

SOCIAL IMPACTS OF PACKAGED AND BOTTLED WATER BUSINESSES IN NIGERIA

B. S. Bello 

MSc. Candidate, Business School, Hohai University Nanjing, Jiangsu Province, China

belsann@yahoo.com

Liu Shuangqin

Asst. Professor, Business School, Hohai University Nanjing, Jiangsu Province, China

S.G. Dalibi

PhD Candidate, Business School, Hohai University Nanjing, Jiangsu Province, China

Abstract

The increasing stress on freshwater resources brought about by ever rising demand and profligate use, as well as growing pollution worldwide, is of serious concern. Water, apart from being absolutely essential for life, is also the most common, widely distributed and most useful liquid on earth. To achieve the Millennium Development Goals (MDGs) target, Nigeria must increase the access to improved drinking water to its rural population by 33%. Packaged and bottled water businesses in Nigeria suffer from various social challenges such as littering or environmental pollution, integrity, quality, inspection or business feasibility concerns and inefficacy of government regulatory bodies. The aim of this paper is to examine and discuss Social Impacts of Packaged and Bottled Water Businesses in Nigeria and to extend the existing literature on Social Impacts of Packaged and Bottled Water Businesses in Nigeria. For this extensive review literatures in the Water Business field was done. The result shows that the social impacts of packaged and bottled water businesses identified in this work were as follows: it engages both male and female members of the society; offers employment; provides income; improves standard of living; reduces crimes; provides more access and availability of water; provides a low-cost and hygienic drinking water; also a medium of achieving the MDGs. These all impact Nigerian social and business environment.

Keywords: Bottled water, Businesses, Nigeria, Packaged Water, Social Impacts

INTRODUCTION

The extent to which water resources development contributes to economic productivity and social well-being is not usually appreciated, although all social and economic activities (related to water) rely heavily on adequate quality or quantity of freshwater supply (Odafivwotu and Abel, 2014). 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).

The World Bank while commenting on the world water challenge stated that access to water supply services and sanitation is a major factor in reducing child mortality. It revealed that about 1.7 million deaths that occur every year worldwide (90 per cent of which are children) are attributed to inadequate and unsafe water (World Bank, 2007). A reliable supply of clean water is crucial for healthy living amongst the inhabitants of a geographical region (Mustapha and Adam, 1991).

Water, apart from being absolutely essential for life, is also 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). Accessibility and availability of fresh clean water is a key to sustainable development and an essential element in health, food production and poverty reduction (Third World Water Forum on Water, 2003). Drinking water is an integral component and indispensable requirement in life. It therefore cannot be substituted for any other fluid (Aroh et al., 2013).

As with most developing countries, access to safe water is a major challenge in Nigeria. Nigeria, the eight most populous countries in the world, has begun grappling with issues of water scarcity across a number of its states – forcing infrastructure and long – term sustainability questions. The water scarcity issue is considerably daunting, given the fact that Nigeria represents the eight most populous nations in the world – with a total population of over 152 million people. Among the 152 million who reside in Nigeria, less than 30 percent have access to adequate drinking water (Krebs, 2010).

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. The objective is of the policy is for all Nigerians to have access to adequate and affordable clean water through the active participation of the Federal, State and Local Governments, Non-Governmental Organisations (NGOs), Development Partners, Private sector, Communities, Households and Individuals (Federal Republic of Nigeria, 2000; WSMP, 2008).

According to a report, Nigeria water supply situation has not kept pace in meeting the Millennium Development Goal (MDG) target of 75% coverage for safe drinking water. To achieve the MDG target, Nigeria must increase the rural population with access to improved drinking water by 33% (WSMP, 2008; WHO/UNICEF, 2010; UNEP, 2010). Access to improved drinking water in Nigeria still lags behind demand, with urban areas having a higher proportion than those in rural areas who have access. Generally speaking, improved water supply in Nigeria only increased from 47% in 1990 to 58% in 2008 (WSMP, 2008); with a target projection of 90-100% water supply to the population by 2020 (Federal Republic of Nigeria, 2000; WSMP, 2008).

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 "Social Impact" is not an easy term to define. Many professionals define it in many different ways such as; a significant, positive change that addresses a pressing social challenge (socialimpact.umich.edu); The net effect of an activity on a community and the well-being of individuals and families (ibid); The effect of an activity on the social fabric of the community and well-being of the individuals and families (Businessdictionary.com); when we talk about 'social impact' we are talking about understanding the effects on various people that happen as a result of an action, activity, project, programme or policy which can be positive or negative, and can be intended or unintended, or a combination of all of these (Socialimpactsotland.org); The change that happens for people as a result of an action or activity (ibid); It's how organizations' actions affect the surrounding community (Stanforddaily.com); The effect an organization's actions have on the well-being of the community(wharton.upenn.edu); A social process whereby the values, attitudes, or institutions of society, such as education, family, religion, and industry become modified. It includes both the natural process and action programs initiated by members of the community

(Sensagent.com); it also refers to how the organization's actions affect the surrounding community (Definitions.net).

From the above definitions, this research work simply defines Social Impact as *“the effect of an activity, action, project, programme, policy or business operations on the well-being of individuals and families in a society which may be positive or negative.* The particular area of interest for this research work is limited to Social Impacts of Packaged and Bottled Water Businesses in Nigeria.

In Nigeria, a large percentage of the population still lack access to water in adequate quantity and quality. Of the total number of people in urban and semi-urban areas, only about 48% have access to portable water while only 39% have access in rural areas (Abubakar, 2006; Hall, 2006). The main sources of water are rain water, borehole water, ground water and pipe borne (tap) 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. 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). 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 social challenges such as 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. Edoaga 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 involve or bring various 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 social impacts of the Packaged and Bottled Water Businesses in Nigeria.

Purpose of the Study

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

Approach of the Study

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 social impacts. These help in understanding the Water Businesses, especially Packaged and Bottled Businesses in Nigeria.

LITERATURE REVIEW

Packaged and Bottled Water Businesses in Nigeria

The ever-expanding demand for water by the world is growing, more prosperous and increasingly urbanised population, combined with the impacts of climate change policies and responses, mean that water is of increasing strategic importance for business and economic prosperity. Yet water scarcity is a reality in many parts of the world and with it, livelihoods, human health and entire ecosystems are under threat (Nestlé, 2011).

In Nigeria, although there is temporal and spatial variation in water availability between the north (precipitation of 500 mm) and the south (precipitation over 4,000 mm), the country is considered to be abundantly blessed with water resources (Federal Republic of Nigeria, 2004). Despite numerous efforts by the Nigerian three tiers of Government, external support and donor agencies to enhance efficient water supply and distribution to all, there is still a general consensus that water supply and distribution is inadequate (Kuruk, 2004). 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 social impacts of packaged and bottled water businesses in the country. The social impacts or effects are a sub-part of environmental analyses for any given product or a 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 social aspects / impacts / effects of Packaged and Bottled Water Businesses in Nigeria. Countries and their respective societies / communities vary from each other. Every country has a distinctive mindset. These attitudes have an impact on the businesses. The social factors might ultimately affect the sales of products and services. These include but not limited to: cultural implications, gender and connected demographics, social lifestyles, domestic structures and educational levels etc. (ibid)

Social Impacts of Packaged and Bottled Water Businesses in Nigeria

Water is one of the key and probably the most fundamental and indispensable of the natural resources. It is essential to life, the environment, food production, hygiene, industries and power

generation. The importance of water for socio-economic development is globally recognized but with increased population growth and rapid industrialization and the demands for water for various uses, water scarcity seems to be looming in many countries of the world. The unavailability of water can also place a limit on economic growth and social development (Rademeyer and Snyman, 2004).

In Nigeria, the main sources of water are rain water, borehole water, ground water and pipe borne (tap) 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 (UNDESA, 2004). 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).

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). An alternative to the seemingly inadequate water supply was found in packaged and bottled water. The bottled water price is within the reach of the tautology — that is elite (Adekunle et al, 2004). Whereas, 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).

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). 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). Bottled water and packaged water packed in sachets if improved upon has been suggested as a low cost, readily available alternative water provision (Dada, 2009). Packaged water notably, offers the most accessible and quickest means of assuaging the feeling of thirst (Aroh et al., 2013). This form of drinking water is easy to get and the price is affordable. Although, it is cheap 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).

As most Nigerian homes do not have running water, or at least not water that is clean enough to drink. As a result, people drink water from small plastic bags sold on the streets. Since the 1990s a familiar scene has regularly played out in Nigerian markets and busy intersections. A youth balanced on his/her head is a bucket of clear plastic bags, each containing about a half liter of water. The product is known as “pure water.” For a little more than 10 cents, customers rip off a corner of the bag with their teeth and suck the water in. It is a cheap way to stay hydrated and a much needed business opportunity for youths and adults struggling to stay alive in a country where most people live in abject poverty (voanews.com).

The importance of safe water cannot be over-emphasized for it even accelerates the rate of economic growth and development through improved welfare, better health and quality education. As a business venture, packaged and bottled water businesses can add 3600 new jobs in 36 States of Nigeria, thus, cutting down unemployment rate, poverty and instability (Nwanya et al., 2013).

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 of the locals. 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 (Aroh et al., 2013).

Packaged and bottled water businesses has business implications and significance for Nigeria in meeting Millennium Development Goals (MDG) targets for 2015 (Nwanya et al., 2013). Targets, such as those in the MDG relating to water, are unlikely to be achieved unless gender perspectives are integrated into planning and implementation activities (UNDESA, 2005). In the MDG target, packaged and bottled water businesses increases access to portable water and also helps to avoid water borne-diseases (Nwanya et al., 2013);Which could help bridge the gap and ultimately allow contributions from local initiatives in the drive towards achieving the Water target of the MDGs marked for 2015 (Dada, 2009).

The lack of access to safe drinking water is probably directly related to poverty, insecurity and in many cases to corruption and the inability of governments to develop the political will to provide water systems for their citizens (World Bank and Federal Ministry of Water Resources, 2000). Sustainable management of water resources provides great benefits

to a society and the economy as a whole. It is crucial because it involves both men and women in water resource management and to ensure that the specific needs and concerns of men and women from all social groups are taken into account (Wijk-Sijbesma and Christine, 1998). 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 emergence of the packaged and bottled water enterprises has not only provided income and employment opportunities for male and female; young and old people in the society; it has also provided a much needed stability which led to increase in standard of living, increase privacy and reduction in crime rate and other social vices.

The Social Impacts of Packaged and Bottled Water Businesses in Nigeria

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

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

S/N	Social Impacts of Packaged and Bottled Water Businesses in Nigeria	Sources
1	Engages both male and female members of the society.	[Aroh et al., 2013]; [Voanews.com]; [Nwanya et al., 2013]
2	Employment to young and old members of the society.	[Voanews.com]; [Aroh et al., 2013]; [Nwanya et al., 2013]
3	Provides income to members of the society.	[Aroh et al., 2013]; [Voanews.com]; [Nwanya et al., 2013]
4	Impacts the standard of living of members of the society.	[Health, Dignity and Development, 2005]; [Nwanya et al., 2013]
5	Reduces crimes and other social vices due to employment and income.	[Health, Dignity and Development, 2005]; [Nwanya et al., 2013]
6	Provides more access and availability of drinking water to the society.	[Aroh et al., 2013]; [Dada, 2009]; [Adekunle et al, 2004]; [Nwanya et al., 2013]
7	Provides an alternative low-cost and hygienic drinking water to the society.	[Dada, 2009]; [Aroh et al., 2013]; [Adekunle et al, 2004]; [Voanews.com]
8	Offers a medium of achieving the Millennium Development Goals (MDGs)	[Dada, 2009]; [Nwanya et al., 2013]

Social Impacts of Water Businesses in Nigeria

Engages both male and female members of the society

The packaged and bottled water businesses in Nigeria involve or engage both male and female 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. This is especially crucial for women, for it aids them to gain control of their lives and/or make more money in a country where cultural barriers or core values inhibits their capacity to earn.

Employment to young and old members of the society

In a country where unemployment rate keeps rising, the packaged and bottled water businesses in Nigeria has reduced the rate of unemployment. The unemployment covered persons (aged 15–64) who during the reference period were currently available for work, actively seeking for work but were without work. The packaged and bottled water businesses have provided the young and old members of the society with employment opportunities and have reduced restlessness especially among the youth.

Provides income to members of the society

The majority of the population lives in poverty and only half of Nigerians have access to clean water. The packaged and bottled water businesses in Nigeria have provided more access to drinking water and a much needed income stream to members of different status in a country where millions of able men and women are willing to work, to earn an income but cannot find work. The price of packaged water is affordable to the middle class and some of the lower class because it takes a very small proportion of their earnings to have an impact. Whereas, the bottled water price is also affordable and is within reach to have any significant impact on the incomes of upper class and some of the middle class members of the society.

Impacts the standard of living of members of the society

Poverty reduction and job creation have not kept pace with population growth, implying social distress for an increasing number of Nigerians. The provision of water that is safe and clean is a must for any country pursuing sustainable development. The packaged and bottled water are more hygienically produced than government public water production and distribution because it is treated more than aforementioned public water. In addition, the packaged and bottled water businesses in Nigeria have engaged hundreds of thousands if not millions of Nigerians into the

local markets thereby providing income and employment which are essential aspects to reducing poverty rate and raising living standard.

Reduces crimes and other social vices due to employment and income

The high unemployment rate amongst youth, women and men alike does not only pose a serious danger to the economy and increases poverty rate but it also encourages crime in the country. 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.

Provides more access and availability of drinking water to the society

According to UNDESA (2004), In Nigeria, the main sources of water are rain water, borehole water, ground water and pipe borne (tap) water but these sources are unsafe because they contain excess impurities that may be dangerous to the health of the people. The insufficiency of clean water is almost endemic and this deficiency is both in quality and quantity. As such, the Packaged and bottled water businesses have led to improved access and availability of hygienic drinking water both; because these forms of water can be found even in remote areas of the country.

Provides an alternative low-cost and hygienic drinking water to the society

The packaged and bottled water businesses in Nigeria have provided alternative cheap and affordable clean water to members of different status, in a country where the government is unable to consistently provide potable water both in quantity and quality for the growing population. The packaged water price is affordable for the middle class of the society and the lower class also; whereas the bottled water price is affordable and within the reach of the upper class and some of the middle class.

Offers a medium of achieving the Millennium Development Goals (MDGs)

The packaged and bottled water businesses in Nigeria do not only have business implications, but also plays an important role for Nigeria in meeting the Millennium Development Goals (MDG) targets of increase access and distribution of potable water. The packaged and bottled water has indeed increased access and availability of potable water in both quantity and quality to even remote areas of the country.

SUMMARY AND CONCLUSIONS

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

The social impacts of packaged and bottled water businesses were identified as: a business that engages both male and female members of the society; it offers employment to young and old people of the society; it provides income to members of the society; it impacts the standard of living of members of the society; it reduces crimes and other social vices due to employment and income; it provides more access and availability of water to the society; it provides an alternative low-cost and hygienic drinking water to the society and it serves as a medium of achieving the Millennium Development Goals (MDGs).

In Nigeria, the deficiency of the quality and quantity of public water supply is a serious problem. Although, the packaged and bottled water integrity, quality, and business feasibilities have been questioned, however, this study found that the packaged and bottled water businesses in Nigeria has positive social impacts in the country; for it engages both male and female; young and old members in the society by providing them with employment opportunities and income. These employment opportunities and income invariably led to increase in standard of living thereby reducing crimes and other social vices. In addition, the packaged and bottled water businesses has not only increased access and availability of clean water, but also provided water at prices within the reach of members of lower class, middle class and upper class, which invariably created a medium of achieving the Millennium Development Goals (MDGs) target of increase access and distribution of portable water.

LIMITATIONS AND FURTHER RESEARCH

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

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

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