area covered by the research which is the core area of Ilaro town. Two sets of questionnaires were designed and administered towards the collection of relevant data, one for the suppliers i.e. water corporation, water dealers etc and the other for the consumers i.e. households. Systematic sampling technique was adopted in the selection of appropriate sample for the study. To this end, a total of 150 questionnaires were administered in the ten sampling wards which the area had been divided into, using the existing population wards of the town. However, only 144 of the questionnaires were found valid for analysis.

The second category of the questionnaires was administered on water supply agencies which include the zonal office of the Ogun State Water Corporation in the town, the borehole operators and the operators of water tanker services. The findings of the study were presented with the aid of graphical illustrations while the descriptive statistics was used in the eventual analysis of the data.

ANALYSIS OF FINDINGS

As stated earlier a total of 150 household questionnaires were available for analysis in this study as the remaining 6 could not be processed as a result of errors of inadequate or inconsistent responses. Therefore, the percentage of valid responses stands at 96% which is found to be suitable enough for the study.

SOURCES OF WATER SUPPLY TO HOUSEHOLDS

It was discovered that the overwhelming majority of the respondents (53.68%) sourced their water mainly from boreholes while the least patronized source is tanker with only 0.74 patronage. This is followed by tap water with 2.20%. The striking importance of this findings as indicated in table 1 is the revelation that large proportion of the households source their water from streams and shallow wells (43%) normally classified as unsafe sources of water for domestic consumption.

Source	No of Respondents	%	Classification of Source
Public tap	5	3.47	Potable
Tanker	1	0.69	Doubtful
Borehole	72	50.00	Potable
Stream/River	8	5.56	Not potable
Shallow well	58	40.28	Not potable
Total	144	100.00	

 Table 1: Respondents' main sources of water supply

Source: Author's field survey, Dec. 2009.

CAPACITY OF WATER SUPPLY SOURCES

The study reveals gross undersupply of water in the town as indicated in table 2 below. Besides shallow wells, streams and other similar sources whose delivery capacity was difficult to estimate, other major sources have total delivery capacity of about 250,000 litres as against the installed capacity of 369,000 litres. What this means is that only about 64 percent of the expected potable water supply in the area is actually available to the people which translates to 4.2 litres per capital per day (Lcpd) when put side by side with the population of the town put at about 60,000 (NPC, 1991). With the estimated domestic water consumption in the country put at 30lcpd (DFID, 2007) it means that a great deal of this consumption (86%) come from other sources regarded to be unsafe.

Source	Installed Capacity	Delivery Capacity	%
Water Corporation	250,000 litres	132,000 litres	52.8
Tanker Services	44,000 litres	22,000 litres	50.0
Borehole operators	100,000 litres	100,000 litres	100.0
Stream/River	N/A	N/A	-
Well (Shallow)	N/A	N/A	-
Total	394,000	254,000	64.5

 Table 2: Water sources and capacities in Ilaro

Source: Author's field survey, Dec. 2009.

5.0 HEALTH IMPLICATION

The investigation of prevalence of water and sanitation related diseases in the town was carried out in 'selected health institutions in the study area and the result indicates significant incidence of such diseases in the last twelve months preceding the survey as revealed in table 3 below. These diseases include typhoid fever, diarrhea, dysentery, cholera and guinea worm.

Table 3: Cases of Water related diseases registered in selected HealthInstitutions in Ilaro (Sept. 2005 – Aug. 2006)

Health Institution	Total number of	Number of Water	%
	cases	related cases	
General Hospital	3,022	57	1.89
L.G. Health Centre	958	85	8.87
Private Hospital	3,852	422	10.96
Others	3,904	402	10.30
Total	11,736	966	8.23

Source: Author's field survey, Dec. 2009,

HOUSEHOLDS EXPENDITURE ON WATER SUPPLY

The survey reveals that majority of the households spend between N25 and N50 on water procurement daily which translate to 16-33% of the estimated per capital income of the vast majority of the people in the developing countries which United Nations put at one US dollar (N150). These findings is in tandem with the

observation of Arimah and Ekong (1993) as cited in Okonkwo (2006) which indicated that poor households in Nigeria spend about 18% of their income on water. It goes to show that the situation is far from improving but getting worse.

6.0 CONCLUSION AND RECOMMENDATION

The study has revealed a lot of inadequacy in the efforts of public authority to improve access to potable Water by all and sundry especially the low income earners who could hardly afford basic means of life. The causes of the identified lapses are legion ranging from lack of optimum performance of public water scheme, lack of viable private substitute for epileptic public water schemes as well as prohibitive cost of accessing such a substitute where they are available. A situation where common masses would be committing as high as one-fifth of their hard earned income on water alone left much to be desired. All this calls to question the 'much touted desire to half the number of people that are currently suffering from inadequate domestic water supply in the developing county by the year 2015 (target year of MDGs).

If this target is to be met there must be a review of strategy on the part of governments at all level to seriously address the nagging problem because of its widespread socio-economic and health implications. There has to be a complete overhauling of all public water schemes, majority of which are currently performing far below their installed capacity. Where centrally located scheme proved to be ineffective they could be decentralized in form of small scale borehole projects for individual communities.

The issue of appropriate funding which past studies held responsible for poor performance of public water agencies needed to be tackled with the seriousness it deserves. Sustainable low cost power supply such as solar energy can be provided to save the public water scheme from epileptic performance as a result of unstable power supply.

Concerted effort must be made by government to ensure that potable water is made available at reasonable cost to the people in order to minimize the tendency to patronize doubtful sources of water supply which may be harmful to the health of the people.

Above all to demonstrate the seriousness of government in making life more meaningful to the citizenry as far as the provision of potable water is concern a kind of marshal plan should be put in place to declare water supply sector as an area which require massive funding from all the three tiers of government in the country at least in the next five years. These measures if fully implemented are capable of bringing about the much expected turn around in this important sector.

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