

SOCIOECONOMIC IMPACTS OF PACKAGED AND BOTTLED WATER BUSINESSES IN NIGERIA

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Abstract

Water is an essential resource for life and good health. It is the most precious natural resource that exists on our planet. As with most developing countries, access to safe water is a major challenge in Nigeria. Ground water and tap water are the major sources of drinking water. These sources are said to be unsafe which led to the emergence of the packaged and bottled water businesses. These businesses suffer from various socioeconomic challenges such as epileptic power supply, distribution problems, pollution and integrity concerns etc. The aim of this research paper is to examine and discuss socioeconomic impacts of these businesses with a view of identifying the socioeconomic impacts and to extend the existing literature on socioeconomic impacts of these businesses. The main sources of data were journals, conference, text books, newspapers, and the internet sources etc., which were used to review literatures in the water business field. The result shows that the socioeconomic impacts of packaged and bottled water businesses identified in this work were as follows: it provides employment to male, female, young and old people; provides income which increases living condition thereby reducing crime; offers business opportunities and ventures that provide alternative low-cost and hygienic water; provides companies with profits by providing more access to water; engages the small scale (packaged and bottled) water manufacturers thereby increasing government revenue such as Tax etc. and offers water at affordable price due to more access. These impact Nigerians socially, economically and also the business environment from which they operate.

Keywords: Bottled Water, Businesses, Nigeria, Packaged Water, Socioeconomic Impacts

INTRODUCTION

Water is an essential resource for life and good health. It is the most common, most widely distributed and most useful liquid on earth. It is the most precious natural resource that exist on our planet (Musa, et al; 2008). Two third of the human body weight is made up of water attaining forty-five percent in the average adult. The brain is eighty five percent water, muscles contain seventy five percent water, and bones thirty three percent (Akpan, 1998). As a result of the significance of water in physiological systems, it is difficult to survive long without water (Longdet, et al; 2004).

People need access to a clean water supply for varied uses. Paradoxically, there is shortage of clean water as demand for it continues to grow across the globe at an alarming rate. With almost two – thirds of earth covered by water, it is difficult to understand how a shortage of clean water supply could exist. However, it does exist as only one percent of the water in the world is consumable without treatment (Lee, W., Liang, Z.Y., Sanchez-Torres, A., and Zhang, K., 2005)

As with most developing countries, access to safe water is a major challenge in Nigeria. Ground water and pipe borne (tap) water are the major sources of drinking water. These sources are said to be unsafe sources of drinking water because findings indicated that ground water sources contain trace elements, dissolved solids and pathogens in excessive quantities that may be dangerous to the health of the people. Consequently, most of the investigations carried out on ground water samples from different parts of Nigeria revealed that most of the available sources of water or water types are polluted or contaminated hence, were not fit for drinking purpose (Ogunbanjo, 2004; Tijani, 2004; Muta'a Hellandendu, 2012).

In Nigeria, Government-owned public water utilities, such as Water Corporations, are statutorily charged with the responsibility of supplying water from conventional water treatment plants that use water from impounded reservoir (Dams) flowing streams, lakes and deep boreholes (Adetunji and Ilias, 2010). The Nigerian government has a national water supply policy, whose aim is to provide potable water to all citizens by the year 2020.

Nigeria is blessed with abundant water resources but largely untapped. In spite of the abundant water resources, government at all levels (federal, state and local) have not been able to successfully harness these resources to ensure a sustainable and equitable access to safe, adequate, improved and affordable water supply to its population (Muta'aHellandendu, 2012). However, giant strides were made by the private sector inform of packaged and bottled water businesses to fill this gap/ void by the government. These businesses operate in the environment and have impacts on the populace socially, economically and environmentally.

The term “Socioeconomic Impact” is not an easy term to define. Many professionals define it in many different ways such as; a social science that studies how economic activity affects and is shaped by social processes (wikipedia.com); it analyzes how societies progress, stagnate, or regress because of their local or regional economy, or the global economy (ibid); a field of study that examines social and economic factors to better understand how the combination of both influences something (businessdictionary.com); it may refer broadly to the "use of economics in the study of society (John Eatwell, Murray Milgate, and Peter Newman, 1987,1989); a discipline studying the reciprocal relationship between economic science on the one hand and social philosophy, ethics, and human dignity on the other" toward social reconstruction and improvement(Mark A. Lutz, 2009); it studies the relation of economics to social values (Jess Benhabib, Alberto Bisin, and Matthew Jackson, ed., 2011).

From the above definitions, this research work simply defines Socioeconomic Impact as *“a field of study that analyzes the relationship between social processes and economic activities of a given region.”*The particular area of interest for this research work is limited to socioeconomic impacts of packaged and bottled water businesses in Nigeria.

Consequently, given the renewed global commitments towards the Millennium Development Goals (MDG) marked for 2015, the importance and contribution of locally sourced low-cost alternative drinking water schemes to sustainable access in rural and peri-urban settings of developing nations cannot be over-emphasized (UNDESA, 2004). An example of locally developed alternative low cost safe water provision in Nigeria is the drinking water sold in polythene sachets and plastic bottles.

Research Problem

Packaged and bottled water businesses in Nigeria suffer from various socio economic challenges such as high cost of production, unreliable grid supply, distribution problems, multiple taxation, littering or environmental pollution, integrity, quality, inspection or business feasibility concerns and inefficacy of government regulatory bodies. According to Ademoroti (1996); Dada (2009); Aroh et al. (2013), People still worry about the purity of the sachet water. The integrity of the hygienic environment and conditions where majority of the packaged water in the markets are produced has been questioned. CAMON (2007), as cited by Dada (2009); stated that “there are claims of past outbreaks of water borne illnesses that resulted from consumption of polluted sachet waters most of which are of unknown origin.”Adetunji and Ilias(2010), also stated that increasing number of private companies registered and unregistered, are getting involved in the packaged water business in virtually every district in the country. Edoga et al.(2008) noted that“ about 70 percent of Nigerian adults drink at least a

bottled or sachet of water per day resulting in about 50 to 60 million used water-bottles and water-sachets disposed daily across the country.”This has led to a lot of littering of the disposables (empty bottle and the sachet) and by extension environmental pollution.

Packaged and bottled water businesses in Nigeria engage people of different status in the society. These range from the Packaged and bottled water producers/manufacturers, whole sellers, retailers, consumers, government regulatory bodies, consumer protection organizations and pressure groups. Each views the impact differently. Hence, the need to study the socioeconomic impacts of the Packaged and Bottled Water Businesses in Nigeria.

Research Aim

The aim of this research paper is to examine and discuss Socioeconomic Impacts of Packaged and Bottled Water Businesses in Nigeria with a view of identifying the Socioeconomic Impacts and to extend the existing literature on Socioeconomic Impacts of Packaged and Bottled Water Businesses in Nigeria.

Research Approach

The main sources of data were journals, conference / seminar / workshop papers, text books, newspapers, magazines and the internet sources etc., which were used to review literatures in the Water Business field and help in examining, identifying and narrowing some of its socioeconomic impacts. These help in understanding the Water Businesses, especially Packaged and Bottled Businesses in Nigeria.

LITERATURE REVIEW

Packaged and Bottled Water Businesses in Nigeria

Water scarcity affects all social and economic sectors and threatens the sustainability of the natural resources base. Addressing water scarcity requires an intersectoral and multidisciplinary approach to managing water resources in order to maximize economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems. Integration across sectors is needed. This integration needs to take into account development, supply, use and demand, and to place the emphasis on people, their livelihood and the ecosystems that sustain them. On demand side, enhancing water productivity (the volume of production per unit of water) in all sectors is paramount to successful programmes of water scarcity alleviation (FAO, 2007).

Since independent, Nigeria has spent a lot of money on developing water supplies. However, there are still many health problems in both urban and rural areas due to polluted

drinking water and a shortage of water for daily hygiene. Rural areas face specific problems not encountered in the towns. It is simply too expensive to provide a house - to - house water supply because homes are so widely scattered. Many rural people have low incomes and find it difficult to fund or maintain a water supply. They also lack the skills needed to maintain the water source (DFID, 2003). Pipe borne potable water is also inadequate both in quantity and quality (Adekunle et al, 2004; Voanews.com). An alternative to the seemingly inadequate water supply is found in Packaged and Bottled Water.

Increasing number of private companies registered and unregistered, are getting involved in the packaged water business in virtually every street (Adetunji and Ilias, 2010).It is also expected that total bottled water will record a total volume compound annual growth rate (CAGR) of 9% over the forecast period, driven by population and urbanization growth (Euromonitor International, 2016).Therefore, it is paramount to identify the socioeconomic impacts of packaged and bottled water businesses in the country. The socioeconomic impacts or effects are a sub-part of environmental analyses for any given product or business operating within an environment.

Environmental analysis is a strategic tool used to identify all the external and internal elements, which can affect the organization's performance. The analysis entails assessing the level of threat or opportunity the factors might present. These evaluations are later translated into the decision-making process. The analysis helps align strategies with the firm's environment. Businesses are greatly influenced by their environment. All the situational factors which determine day to day circumstances impact firms. So, businesses must constantly analyze the trade environment and the market. The most used detailed analysis of the environment is the PESTLE analysis. This is a bird's eye view of the business conduct which is used to foresee where the organization will be in the future (pestleanalysis.com)

PESTLE analysis consists of various factors that affect the business environment. Each letter in the acronym signifies a set of factors. These factors can affect every industry directly or indirectly. The letters in PESTLE, also called PESTEL, denote the following things:

- i. Political factors
- ii. Economic factors
- iii. Social factors
- iv. Technological factors
- v. Legal factors
- vi. Environmental factor

This study is limited to the socioeconomic (social and economic) aspects / impacts / effects of Packaged and Bottled Water Businesses in Nigeria. Social and economic factors involve all the determinants of the society and its economy respectively. Businesses analyze these factors because they can conclude the direction in which the economy and society might move. It helps to set up strategies in line with changes. These include but not limited to: cultural implications, gender and connected demographics, social lifestyles, domestic structures and educational levels, the inflation rate, the interest rate, disposable income of buyers, credit accessibility, unemployment rates, the monetary or fiscal policies, the foreign exchange rate etc. (ibid)

Socioeconomic Impacts of Packaged and Bottled Water Businesses in Nigeria

Water is essential for all socio-economic development and for maintaining healthy ecosystems. As population increases and development calls for increased allocations of ground water and surface water for domestic, agriculture and industrial sectors, the pressure on water resources intensifies, leading to tensions, conflicts among users, and excessive pressure on the environment. The increasing stress on freshwater resources brought about by ever – rising demand and profligate use, as well as by growing pollution worldwide, is of serious concern. Despite considerable humanitarian endeavor over the last three decades, almost 900 million people continue to lack access to safe water (One World, 2012).

In terms of quality and quantity of public water supply, the inadequacy of pipe borne water in Nigeria is almost endemic. As studies have shown that standard industrialized world model for delivery of safe drinking water technology is not affordable in much of the developing world (Gadgil and Derby, 2003). The achievement or realization of the renewed global Commitments toward the Millennium Development Goals (MDGs) by 2015 required the development of locally sourced alternative low cost drinking water schemes that will provide sustainable access to safe drinking water in all areas in developing countries (UNDESA, 2004). As the country population grew and industries increased, the supply of water by the public utilities became inadequate in quality and quantity (Adetunji and Ilias, 2010).

According to Akunyili (2003), it is the inability of the Government to persistently provide adequate potable water for the growing population that has tremendously contributed to the proliferation of the packaged and bottled water businesses. The bottled water price is within the reach of the tautology — that is elite (Adekunle et al, 2004). Whereas, packaged water notably, offers the most accessible and quickest means of assuaging the feeling of thirst. Although this form of drinking water is easy to get and the price is affordable, people still worry about its purity (Dada, 2009). The relatively cheap and inexpensive nature of the packaged water compared to

bottled water makes it a cherished and preferred commodity in the hands of many (Aroh et al., 2013).

Packaged and bottled water businesses were established for the purpose of making profits by the provider or owners of the enterprise (Dada, 2009). The business engages members of different status in the society. These range from the Packaged and bottled water producers/manufacturers, whole sellers, retailers, consumers, government regulatory bodies, consumer protection organizations and pressure groups etc. (Bello et al., 2017b). Packaged water if improved upon has been suggested as a low cost, readily available alternative water provision that could help bridge the gap and ultimately allow contributions from local initiatives in the drive towards economic development and achieving the Water target of the Millennium Development Goals (MDG) marked for 2015 (Dada, 2009; Nwanya et al., 2013).

Increases in small scale businesses are an extremely important indicator of the economic well-being of any nation. In fact, some have claimed that small businesses hire more employees than larger corporations and, thereby, contribute more to addressing unemployment and poverty (Bello et al., 2017a). As a business venture, packaged and bottled water businesses can add more than 3600 new jobs in 36 States of Nigeria, thus, providing income, employment, and numerous business opportunities for the young and old of the growing population in the country (Nwanya et al., 2013; Bello et al., 2017b). This ranges from the packaged and bottled water producers, whole sellers, recyclers, distributors and retailers (Bello et al., 2017a).

The provision of water that is safe and clean is a must for any country pursuing sustainable development (Bello et al., 2017b); and Nigeria is no different. At first, there were worries about the purity of packaged water. In recent times, packaging of potable water in form of sachet water has gradually gained wider acceptability in our major cities. Demographic and socio-economic variables are largely responsible for the choice and preference for this product. It is usually packaged and sold to members of the public in sealed nylons. This occurs in almost all parts of the country, like motor parks, markets, public functions and street corner shops thereby engaging many hundreds of thousands if not millions of Nigerians by providing income and employment which are essential aspects to reducing poverty rate and raising living standards in the country (Aroh et al., 2013; Bello et al., 2017b). The growing popularity of this potable water unit in our cities singles it out as one of the fastest growing small scale businesses in Nigeria, thus, providing the government with a steady revenue source that keeps on increasing driven by the increasing population and urbanization (Aroh et al., 2013; Bello et al., 2017a).

Convenient access to drinking water increase privacy, reduce crime rate and risk to women and girls of sexual harassment/assault while gathering water (Health, Dignity and

Development, 2005).The packaged and bottled water businesses in Nigeria has provided a much needed stability in the form of income and employment which led to increase privacy and reduction in crime rate and other social vices (Bello et al., 2017b).

The Socioeconomic Impacts of Packaged and Bottled Water Businesses in Nigeria

From the reviewed literature above, the table below shows the summary of Socioeconomic Impacts of Packaged and Bottled Water Businesses in Nigeria.

Table 1: Socioeconomic Impacts of Packaged and Bottled Water Businesses in Nigeria

Socioeconomic Impacts of Packaged and Bottled Water Businesses in Nigeria	Sources
1 Provides employment opportunities for male and female; young and old people in the society	[Aroh et al., 2013]; [Bello et al., 2017a];[Bello et al., 2017b]; [Nwanya et al., 2013]
2 Provides income thereby increasing standards of living and reducing crime rate in the society	[Aroh et al., 2013]; [Bello et al., 2017a]; [Bello et al., 2017b];[Dada, 2009]; [Nwanya et al., 2013]
3 Offers business opportunities and ventures that provide alternative low-cost and hygienic drinking water to the society.	[Adekunle et al, 2004]; [Aroh et al., 2013]; [Bello et al., 2017a]; [Bello et al., 2017b]; [Dada, 2009]; [Nwanya et al., 2013]
4 Provides a medium for companies to make profit by providing more access and availability of drinking water to the society.	[Aroh et al., 2013]; [Dada, 2009]
5 Engages the growing population and the small scale (bottled and packaged) drinking water manufacturers thereby increasing revenue generation for the government such as Tax etc.	[Aroh et al., 2013]; [Bello et al., 2017a];[Bello et al., 2017b]; [Dada, 2009]
6 Offers water at affordable price due to more access and availability of drinking water in the society.	[Adekunle et al, 2004]; [Aroh et al., 2013]; [Dada, 2009]

Socioeconomic Impacts of Water Businesses in Nigeria

Provides Employment Opportunities for Male and Female; Young and Old People in the Society

Unemployment is one of the major issues affecting Nigeria's economy and its society. The rate of unemployment has increased during last few years due the fallout from the economic challenges. The proliferation of the packaged and bottled water businesses has drastically reduced the rate of unemployment of male and female, young and old members of the society, for it has provided hundreds of thousands if not millions of Nigerians with numerous employment opportunities. These range from the packaged and bottled water manufacturers, whole sellers, retailers, labour workers, government regulatory bodies, consumer protection organizations and pressure groups

Provides Income thereby Increasing Standards of Living and Reducing Crime Rate in the Society

Poverty rate just like unemployment rate keeps rising in the country, and this poses a serious danger to the socioeconomic status of many Nigerians. The packaged and bottled water businesses have provide millions of Nigerian with a steady income stream; and with water being an indispensable requirement in life; this trend is expected to continue. Also, with increasing income comes increase in living standards which invariably reduces crime and other social vices.

Offers Business Opportunities and Ventures that provide Alternative Low-Cost and Hygienic Drinking Water to the Society

The Nigerian government is unable to consistently provide potable water both in quantity and quality for the growing population. The emergence of the packaged and the bottled water businesses has not only provided alternative cheap and affordable clean water to members of different status in the society, but also provides numerous business opportunities for the growing population of the country. These range from the Packaged and bottled water producers, whole sellers, recyclers, distributors and retailers etc.

Provides a Medium for Companies to Make Profit by Providing More Access and availability of Drinking Water to the Society

The insufficiency of clean water is a serious problem in Nigeria and this deficiency is both in quality and quantity, and with the main sources of water in the country such as borehole water, well water and rain water unsafe for drinking; the packaged and bottled water businesses have dramatically improve access and availability of hygienic drinking water because these forms of water can be found in every street and corner in the country. In addition, the growing population, the increasing urbanization and the large market provides companies in the business with a profitable venture that is expected to expand even further.

Engages the Growing Population and the Small Scale (Bottled and Packaged) Drinking Water Manufacturers' thereby Increasing Revenue Generation for the Government such as Tax etc

According to Bello et al. (2017a), Small businesses hire more employees than larger corporations and, thereby contribute more to addressing unemployment and poverty. The packaged and bottled water businesses in Nigeria engage members of both sex and different status in the society. With many more small companies getting involved in the businesses, taxes

paid by these businesses have provide the government with a steady and increasing revenue source driven by the increasing population and urbanization.

Offers Water at Affordable Price due to More Access and Availability of Drinking Water in the Society

In a country where the government-owned public water utilities is unable to consistently provide potable water both in quantity and quality, the packaged and bottled water businesses in Nigeria has not only led to improve access and availability of hygienic drinking water both in quantity and quality but also provide alternative cheap and affordable clean water to members of members of different status of the society. The prices of the packaged and bottled water are within the reach of the upper class, the middle class and the lower class, for it takes only a very small proportion of their earnings to have any significant impact.

SUMMARY AND CONCLUSIONS

This study discusses the socioeconomic impacts of packaged and bottled water businesses in Nigeria. The literature reviewed in this work was used to identify, tabulate and discuss the main socioeconomic impacts of packaged and bottled water businesses in Nigeria.

The socioeconomic impacts of packaged and bottled water businesses were identified as: a business that provides employment opportunities for male and female, young and old people in the society; it provides income thereby increasing standards of living and reducing crime rate in the society; it offers business opportunities and ventures that provide alternative low-cost and hygienic drinking water to the society; it provides a medium for companies to make profit by providing more access and availability drinking water to the society; it engages the growing population and the small scale (bottled and packaged) drinking water manufacturers thereby increasing revenue generation for the government such as Tax etc. and it offers water at affordable price due to more access and availability of drinking water in the society.

In Nigeria, the supply of water is inadequate in both quantity and quality Although, the packaged and bottled water businesses face numerous challenges like littering, high cost of production, distribution problems, epileptic power supply, integrity, quality, and business feasibilities concerns, however, this study found that the packaged and bottled water businesses in Nigeria has positive socioeconomic impact in the country; for it provides business opportunities, employment and income to the growing population of male and female, young and old people in the country thereby reducing crime rate and raising living standards. The packaged and bottled water businesses has not only provided alternative low-cost and hygienic drinking water to the society, but also provided more access and water at prices within the reach

of members of the lower class, the middle class and the upper class. In addition, by engaging the growing population and the small scale (bottled and packaged) drinking water manufacturers it has invariably provided the government with a growing source of revenue e.g. tax etc.

LIMITATIONS OF THE STUDY AND FURTHER RESEARCH DIRECTION

This study has been carried out with an aim to examine and discuss socioeconomic impacts of packaged and bottled water businesses in Nigeria with a view of identifying the socioeconomic impacts and to extend the existing literature. Further research is suggested as follows:

- i. To assess the socioeconomic factors affecting the packaged and bottled water businesses in Nigeria's business environment.
- ii. To carry out an empirical study to determine the extent to which these socioeconomic factors of packaged and bottled water businesses in Nigeria affect the stakeholders etc.

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