Political Interference and Institutional Performance of Cross River State Water Board Limited, Nigeria: Towards a Scientific Management of Public Corporations.

Agbor, Uno Ijim (Ph.D) Department of Public Administration University of Calabar, Calabar

Abstract:-This study examines the influence of political interference on institutional performance of Cross River State Water Board Limited, Nigeria. The main objective of the study was to determine the influence of political interference on efficient administration of public water supply by Cross River State Water Board Limited. The study utilized the survey mode of programme evaluation. This helps to establish the relationship between the variables. Questionnaire and documentary study were used to elicit information for the study. This was used to measure the influence of political interference on institutional performance of Cross River State Water Board Limited. The chi-square (χ^2) statistical test was utilized to determine the degree of association and influence of political interference on the performance of water board limited. The result of the analysis revealed that undue political interference had undermined the efficient administration of public water supply in the state, preventing the operations of the Cross River State Water Board Limited from achieving its objectives. Based on the findings, the study concludes by suggesting that for efficient administration of public water supply in the state, **Cross River State Water Board Limited should be allowed** to function fully as a Public Limited Liability Company with little or no political interference in order to enhance performance of the corporation.

Keywords: Political Interference; Institutional Performance; Public Water Supply.

I. INTRODUCTION

In developing countries political interference in the management of public institutions has been on the rise leading to high rate of corruption and abysmal performance. This situation has given concerned to successive governments particularly in Nigeria on ways of reducing this dilemma in order to enhance effective management of public institutions. Similarly, state water corporations in the country, particularly Cross River State Water Board have witness incessant changes in its Board in order to favour the political powers of the day. However, a number of studies have revealed that the problem of water supply is attributed to undue political interference and unwarranted operational control of water agencies by the State and as these tends to affect capacity to Akpan, Peter Okon Ph.D Department of Public Administration University of Calabar, Calabar

recover cost through user charges (Fadumila, 1983; Isa, 1992; Ammani, 1995; Abdu, 1998 cited in Obadiah, 2014). The usual approach towards performance improvement has been to design projects for urban water supply that feature a packaged application of more finance, imported technologies often from foreign development assistance agencies for upgrading of existing plants and development of new ones. Furthermore, the water agencies therefore continue to rely on government subventions for much of their operations (Obadiah, 2014). These have not yielded the desired results as water institutions remain incapable of improving performance basically due to local political interests.

Significantly, the problem is often in the reforms of the sector. Usually, intensions are blurred by interests reflected in the lack of management of structural and regulatory reforms. However, structural reforms in most cases are preceded by regulatory reforms and these in turn have had to deal with new settings that were not envisaged during the reforms. For any region as in this study, one of the vital services is adequate water supply. When the organizational structure of any water supply agency does not encourage effective operations, then the overall administrative wheel will be dysfunctional. Administration in this regard is the act of giving direction to water activities and channeling resources toward the achievement of better and efficient water supply system. In Nigeria, provision and management of water supply systems are usually inefficient due to increase political interference in the management of water corporations, resulting in interruptions in the services and occasionally the collapse of systems. This could force users to turn to traditional water sources that may be contaminated and dangerous to health (Obadiah, 2014). This situation has made it imperative to critically interrogate the influence of political interference on institutional performance of Cross River State Water Board Limited.

II. STATEMENT OF PROBLEM

Water is a vital necessity for human existence and growth. However, water supply in developing countries like Nigeria and Cross Rivers State has been erratic leading to a situation where citizens turn to traditional water sources that may be contaminated and dangerous to health. The performance profile of the Cross River State Water Board

Limited over the years has been rather very disappointing. From consistent non supply of water to occasional supply of dirty water that smells uncontrollably, residents have been grappling with this disappointing outing. The dilemma of abysmal water supply by water corporations in Nigeria, particularly Cross River State Water Board Limited has been attributed to several factors such as corruption in the management of water resources, government's unconcerned attitude to public utilities and substandard water infrastructure. Furthermore, some studies on institutional performance in Nigeria have mainly focused on the importance of effective management to increase performance of institutions. Successive managements of the corporation from 1999 to 2015 have grapple with the task of ensuring effective water supply system but to no avail. What could account for this pronounced poor performance of the water corporation? Could political interference in the management of the water board by the state impinge on its performance profile? It is the problem of the study therefore to interrogate the impact of government's involvement in the control of activities of the water corporation on its performance.

III. OBJECTIVES OF THE STUDY AND HYPOTHESIS

The broad objective of this paper is to evaluate the influence of political interference on public water supply by Cross River State Water Board Limited. The study hypothesizes that Political interference tends not to significantly affect efficient performance of Cross River State Water Board Limited.

IV. OPERATIONAL DEFINITION OF CONCEPTS

A. Political interference

By political interference, we mean the practice where the state directs major operational processes of the water Corporation. In other words, there is little or no autonomy by the Corporation to institute action without clearance from the state. Areas of political interference considered by this study are political considerations guiding operational decisions of the water corporation, lack of financial autonomy and political patronages. They include:

- 1. State's directives on when and where water infrastructure should be provided.
- 2. State control of the budget of the Corporation.
- 3. State's control of the revenue generated by the Corporation from water bills.
- 4. State's dominance in the hiring of technical experts.

B. Performance

Performance is the actions of the corporation that manifest the desired outcome. It is measured here in terms of:

- 1. Uninterrupted supply of water.
- 2. Extension of water supply to new areas.
- 3. Supply of clean water.
- 4. Prompt maintenance of water infrastructure.

V. LITERATURE REVIEW

A. Public water supply and institutional performance

Measurement of performance in public institutions has been such a notoriously difficult exercise (Atkinson, 2005). This is less so in private sector institutions which survive by means of success in the market place. In this context, consumers define and determine whether a firm can earn sufficient revenue as income to cover costs and risk in its venture. If this fails, the business cannot survive. This is not so in the public sector investments. The absence of such a market sector situation in the public sector creates for it certain important peculiarities. The existence and survival of government enterprise and such entities as public service delivery institutions, such as a Water Board in our study, is not as dependent on the satisfaction of consumers (city residents, users of utilities, etc). Revenue generation is not based on economic value of products or services provided to consumers. Instead, the revenue is generated based more on political criteria such as the politically feasible amount of taxes that are imposable during a given fiscal period (O'Mahony, 2005).

The above scenario exists largely because many aspects of government activities, production and service outfits, are monopolies. Consumers cannot afford to forego such essential services, as fire protection, water supply, sewage removal and public electricity. Also, many services can be provided only on a collective basis or to satisfy a collective need through the determined political process independent of purely economic value to the individual consumer. Logically, since the services we have discussed above are collective, public goods, the consumers cannot, morally, refuse to pay for them. For instance, whether we decide to sink private boreholes for water in our homes, arrange privately to haul away our garbage, we have no choice, but to still pay taxes to support the government supply of these goods and public service, whether we use them or not. The government also derives significant incentive and retains legitimacy by providing and improving the level of service delivery (De Buitleir, 2006).

It should also be noted that the linkage between service delivery and end user (consumer) satisfaction in the public sector is that public sector consumer often do not define the market. Most of such goods and services are welfare oriented programs. Generally, customers of such programs are welfare recipients, whose market is typically defined by non consumers of the products or services. The welfare recipients do not often have much say as to who the customers are and what they are entitled to receive by way of the standard of services provided. The foregoing, however, have a few exceptions. In the area of highly significant essential services as the provision of potable water, basically, every one may be classified as welfare recipient in view of the fact that the attendant health related gains cut across the strata of the society. For instance, in the State Capital, Calabar, during Governor Donald Duke's regime, the Cross River State Water

Board Limited was able to cut off (disconnect) public water supply to influential personalities including cabinet members who defaulted in bill payments. This shows that under certain situations, virtually everyone may fall under the category of welfare recipient; even the state governor, Mr. Donald Duke was credited to have shown evidence of his regular bill payments as a beneficiary of the public water supply in Calabar by the State Water Company (MOFINEWS, 2009).

However, the factors discussed above tend to permit government institutions to escape from performance assessment. This has serious implications for the way and manner the public administration process is conducted without externally imposed pressure by non-State actors on such agencies to act as better providers of services or produce more with fewer funds and less personnel. Moreover, without competition, no incentive exists to reallocate scarce resources, to curtail nonproductive, high cost activities and to seek better ways to accomplish certain objectives. For the most part, even with the activities of such external groups as the media, major private citizen groups, and the judiciary as watch dogs, their overall impact is often less than that exerted by the market forces in the private sector (Khury, Pommer & Kam, 2006).

Comparatively, the private sector provides a significant number of performance measurement criteria such as profits, net earnings, sales increases, returns on investment, earning per share and stock prices. True, disagreements exist as to which of these are important and under what circumstances each can be useful. However, they still provide acceptable quantitative criteria for consensus as to what performance measures are available in determining success or failure. Not so in public sector performance measurement (De Buitleir, 2006).

In public sector operations, disagreement exists on what measures will inform public administrators, political officials or the citizenry whether public business can be classified a success or failure. Atkinson (2005:37) provides insight into this challenge and how it affects public utility administration, thus:

The absence of acceptable performance measures in [public sector] results from three principal factors: first, the overall purpose of [public sector] administration – improving the quality of life of its citizens – is intangible. Second, political leaders are resistant to the establishment of measures that can be used by their constituents to hold them accountable for their own performance. Finally, there is less incentive to develop performance measures where there is no competition or market place in which the value of service is tested.

The above creates serious challenges for public sector agency administration where very little or no means of measuring success or failure exists. The absence of acceptable performance measurement criterion makes impossible the establishment of achievable objectives which also affect the foundation for establishing priorities, allocation of scare resources, organizing workers and measuring programme implementation. For example, without an acceptable performance vardstick, it is complex to take investment decision whether to establish more road net work, expanding municipal water supply network - will provide citizens with the highest possible level of satisfaction and the greatest return on their tax funds. The bane for governmental (public) agency is that when objectives are blurred with no measurement criterion existing for evaluation, means (process) tend to become more important than ends (result), style replaces substance and preoccupation with procedures takes over from a willingness to make far reaching decisions.

This raises further implications for the internal administration of public utility agencies such as the CRS Water Board. The inability to measure performance also makes it impossible to objectively evaluate the activities of such public agency personnel. This prevents the translation of organizational objectives into personal objectives. It also generates a conflict between personnel objectives and organizational objectives. For example, where administrators in the public sector agency believe that the citizen has no way of ascertaining the level of service network available, he might end up using his office for selfish gains with impunity. For instance, the availability of water meters for household connection has, apparently, been hijacked by some anonymous personnel and provided at higher cost to desperate CRSWBL water customers. Meanwhile, officially, the meters were not available except at inflated prices via contractors in the black market (Daily Trust, 2012).

As noted by Van-DeWalle (2005), the inability to measure adequately the performance of [public agency] operations has also led to creation of personnel system in which promotion and compensation [reward] decisions are based on the budget size, number of people supervised or the length of years of government service and not the quality of result produced. This makes the function of administering personnel for improved performance more cumbersome with significant adverse effect on the agency performance. Finally, absence of performance measurement criterion makes it difficult for citizens to determine the gap between optimum performance outputs as against actual performance of government agency - over time.

Thornhill (2006) asserted that there was a fundamental difference on the relative focus between private and public administration. This is on the means and ends objective. Private administration focuses more on ends, that is, result achieved over how or the means used to accomplish them, placing fewer constraints on business administrators. On the other hand, for the public administrator, how things are done often was of more importance for public perception of government activities than what was done. Public

administrators in government institutions prefer short-term view that place greater premium on means (processes) than on ends (results). This concern for means is necessitated by the quest for political expediency and short term political gains rather than long term interests of the citizens. For example, a public agency administrator would prefer purchasing goods or services from local businesses with political connections at a higher cost rather than going to outside suppliers who are disposed to supplying the same items at lower costs. From field interviews for this study, it was asserted that the supply or procurement of inputs such as diesel fuel, maintenance of plants, other chemicals for water treatment have witnessed this end focused trait in the Water Board from inception. The obvious implication of the behavior is increase in the cost of operations. Where government employees are rewarded based on how they do their work, there is little incentive or even a strong disincentive to seek better means to accomplish objectives (Maduabum, 2006).

In consonance to the above on public agency performance is conflict of interests among stakeholders. In public institutions, there are four groups of participants in the administrative process:

(i) Citizens

- (ii) Political representatives (commissioners, permanent secretaries, assembly members, etc.)
- (iii) Administrators; and
- (iv) Labour (Maduabum, 2008).

In our public administration context, participants have little reasons to form alliances based on common incentives that are related to performance. All four groups can share similar incentives at any given time. As in private business, labor has the same incentive; to ensure proper compensation for its members. Managers, however, do not have the same incentives as political representatives (the elected board of directors). It has been stressed that [public agency administrators] may have incentives that are more like those of labor; that is, they may be more interested in continuing their jobs and protecting themselves from exploitation by politicians than they are in maximizing the performance of the state government. Citizens may not necessarily have the same motivation as their political representatives. Politicians may be more interested in retaining their offices or aspiring for a higher office than in finding ways to provide better-quality services to their constituencies (Martin & Bovaird, 2005).

These conflicting interests among the three groups – citizens, political leaders and municipal administrators - can be due to a number of factors. First, government revenues are not related to the result produced. Thus, the parties in conflict of interest within the public agency context have no reason to worry or be concerned about how their action (or inaction) will affect performance. Secondly, there is no way to effectively measure performance itself, where available, thus, reward or compensation is almost impossible to relate to performance. In public administration settings, roles are significantly more confused. Public sector employees are both stakeholders and members of labor. More often than not, political leaders well owe their elections (and re-elections) to and are heavily dependent on public employees, labor unions and this heavily enhances labor's influence in the administrative process (Martin & Bovaird, 2005).

The factors discussed so far percolate into several implications for public administration within our context. One of the consequences is a reluctance to delegate to municipal administrators the authority required and commensurate to better maximize performance. When no consistent incentive or consensus links the interests of political leaders, citizens, and public sector managers, a greater hesitancy to take risk or seek out innovation strategies It also inhibits the attraction of competent arises. administrators in a situation where shifting incentives and alliances are rife. As public agencies have discovered when the responsibilities of public agency administrators are unclear and the required political support coalitions are uncertain, fewer competent managers are willing to take the In government, particularly municipal jobs offered. government agency, labor is often the only participant with Thus, labor pursuit of parochial consistent incentives. interests is intense at the expense of public agency performance (Martin & Bovaird, 2005).

The nagging issues of responsibility and accountability also underpin the performance of public sector institutions (Anand, Santos & Smith, 2009). These are strong issues because of several groups as stakeholders. The state government and their agencies provide a typical example. Beyond the conventional level of separation of powers amongst the executive, legislature and judiciary, many other fragmented levels of authorities and responsibilities exist within the executive branch. By constitution, edict or law, state government have legitimately created numerous decision making bodies that are independent and quasi independent of the chief executive and the citizens. For instance, elected officials and departmental heads are independent of the chief executive of such bodies as Boards and Commissions and Special Agencies such as water supply authorities. While they are responsible for very essential aspects of the administrative processes, they, nonetheless, provide significant constraints on the principle of accountability. These factors obscure the decision making process, create duplication of efforts, and leave citizens with no clear basis for determining who is ultimately in charge and responsible for outcomes. The consequence is for government officials to escape responsibility and hide under the successive layers of legal and procedural web of bureaucracy. These have engendered growing citizen alienation and apathy towards government programs (Corduneanu-Huci, Hamilton & Masses Ferrer, 2012).

The above does not imply that public administrators are completely off the accountability hooks. It depends on the

sector involved. Where the government programs have high visibility and are of high public interests, they are hardly anonymous and no longer faceless mandarin. They have been described as high-level public administrators who live in a fish bowl (Chung-Hua, 2012). They have to deal with the amorphous standard called public trust. However, such a standard of accountability is often ambiguous and sometimes capricious in application. High level public administrators are sensitive to the nature of this standard and tend to behave cautiously. Even so, public administrators often find innovations as threatening because the rewards received for improvement are typically offset drastically by the cost of failure. Therefore, they eschew risk taking because of the element of chance that could potentially incur for them the criticism of the public, legislative and administrative superiors.

The issues on performance of government agencies in this study show that measurement of this variable is as dicey in the public sector as it is in its context. While public utility agency such as the phenomenon of our study - the CRS Water Board Limited - has been set up for the purpose of providing public water at economic cost, attaining such coveted goal as public liability company is hardly an easy task. The economic dimension of public-private-partnership under donor fund assistance is juxtaposed by the state ownership with her welfare responsibility over her citizens. Thus, stakeholders with citizens as end users (clientele), political representatives at the Boardroom, business people as contractors and corporate managers also have competing and contending interests which are often in conflict. These variables which stifle competence, risk taking, high incentive and accountability end up in limiting the measurement of performance of the agency.

However, some measurement criteria have been developed for undertaking performance evaluation, empirically. This study will utilize the social science statistical methodology available in objectively identifying possible challenges which tend to hamper the smooth operations of the Water Board using data from the field against the criteria stipulated as objective of the Water Board Limited

B. Institutions and public water supply

A study of Institutions, including water institution, would also involve attempts to capture the basic conception underlying the phenomenon. A diversity of definitions and interpretations has been developed over time which is reflections of different disciplinary perspectives and theoretical traditions. Even, so, there is an undercurrent of convergence on the general meaning and purpose of institution.

According to Simon cited by Saleth and Dinar (2004), humans substitute institutional forms for knowledge and skills in an effort to enlarge their capacities and off set their

limitations. Thus, institutions are conceived as codified knowledge evolved from the wisdom derived from natural samples found in nature and distilled from cumulative collective knowledge of human being. This raises a mutual relationship between knowledge and institution which are viewed as reciprocal substitute. In consonance with this basic view, Amori, Odjegba, and Adekitan (2015) indicated that institutions are hardly necessary in a world of perfect knowledge and complete information. The development of economies gives rise to diversity and complexity, increasing uncertainty which engender an increasing reliance on institutions to curtail behavioral uncertainty through predictive information. Institutions constitute substitutes for accurate information by providing the basis for reaching reasonably sound decisions through the behavior of others (Ajao, Obafemi, & Ewumi, 2011).

Institutions are also conceived as instruments for interpreting and transforming information into knowledge. In consonance with Desai, (2008) institutions are essential for providing a cognitive framework to interpret sense data, habits, and routines and transforming them as economically and socially useful knowledge. The way in which institutions utilize knowledge and information for use by individual for collective decisions and to coordinate societal collective interaction has also been noted. Thus by this means, institutions define what the scope and limits of individual actions in a given context and tend to delineate the action set for both person and joint decision making (Commons, Bromley in Saleth and Dinar, 2004). As noted by Peuckert (2013), the limitations on choice set by institutions determines the incentive structure for human exchanges and reduce uncertainty by setting the structure to everyday life.

Institutions are also categorized, analytically, into two distinct types to foster insights into their functions. Avwokeni (2016) identifies institutions and organizations or institutional environment and institutional arrangement. Institutional arrangement provides the structure within which members of a given society - individually and collectively cooperate and compete. The inter-relatedness of the analysis is that while institutional environment covers the rules of the games, the institutional arrangement includes the structure of governance and its evolution within, and interaction with, the institutional environment.

The governance structure incorporates both economic and political organizations that make up the institutional arrangement (Saleth & Dinar, 2004). The specific focus on organization or institutional arrangement is to highlight their role as agents of institutional change. While the rules determine the outcome, the players or actors - as individual and as organization - can also change the rules based on the perceived outcome of their relative share of their political bargaining power. This institutional arrangement acts as a means of effecting change within the institutional environment (Abraham, 2009).

The demarcating line between institutional environment and institutional arrangement or governance structure is not fixed; it varies with the focus and level of analysis. Thus, some segments of the institutional arrangement can become part of the institutional environment and vice versa. In considering water institutional arrangements, such as within the CRS Water Board Limited, the totality of economic, political, and resource related institutions become part of the institutional arrangement of a particular region or subsector such as the urban water supply sector in the three senatorial districts sampled as study area; the institutional arrangements the national and state level become part of the at institutional environment. Be that as it may, this symbiotic institutional environment and relationship between institutional arrangement has the objectives of achieving a human purpose and/or to address a going concern through a collectivity of rules and carefully crafted structure.

The characteristic features of institution can be distinguished to appreciate the link between it and economic performance. Institutions operate at different levels and within specific contexts (Thynne in Balletti, Kingdom & Ginneken, 2007). There are formal institutions and informal institutions, macro-level institutions and micro-level institutions. procedural institutions and behavioral Institutions. There are, also, ceremonial and instrumental institutions (Saleth & Dinar, 2004). Abraham (2009) provides two interpretations of institution, collectivist and organic. He noted that collectivist institutions correspond to Hurwicz's as cited in Abdulmutallib (2009) designers' perspective and the organic perspective is akin to the endogenous or induced innovation perspective by Simon (2011). While they are different in purpose and spheres of influence, these institutions have the common objectives of generating and providing information and reducing human-human uncertainty in and human-resource relationships within different social, economic and political Most scholars, including those in institutional settings. economics have delved into studying various elements of public institutional water supply (Amori, Odjegba, & Adekitan, 2015).

Apart from the generic literature on institutional administration, most scholars have also paid particular attention to the water sector and urban water administration (Mark, Vinung & Sarah in Saleth and Dinar 2004; WHO 2004; Bates, Kundezewicz & Polulikof, 2008). These studies explore the debates, challenges, diagnoses and prognosis of the global water crisis from different perspectives.

According to Ayodele, Maurice, Ugumanin and Ude (2013) declining economic and welfare contributions of water can be felt in urban context. In the urban water supply sector, expanding water supplies go with correspondingly higher costs than benefits. It is capital intensive in view of sophisticated technology and huge overhead cost involved. A pervasive water loss, lower water rates, and poor cost recovery pose new challenges. In the developing regions of

the world México provides the worst-case example of water losses. This high operational and financial mal-performance informed many countries and their sub-regions to privatize their water service delivery systems (Sanchez-Ancochea, & Mattei, 2011). However, other countries have adopted the public private partnership model.

The other economic, financial and operational challenges faced by water institutions stem from controllable inefficient use, administrative lapses, political factors: interference, declining productivity, and environmental and high financial costs. Falkenmark in Saleth and Dinar (2004) identifies other factors as involving the initially linear relationship between water resources and economic development and the incorporating of the circularity of multifarious effects that have emerged in the interaction among society, water and the ecosystem. These linkages between water, society and the environment have affected the general perception of the economics of water pricing and the provision of necessary infrastructure. Water as a social good and not an economic good has given rise to, and resulted in the declining net economic contribution of the urban water supply sector. The negative financial contribution to the sector is informed by this irreconcilable notion. Thus, water supply institutions, while publicly owned end up not being able to break even in their operations.

This negative financial trends which is an outcome of lower water charges and poor cost recovery regimes, have significantly jeopardized the efficient maintenance of water infrastructure and the potential for reinvestment in water development and administration. The declining investment and the declining health of water infrastructure have cast ominous shadows on the sustainability of any urban water supply scheme especially in third world countries. In view of these intertwining linkages between financial state, physical health of infrastructure, quality of service delivery, and economic performance of the urban water supply sector, the overall process of economic development depends, critically, on water sector administrative system performance. Thus, the thrust of the economic dimension of the urban water supply sector administrative efficiency is on how to improve the financial and economic sustainability of the sector thereby enhancing and sustaining its indispensable contributions of infrastructure, high quality human resource and reduced political interference in water supply service institutions (Abraham, 2009).

The physical and economic variables discussed by scholars on water sector challenges emphasize the fact that the era of water scarcity – mainly in qualitatively terms - has come to stay locally, nationally, and globally. Contrary to classical economic theories which asserted that resources used efficiently improve with scarcity, water use has become more and more inefficient as water scarcity escalates. Accordingly Desai (2008) link these problems with the policy in the water sector and the approach on which they are based, along with the framework within which they are formulated and implemented. Thus, the approach, institutional and policy framework dominant in the surplus era without any modification in the present era of scarcity exacerbated the crises. The conservative stance on engineering solutions, the management of water as a free product, and bureaucratic bottlenecks on resource allotment and general administration has now become inconsistent with the realities spawned by the challenges and necessities of the new era. The thrust of the administrative solutions necessary for addressing the present water crisis constitutes the new policy dimensional challenges faced by water policy decision makers (Amah, Ugbaja, & Esu, 2012).

The crisis facing water supply sector institutions also stems from the imbalance between water needs (determined by population growth and economic development) and the supply augmentation capabilities (determined by economic policies, administrative framework and technological conditions). To be sure, water policy has a vital place in water needs and administering enhancing supply augmentation and administrative capabilities. Policy adjustment can reflect the increasing value of water and can also justify options ranging from desalination to interregional water transfer through importation of water intensive technology equipment. However, it should be pointed out that economic justification for these costly options can be viable only when the efficient use, if available, of water resources raises the economic and social value of water. Correspondingly, a higher value and price of water can justify and pay for the costly supply outlay involved (Chung-Hua, 2012).

Thus, a carefully crafted cost recovery mechanism embedded in the policy framework would cater for expansion, continuity and sustainability which constitute the critical challenge of administration within the sector, mostly, in developing, third world regions such as in our study. The extent to which these policies succeed depends on the critical aspects of economic approach and the fiscal allocation framework. It is the absence of policies with an economic approach and the over-arching political control in fiscal allocation framework that are responsible for the present predicament facing the water supply administrative efficiency in most localities such as in Cross River State (USAID, 2012).

Hopefully, the situation on water crisis is not totally bleak in view of the few positive trends in policy direction for Cross River State and Calabar Municipality. As there is a growing consciousness that the present water crisis is due mainly because of inappropriate policies and maladministration, there is hope that the water problems can be addressed with appropriate national and local policies. For instance, India has developed her national water policy which incorporates most of the elements of the current fears and needs of the new realities. Most countries in the developing world including Nigerian and, indeed, Cross River State, have followed the trend (Nigeria Water Note, 2012).

C. Institutional organizations and water supply

The most vital outside associates in the Nigerian water supply and sanitation sector are World Bank, the African Development Bank (AfDB), the European Union (EU), Japanese JICA, UNICEF, USAID, and the NGO Water Aid. This agencies offer loans to the government which supports the implementation of water projects in Nigeria.

A study by Chung-Hua (2012) indicates that AfDB approved a US\$100 million soft loan to increase water and sanitation in the northern city of Zaria in February 2012; the project which is to be carried out by Kaduna State Water Board. Also, in 2009 the bank also intervened in water projects in Jalingo, Ibadan and Oyo states. These interventions have witnessed significant improvement in water supply in these cities.

Several external partners such as the World Bank, WHO, UNICEF etc have invested significantly with a view to solving water problems in Nigeria. For instance, in a Joint Monitoring Programme of WHO/UNICEF for water and sanitation in 2012, it was estimated that based on development in the previous years, it would take 28 years for Nigeria to meet the target of making water available to 75 per cent of her citizens. The Joint Monitoring Programme report also showed that between 1990 and 2010, there were about 11 per cent point improvement in public water supply in Nigeria. Presently, only 58 per cent of Nigeria's 160 population gain access to potable water (WHO/UNICEF, 2010).

However, rather than improve, the country is in a fix. Last year, Water Aid Nigeria, an international nongovernmental organization, estimated that 112 million Nigerians lack access to basic sanitation and clean water. However, as against obvious reality, President Jonathan during the 2015 New Year broadcast asserted that the right to potable water had improved from 57 per cent to 70 per cent; this presupposes that government had been resilient in meeting its target. But budgetary allocations to water and sanitation subsectors have been fluctuating (Daily Trust, 2015)

In a pocket-hand book produced by the Office of the SA to the President on Research, Documentation and Strategy, Oronto Douglas, asserted that as of 2012, the achievement of the current administration in the water sector was listed as completing seven water projects, providing about 4.3 million Nigerians access to potable water; completion of nine dams in Akwa Ibom, Katsina, Enugu and Ondo states which increased the volume of Nigeria's water reserve by 422mcm. The same booklet pointed out that 4,000 jobs were created and as of 2012, 65.29 per cent of the populace has rights to safe water, compared to 60 per cent in 2011. And 375, 000 farmers had

access to irrigated land in 2012, up from 236,000 in 2011 (Daily Trust, 2015)

However, by 2014, when the same booklet was to be reproduced ostensibly for the 2015 elections, the only achievement recorded in the water sector was 422m cubic metres of water added to the country's reservoir, the same one documented in 2012. For discerning minds, this was a clear case of deceit and blatant disregard for citizens who take time to check government files (Vanguard, 2015).

The worst situation of Nigeria's lack of access to potable water is the crude alternative of commercialized sachet water, otherwise known as, pure water or pure gutter which, Nigerians have found solace in consuming on daily basis. Even though almost every sachet comes with purported NAFDAC number, many know how weak the inspection processes are and most pure water brands are the end products of impure environments. Hence, the derogatory tag as pure gutter. As a matter of urgency, there is an urgent need for NAFDAC to review its monitoring policy and make public, verifiable data on the number of companies it has approved to produce sachet water and their company addresses.

One known feature of the water resources sector in Nigeria is the litany of abandoned projects embroiled in corruption. It is asserted that lack of accountability, transparency and unclear management structure, are an albatross of making water available to all. Both the executive and legislativr arms (through their constituency projects), construct boreholes that break down a few days after inauguration. There is hardly any maintenance culture to sustain these water projects. And for centrally controlled water works department, lack of efficiency has created economic deficits. Decentralized structure with efficient coordination may reduce the problem. There also exists weak water rate collection structures; thus, the water sector cannot be equitably relied upon to generate revenue to cover its cost of operations. It is estimated that about 90 per cent of Nigeria's cities lack adequate framework for metering, billing or collection of water payments. Bill payment default is expected to have accumulated to an astonishing debt of N1bn due to inefficiencies from water providers and the unwillingness of consumers to pay their bills as a result of poor services. Water providing Agencies have been negligent in providing sufficient monitoring mechanisms to check default. This sector alone, given the necessary political will, would have created ample employment opportunities and help the country in bridging the gap of unemployment. This could be feasible through effective human resources administration. (Sheng, 2012)

At the 24th African Union Summit, which closed on January 31, 2015, the African Union officially launched the Kigali Action Plan of 50 million euro agreement to bring drinking water, basic toilets and hygiene promotion to 10 million Africans in 10 countries: Central African Republic, Burundi, Chad, Liberia, Mali, Sierra Leone, Madagascar, South Sudan, Lesotho and Mauritania, all on the list of the Least Developed Countries, in the next 15 years. Even though Nigeria is not in the list of countries, a home-made plan needs to be developed to essentially reduce the number of people without access to water in Nigeria as Africa's biggest economy. This will save as a prototype plan for the purpose of solving water challenges in Nigeria (AMCOW, 2011).

The National Water Supply and Sanitation Policy (2012) encourage private-sector involvement and envisaged institutional and policy reforms at the state level. However, as of 2007, only four of the 36 states - Lagos, Cross River, Kaduna and Ogun States - adopted public-private partnerships (PPP) in the form of service contracts (USAID 2011; Nigeria Water Aid, 2011). This kind of PPP allowed for the duties of the private sector to be limited to providing water facilities without performance incentives. To sum it up, international experiences with PPP in water supply indicate that cooperation of public and private entities was possible in this sector in various forms and has higher chances for bringing positive results. However it is possible on the following conditions:

- 1. Potable water supply services are subject to pressure of competition (for market and yardstick competition) including the particularly democratic control, so it is possible to create clear measures for assessment of results of a venture (Zhang, Parker & Kirkpatric, 2013).
- 2. Necessity for retention of public responsibility for the most important decisions referring to investments and development of an enterprise (Williams, 2009). While the government has a decentralization policy, little actually has happened. There is little ability for local governments to carry out significant investments in water infrastructure and maintain the schemes. However, the national policy places emphasis on water supply to the neglect of sanitation needs (Williams, 2009).

VI. METHODOLOGY

The study adopts a cross-sectional design. Crosssectional design is a study that collects data on all relevant variables at one time. An investigator decides how to measure each variable in a model and uses statistical models to examine the relationships between the variable. The key feature of the cross-sectional design is that its data represents a set of people or cases at one point in time. The design is particularly suited for studies that involve collecting data on many variables, from a large group of subjects and subjects who are geographically dispersed. It is a design of choice to gather information on people's attitudes and behavior, answer questions of how much, how many, who, what happened. The design approximates survey techniques to collect data (O'Sullivan & Rassel, 1989). Survey design is a design that analyzes phenomena as they affect a given variable in a set of circumstances by studying samples drawn from the population (Nwankwoala, 2011). The design is suitable to

obtain data for assessing thoughts, opinions and feelings about practices and situations through interviews and questionnaire at one point in time. It is used to analyze behaviour and to meet the realistic desires of researchers such as in public service delivery. It comprises of predetermined set of questions given to a sample; with a representative sample that explain the attitude or opinion of the population from which the sample was drawn. In the end, one can evaluate the association between the diverse population and the changes over time (Peter, 2012).

The study adopts mix method as an approach to data collection. It gathered secondary information from the works of scholars on political interference and performance of public institutions. The primary information was based on the views of stake holders in water supply decision making as expressed in their responses to questions in the questionnaire. Data generated were descriptively analyzed using tables and percentages and statistically tested using the Chi. Square statistical analysis.

VII. POPULATION OF STUDY, SAMPLING TECHNIQUE AND SAMPLE SIZE

The population of the study covers the staff of the department of water resources and those of the Cross River State Water Board Limited with a population size of 1,850 personnel.

Purposive sampling technique was adopted. We decided to use our judgment to select respondents for the study. This was to allow us involve those who have a good idea of how the Corporation is administered and its relationship with the state government. These categories of people by our estimation will adequately respond to our research questions.

The sample size was 594 drawn as follows:

- State officials -144
- Senior and management staff of the Water Corporation 160
- Operation staff of the water corporation 290

VIII. RESEARCH QUESTIONS

Respondents were confronted with the following questions in the thematic areas of political interference.

- A. Political Consideration
- 1. The state directing thet the Corporation on where and when water infrastructure should be provided affects performance?
- B. Lack of financial autonomy.
- 1. The control of the budget of the Corporation by the state is counterproductive?
- 2. The state control of greater percentage of the revenue generated by the Water Corporation affects operational processes?
- C. Political Patronages
- 1. The determination by the state on the hiring of technical experts leads to mediocrity?

IX. RESULTS AND DISCUSSION

The analysis and discussion of this study involves 594 respondents drawn purposively from the staff of the water board and state officials of water resources department. The analysis and discussion is on whether political interference affects the performance of Cross River State Water Board Limited in delivering potable water and meeting the water needs of the people.

In the operation of the CRSWBL the followings hold sway:

- The state government substantially determine where and when water infrastructure is provided
- The budget of the water corporation is controlled by the state.
- The revenue generated by the water corporation is controlled by the state
- The state controls the hiring of technical experts

Does all this affect the performance of the water corporation? The answers are provided by responses of the decision stakeholders in water administration below

Respondents	Yes	No	Not sure	Total
State officials	120	7	17	144
Senior & Management Staff of the water corporation	140	3	17	160
Operation staff of the water Corporation	200	60	30	290
Total	460 (97%)	70(11.795)	64(10.77%)	594(100%)

 Table 1:- Responses on whether political consideration by the state informs where and when water infrastructure should be provided by the Corporation (Source: Fieldwork, 2019)

The responses on whether political consideration by the state inform where and when water infrastructure should be provided by the water corporation shows that about 77.44percent of the respondents affirmed that it is a serious

factor in providing water facility in the state; 11.79percent said No while 10.77percent where not sure.

ISSN No:-2456-2165

Respondents	Yes	No	Not sure	Total
State officials	102	6	36	144
Senior & Management Staff of the water corporation	144	4	12	160
Operation staff of the water Corporation	210	40	40	290
Total	456(76.77%)	50(8.42)	88(14.87)	594(1005)

Table 2:- Responses on lack of financial autonomy by the water corporation (control of budget)

(Source: Fieldwork, 2019)

Table to above indicate that 76.77percent of the respondents affirm that the budget of the Water Corporation is controlled by the state. 8.42percent say it is not largely controlled by the state while 14.81percent were not sure. The

implication of this excessive control of budget is that the Corporation cannot intervene swiftly when they want to embark on addressing major needs. They will act only when money is made available. This is simply counterproductive.

Respondents	Yes	No	Not sure	Total
State officials	99	15	30	144
Senior & Management Staff of the water	151	3	6	160
corporation				
Operation staff of the water Corporation	220	30	40	290
Total	470(79.12%)	48(8.08%)	76(12.80%)	594(100%)

Table 3:- Responses on state control of greater percentage of revenue generated by the Corporation (Source: Fieldwork, 2019)

Table 3 shows that about 79.12percent of the respondents submitted that greater percentage of the revenue generated by the Water Corporation is controlled by the state government. 8.08percent did not share this view, while 12.80percent were not sure.

Controlling greater percentage of revenue generated by the water corporation suggests that revenue is paid to accounts of the corporation that the state government has control over. The implication of this control is that the corporation will not address their immediate needs as quickly as possible. The process of getting approval to access money for quick interventions will certainly meet financial bureaucratic bottleneck. There is also the possibility that available money could be veered to addressing other needs of the state other than water. When the water corporation now needs money, it may not be readily available. All these are likely to affect performance.

Respondents	Yes	No	Not sure	Total
State officials	70	40	34	144
Senior & Management Staff of the water corporation	135	10	15	160
Operation staff of the water Corporation	225	20	45	290
Total	430(72.40%)	70(11.78%)	94(15.82%)	594(100%)

Table 4:- Responses on state control over the hiring of technical experts (Source: Fieldwork, 2019)

The result in table 4 indicates that 72.40percent of the respondents agree that the state influences maximally the hiring of technical experts for the Water Corporation. 11.78percent do not share that view while 15.82percent were not sure.

It is very possible that the state could influence the choice of who is employed in the Water Corporation. This is because, employment is a patronage that is used to satisfy political, ethnic, religious and nepotic interests in Nigeria. In doing this, no consideration is made for merit and expertise. One finds a situation where intellectually weak technical personnel with no exposure are hired to occupy sensitive positions. It is obvious that one cannot give what he/she does not have. The result has always been failure in performance and increase in the suffering of those who are meant to benefit from their services.

Respondents were also asked whether they consider political interference as a major influence on the poor performance of the Cross River State water Board Limited. Their responses are presented on the table 5 below.

Respondents	Yes	No	Not sure	Total
State officials	65	45	34	144
Senior & Management Staff of the water corporation	139	10	13	160
Operation staff of the water Corporation	227	15	48	290
Total	429(72.22%)	70(11.79%)	95(15.99%)	594(100%)

Table 5:- Responses on whether political interference accounts for the poor performance of the water corporation (Source: Fieldwork, 2019)

The responses on table 5 shows that 72.22percent of the respondent are of the firm view that political interference accounts largely for the performance crisis of the Water Corporation. About 11.79percent of the respondents do not hold this view while 15.99percent were not sure.

From these responses, what greater percentage of decision and operational stakeholders of the Water Corporation see as a major challenge to the performance of the Corporation is political interference. Political interference;

- affects effective maintenance of water facilities when they go bad.
- It does not allow for uninterrupted supply of water.
- It leads to the supply of unsafe water for public consumption.

- They Corporation can hardly extend water supply to areas not covered.
- It leads to the hiring weak and intellectually bereft technical experts.

The implication here is that if political interference is relaxed, there is the possibility of better performance by the Corporation.

This result is statistically analyzed below using the chi square statistical analysis to determine whether significant association exists between political interference and performance of the Water Corporation.

Fo	Fe	Fo-fe	$(\mathbf{fo-fe})^2$	(<u>fo-fe</u>) ²
				fe
65	104	-39	1,521	14.62
45	16.96	28.04	786.24	46.35
34	23.03	10.97	120.34	5.22
137	115.55	21.45	460.10	3.98
10	18.85	-8.85	78.32	4.15
13	25.58	-12.58	158.25	6.18
227	209.44	17.56	308.35	1.47
15	34.17	-19.17	367.48	10.75
48	46.38	1.62	2.62	0.05
				$X^2 92.77$

Table 6:- Chi Square statistical analysis

Formula: χ ²	=	$\sum (\text{fo} - \text{fe})^2$
		fe
Where: fo	=	observed frequency
Fe	=	expected frequency
$\sum =$	sumn	nation

Df = 4 Significance level = 0.05 Table value = 9.488

Decision Rule: when chi square calculated is greater than the table value, reject null hypothesis.

The result of the chi square calculation of 92.77 is greater than the table value of 9.488. This implies that the hypothesis that political interference tends not to significantly affect performance of the Water Corporation is hereby rejected. The study therefore, concludes that political interference in the operation of the Corporation ranging from political considerations in the provision of water facilitates to lack of financial autonomy and political patronage in the hiring of technical experts contributes to the poor performance of the Water Corporation.

The result above is corroborated by various studies and supports the finding that the problem of water supply is also attributed to undue political interference and unwarranted operational control of water agencies by the State and these affects capacity to recover cost through user charges (Fadumila, 1983; Isa, 1992; Ammani, 1995; Abdu, 1998 cited in Obadiah, 2014). The usual approach towards performance improvement has been to design projects for urban water supply that feature a packaged application of more finance, imported technologies often from foreign development assistance agencies for upgrading of existing plants and development of new ones. However, the water agencies continue to rely on government subventions for much of their operations (Obadiah, 2011).

According Obadiah (2011) political interference constituted one of the major problems and is responsible for the poor performance of public water supply and sanitation in Africa. This interference gives room to administrative corruption and other irregularities characterizing public water supply in Africa. These situations have not yielded the desired results as water institutions remain incapable of improving performance basically due to local political interests as shown by the result of this study.

Undue political interference on the Water Board's operations affects the swift tackling of the administrative challenges confronting the corporation. This is generally considered a major causative factor which often gives rise to

other challenges. For instance, the decision making procedure and the role of the supervising and other complementary government Ministries were significantly patterned after the long standing civil service ethos. Their intertwining roles, rather than enhance the activities of the Water Board, only helped to undermine the Water Board's operations and inhibited her performance.

X. CONCLUSION AND RECOMMENDATION

It is pertinent to conclude that undue political interference has negatively affected the performance and institutional capacity of Cross River State Water Board Limited. Also, inadequate infrastructure in terms of erratic public power supply; inadequate storage facilities and insufficient pipe network connection have caused the Cross River State Water Board Limited not to administer public water efficiently across the state. In view of this failure, this study recommends that the state government should divest itself from and relax excruciating control on the Water Board Limited. The Cross River State Water Board Limited should be left to operate as a limited liability outfit along economic lines. In-as-much-as potable public water supply was welfare good it has also become an economic good in view of the large financial outlay on investment involved. Up-to-date processes of treatment of water call for modern technology, equipment and skilled professionals. These require that the huge investment should be administered economically and business wise, to recover cost, make reasonable returns and enhance further reinvestment and expansion in the sector. The Cross River State Water Board Limited should declare its equity share holdings in the Stock Exchange Market. This will generate long term capital investment funds from high profile investors who will be attracted to the Company. The Water Board Company would also benefit from modern corporate governance where its books of account would be subject to public scrutiny. The benefit will also include access to long term investment funds for infrastructural development, attracting highly skilled water sector personnel for its operations. The end result would be economic viability and sustainability.

The state government should also in the process absolve the Cross River State Water Board Limited from unnecessary control by other state ministries and institutions. The CRS Water Board Limited as a Public Limited Liability Company should be free from such primordial elements such as ethnicity, cronyism and other negative influences. Thus, the company will be able to operate without the bane of the Nigeria Civil Service syndrome that has engendered inefficiency in public service delivery. Highly qualified personnel recruited on competitive basis would be attracted to the Water Board Company and would be paid commensurate remunerations based on productivity.

From the findings of the study, the Cross River State Water Board Limited was being heavily restricted in its ability

to take appropriate business driven decisions without recourse to other State agencies including the State House of Assembly. As a Public Limited Liability Company, its Memorandum of Association should allow it to source for funds after the initial take off investment grant from the State Government. This will obviate the fiscal burden on the State Government from this subsector. It will allow the State Government invests in other viable areas of developmental projects. Declared dividends would also accrue to the State coffers. The state government needs to apply scientific management in running the water corporation. Scientific management will involve systematic recruitment and training procedure for technical personnel who will bring their robust knowledge to bear on the job and this will improve performance. Scientific management emphasizes efficiency and improvement in productivity. In doing so it monitors workers performance to ensure that they work as expected to improve performance. Scientific management emphasizes standardization of tools and equipment which can produce the right kind of value. Scientific management promotes industrial peace and harmony. It reduces cost in production because wastage is not tolerated. Adopting the scientific management to running the water corporation will bring financial stability to the corporation and make it attractive for investors in the water industry to come and the sector for the state. Scientific management will free the water corporation from the unnecessary meddling by the state government since it will be run purely as business concern devoid of political interference.

REFERENCES

- [1]. Abdulmutallib A. A. (2009). *Nigeria: In Kano, 'water, water everywhere*. all Africa.com. Retrieved from www.allafrica.com/stories/200912097.
- [2]. Abraham, O. (2009). Challenges of intersectoral monitoring of developments in the provision of water and sanitation services in Nigeria. *Knowledge Management for Development Journal*, 6(8), 108-119
- [3]. Amah, E., Ugbaja, A. & Esu, E. (2012).Evaluation of groundwater potentials of the Calabar coastal aquifers. *Journal of Geography and Geology*,2(4), 103-115.
- [4]. AMCOW (2011). Water supply and sanitation in Nigeria: Turning Finance into Service for 2015 and Beyond. Water and sanitation Programme. *Country Status Review*, 1, 72-82
- [5]. Amori, A., Odjegba, E, & Adekitan,A. (2015).Assessment of public perspectives on quality control measures in public water supply in Oyo state, Nigeria. *Journal of Applied Sciences and Environmental Management*, 3(7). 45-60
- [6]. Anand, S., Santos, H., & Smith, B. (2009). Avoiding customer and taxpayer bailouts in private infrastructure projects policy toward Leverage, risk allocation, and bankruptcy. *Policy Research Working Paper, 3274,* 76-76.

- [7]. Atkinson (2005). Atkinson review: Final report measurement of government output and productivity for the national accounts, final report. Basingstoke: Palgrave Macmillan.
- [8]. Avwokeni, A. (2016). Cultural resistance, output measures, and audit practice: Impact on nonimplementation of program-based budgeting in Nigeria. *International Journal of Public Administration*, 7(4), 87-96
- [9]. Bates, B. C. Kundzewicz, Z.W., & Polulikof, J. P. (2008), *Climate change and water*. Technical Paper of the Intergovernmental Panel on Climate Change (IPCC) Secretariat, Geneva.
- [10]. Chung-Hua, P. (2012). Challenges of urban water management in Africa: The way forward. *Journal of Environmental Sciences and Resource Management*, 5(1), 111-121.
- [11]. Corduneanu-Huci, I., Hamilton, G., & Masses Ferrer, O. (2012). *The crucial role of water in human existenc*. Rome: FAO press.
- [12]. Daily Trust (2015). *Abuja's water infrastructure imperatives*. Retrieved from www.dailytrust/news.ng/46482
- [13]. De-Buitléir, D. (2006). *Promoting productivity in a diverse public sector*. Paper Presentation at Institute of Public Administration Seminar on Promoting Productivity in a Diverse Public Sector, Dublin.
- [14]. Desai, A. (2008). *Moderating the debate: Rationality and the promise of American Education*. Cambridge: Harvard Education Press
- [15]. Kuhry, B., Pommer, E, & De-Kam F. (2006). Public sector performance, an international comparison. Paper Presented at the National Institute of Economic and Social Research (NIESR) Fourth Public Sector Performance Conference, London.
- [16]. Maduabum, C.P. (2006). *Reforming government bureaucracies in Nigeria*. Badagry: ASCON Press.
- [17]. Martin, S., & Bovaird, T. (2005). *Meta-evaluation of the local government modernization agenda: Progress report on service improvement in local government.* London: Office of the Deputy Prime Minister Press.
- [18]. MOFINEWS (2009). Donald Duke's second anniversary report. Bimonthly Journal of Ministry of Finance, l (5), 13-15
- [19]. Nigeria Water Note (2012). Water supply and sanitation working notes. Retrieved from www.waterutilities.org/572820
- [20]. Nwankwoala, H. O. (2011). Improving water resources management in Nigeria: Policy imperatives and emerging realities. *Scientia Africana*, *10*(1), 46-57.
- [21]. O'Mahony, E. (2005). *Economic development and political reform: The impact of external capital on the Middle East*. Cheltenham: Edward Elgar Publishing.
- [22]. Obadiah M. (2014). Public administration and national transformation. *Business Day, 18,* 12-15

- [23]. Peuckert, J. (2013). *Developing systems of environmental innovation in emerging economies: Challenging the environmental Kuznets Curve.* Berlin: Technische Universität Berlin Publication
- [24]. Saleth R. M., & Dinar A. (2004). The institutional economics of water: A cross country analysis of institutions and performances. United kingdom: Edward Elgar Publishing Limited.
- [25]. Sheng, C. (2012) Why government banks underperform: A political interference view. Retrieved from www.idea.repec.org/a/ee/jefinin/v21y2012i2p181-202.html
- [26]. Simon, I. (2011). Non-formal education programmes and poverty reduction among young adults in Southern Senatorial District, Cross River State, Nigeria. *Journal of Educational and Developmental Psychology*, 12(3), 56-63
- [27]. Thornhill, N. (2006). Does the sequencing of water reforms reforms matter? *The Quarterly Review of Economics*, 4, 54-62.
- [28]. USAID (2007). Nigeria Water And Sanitation Profile. Retrieved from www.nigeria.usaid.gov/access-watersanitation/548585
- [29]. USAID (2011). *Water is Life*. Retrieved from www.usaid.gov/access-water-life/548585
- [30]. USAID (2012). Access to water sanitation and hygiene. Retrieved from www.nigeria.usaid.gov/access-watersanitation/548585
- [31]. Van-DeWalle, A. (2005). Public Water supply and its effect on citizendary. *Quarterly Journal of Economics*, 114 (4), 1243–1284.
- [32]. Vanguard (2015). *Lagos: Water everywhere but none to drink.* Retrieved from www.vanguardngr.com/2012/04/lagoswater/648489
- [33]. Water Aid Nigeria (2011). Water supply and sanitation sector reform programme. Retrieved from www. Wsssrp.org/about-wssrp/7942
- [34]. Water Aid Nigeria (2012). *Federal government tasks*. *Monitoring and evaluation of WASH projects*. Retrieved from www.wateraid.org/ng/870898
- [35]. WHO (2010). Joint monitoring programme for water supply and sanitation. Retrieved from www.who.org.ng/7359-281
- [36]. WHO / UNICEF Joint Monitoring Programme (2010) for Water Supply and Sanitation, Wssinfo.org/datamining/tables
- [37]. Williams, C. (2009). Public-private partnerships in transportation: Lessons learned by a public-sector entrepreneur. *Public Works Financing*, 5(4), 22–25.
- [38]. Zhang, E., Parker, A., & Kirkpatric, D. (2013). *Drinking water from the sea: Polymeric membranes for desalination.* Retrieved from www.amazon.org/pdf/468283