Water and Development Challenges in Nigeria

OYEBODE, Oluwadare Joshua
Civil Engineering Department, Afe Babalola University, Ado-Ekiti, Nigeria
oyebodedare@yahoo.com

ADEBAYO, Victor Babafemi
Civil Engineering Department, Afe Babalola University, Ado-Ekiti, Nigeria
vicfema2k5@yahoo.com

OYEGOKE, Sunday Olakunle
Civil Engineering Department, Afe Babalola University, Ado – Ekiti
Oyegokeso2002@yahoo.co.uk

ABSTRACT: A paper presentation on Water and development challenges in Nigeria can never come at a better time than now. It has been carefully written, with respect to previous publications and works done in the light of the Water Sector of Nigeria. The Nigerian Government has long considered the provision of water supply and sanitation services to be the domain of the federal, state and local governments. However, the public sector has not been successful in meeting more than a small portion of the demand for water and sanitation of residential and commercial users. Services are in critically short supply. For example, out of the 85 million people living in urban and semi-urban areas, less than half have reasonable access to reliable water supply. It is the keen interest of the writer to bring forward the various challenges of the sector and probable solutions. It has been said, for the system to come alive, every mechanism of the system needs to be forthcoming. The Government should be the Referee; the policy making and implementing arm, the various investors and finally the populace, who doubles as the costumer and also the consumer. It is the expectation this work would generate the interest of the various Organs of the Nigerian Government, Water Sector Investors, NGOs, External Partners and the entire populace that we need to play our individual role to make the Sector a worthy one, thereby eradicating poverty, unemployment and various ills that seems to be contributed by this vague negligence and mass failure.

Key words: Water, Development, Challenges, Government, Nigeria.

1. INTRODUCTION

Water in this context needs no definition. It is crucial for human existence. An adequate supply of "clean" water is one of the most basic human needs – and one that is not met for more than half of the world's population. According to various estimates, one-half to two-thirds of the world's population does not have access to adequate quantities of safe drinking water yet two - third of the surface of our globe is covered with water. Food supply and adequate nutrition also depend on adequate water. Apparently there is enough water around when we take the mighty rivers and the oceans into consideration but it will be a gross mistake to take the supply of water for human use for granted. Many developing nations not only have population and pollution issues, but also serious water related problems. Nigeria, African's most populated country, with, about 150 million people, has limited water supply not only in the arid to semiarid north, but also in the southern region along the Atlantic Ocean.

Development on the other hand can be defined as "process of change: the process of changing and becoming larger, stronger, or more impressive, successful, or advanced". Vilanilam (1979) rightly observed that ''development means different things to different people (and that) its meaning varies according to the changes occurring in the social, economic, political, cultural, ethical, scientific and technological value of a given society.''

- "The ability of an individual to have greater control over his environment and increased realization of the values of the society, its political destiny and self-discipline" (Inayatullah, 1967)

- "A widely participatory process of social change in the society, intended to bring both social and material advancement (including greater equality, freedom and other valued qualities) for the majority of the people through their gaining control over their environment "(Rogers, 1976).

We are good at identifying problems. But the challenges are not as many as we think. All the challenges can be said to be:

- Political
- Financial
- Attitudinal

The main problem confronting Water Development in Nigeria is lack of Absolute Planning and its Implementation. We all know that to fail to plan is to plan to fail.

The scenario in our country still deserves attention. The facilities are fast deteriorating, our rivers are in deplorable conditions and the ever increasing population is all making water problems bigger every day. From north to south, west to east, millions of people in urban and rural areas still lack access to safe drinking water. In many cases, they do not have access because the system does not reach them, because the municipality does not extend water to their areas or they cannot afford a house connection. In the light of inaccessibility to safe water supply, the people then have to turn to other sources and they have to go through a third party who delivers in small quantities and charge a lot more money for it. In fact the poorest pay the highest prices for water and often polluted and contaminated water. The problem is perhaps most acute where people still needs large quantities of water for agriculture. It is a common sight nowadays to see the population in urban and rural areas searching endlessly for water because of one problem or the other.

For the sake of this work, the focus shall be limited only to Social and Economic Development of Water in Nigeria.

2. WHERE WE ARE

Water coverage rates in Nigeria are amongst the lowest in the world. Access to an improved water source stagnated at 47% from 1990 to 2006, but increased to 54% in 2010. In urban areas access actually decreased from 80% to 65% in 2006, but it then recovered to 74% in 2010. However, in urban areas access to standpipes substituted to a large extent to piped water access. The statistics on access to water conflicting due to divergent definitions, indicators and methodologies applied by different agencies. There is hardly any sector monitoring.

According to the World Bank, in 2010 water production facilities in Nigeria were "rarely operated to capacity due to broken down equipment, or lack of power or fuel for pumping." The operating cost of water agencies is pushed up by the need to rely on diesel generators or even having to build their own power plants, since power supply is erratic. Equipment and pipes are poorly maintained, leading to intermittent supply and high levels of non – revenue water.

As of 2000, about 80% of all government-owned water systems in small towns were non-operational. Through investments and capacity building for communities, the functionality of water points can be increased in the short term. For example, in focus communities supported by UNICEF in Kwara State, functionality has improved from 53% to 98%, and in Kebbi State the functionality of boreholes has improved from 12% to 88%. However, it is not clear what the long-term functionality of these facilities is.

Supply by cities

- Nigeria's capital Abuja receives part of its drinking water from the lower Usuma Dam. The Guara Dam, which was under construction in 2012, is expected to

further increase water supply to Abuja and to mitigate against the risk of drought.

- Nigeria's largest city Lagos is surrounded by water from the sea and a lagoon. Its clean water supply in the city is about 81.32%. But since the raw water in the lagoon is too polluted, the city gets its water from Ogun River and Owo River. The city's oldest water treatment plant, located in Iju on the Ogun River, was built in 1910. It was expanded in stages to 45m gallons per day. Another smaller plant was built at Ishashi on the Owo River in the 1970s. The biggest plant so far was commissioned in 1991 in Adiyan with a capacity of 70m gallons per day. It also draws from the Owo River. There are also seven mini-waterworks drawing from local sources with a combined capacity of 18m gallons per day.
- In Makurdi, the capital of Benue State, only about 25-30% of the populations are served by a crumbling network and inhabitants fetch raw water in buckets from the polluted Benue River. In 2008 the construction of a water treatment plant was left unfinished and officials were unable to account for USD 6 million. As of 2012, a water treatment plant was under construction as part of the Greater Makurdi Waterworks Project.
- Kano is supplied from local rivers and from groundwater which is over-exploited. Public water supply is deficient, so that private water selling points are multiplying and generate profits for their private operators.
- Kaduna receives drinking water from the Kaduna River.
- Ibadan receives its drinking water from Eleyele dam.

Responsibilities

- **Federal Government:** The Federal Ministry of Water Resources, which had been part of the Ministry of Agriculture for a period until 2010, is responsible for large water resources development projects and water allocation between states. There are 12 River Basin Development Authorities under the Ministry, responsible for planning and developing water resources, irrigation work and the collection of hydrological, hydro-geological data. They also provide water in bulk to cities from dams. A Utilities Charges Commission was established in 1992 to monitor and regulate utility tariffs, including those of State Water Agencies. However, as of 2000, it was not functional.
- State Governments: Responsibility for potable water supply is entrusted to State Water Agencies (SWAs) or state water departments in the 36 Nigerian states. The SWAs are responsible to their state governments, generally through a State Ministry of Water Resources. SWAs are responsible for urban water supply and in some states also for rural water supply. As of 2000, 22 states had separate state rural water and sanitation agencies, mostly set up to implement a UNICEF program. In 2010, Lagos state set up a State Wastewater Management Office under the Lagos State Water Corporation. It took the responsibility for sanitation over from the State Ministry of Environment.
- Local Governments: The Local Government Authorities (LGAs), of which there are 774, are responsible for the provision of rural water supplies and sanitation facilities in their areas although only a few have the resources and skills to address the problem. Only few LGAs have rural water supply divisions.
- Communities: In some communities in rural areas, water and sanitation

committees (WASCOs) have been formed to operate and maintain water facilities. These committees are supposed to collect their own water tariffs. Donors such as the African Development Bank have set a requirement that at least 30% of members of WASCOs must be women. In 1993 the Government committed itself to strengthen community participation in rural water supply in a policy document. As of 2000, the policy had n ot been disseminated or implemented in all government- or donor-financed programs.

- **Civil Society:** Nigeria's Water sector has a vibrant and dynamic civil society implementing several initiatives to address sectorial crisis. The Society for Water and Sanitation (NEWSAN) is the umbrella network of WASH NGOs, while the Water and Sanitation Media Network www.wash-jn.net comprises Journalists reporting the sector. A leading non-governmental organization in the sector is Bread of Life Development Foundation which manages the eWASH webblog www.assemblyonline.info on water and sanitation news in Nigeria.

Financial aspects

Flat rates for unmetered connections: Most Nigerian water supply connections are not metered. The metering ratio varies from 7% in Katsina to 16% in Kaduna and 24% in Lagos in 2007. Unmetered customers are charged a flat rate independent of consumption. For unmetered residential customers the monthly flat rate was USD 3 in Lagos, USD 5 in Katsina and USD 11 in Kaduna. In Yobe state it was only Naira 100 (USD 0.60) per month, the lowest level in the country according to the Yobe State Water Corporation. The tariff revenues covered only 2% of the costs of supplying water.

Tariffs for metered connections: Metered customers are either charged a linear tariff, as it is the case in Lagos, or an increasing-block tariff, as it is the case in Katsina and Kaduna. Under the increasing-block tariff, the tariff per cubic meter increases stepwise with consumption beginning at a consumption of 30m3 per month with a total of 3 to 6 blocks. The residential tariff for the first block of consumption is USD 0.19 per m3 in Kaduna and USD 0.44 per m3 in Katsina. Tariffs for commercial and industrial users are higher. The average water tariff for metered customers was Naira 50 per m3 (USD 0.30) in Oyo state and Naira 16 per m3 (USD 0.10) in Taraba state in 2009.

Tariff collection: Outdated information systems and inconsistent billing practices cause additional revenue losses. The revenue collection rate is very low. In some areas it is less than 10% of billed amounts. There are significant arrears, particularly from government agencies.

Tariff adjustments: Each state sets its own water tariff. Tariff adjustments need to be approved by the State Executive Council through a lengthy procedure. Being unable to cover their operating costs, and unable to secure regular revisions of the tariff, the State Water Agencies receive financial assistance from the state governments. The subsidies are inadequate and unpredictable.

Vendor prices: Surveys of street vendors in Lagos, Kaduna and Katsina show that they charge as much as 20 times more than the State Water Agencies. The poorest families pay more per month than some of the richest who can afford a connection. The amount

paid, for a very limited volume of supply from private water vendors, can be four to ten times that of one month's much larger volume of tap supply.

3. INVESTMENTS IN THE WATER SUPPLY SECTOR IN NIGERIA

For Nigeria to meet the Millennium Development Goal for water supply by 2015, the country needs to invest approximately N215 billion (USD 1.3 billion) annually. Nigeria is currently investing not more than N82.5 billion (USD 0.5 billion) into the sector. Much of these investments are needed to rehabilitate infrastructure that has not been properly maintained. It is not clear if the estimate includes sanitation.

While all three government levels are supposed to participate in financing water and sanitation investments, local governments often do not have the resources to do so. State and federal levels also provide only limited funding. Thus, most public water and sanitation investments in Nigeria are financed by external partners.

External cooperation

The most important external partners in the Nigerian water supply and sanitation sector are the African Development Bank, the European Union, Japanese JICA, UNICEF, USAID, the NGO WaterAid and the World Bank. The African Development Bank and the World Bank provide loans to the government; the European Union, JICA and USAID provide grants to the government; UNICEF and WaterAid receive grants from governments and donations from the public to implement their projects in cooperation with, but not through the government.

- **African Development Bank:** In February 2012 the African Development Bank approved a USD 100 million soft loan to improve water and sanitation in the northern city of Zaria. The project will be implemented by the Kaduna State Water Board. It also approved an Urban Water Supply and Sanitation Project in the cities of Ibadan and Jalingo in Oyo and Taraba States in 2009. Both urban projects include the installation of water meters, hygiene promotion as well as the construction of toilets at schools, health clinics, market places and parks. Unlike the newer project in Zaria, the older project supports reforms at the state level to separate regulatory from operational functions, and the introduction of public-private partnerships. The AfDB also finances a Rural Water and Sanitation projects in Yobe and Osun States approved in 2007. The project aimed to increase the functionality of rural water supply and sanitation facilities in the two states, estimated to be below 50% in 2006, to 100% in 2012. The AfDB finances the entire costs of these projects without requiring a contribution by the Nigerian state. The AfDB has invested USD 905 million in the sector since 1971.
- **China:** In 2005 China signed a grant agreement with Nigeria to drill 598 boreholes in 18 states and Abuja. The amount of the grant and the implementing agency were not specified.
- **European Union:** The EU supports a Water Supply and Sanitation Sector Reform Programme in six states (Anambra, Cross-River State, Jigawa, Kano, Osun and Yobe) with 87 million Euros grant funding. The Nigerian state, at all three levels of government, and local communities are expected to contribute another 31 million Euros.

- **JICA:** JICA provides grants for rural water supply and sanitation in three states, Oyo, Kano and Yobe.

- **UNICEF:** UNICEF has supported rural water supply, sanitation and hygiene in communities and schools across the country since 2002. Its interventions have been financed by DFID and the European Commission. A total of 6,960 new safe water sources (boreholes, dug wells and protected springs) and over 19,100 household latrines have been constructed. Over 400 schools have been provided with latrines with separate provision for boys and girls and hand washing facilities.

- **USAID:** USAID supports rural water supply, sanitation and hygiene education in Northern Nigeria, in 46 communities in Bauchi, Kano and Sokoto States. USAID is partnering with Nigerian non-governmental agency Women Farmers Advancement Network (WOFAN) and WaterAid.

- **WaterAid:** WaterAid, a British NGO, promoted the integration of sanitation, water supply and hygiene education using a community-based approach and low cost appropriate technologies. It works closely with Nigerian NGOs, including the Benue NGO Network (BENGONET), Society for Water and Sanitation in Nigeria (NEWSAN), Justice Development and Peace Initiative (JDPI), Community Based Development - NGO (CBD-NGO), Women Empowerment in Nigeria (WEIN) and the Bol Development Association (BOLDA). It works in over 100 communities in the stats of Bauchi, Benue and Plateau. It has developed a vulnerability ranking, based on criteria suggested by communities themselves, to help communities in selecting themselves where resources should be allocated. Such a participatory and transparent decision-making process is of particular importance in a context of low trust and poor governance.
- In January 2012 it has been tasked by the government with the task of facilitating monitoring and evaluation of government water, sanitation and hygiene projects in Nigeria. According to the Minister of Water Resources, President Goodluck Jonathan is interested in an independent assessment of sector performance and NGOs are well placed to undertake this task.
- **World Bank:** The World Bank has completed seven water projects since 1985 and had three on-going projects in 2010. Total investment for the 10 projects is about US$1.4 billion. The First Urban Water Reform Project (US$120 million) targets 13 towns in the states of Kaduna, Ogun and Enugu. The project also aims to

establish state water policies, and to foster the engagement with the private sector. The second Urban Water Reform Project worth US$200 million supports the extension of the piped network in Calabar, and the rehabilitation of water treatment plants and distribution systems in Lagos as well as another three towns in Cross River State. Under a Privatization Project, the Federal Capital Territory (FCT) Water Board is being assisted with US$25 million. In 2012 the World Bank approved a US$ 400 million National Urban Water Sector Reform Project for Lagos, Kaduna, Ogun, Enugu and Cross River State.

- Nigeria's National Water Supply and Sanitation Policy, approved in 2000, encouraged private-sector participation and envisages institutional and policy reforms at the state level. However, little has happened in both respects. As of 2007, only four of the 37 states - Lagos, Cross River, Kaduna and Ogun States - began to introduce public-private partnerships (PPP) in the form of service contracts, a form of PPP where the responsibility of the private sector is limited to operating infrastructure without performance incentives. While the government has a decentralization policy, little actual decentralization has happened. The capacity of local governments to plan and carry out investments, or to operate and maintain systems, remains low despite efforts at capacity development. Furthermore, the national policy focuses on water supply and neglects sanitation.
- In 2003 a "Presidential Water Initiative (PWI): Water for People, Water for Life" was launched by then-President Olusegun Obasanjo. The initiative had ambitious targets to increase access, including a 100 percent water access target in state capitals, 75 percent access in other urban areas, and 66 percent access in rural areas. Little has been done to implement the initiative and targets have not been met.
- In 2011 the government voted in the United Nations in favor of a resolution making water and sanitation a human right. However, it has not passed legislation to enshrine the human right to water and sanitation in national law. The country is not on track to reach the Millennium Development Goal for water and sanitation.
- Since 2008 community-led total sanitation has been introduced in six states, including in Cross River State, with the support of UNICEF and the EU. While not being a national policy, apparently this grass-roots initiative has met with some success. More than 17,000 latrines have been built in 836 communities, and more than 100 of these communities have attained the goal of being declared free of open defecation.

4. BENEFITS FOR THE POPULACE

WATER DEMAND AND USE

Water use falls into several major classes, each of which is associated with certain quantity and quality requirements. These classes include water for drinking and cooking, waste disposal, crop production, aquaculture, livestock, industrial use, recreational use, navigational uses, and ecological values such as survival of natural lake, riverine or wetland communities. The quantity of water required for activities within each of these classes is influenced mainly by variables such as climate and precipitation.

Table 1 gives a breakdown of minimum water requirement for an average Nigerian; a total water volume of 80 litres per head per day is required to sustain a moderate living standard.

Usage Items Water Volume Required (litres/head/day)

Cloths washing	10
Drinking and Cooking	5
Utensils	5
Bathing	20
Body washing	5
House cleaning	5
Water closet (WC)	20
Miscellaneous	10
Total	80

Table 1: Minimum Domestic Water Requirement (Martins, Idowu et al., 1998).

The proportion of total water used for any specific purpose is controlled by socio-economic conditions, tradition, culture and water availability (Fig. 18). Agriculture-based economies, such as Nigeria's, shall require up to 80% of available water for agriculture, and 10% each for industrial and domestic purposes.

In an urban setting, the water used to generate electricity may be used for irrigation down a river.

The same water might be used yet again as it is withdrawn for a public water supply or an industry. Only a few uses actually consume water (i.e. remove it from the system so that it is no longer available to down-stream users). Irrigated agriculture, for example, consumes 55% of the water it uses. The consumptive nature or irrigation, therefore, limits many simultaneous users of the same resource. Municipal facilities such as cities consume 21% of water they withdraw. In contrast, industry, which withdraws very large quantities of water, consumes only about 3% of that water, although the quality of the water returned to the system may change. Unless unacceptable changes in quality occur, many industrial users could benefit from same water resource.

Domestic water use

The human needs about 2-10 litres of water per day for normal physiological functions, depending on climate and workload. About 1 litre of water is provided by daily food consumption. The total water consumption per capita per day is determined by a number of factors, such as availability, quality, cost income, size of family, cultural habits, standard of living, ways and means of water distribution and climate (World Bank Water Research Team,
1993).

Industrial Water Uses

Most industrial water is used for cooling, although many industries consume large quantities of water in their manufacturing practices. Industrial production requires enormous amounts of water. Countries that prioritize industrial production, therefore, face numerous trade-offs in areas where industrial requirements compete with other supply needs

Agricultural Water Uses

Agriculture is by far the largest water user in the world today. Vast areas of the world are already irrigated and irrigation development continues to increase in an attempt to meet the world's growing food demands. Much of the water applied to agricultural crops is consumed through either evaporation or plant growth. Because irrigated agriculture occupies such a large land area, the quantity of water consumed is dramatic: irrigated agriculture in China, for example, consumes a quantity of water each year equivalent to one and a half times the mean daily flow of the River Niger. Water consumption rates range between 5-10,000 m^3/ha/yr depending on the crop, temperature and length of the growing season.

Cost of water

Traditionally, water services have been regarded as one of governments many responsibilities – it must be supplied regularly and free of charge. In some parts of the country, inhabitants still do not understand why they must be made to pay for this "free gift from heaven". The development, distribution, and treatment of water include

costs for design, initial investments, and operation and maintenance of the service.

Putting a price to water is a reflection of water's economic value and it affects water use efficiency; it is a key way to improve water allocation, discourage wastage, and improve conservation. However, the current practice whereby State Water Corporations charge fixed rates for services rendered only intermittently does not encourage consumers to pay. In most urban areas, there is scarcely a household that does not have, or nurse the ambition to have, an alternative source of domestic water supply by constructing a hand-dug well or a borehole. State

Water Agencies should consider the introduction of water meters, particularly in urban centers; this simply act of measuring consumption can help people control the actual amount of water they use and/or waste; it is also a more accurate, equitable and just way for the Water Agencies to commensurately get paid for services rendered.

5. LIBERALISATION OF WATER SUPPLY ADMINISTRATION

There are a number of challenges facing the sector to the extent that the sector performance has been below expectation. These challenges can be categorized into financial, commercial, operational and institutional challenges. It is worthwhile to throw more light on these challenges to know what each contributes to the sector problems.

- **Financial Challenges**

The sector is in critical need of funds to finance the required investment on water supply facilities development and rehabilitation. Most of the investments in the last decade have mostly come from international finance and donor agencies and which are by far below the funds requirement by the sector. The accompanied local funds from the governments are also in short supply. The result is that over =N=400 billion is presently required to meet the investment gaps for urban, small towns and rural water supply and sanitation.

Revenue generation by water supply agencies that would have complemented the funds received to the sector is handicapped by (a) very low and politicised tariff (b) inaccurate billing and collection (c) high and steadily increasing operating costs

- **Commercial Challenges**

Most Water Agencies are not commercially oriented. Because of the subvention they enjoy from government which in most cases is grossly inadequate, they tend to treat water users as consumers instead of customers. Hence, complaints from the customers are usually not given the priority they deserve which in turn makes the customers to retaliate by not paying their water bills. This situation is also further compounded by dearth of accurate customer's data by most agencies which limit their commercial operations to billing and collection that are based on incomplete and at times inaccurate customer's data.

- **Operational challenges**

Most Water agencies are operating in a very constrained environment using facilities whose design capacities cannot be attained because of malfunctioning equipment and plants. Maintenance is frequently under-performed due to financial constraint, lack of spares, lack of expertise and general lack of motivation on the part of the operating staff. The low reliability of power supply from NEPA is also another major factor affecting the operations of most water agencies. The regular power outages require the agencies to rely on standby power generation which is very expensive. The consequence is that the agencies reduce their hours of operations to match the available revenue.

Institutional Challenges

There are challenges facing the three levels of government with respect to provision of water supply and sanitation. At the federal level, there are still problems relating to sector coordination, monitoring and evaluation. Also, the legal and regulatory framework that would provide the appropriate environment for all the stakeholders to have a stake is still a challenge.

At the state level, despite the fact that the edict that established the SWAs provide that they operate as autonomous entities, in practise they operate like government departments closely integrated into the civil service. This is due to their dependence on subvention from the state governments to cover significant part of their operating costs. There is also a high turnover of the chief Executives and senior staffs are often transferred from the agencies to other government departments and vice versa leading to managerial instability. The pay scales of the agencies are similar to the civil service which often leads to loss of competent and motivated professional staff, especially in finance and accounting, to the private sector. At the local government level, the major challenge is lack of competent staff for water supply and sanitation activities.

PAST EFFORTS TO ADDRESS CHALLENGES IN THE SECTOR

The most outstanding and notable efforts that addressed some of the challenges in the sector came under the recently completed national water rehabilitation project.

The project was sponsored with a loan from the World Bank and counterpart funds from both the Federal and State Governments. The funds were not only used to rehabilitate 250 water supply schemes nationwide but several efforts were made under the institutional development components of the project to address the challenges through the following activities;

- Manpower assessment and training needs analysis;
- development of operational manuals for billing and collection, accounting and budgeting, stores procedures, preventive maintenance;
- Engagement of Development Facilitators to implement a & b above as well as facilitating the operations of the water agencies to meet the set targets for 2 years;
- Engagement of technical consultants for customers enumeration, mapping,
- water audit and operation and maintenance improvement;
- Engagement of financial consultants for financial and accounting system improvement, purchasing and supply procedures improvement, billing and collection improvement and fixed assets revaluation;
- Establishment of national water supply training network under the National Water Resources Institute, to address the manpower problems of the sector; and
- On-the-job training by contractors and consultants that were engaged for both physical works and institutional development.

In spite of all the above efforts under NWRP, it was established at project closing that the institutions responsible for the operations and maintenance are still very weak to the extent that some of the water supply systems that

were rehabilitated and put into operations under the project were already due for rehabilitation. It thus became clear that the problem of the water supply and sanitation sector goes beyond mere provision of funds for rehabilitating and/or expanding water supply infrastructure. Raising funds and efficiently and effectively utilizing them requires fundamental reform of present sector practices, including institutional reform and new approaches to incorporate the private sector more systematically. These views was not only accepted but were openly expressed by the Chief Executives of some State Water Agencies (SWAs) with the backing of their Governors at two conferences organized by the Ministry in February and July 2000.

The reform being envisaged is intended to improve the existing structural defects, abolish abuses or give up malpractices in order to improve service delivery in the water supply and sanitation sector.

DEVELOPMENT OBJECTIVE OF REFORM INITIATIVES

The objective of the water supply and sanitation reform initiative is to foster sustainable water supply to all the socio-economic groups in the country through optimum Private Sector Participation (PSP) in the operation, maintenance and management of, and investment in water utilities.

PRIVATE SECTOR PARTICIPATION CONCEPT

It is necessary to explain the concept of private sector participation to make it clear and thus avoid the confusion and ambiquity associated with it. The concept includes a wide range of PSP menu that will ultimately be examined in order to determine the best option for each utility for optimum result. Classically, for a weak utility, it will entail a journey from a less stringent option through aggressive pursuit of improvement up to the ultimate divestiture.

To provide an insight into the possible options that are available, a brief description of the options on the PSP menu is as follows:

(i) Service Contract.

A service contract exists where the public utility hires a private organization to carry out one or more specific task or services for a relatively short period of time, usually between 1 to 3 years. The public utility pays the organization a predetermined fee. The benefits of service contracts include substantially low private sector risk and investment. Service contracts also allow a finely targeted injection of technical talent and training of staff. On the other hand, service contracts rarely improve performance where overall management is weak.

(ii) Management Contract.

In management contract, government (owner of the public utility) awards a private organization responsibility for all operations and maintenance, billing and collection and other management activities. The public sector remains responsible for investment. The private organization is paid a management fee to operate and manage the utility. Often the fee is pre-determined and may be performance based.

The average length of such a contract is usually three to five years. Management contracts are particularly helpful in introducing technological innovations, injecting skills into public utility administration functions, and allowing both parties government contractor and PSP the opportunity to gather data where insufficient information bars a more investment-driven PSP.

(iii) Lease or Affermage Contract.

For a lease or affermage contract, a private organization leases public assets and maintains and operates them in return for the right to revenues generated by the use of public assets. The organization pays lease fees to the public sector entity from its cash flow

generated by billing utility customers, while the public sector controls major capital expenditures. Closely related is the hybrid lease in which the PSP operator takes responsibility for some investment requirements, though not major capital projects or rehabilitation. Lease contracts are usually for duration of between 10-15 years. The utility facilities are returned to the Government at the end of the contract.

(iv) Concession.

In concession contract, government awards the private organization the full responsibility for the delivery of infrastructure services in a specified area for a period (usually 20 – 30 years), including all related operation, maintenance, billing and collection and other management activities. The concessionaire is responsible for any capital investments.

(v) Build Own Transfer (BOT).

Under a BOT contract, a private organization brings private investment into the construction of new infrastructure plants. The contract usually has duration of 20 to 30 years. A BOT is typically used where significant new bulk water supply is required. The private organization recovers its investment costs by operating the infrastructure during the time of the contract through tariffs from the end-users or an off-take agreement with the public sector to recover costs.

(vi) Divestiture.

Divestiture is the extreme of private sector participation. The government sells the utility assets to a private organization which is responsible for all aspects of providing the service within its service area (including operation and maintenance, billing and collection, investment, etc.).

PUBLIC-PRIVATE PARTNERSHIPS (PPP)

Public-private partnerships are frameworks for integrating complementary interests and joint efforts of the public and private sectors in order to address the water supply problems in our communities. It is clear from the PSP concepts presented above (paragraphs 5i-vi) that all except the last concept requires the joint efforts of the public utilities and the private partners. Water supply and sanitation sector reform founded on the tenets of the private sector participation would therefore not undermine the interests and position of governments and those of water utilities but complement them.

CONCLUSIONS AND RECOMMENDATIONS

Water is a finite and vulnerable resource, essential to maintain life, environment and development. It is intimately related to agricultural and rural development. Land is indispensable for agricultural production, yet it is water that determines success or failure.

Traditionally, water resource management has been one-dimensional, with actions designed to address single-purpose needs such as hydropower, irrigation, or navigation. A resource-sensitive approach is needed, which takes into account all aspects of demand and supply and aims for efficiency and long-term sustainability of the resource. Managing water resources should take place at the community level, where the needs and constraints are most felt.

Water resources affect and is affected by all other forms of land use – agriculture, industry, environmental needs- and therefore must be practiced at levels where effective interaction between these sectors can be achieved.

The recognition that water has an economic value has increased the relevance of water managers in the Nigerian society and this is also driving integration in water management. Integration, in this sense, is only achievable through a process of joint planning, programming, and implementation, in order to

optimize the utilization of the resources through the application of social, economic, political and technical instruments. The recognition of the hydrological drainage basin as the most appropriate unit of reference, through operation of the River Basin Authorities, is commendable, **but Government should remain true to the initial philosophy that defined the role and functions of the Authorities**.

Proffered Solution to Water Challenges

- The government, the municipalities, the private sectors, non - governmental organizations and the general public have responsibilities in provision of safe drinking water and minimum sanitation. To provide clean safe water, the private sector, public sector and NGOs must take the lead in providing the service, though the government remains the key actor in the solution.

- To meet demands for water for all in Nigeria, there must be a continued water policy implementation. It is expected that in the next four or five decades, many countries around the will experience severe water shortage. Therefore it calls for urgent actions from all of us to achieve the "aim of water for all" and to attain national water security.

- Aware of this enormous challenges, and the pivotal place of water resources in our country's economic development, this forms the resolves of this organization to participate actively in providing access to safe drinking water for all and appropriate sanitation as laid down by the
- United Nations Our organization wants to play a leading role in this direction, through self and assisted water projects, awareness campaign, advocacy, training and capacity building, and research.

- Available data and coverage estimates show that improved drinking water and sanitation coverage rates are low in Nigeria.
- Nigeria needs to revisit sector investment levels and patterns, and to mobilize civil and political commitment to meet WASH sector demand of the population.
- Government as a driver of change should strengthen the State and Local Government councils so that they can fulfill their mandate in the water and sanitation sector.
- There is need to enhance co-ordination and institutional collaboration in the water and sanitation sector to sustain gains of the past and maximise benefits of contributions of sector partners.
- There is need for a joint sector review to enable the sector partners take stock of the country development and strategise for accelerated progress if we are to meet the MDG targets on water supply and sanitation.

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