# Institutional Challenges in Water Supply Development and Sustainability in Nigeria - A Case of a Government-Owned Water Agency

Akhionbare, W.N.<sup>1</sup>, Akhionbare, S. M. O.<sup>2</sup>, Ikhile, C.I.<sup>3</sup> and Ubuoh, E.A.<sup>4</sup>

<sup>1</sup>Department of Project Management Technology, Federal University of Technology, Owerri, Nigeria <sup>2</sup>Department of Environmental Technology, Federal University of Technology, Owerri, Nigeria <sup>3</sup>Department of Geography, University of Benin, Nigeria <sup>4</sup>Department of Geography, University of Nigeria, Nsukka amerikhinghare2007@urphon.com

smoakhionbare2007@yahoo.com

Abstract- The study examined the institutional setup and the activities of a government-owned agency in order to determine the effectiveness and sustainability of its operations in water supply provision for the populace. It was observed that the institutional set-up of the establishment does not make for autonomy and independence of decisions. Constant interference of government in its daily activities and mass retrenchment of professionals negatively affected its efficiency and was an obvious drain to government in terms of trained/skilled manpower. Staffing was poor in relevant professions, with workers being inadequately motivated. Non-availability of a well-defined approved government edict and organizational structure, supervision by Board of Directors who lack relevant background/experience in water supply operations and a high turnover of CEOs were observed. Adequate water supply provision was thus far-fetched. The selection of Board of Directors for a highly technical establishment like the Water Agency should not be political but should involve the identification and appointment of qualified and experienced people who can contribute meaningfully to policy formulation and the positive direction of the system. Legal reforms are needed in the edicts establishing it in order to change its orientation or operating environment from that of the Civil service to a serious business organization. The establishment must be given clear objectives by the Government, with necessary legal and institutional frameworks to enable it achieve set-down objectives. Management should be granted autonomy to function without political interference and should be allowed to hire, discipline and train the right caliber of staff at the appropriate cost and time.

*Keywords*- Autonomy, Edict, Organogram, Retrenchment, Interference, Motivation and Turnover

## 1. INTRODUCTION

Nigeria is blessed with abundant water resources, the excess of which has been causing floods and erosion in many parts of the country. Although the distribution of water resources over the country is not evenly spread, all areas receive water to sustain life and other agricultural activities year in year out despite the drought that frequently occurs in the northern part of the country. In spite of the

availability of these resources, its supply to the majority of the population especially rural areas is very much inadequate. Today, only about 30% of the nation's populations have access to potable water supply and the majority of these people are those living in urban areas (Akhionbare, 1998). Even the privileged places that have access to such a facility are not being served efficiently. It can safely be said that very few cities and towns, if any, in Nigeria enjoy an uninterrupted water supply for thirty days in a month. This is so, despite the heavy investments that have been made in the last 40 years by the various levels of government, especially the States. Potable water supply inadequacies being experienced in Nigeria have been brought about by many factors some of which border on policy, institutional framework, capability and autonomy of responsible agents, appropriate technology, and investment strategy amongst others (Bukar, 1995; 1997; Akhionbare et. al., 2010; Akhionbare and Akhionbare, 2011).

As part of their statutory responsibilities, State governments and the Federal Capital Territory of Nigeria have each set up a State Water Agency (SWA) charged with the responsibility of providing potable water supply to urban and rural population in their States. These agencies were established as parastatals of State governments with varying institutional and monitoring arrangements. State governments have installed facilities in most towns and semi-urban communities spanning over three decades (Bukar, 1997). In spite of these investments by earlier visionary regimes, the problem of water scarcity still remains a colossus and a major development bottleneck in the State.

Provision of potable water supply was put on the concurrent list of the Nigerian Constitution to be the responsibility of the three tiers of government i.e. Federal, State and Local governments. The National Water Policy however puts the responsibility of urban and semi-urban water supply delivery to the State governments. All the three tiers of government are providing the rural water supply. Each State of the Federation and the Federal Capital Territory (FCT) has established through an edict, a State Water Agency (SWA), responsible for water supply in the state. The edicts provide the necessary legal and administrative frameworks for the functions of the State Water Agencies.

Osaze (1998) reports that what seems to be a major contributor to the poor performance of government-owned companies and those in which government has a substantial stake is the high turnover of Chief Executive Officers (CEOs). In addition, he opines that the Board of Directors (BOD) for any organization must be balanced in its constitution which should be done through the inclusion of people who are seasoned in the running of successful enterprises, who have some knowledge of the company on whose Board they serve as well as possessing the necessary management depth and breadth to steer the company through the muddy waters of economic navigation.

This paper x-rays the activities of a government-owned water agency in Nigeria, highlighting the management set-up and evaluates how these factors have affected its performance in sustainable water supply service delivery. It also recommends ways of achieving government's objective of regular and adequate supply of potable water to the populace.

# II. METHODOLOGY

The data for this study were basically secondary data gathered through scrutiny of relevant administrative/personnel official records of the State Water Agency as well as the personal observations of the researcher. The scope of data and information collected, though not continuous and consistent, dates from the inception of the Water Board as an independent institution in 1973 up to date. Files, minutes of management meetings, monthly Area/District Managers meetings for the period were studied.

Personal interaction with the staff at the Agency's administrative headquarters, Area/District Officers and some water consumers were carried out. The end-of-year reports, which contain update on the activities of the various arms of the establishment, were also useful sources of data. The handing-over notes of the various CEOs to their various successors offered information on government policies vis-à-vis implementation strategies and limitations; interference of the Board of Directors and the State political class in the success of water supply strategies.

#### **III. FINDINGS AND DISCUSSION**

#### A. Evolution and Historical Perspective

The State Water Agency metamorphosed from the State Public Works Department from where it was cut off in 1973. On the 1<sup>st</sup> of May 1987, through a merger with the State Rural Electrification outfit under an Edict, it became known as the Public Utilities Board. While its name changed, the mandate for water supply remained, but in addition, its coasts were enlarged to include the electrification of rural communities in the State. On 12<sup>th</sup> September 1994, the State Public Utilities Board was again split into the Urban Water Board and the State Electricity Board through an Edict. This Edict was not passed into law but was signed by the Military Administrator on the eve of his departure from the State and from office. There was not much difference in content between the new Edict and the existing one that it replaced. Generally, the Edicts have been tampered with many times through amendments either by the State Executive Council or by the ministerial supervising bodies at the point in time. The Edicts specify the composition of the establishment, qualifications of members of the Board of Directors, committees, objective, functions and powers of the establishment, Management and staff, financial provisions, and other general items regarding it. The provisions were not strictly adhered to going by the observed situations existing in the Water institution.

At various times, the establishment had been under the supervision of Ministries, e.g. Ministry of Works and Transport or the Ministry of Public Utilities and Rural Development. At other times, she was supervised directly by the Military Governor's (Administrator's) office. During political regimes, a Board of Directors, which was made up of politicians and appointed by the Executive Governors at those times, supervised the Board. These Directors had little or no professional/ managerial expertise in the water industry.

The organizational structure of the Agency was also stipulated by the Edicts. At various times, different structures had been approved (Figures 1-4). The edict No. 6 of 1988 for the then Public Utilities Board made provisions for six Departments- Administration, Finance, Commercial, Water Resources, Engineering Services and Electrical. The Water Resources Department was in charge of the execution of capital projects that were later handed over to the Engineering Services Department for maintenance at completion and commissioning. The Electrical Department was created to take over the functions of the defunct Rural Electricity Board. Prior to this stage, only three Departments were operational namely, Administration, Finance and Engineering. There was no existence of a Commercial Department but such commercial activities as billing; revenue generation and collection were carried out by a section of the Finance Department. In 1994 however, the set up was different (Fig. 3). Reporting directly to the Chief Executive were three Deputy General Managers for Administration/Finance, Commercial and Engineering. The Administration/Finance Department was made of two Divisions namely: - General Administration/Personnel and Materials; while the Engineering department had Water Supply, Civil and Mechanical Engineering as its Divisions. These sub-units were each headed by an Assistant General Manager. There were four Area offices each headed by an Area Manager who reported to the Assistant General Manager in charge of Water Supply. The Area offices were further subdivided into eight District offices. These Area and District office sub-divisions still exist today.

The Administration Department oversees the Personnel, Stores, Public Relations and Legal units as well as the general administration of the establishment. The Engineering Department ensures water supply operations, maintenance of operational equipment through the administration of the dams, the Area and District offices. The Commercial Department is in charge of generation and distribution of bills as well as revenue drive. The Finance unit, which is subsumed in the Administration/Finance Department, is responsible for the implementation of the financial activities. In addition, it is responsible for safe custody and disbursement of funds, maintenance of accounts records, preparation of relevant financial statements and staff salaries.

#### **B.** Staffing and Management Autonomy

Prior to the 1996 mass staff retrenchment exercise, the total staff strength of the establishment was 1084. Under the military regime there was no Board of Directors and hence the Chief Executive reported to the Military Administrator through the supervisory Ministry of Public Utilities and Rural Development. Within the establishment, a Management Board made up the General Manager (GM), the Deputy General Managers (DGMs), the Assistant Managers (AGMs), the Heads of critical operational units like the Audit department were in place. In 1995, this Management Board had a membership of 15 with the General Manager as Chairman. It was responsible for consideration of tenders for job contracts, staff promotion, discipline and ratification of issues bordering on the day to day operations of the establishment. The Management Board met monthly at the instance of the General Manager but records show that at times it met about three times a year as it pleased the General Manager. The supervising Ministry ratified the minutes of Management Board meetings before implementation. The Management Board did not have the power to approve expenditure above N75, 000.00 while the General Manager alone could only approve expenditure below N30, 000.00 including issues involving purchases. The promotion of staff from salary grade level 08-16 was also above the approval of this Management Board. The supervisory Ministry was responsible for such approvals and in major cases; the Governor's approval was also needed.

In 1998 after 1996 staff retrenchment, the staff strength came down to 645 with senior staff (salary grade level 07-16) being 233 while junior staff (salary grade level 01-06) was 412. A further staff reduction exercise in the year 2000

brought the number to about 300. The professionals constituted the bulk of the staff retired, thus drastically aggravating the dearth of skilled and experienced work force in the establishment.

#### C. Autonomy of Area/District Offices

The District/Area offices are units under the Water Supply Department, which is divided into four Area offices manned by Area Managers. The Area offices are located at various political divisions of the State. Serving under the Area Managers are District Managers and other support staff. These Area/District offices are mere command-receiving offices. They operate and maintain the various water works (stations) under their jurisdiction. Bi-monthly meetings are organized for the Area Managers and District Managers to brief Management of their operations as well as to receive instructions relating to such issues as personnel, administrative policies, tariff reviews and new commercial policies amongst others.

#### D. Organizational Structure

The organizational structure of the establishment has been altered by various Chief Executive Officers over the years. Under the regime that ended in 1980, the organizational structure showing the first three tiers is as shown in Fig. 1. Between 1988-1994, under the Public utilities Board regime, the organizational structure changed to Figure 2. Between 1994 and 1998, under a new General Manager, the organizational structure changed to Figure 3. In 1998, under another new General Manager, a new organizational structure emerged as shown in Fig. 4.

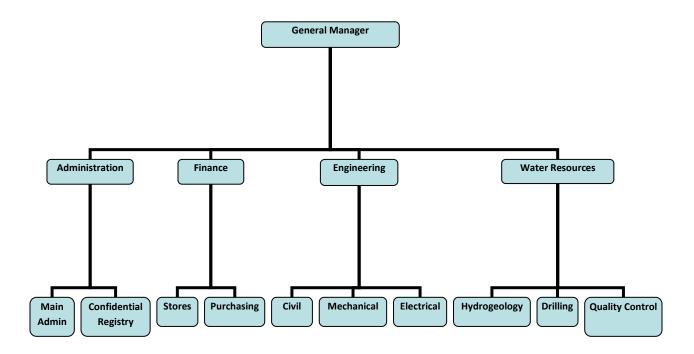


Fig. 1: Organizational Structure of Water Board in 1980

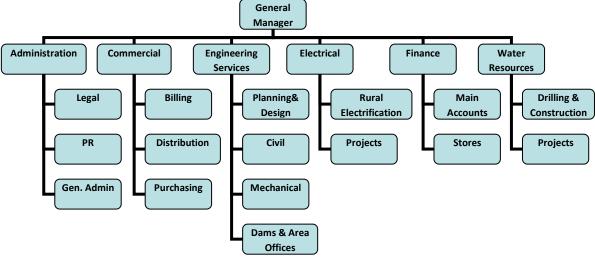
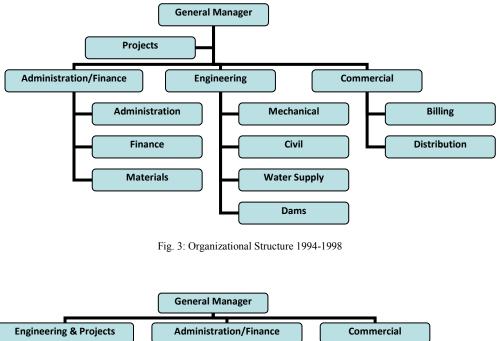


Fig. 2: Organizational Structure 1988-1994



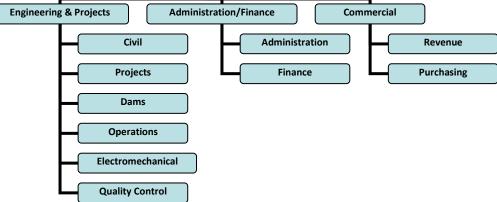


Fig. 4: Organizational Structure 1998 to Date

Generally, most of the above organizational structures were not ratified by the supervising body, but were drawn up by the incumbent Chief Executive Officer to enable him manage the Board's activities and operations for ease of his operations.

## E. Defects of the Existing Management System

Ideally, the structure of an organization should reflect its objectives and plans among other considerations. In addition, the structure must be staffed with the relevant professionals in the various fields of its operations. The structure could either be flat or tall in span and its effectiveness will depend on the capabilities of the supervisors, their training and experience (Koontz, 1984). In the 1998 organogram, the structure is neither tall nor flat (Fig. 4). It is flat with respect to two Departments (Commercial and Finance), and tall with respect to Engineering department. It does not also reflect the objective and plans of the organization. The essential objective of the establishment is to produce and supply water to the State populace. This issue seems to have been relegated by concentrating authority on an individual hence making the Engineering Department too unwieldy to operate effectively. The structure rather created two major departments for staff operations while only one is for line operations; and since attention and allocations are done on the basis of Departments, the life wire of the water supply operations, which is embedded in the Engineering department is disadvantaged. Moreover the organization structure of the establishment was subject to regular changes because of the practice whereby any Chief Executive had the power to alter it according to his desire. This lends itself to abuse. A properly structured organizational chart should normally be drawn up, standardized and given legal backing by the State Executive Council. It should form a part of the Edict establishing the organization.

Militating against the proper working of the structure is also the situation where one person held two of the major job positions; e.g. the Project Manager of the ADB-assisted Benin Water Supply Project also held the position of Deputy General Manager in charge of the Engineering Department. The combination of the jobs of project management and engineering operations, which is the nerve-centre of water supply operations. The same situation holds for the combination of the Project Manager of the World Bankassisted National Water Rehabilitation Project with the job of an Assisted General Manager (Water Supply).

## F. The Chief Executive Officer (CEO) Turnover

Between 1988 and the year 2000, a space of twelve years, the establishment had nine CEOs at various periods. Their tenures ranged from five months to six years. The problems have remained despite the turnover of its captains. Instead of addressing the main problems militating against the proper functioning of the establishment, the authorities merely replaced the CEOs. Even with the coming of a new Chief Executive, only the symptoms of the problems were addressed leaving the main issues unresolved. There have also been cases of CEOs being removed on the recommendation of the Chairman, Board of Directors. Osaze (1998) opined that a CEO can be assessed based on an agreed-upon strategy. which must be put in place in an establishment. When an agreed strategy is in place, the matter of replacing a CEO with another, who should be given the clear mandate to execute the existing sound policy, is rational. Even with a sound strategy in place, a new CEO must be given the opportunity of modifying, readjusting or jettisoning it completely if corporate internal and environmental circumstances so dictate. The issue is different when there is no strategy in operation or there is dissatisfaction with the existing strategy when the incumbent CEO exists. In the operations of this State Water Agency as a government organ, the existence of clear-cut strategies, government commitment to the strategies as well as provision for the execution of these strategies have been lacking. A situation where a CEO is removed or replaced even before he comes to terms with the job, its requirements and ramifications, is counter-productive and definitely not in the interest of water supply in the State.

## G. An Ideal Edict for the Water Board

It was observed that the organization had experienced the practice of operating more than three different edicts within a space of four years. Some of these edicts got to the ridiculous extent of bearing certain people in mind in their promulgations. An unbiased proper and sound edict would take care of the basic aims and objectives of the setting up of the institution and legal reforms in such an edict would change the orientation or operating environment from that of a civil service/ social service to that of a business organization in order to enhance efficiency of its operations (Garn, 1997). A well-specified and articulated career path and development for the various professionals within the organization is a way of motivating and retaining experienced professionals in any establishment (Akinmayowa, 1999). It would not be fluid, but will have a definite schedule of duties for different categories of staff. Clear objectives are given, with necessary legal and institutional frameworks to enable them to be achieved. The organization and its management are made accountable for results based on approved strategies. The above situations enhance and enable the measurement of the productivity of the various staff as well as the entire establishment.

#### H. Manpower and Training

There was evidence of gross lack of manpower in the key areas of supply operations. This was attributed to two mass retrenchment exercises of civil servants in 1990 and 2000. These created deficiencies in the number of qualified Accountants, Personnel Managers, Water Engineers, Equipment installation/repair experts, Hydro-geologists and Drillers amongst others. The resultant effect was that the establishment was not professionally managed and the incumbent staff did not have the necessary qualifications, expertise and support facilities needed to carry out the various functions required to meet the objectives (Akhionbare et. al., 2011). There was also no continuity of activities of Management and staff because of the exit of many who unhappily left the organization due to inadequate motivation and job insecurity (Akinmayowa, 1999). The Board of Directors and the CEOs did not have autonomy to hire and train the right caliber of staff at the appropriate cost and time. The Management team, which was picked from the left over staff after the retrenchment exercises, did not have a clear idea of the objectives and functions of the establishment and hence could not perform effectively. Observations revealed a lot of political interference in staff recruitment including interference with the Management functions. The personnel trained in National Water Supply Training System under the World Bank-assisted National Water Rehabilitation Project were also retired or retrenched.

### IV. SUMMARY AND RECOMMENDATIONS

The challenges facing the water supply system include poor organizational structure for the Management Board, legal framework problems, lack of motivated staff, lack of autonomy and political interference. The high level of CEO turnover as well as the constant interference of government in the daily activities of the system has negative implications. Mass retrenchment of professionals in the water industry leaves it the worse for it and is an obvious drain to government in terms of trained/skilled manpower. It also has negative attendant costs in terms of staff replacement and break in productivity. In addition, the selection of Board of Directors for a highly technical establishment like the Water Agency should not be political but should involve the identification and appointment of qualified and experienced people who can contribute meaningfully to policy formulation and the positive direction of the system. Legal reforms are needed in the edicts establishing the Water Agency in order to change its orientation or operating environment from that of the Civil service to a serious business organization. The establishment must be given clear objectives by the Government, with necessary legal and institutional framework to enable it achieves set-down objectives. Government should ensure that a good organizational structure is drawn up and a qualified Management with clear functions constituted. Such Management should be granted autonomy to function without political interference. A proper Board of Directors, consisting of not more than six to seven people (including the Chairman) should be appointed to include a representative of the State Government, the consumers, the private sector, the CEO of the Water Agency and the traditional institution. The new Board and Management should be allowed to hire, discipline and train the right caliber of staff at the appropriate cost and time.

#### REFERENCES

- Akhionbare, S. M. O. (1998). "Quality Assessment of Sources of Drinking Water in the Owan Area of Edo State", A Ph. D. thesis submitted to the Department of Chemistry, University of Benin, City, Nigeria.
- Akhionbare, W.N. and Akhionbare, S.M.O. (2011), "Appropriate Water Treatment Systems for Owan Community, Nigeria, International Journal of Science and Nature (IJSN), Lucknow, 2(4): 850 - 855.
- Akhionbare, W.N., Ukwuoma, F.P.O. and Akhionbare, S.M.O. (2010), "Environmental Impact Analysis of a Water Supply Project The Case of Ikpoba River Dam Waterworks, Benin

City, Nigeria", Journal of Applied Sciences Research, INSInet Publication, Punjab, Pakistan, 6((12): 2081 - 2084.

- Akinmayowa, J. T. (1999). Man-in-Organization, 2<sup>nd</sup> Edition, Educational Resources Center, Benin City, Nigeria.
- Bukar, M. (1995). "Major Issues Affecting Effective Performance of State Water Agencies in Nigeria"- A paper at the 1<sup>st</sup> workshop on Management and Financial Reform Programme of SWAs organized by Federal Ministry of Water Resources and Development and the World Bank held at Kastina, Nigeria.
- Bukar, M. (1997). "Nigerian Water Sector: Overview of Reality, Challenges and on-going Initiatives", A paper presented at the National Conference on Water Sector Reform: Policy Options in the Water Supply and Sanitation Sector held at Abuja, Nigeria.
- Garn, H. (1997). "Enabling Environment for a well Functioning Water Sector: Institutional and Regulatory Framework", A paper presented at the National Conference on Water Sector Reform: Policy Options in the Water Supply and Sanitation Sector held at Abuja, Nigeria.
- Koontz, H., O'Donnell, C. & Weihrich, H. (1984). Management, 8<sup>th</sup> edition, McGraw-Hill International Book Co. London.
- Osaze, B. E. (1998). Strategic Management in Nigeria, 3<sup>rd</sup> edition, Center for Management Development, Ikeja, Nigeria.