

IMAGINE! THE IMPACTS OF COVID-19 ON THE RESIDENCE OF BIDA IN NIGER STATE: AN URBAN COMMUNITY WITHOUT WATER SUPPLY

Background

It is an assumed fact that, man cannot survive longer without food than water. But because water is freely available through rainfall, man has until fairly recently, taken this unique resources for granted. Although more than 70% of the earth surface is water, water has become a scarce commodity in many part of the world. The threat of a world water crisis is becoming increasingly real in the face of increase demand, relatively statistic supply and deteriorating quality due to over exploitation. It is universally accepted that an adequate supply of water for drinking, personal hygiene and other domestic purposes is essential to public health and well-being. It is well known fact that large number of people in Nigeria mostly those in rural area lack safe potable drinking water, about 90% of the rural communities in Nigeria are lacking potable water for their domestic activities (Uwais, 2004). Of Nigeria's population of nearly 300 million people, 71 million do not have access to clean water and 130 million do not have access to basic sanitation. This lack of water, sanitation, and hygiene services exacerbated by accelerated urbanization, poor cost recovery weak governance and institutional frameworks - adversely affects Nigerian citizens' health, as well as their access to educational and economic opportunities and their work efficiency and labor productivity.

The present position of water supply in Nigeria is grossly inadequate. The Federal Government and indeed the Government of Niger State have over the years been intervening from time to time in terms of the provision of potable water to the people through the Federal Ministry of Water Resources, Petroleum Trust Fund (PTF), River Basin Authorities, DFRRI, National Water Supply Rehabilitation Project, National Borehole programme and of course, the present government's E-WASH Program.

For instance, during the 2013 edition of the world water day on march 22 marked by stakeholders in water and sanitation business in Hague, Nether land, the authorities at Niger State ministry of water resources dedicate the day to takes stocks of it achievement and to marshal out

ways of improving on its effort of tackling the challenges of supplying portable water to the 4.5 million people spread across the 25 Local Government Area of the state. The ministry also embarked on other semi-urban water supply schemes in the state and introducing mini water scheme in Kuta, Madaka, Mashegu, Agwara, Lemu and Kata eregi. It produced several borehole rigs for drilling of borehole in communities and trained some of its staff on water related issues both locally and abroad. The state has also brought several water supply vehicles and distributed some to the 25 Local Government Areas for distribution of water to communities known to be facing water shortages which has aimed to reduce the problem of water scarcity in these communities.

Further still, as part of palliative measure to cushion the effect of the 'lockdown' order imposed by the Niger State Government over the outbreak of the corona virus, Covid-19 pandemic on residents of Bida. The government through the NSWB engaged the services of water supply vehicles to provide water to households in Bida community to address the problem of acute lack of clean and potable water supply.

The Effective Water, Sanitation and Hygiene Service (E-WASH) program, is a United States Government supported program in Nigeria. The program works to improve the availability of clean water and sanitation for Nigeria's vulnerable urban neighbor-hoods. The program's focus is on ensuring sustainable water services delivery, through operational improvements, better governance and accountability, as well as policy, institutional and operational reforms of the SWBs., The program aims to increase access to basic drinking water supplies for 500,000 household through technical assistance to SWBs in six selected states of Abia, Delta, Imo, Niger, Sokoto, and Taraba States, while at the state level the program aims to improve access to clean and potable water supply to 85,000 thousand households in Niger States.

Following the declaration of state of emergency on water sector (WASH) by the Federal Government of Nigeria in 2019, with a view to curbing the acute water sanitation and hygiene management as well as open defecation free society. The Niger State Government, no doubt, has shown tremendous commitment towards provision of potable and clean water to the people of the state. Amongst these efforts includes:

- The improvement, supply of equipments and rehabilitation of Chanchanga water works in Minna,
- Supply and delivery of equipments and machines to the Bida Area Office of the NSWB, with a view to resuscitating the Bida water works.

However, as commendable and laudable as these efforts are, the impact of government in this regard, is yet to be felt by the people in Bida Local Government Area of the State as the supply and provision of water is yet to commence due to lack of electricity supply of a dedicated 33kva transformer to the water works. The fact remains that these equipments supplied if not put into use might become non-functional/dysfunctional, deplorable and in the long run obsolete, due to wear and tear as time goes on. This would invariably impact on the government who had to incur more fund for the purchase of another batch of equipments.

It's against this back drop that this editorial seeks to assess the accessibility of potable water in Bida Local Government, with objectives to determining the quantity of domestic water demand; assess the existing water supply source; examine the water quality and establish the potential public health of the water as well as the impact of its unavailability on residents in the wake of the present COVID-19 pandemic.

Historical Framework

Bida is the second largest city in Niger State with an estimated population of 178,840 (2007). It is located southwest of Minna, capital of Niger State, and is a dry, arid town. Bida local government is in Niger State. It is situated between latitude 9° 05'N and 6° 01'E. The local government has an area of 512km² and it is equally bounded by Gbako local government to the North, Lavun local government to the south, and Katcha local government to the west.

The major ethnic group is the Nupe. Bida is the headquarters of the Nupe Kingdom led by the Etsu Nupe (presently Etsu Yahaya Abubakar). The leadership style of the ancient town of Bida is emirship, and the head of the town is addressed as Etsu Nupe. Other tribes include: Fulani, Igbo, Yoruba, Hausa, Igala and Gbagi, Ibira. The town is known for its production of traditional crafts, notably glass, bronze art crafts and brass wares. Bida is also known for its Durbar festival and the Nupe Day Festival. It is also the home to the Federal Polytechnic, Bida, Federal Medical Centre and Niger State School of Nursing.

Statement of the Problem

The importance of water supply in Bida cannot be overemphasized nor easily ignored. This is premised on the backdrop of the outbreak of the Corona Virus, COVID-19 pandemic which originated in Wuhan, China. On the 12th of February, 2020 Nigerian detected its first index case of corona virus positive patient, in the city of Lagos. And since then the country have recorded increase in the spread of the disease in most states across the country with the exception of some few. Niger State happens to be among the states with positive case patients. The preventive measures prescribed by the National Centre for Disease Control are; observance of personal hygiene through regular hand washing with soap and running water, use of alcohol-base hand sanitiser, maintenance of social distancing. The symptoms associated with this disease are: dry cough, sneezing, difficulty in breathing, high fever, headache.

Following the detection of the corona virus positive patients in the Federal Capital Territory, Abuja, as well as the proximity of the city to Niger State, the Government of Niger State declared a total 'lockdown' curfew in the state. This measure was aimed at containing the spread of COVID-19. The measures amongst other things places ban on movement of vehicles, of within and outside the state as well as restriction of movement of persons and stay at home order, Top most on the prevention of this pandemic is the promotion of sanitation and hygiene practice through the use of water and soap for regular hand washing as a measure in curbing COVID-19 from spreading and other universal precautions.

Reality of the Situation

Potable water, also known as drinking water, is water that is safe to drink or to use for food preparation. Potable water comes from surface and ground sources and is treated to levels that meet international standards state and federal standards for consumption. Water from natural sources is treated for microorganisms, bacteria, toxic chemicals, viruses and feacal matter. Drinking raw, untreated water therefore, can cause gastrointestinal problems such as diarrhea, vomiting or fever. The amount of drinking water required to maintain good health varies, and depends on physical activity level, age, health-related issues, and environmental conditions.

Residents of Bida community in Bida Local Government today has overtime suffered the impact of outbreak of cholera disease and other infectious ailments that were traceable to drinking water from unhygienic sources. "Cholera is infectious disease that affects the digestive system and

causes abnormal watery visits to the toilet and vomiting. It is a contagious disease that is usually spread through unhealthy environment with the causal organism easily transported from one infected person to another”

Further still, the effect of the restriction of movement order ‘lockdown’ orchestrated by the outbreak of the COVID-19, has subjected the residents of Bida to untold hardship, occasioned by lack of access to availability of potable and clean water supply in the community, that can only be provided by a functional water scheme from the State Water Board, thereby making the people to be exposed and more vulnerable to the infection of the dreaded corona virus.

Unfortunately, the Bida water works is yet to be revived to fully commence the pumping and supply of water to residents, this perennial water problems have been attributed to majorly: lack of adequate electricity supply to the Bida works, and lack of funds to carry out repairs and rehabilitation of obsolete equipments. This has heightened the vulnerability of residents to water related diseases and food insecurity. Households bridge the gap by sinking boreholes or patronizing vendors. In such cases they pay as much as N20 - N30 for a 20 liter jerry-can. Others, who are unwilling or unable to pay resort to fetching from rivers or streams which are not guaranteed to be pure and healthy. The average per capita water consumption in Bida is 26 liter per person. The internationally recommended; World health Organization (WHO) per capita water is 45 liters per day. This is obtained where water is adequately available to every member of the household for all purposes.

The corona virus disease (COVID-19) is an infectious disease caused by a newly discovered coronavirus. The COVID-19 virus spreads primarily through droplets of saliva or discharge from the nose when an infected person coughs or sneezes. The prevention of its spread requires regular hand washing with soap and running water. In all these water is necessary to maintain safe sanitation, clean environment and proper hygiene.

Drinking water or potable water is water safe enough to be consumed by humans or used with low risk of immediate or long term harm. In most developed countries, the tap water supplied to households, commerce and industry meets the water quality standards to qualify as potable, even though only a very small proportion is actually consumed or used in food preparation. Typical uses other than drinking and cooking include washing, toilet flushing, and irrigation

A data report from **Field Survey, 2020** conducted in Bida urban centre, on a 450 households sample size population through the USAID, E-WASH program of the Federal Government of Nigeria, revealed the state of water service delivery, safe sanitation and hygiene situation in Bida thus:

Number of Households that have access to potable water	=	0 (0%)
Number of Households that have access to borehole water	=	344 (76%)
Number of Households that have access to well water	=	93 (20.6%)
Number of Households dependent on river/stream	=	13 (2.8%)
Number of Households using WC (water cistern Toilet)	=	122 (4.8%)
Number of Households using Pit Toilet	=	239 (53%)
Number of Households using Open Space Defecation	=	89 (19.7%)

From the above information, none of the households have access to clean and potable water. The data also revealed that majority of the people, **344 (76%)** depend on borehole and water vendors as source of water supply. 93 households, representing **20.6%** of the population uses the well water for their domestic purpose. And then 13 households (**2.8%**) fetches the river/stream and so have to travel long distance to access water. This invariably negatively affects children performance and attendance in schools because of the time taken to get water before going to school. On the other hand, out of 450 households visited, **239 (53%)** use pit toilet, while 89 (**19.7%**) of the population lack toilet and therefore practice open space defecation. (**Elohim Foundation editorial, 2020**)

Evidently, therefore the water, sanitation and hygiene level in Bida is in deplorable and pathetic level that requires urgent attention and positive action. Lack of access to potable and reliable source of water supply has remained a major challenge to residents of Bida community.

A situation where no household has access to pipe borne water can only mean a deplorable domestic water condition. Optimum water accessibility according to WHO (2004) is a state of water supply through multiple taps continuously. This would be possible in situations where public tap is provided to deliver water to various homes, with this distance and time as water

access constraints have been eliminated. Where otherwise, these constraints become challenges that must be overcome in order to guarantee households optimal water accessibility.

Over 90% of deaths from diarrheal diseases in the developing world today occur in children under 5 years old, especially protein-energy malnutrition, can decrease the children's resistance to infections, including water-related diarrheal diseases. From 2000-2003, 769,000 children under five years old in sub-Saharan Africa died each year from diarrheal diseases. As a result of only 36 percent of the population in the sub-Saharan region have access to proper means of sanitation. More than 2000 children's lives are lost every day. In South Asia, 683,000 children under five years old died each year from diarrheal disease from 2000-2003. During the same time period, in developed countries, 700 children under five years old died from diarrheal disease. Safe drinking water is therefore a prerequisite for good health.

Water accessibility in Bida Community will impact positively on the residents in the following ways:

- Improved potable water supply reduces the frequency of water related illness and deaths, especially in area like Bida local government area particularly in the wake of the corona virus, COVID-19 pandemic.
- With water availability in Bida Local Government, school enrolment will increase as the children/teachers will no longer walk long distance in fetching water thereby resuming school timely.
- Moreso, deaths of under 5 children who are usually vulnerable to contaminated water tends to drop as water supply increases.
- Also people dwelling in the LGA practice good personal hygiene and environmental sanitation behavior which will lead to better life and better workforce in the Local Government Area, as sickness and diseases associated with contaminated water is eradicated. This will lead to growth in socio-economic life of the LGA as well development of the state.

Conclusion

Accessibility to adequate and safe water supply is important and can influence socio-economic progress of human settlements and the healthy living of the dwellers. The provision of this basic

service in the Bida-Niger State is largely inadequate thereby creating a situation of poor water accessibility in the area. Domestic water supply in the area is mainly an interplay of different traditional water supply sources and few available sources of modern boreholes which are grossly inadequate. Household water accessibility is seriously affected by the factors of income, time spent to obtain water and distance travelled. The impact of inadequacy, which is the most critical manifest strongly on households in terms of waiting time and distance taken to obtain water and low per capita water availability. This study shows the attitude of Government to provision of water in the area. The political will by those in the government in the form of sectoral allocation for the provision of water infrastructure is the major challenge.

Another challenge in provision of water supply in Bida town is complete absence of electricity from the National grid which would have been used to facilitate the functioning of the available water infrastructure in the area. Water as a basic human right should be accessible to all adequately and safely. This is because water is not only natural resources but also it is a base for the dignity and quality of life. Therefore the recommendation of this study is necessary for any serious government that is concerned about the wellbeing of its people and committed to alleviating the water crisis in the area.

Recommendations:

Water supply lies at the heart of development whether it is urban or rural. Water supply and development of any nation are continuing long-term process which requires careful planning and implementation geared towards achieving improved conditions of life.

In the light of the above situation, it is therefore pertinent that there is need for authorities concerned to rise up to the occasion by implementing the following;

1. Most importantly, one would point out that solving the problem of water need of the area requires commitment and political will by the government and also both pro-active and reactionary approach to water planning principles. Government at both local and state level should see provision of water to the citizens as their social responsibility and therefore should as a matter of urgent importance be committed to water infrastructural development, by providing a **33kva** power supply transformer to the Bida water works so as to solve the problem of lack of power supply in the water board as well as lack of

clean and potable water in Bida. Absence of electricity from the National grid which would have been used to facilitate the functioning of the available water infrastructure in the area has been a major challenge.

2. The water board in Bida is not functional; Government should intensify effort towards rehabilitation and maintenance of the water board and expand its capacity so as to meet up with the growing population in the urban centre. If the facilities are put in good condition tariff can be charged for maintenance and development of additional infrastructure.
3. The problem of power supply is serious in some Bida area; it is therefore recommended that government should intensify effort to restore back light to Bida to enhance water accessibility through electric pump boreholes.
4. Plan should be made to harness the existing major rivers such as River Gurara and River Kaduna and create multiple water intake points along the length of these rivers to cover the villages nearby and pump into a central distributor reservoir at an elevated point. This would make it easier for water to be distributed to the scattered settlements.

Picture 1:



Bida residents scrambling for water for domestic consumption, this a temporal water being supplied by NSWB water tanker to households

Picture 2:



Members of the Community queuing for water from a borehole water supply in Bida.