
ATTAINMENT OF THE MILLENNIUM DEVELOPMENT GOALS IN THE PROVISION OF SAFE DRINKING WATER IN CROSS RIVER STATE, NIGERIA

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ABSTRACT: *The study investigated attainment of the millennium development goals in the provision of safe drinking water in Cross River State, Nigeria. One research question was formulated to guide the study. Descriptive survey design was adopted for the study, while stratified and simple random sampling techniques were used in selecting 945 subjects from a population of 1890 from 6 local government areas in the study area. A 7-item questionnaire titled: Attainment of the Safe Drinking Water Rating Scale Questionnaire (ASDWRSQ) which had two sections (A and B) was used for data collection. The instrument was validated by the experts in measurement and evaluation in University of Calabar. Cronbach alpha reliability method was used for ascertaining the reliability coefficient which yielded 0.96. The provision of access to safe drinking water was inadequate. Based on the findings of the study, it was recommended among others that government and other development agencies should embark on water schemes across the state to provide potable and affordable water in the state as it has done in Calabar metropolis. This will reduce the consumption of rain water which is usually polluted with dust and carbon dioxide.*

KEYWORDS: attainment, millennium development goals, safe drinking water

INTRODUCTION

The United Nations General Assembly session consisting of 189 nations including Nigeria in September, 2000 met and resolved to commit themselves to combat poverty and other development challenges so as to improve the standard of living for everyone through a declaration tagged United Nations Millennium Development Goals (MDGs) in September 2000. They decided that these set goals will assist to free all men, women and children from the clutches of abject poverty and other dehumanizing conditions in human settlements by the year 2015 (Fasokun, 2008; Akpama, Asor, Erim & Adekola, 2012).

Millennium Development Goals (MDGs) are standards set to measure the level of socio-economic growth and development of countries across the globe. Before the year 2000, economic growth and development was measured using only Gross Domestic Product (GDP) of a country which uses the level of infrastructure to measure the level of development. There were no uniform standards globally to measure the level of economic growth and development. Most countries with high GDP show high/low level of under-development and some countries with low GDP show high/low level of physical development. These indices stimulated the global bench mark to measure the level of development of nations. The MDGs are framework for measuring development progress at national, regional and global levels. It emanated from the United Nations Millennium Declaration which committed all countries, rich and poor, developed and developing, to do all they can to achieve significant measurable improvement in people's lives, especially the poor. The aim was to create an environment which is conducive

for development and eliminate poverty. According to the United Nation Development Programme (2006) the standards for measuring development were uneven and these gave rise to the internationally agreed framework of eight (8) Millennium Development Goals (MDGs) and eighteen (18) targets. World leaders issued the millennium declaration which has led to the formulation of the Millennium Development Goals (MDGs). The National Planning Commission (2006) listed the MDGs as follows;

1. To eradicate extreme poverty and hunger
2. To achieve universal primary education
3. To promote gender equality and empower women
4. To reduce child mortality
5. To improve maternal health
6. To combat HIV/AIDS, malaria and other diseases
7. To ensure environmental sustainability
8. To develop a global partnership for development

The MDGs and their targets came from the Millennium Declaration, signed by 189 countries including 147 heads of States and governments in September, 2000. Accordingly, to measure progress towards MDGs, a framework of 21 quantifiable targets and 60 indicators were set up by a consensus of experts from the United Nations Secretariat, the International Monetary Fund (IMF), the Organization of Economic Cooperation and Development (OECD) World Bank. This research is however focused on MDGs 7. The Millennium Projects (2002) highlighted the targets and indicators of goals 7 include:

Goal 7: Targets:

- a. Reduce halve by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation.

Indicator:

- a. Proportion of population using improved drinking water source urban and rural.

The Assembly called on member nations to proffer enduring solutions to the problems of hunger, malnutrition and disease. They stressed that immediate measures must be adopted to promote gender equality and the empowerment of women, guarantee basic education for all, and support the principles of sustainable development and global partnership for development (Ering, Nwagbara & Ushie, 2006). The year 2015 was set for all member nations to actualize these lofty human development goals. In order for developing nations to fast track the implementation to these goals, the developed and richer countries of the world committed themselves to assisting developing countries in the form of aid, trade, debt relief, and investment (Fasokun, 2008).

The Millennium Development Goals could be described as a human right approach to development with ardent emphasis on equality and non-discrimination. Fasokun (2008) asserted that the maintenance of a life-sustaining environment forms the main fulcrum around which human development agenda revolves. Each goal has well defined targets and indicators explicitly spelt out as basis for evaluating the achievements of each of the millennium development goals (Akpama, Asor, Erim & Adekole, 2012). These goals and their targets indicate the development levels that countries of the world (especially the third world countries) plan to achieve by the year 2015. As a result of this all hands are expected to be on

deck to ensure achievement of these goals, especially in Nigeria where the progress report seem is not to be favourable for now.

The implementation of Millennium Development Goals in Cross River State began in 2008, this gave birth to the establishment of the Department of International Donors with the appointment of Special Adviser to the Governor to ensure speedy implementation of projects within the time frame of 2015. Cross River State is today a symbol of worldwide environmental, political, economic and social stress characterized by hunger, disease, over population, scarcity of resources, poverty, crime and violence, which make life almost intolerable for majority of citizens (Cross River State Economic Empowerment Development Strategy, 2005). According to Obadan (1996), there is need for sober reflection and urgent actions to move these rural communities out of their improvised conditions.

Cross River State like other states of Nigeria, has poverty is a serious social issue affecting the vast majority of the people especially those in the rural areas of the state. The World Bank (2002) report indicates that more than 70 percent of Nigerians are living below the poverty line, that is, below one United States Dollar (US\$1) per day. The people of Cross River State are not spared from the scourge of poverty and its debilitating impact on their socio-economic wellbeing as evidenced in the paucity of development programmes and projects.

A review of development experience shows that the most effective way of achieving rapid and practical sustainable development is in improving the quality of life of the poor in the rural areas. This can be achieved through poverty reduction programmes. The first element of the strategy is the pursuit of patterns of growth that ensure productive use of available resources to help the poor, while the second element is widespread provision of basic social services to the poor, especially primary education, primary health care, access to safe drinking water supply and access to improve sanitation, reduction in maternal health and family planning (Cross River Economic Empowerment and Development Strategy CR-SEEDs 2005).

Water is essential for life, it is next to air. Water is an essential commodity for survival and the improvement of quality of life for health (drinking, eating and washing economic development (agro-industry). It increases the production activities by reducing the number of days off sack and through the time saved on the water collection. Access to quality water makes it possible to save time and keep children in good health so they can regularly attend school. A good hygiene of the environment and good water provision facilities foster a safe school environment.

The importance of safe drinking in socio-economic development cannot be overemphasized. Access to safe drinking water and adequate sanitation are part of the millennium development goals of reducing poverty by the year 2015. Safe water has been described as water that meets the national standard for drinking water quality for Nigeria (FMWR, 2004).

In a study carried out by Oboqua and Akpama (2014) on the implementation of some millennium development goals and poverty reduction in Akamkpa and Biase Local government areas of Cross River State, Nigeria. The study adopted ex-post facto research design with a population of five thousand (5,000) all adult men and women. The sample size of five hundred (500) respondents selected from the two local government areas of Cross River State. The major instrument used for data collection was a structured questionnaire tagged implementation of some millennium development goals and poverty reduction questionnaire (IMDGPRQ). The research questions examined in this study was to what extent does the provision of rural water supply in fulfillment of MDGs influence poverty reduction in Akamkpa and Biase local

Government Areas. The findings of the study showed a positive relationship exist between provision of rural water supply and poverty reduction among the people in the study area. That is, the more the MDGs provision of rural water supply, the more is poverty reduction among the people.

Africa has the lowest total water supply coverage of any region in the world, currently about 300 million people in Africa do not have access to safe water and about 313 million have no access to sanitation. This situation exacts a heavy toll on the health and economic progress of African countries. The Africa water vision was presented at the second world forum in the Hague, 2000; as part of the World water vision and represents Africa's efforts at addressing the impending Africa water crises. Within the framework of the Bank Groups strategic plan (2003-2007) and in response to the Africa water vision and the UN Millennium Development Goals, the African Development Bank Group conceived the rural water supply and sanitation initiative (RWSS) in 2002 with the view to accelerating access to water supply and sanitation services in rural Africa to attain 66% percent access to water supply and sanitation by the 2010 and 80% by 2015.

The achievement of the objectives of the initiative would contribute to poverty reduction and economic growth. The initiative has received backing from the international community including the G8 summit at Evian, the world panel on financing water infrastructure and the African Ministerial Council on Water (AMCOW) as well as several bilateral donors. As the premier regional development institution, the Bank Group is well placed to play the lead catalytic role in galvanizing broad support and building partnerships to implement the initiative through collective action by donors, RMCS and other stakeholders (UN, 2009). The provision of safe water and hygienic sanitation services underpins the attainment of all the millennium development goals, such as infant mortality, poverty reduction, improve health and increased school enrolment rate. The cascading positive impact of providing improved water supply and sanitation services in improving all aspects of rural livelihood.

A key constraint on promoting economic property in rural areas is the lack or absence of sustainable community-base safe water supply and sanitation systems. The lack of adequate rural water supply and sanitation (RWSS) services impairs rural community health, especially among the poor. Improved access to safe water and sanitation is critical to achieve the goals for poverty reduction development and come within the framework of the Millennium Development Goals (MDGs) to ensure environmental sustainability and aims to halve by 2015, the proportion of rural people without sustainable access to safe drinking water and sanitation should be better understood by integrating improve analyses of community priorities and needs into policy making and implementation, and by delivering increased access to water and sanitation to the poorest people. International experience has shown that for overall improvement in community health, especially among the poor. Improved access to safe water and sanitation is critical to achieve the goals for development and come within the framework of the Millennium Development Goals (MDGs) to ensure environmental sustainability and aims to halve, by 2015, the proportion of rural people without sustainable access to safe drinking water and sanitation.

Akadu (2009) carried out a study to examine the impact of rural water supply and poverty reduction in Akamkpa and Odukpani local government areas of River State. The study used a randomized sample of two hundred and seventy (270) respondents drawn from the area of study. In testing the hypothesis, which states there is a significant relationship between rural water supply and poverty reduction, Pearson product moment correlation analysis statistical

tool was used, the result of the analysis revealed that, the calculated r-value of 0.671 is greater than the critical r-value of 0.196 when tested at .05 level of significance with 268 degree of freedom. This findings showed that a positive relationship exists between rural water supply and poverty reduction in Akamkpa and Odukpani local government areas of Cross River State.

Ekpoh (2002) observed that natural water ranges from water with a very low content of chemical compounds to water too salty for one to drink. The water of the earth is a global concern since the hydrological cycle does not observe political boundaries. What one nation does to the water affects all of mankind because water is a world-wide phenomenon that ties all of the lands and their people together. High quality water is required for drinking and for many industrial and agricultural purposes. Water quality is determined by means of analyses that reveal contamination from various impurities including pesticides and other chemicals as well as bacteria.

On the other hand, Cunningham and Cunningham (2004) observed that, worldwide, clean water is more available to urban people than to rural people, but access to good water is a major problem. Available water is often unsafe, and diarrhoea, dysentery, typhoid and other water borne diseases are common. Many river and streams in third world countries are little more than open sewers, and yet they are all that poor people have for washing clothes, bathing, cooking and in the worst cases drinking. The world is on track to meet the drinking water target, through many remains to be done in some regions. Accelerated and targeted efforts are needed to bring drinking water to all rural households. Safe water supply remains a challenge in many parts of the world (United Nations, 2011).

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The world is on track to meet the drinking water target, through many remains to be done in some regions. Accelerated and targeted efforts are needed to bring drinking water to all rural households. Safe water supply remains a challenge in many parts of the world (United Nations, 2011). The Cross River State Planning commission developed the Cross River State Economic Empowerments and Development Strategy CR-SRRDS, (2005-2007). The thrusts of CR-SEEDS seeks to achieve MDG goal 7, to halve by 2015, the proportion of people without sustainable access to safe drinking water. The policy is aimed at providing access to safe drinking water for all and eradicates the scourge of water born disease, by the year 2010. It aims at bringing environmental and water pollution in our community's water under control and foster private sector participation in environmental management. Basically, water is an important resource. The quality of raw water in Cross River State has been greatly affected by pollution from improper refuse disposal.

UNDP (2010) estimated that, globally, almost 1 billion people lack clean drinking water. 2.4 billion People have no access to hygienic sanitation facilities; 1.2 billion lack any sanitation facilities at all. Over all, the world is on track to meet the water MDG, but there are major gaps in many regions and countries, particularly in sub- Saharan Africa. Availability of water is certainly a concern for some countries. But the global water crisis is mainly rooted in poverty power and inequality, not in physical availability. It is first, and foremost, a Crisis of

governance and thus governance reform must be a key pillar of any strategic approach to addressing the crisis.

It is necessary to have a feedback on whether the programme is achieving the anticipated results and if not find out what the constraints are and how they can be tackled to ensure that appropriate results are achieved. Therefore it is necessary to ascertain whether these projects have been implemented for the overall improvement of the living conditions of the people in these rural communities. It is in light of the above that this study sought to evaluate the attainment of safe drinking water millennium development goals in Cross River State indicator as listed in MDGs goal 7 respectively.

Purpose of the study

The purpose of this study is to evaluate the attainment of millennium development goals (MDGS) in the provision of safe drinking water in Cross Rive State, Nigeria. Specifically, the study intended to:

1. assess the level of attainment of MDGs in the provision of safe drinking water in Cross River state between 2008 to 2014.

Research questions

1. What is the level of attainment of MDGs in the provision of safe drinking water in Cross River State between 2008 to 2014?

METHODOLOGY

Survey research design was adopted for the study. The population of the study was 1,890, while the sample for the study was 945 selected from 6 local government areas out of 18 LGAs in the study area. Stratified and accidental sampling techniques were used to draw 945 male and female respondents. A self-developed questionnaire was used as an instrument for data collection titled: Attainment of the Safe Drinking Water Rating Scale Questionnaire (ASDWRSQ) which had two sections A and B. Section A has respondents demographic information, Section B had 7-items in the form modified rating scale of Yes and No was design to elicit information from the respondents. The instrument was duly validated by experts and its reliability estimate was established at 0.96 using Cronbach alpha reliability methods. This reliability coefficient was considered high enough to justify the use of the instrument for the study. The copies of the questionnaire were administered personally by the researchers with six research assistance trained for the purposed. At the end of the exercise, all the copies of the questionnaire were collected back by the researchers and the research assistants. For ease of data preparation, codes were designed to each item and a coding schedule was prepared by developing a key for each of the construct of the instrument. The data collected for the study were analyzed using simple percentages and bar charts.

RESULTS

Research question 1

What is the level of attainment of MDGs in the provision of access to safe drinking water in Cross River State?

TABLE 1: Summary of simple percentage for level of attainment of MDGs in the access to safe drinking water

Sources of drinking water	Yes	%	No	%
Borehole by government	428	45.29	571	60.42
Water board by government	573	60.63	372	39.37
Stream	386	40.85	559	59.15
River	179	18.94	766	81.06
Rain water	312	33.02	633	66.98
Spring water	634	67.09	311	32.91
Well water	481	50.89	464	49.1

The data presented in Table 1 was used to answer this research question. From the Table, the following proportion of respondent that said 'yes' for the respective indicators were borehole by government 428 (45.29%), water board by government 573 (60.63%), by streams 386 (40.85%), by river 179 (18.94%), by rain water 312 (33.02%), by spring water 634 (67.09%) and well water 481 (50.9%). While the proportion of respondents that said 'no' for the respective indicators were borehole by government 571 (60.42%), water board by government 372 (39.37%), by streams 559 (59.15%), by river 766 (81.06%), by rain water 633 (66.98%), by spring water 311 (32.91%) and well water 464 (49.10%).

The graph presented displays bar chart for the provision of safe drinking water. It reveals that percentages that fall above 50% shows high level of access to safe drinking water such as water board by government and spring water while percentages that fall below 50% show low level of access to safe drinking water such as borehole by government, stream, river, rain, water and well water were inadequate. The results generally indicate that access to safe water in Cross River State is inadequate.

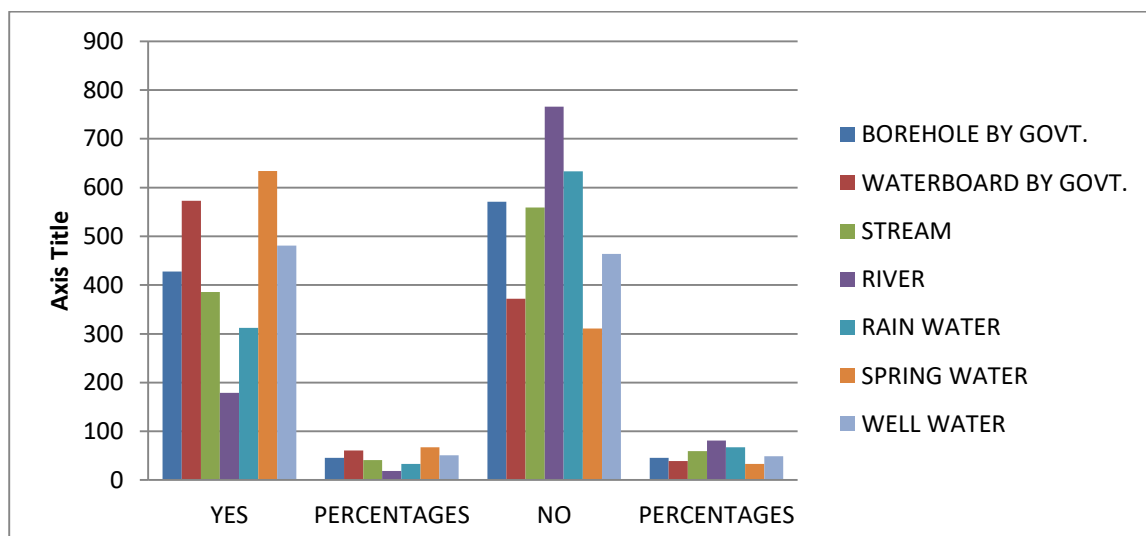


FIGURE 1: Composite bar-chart representation of provision of access to safe drinking water

DISCUSSION OF FINDINGS

The result of research question, revealed that access to safe drinking water is still inadequate. The result also showed that, respondents have adequate perception of people using rivers and streams as a sources of drinking water and also use this source for other house hold needs. The finding also showed that, respondents have adequate perception of natural spring water being used for domestic consumption.

The finding was also in line with Oboqua and Akpama (2014) who argued that rural drinking water sources come largely from surface streams and rivers. This makes them susceptible to easy pollution and contamination from carelessly dumped wastes. Water from stream and rivers are contaminated by solid wastes such as excrement, agricultural waste and dead organisms. The findings was in consonance with Ekpoh (2002) who observed that natural water is not pure, technically, since it contains certain amount of dissolved substances with which its come into contact. Among the various source of freshwater, water has a relatively low degree of mineral content because the water entering the river from the catchment area flows through well-washed soil.

The study is also in line with Cuningham and Cuningham (2004), they observed that, worldwide clean water is more available to urban people than to rural people, but access to good water is a major problem. It was obvious from the result of the finding that respondents have access to water from various sources but they are unsafe for human consumption. This invariably means that, the MDGS target to halve, by 2015 the proportion of persons without sustainably access to safe drinking water was not met. People still use these unsafe sources of dinking water that are contaminated with poisonous chemicals, household water, leaves and human faces.

CONCLUSION

Based on the findings of the study, it was concluded that access to provision of safe drinking water, in the study area was inadequate for the attainment of MDGs and so the programme may not be meeting the objective for which it was establish in Cross River State, so funds and adequate expertise should be made available for the successful implementation of the current Sustainable Development Goals (SDGs) projects/programmes aimed at alleviating poverty in rural communities in Nigeria.

Recommendations

Based on the findings of the study, the following recommendations were made:

1. Government and other development agencies should embark on water schemes across the state to provide potable and affordable water in the state as it has done in Calabar metropolis. This will reduce the consumption of rain water which is usually polluted with dust and carbon dioxide.
2. There should be increase funding to the development control agencies like Cross River State Water Board Limited, Ugep, Ogoja, Ikom and Obudu water urban development authority to step up efforts towards providing access to water.

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