



**RESEARCH ARTICLE**

**INSTITUTIONAL FRAMEWORK/AGENDA FOR SUSTAINABLE RURAL WATER SUPPLY AND  
SANITATION IN NIGERIA**

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**ABSTRACT**

The water supply and sanitation in Nigeria has come under increasing focus since independence, but particularly during the last 20 years when the country participated in the global efforts and initiatives aimed at addressing the problem of low access to safe water and sanitary means of excreta disposal. In Nigeria, the inadequacy of safe water and sanitation services is manifested in the prevalence of water and sanitation related diseases. For example, diarrhea, which results from poor sanitary/hygiene habits and consumption of water of poor quality, is the second main cause of infant mortality, after malaria, and the third main cause of under-five mortality. There is therefore, no doubt that the drive for poverty reduction in Nigeria recognizes water supply and sanitation as an important component. This is so because water supply and sanitation cuts across and affects several sectors of the economy, including agriculture, rural infrastructure development, education, industrial development and indeed all the sectors of development that require the use of water and the management of sanitation for the benefit and welfare of human beings. Many entities are involved in rural water supply and sanitation. These institutions employ their own implementation strategies and involve individual communities to varying degrees. Because of the inadequacy of the approach adopted by these organization and agencies, expected service delivery has proceeded inconsistently and therefore could not be achieved. Sadly enough, despite the robust initiatives and funding of the sector (both internal and external), the sector has suffered from poor coordination, lack of clear policy direction, lack of focus in terms of goals and objectives which resulted in the nation's inability to achieve full coverage of the rural population with safe water and improved sanitation services. This paper therefore considers the water supply and sanitation situation in the country and the challenges facing the sector. Furthermore, the paper calls for institutional reforms and review of policy targets, define key elements for the development of action and investment plans as well as provide some guidelines in order to minimize duplication and maximize effectiveness. The paper also suggested strategies and viable framework/agenda for sustainable water supply and sanitation delivery towards achieving the Millennium Development Goals (MDGs).

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**INTRODUCTION**

The drive for poverty reduction in Nigeria recognizes water supply and sanitation as an important component. Water is needed in all aspects of life (UN-Agenda 21, 1992). The development of the sanitation component of the sector has significantly lagged behind water supply. Generally, this is due to several factors such as inadequate sector capacity at all levels for managing the sanitation development, government agencies clamoring for the ownership of sanitation but not the responsibility for funding it, policy development in the sector is more advanced for water supply than for sanitation, amongst others. It is regrettable to note that Nigeria is still

struggling to attaining a reasonable high level of potable water supply nationwide (Oteze, 2002; Tijani, 2006). Prior to the 1980s, most water supply projects focused on improvement on water quality alone for the reduction of water related diseases. Experience gained from many projects implemented especially during the International Drinking Water Supply and Sanitation Decade (IDWSSD), (1981–1990), which established target of universal coverage was followed immediately by the World Summit for Children (1990), which established goals of universal access to safe water and sanitation and complete eradication of Dracunculiasis (Guinea worm). Following this, the National Programme of Action (NPA) for the Survival, Protection and Development of the Nigerian Child envisaged achievement of 100% coverage in water supply and sanitation by the year 2000 but which could not achieve its targets. Despite these initiatives, by the most

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conservative estimates, the country still recorded less than 50% access to safe water and sanitation coverage. According to Ajayi (2006), institutions at the local level of government have the ultimate responsibility for service delivery to consumers. This is also the area where the greatest breakdown has occurred in the water institutions of developing countries. It is envisaged that the adoption of user-accountable organizations at the local level would guarantee/ lay the proper foundation for improving the effectiveness of water institutions in Nigeria. To achieve this goal, an assessment of the institutional capacity and development of a holistic framework needs to be done and this will require the major effort by all concerned stakeholders, government agencies, NGOs, the private sector, special external support agencies (donor and lending institutions) at all levels and the rural communities will be required. In this paper therefore, peculiarities, challenges, and guidelines for rural water supply and sanitation as well as policy strategies are examined in the context of sustainable services.

### **Rural water supply and sanitation in Nigeria: The journey so far**

In the context of the Rural Water Supply and Sanitation (RWSS) programme, water supply means the delivery of 30 litres per capita per day of safe water within 250 metres of the community and serving about 250 – 500 persons per water point. Safe water here means water that meets the National Standard for Drinking Water Quality for Nigeria. On the other hand, sanitation refers to the disposal and management of human waste or excreta, sometimes diluted with water as sewage. It also includes drainage and disposal of sludge and solid waste (or refuse). Rural communities, in the context of the water supply and sanitation sector in Nigeria, have populations less than 5,000 and usually do not have electricity, pipe borne water or tarred roads. The National Standard of Water Consumption for rural areas is currently 30 litres per capita per day. Data from two major national surveys (Multi-Indicator Cluster Surveys (MICS), (1999), showed that access to safe water and sanitation is put at less than 50% for rural areas. Specifically, the figures are put at 48% and 44% access to safe water and sanitation, respectively. Oyebande, (1990) and Babalola, (1990) noted that the total domestic water need was about 115l/day per capita in modern households for drinking, cooking, and other domestic personal hygiene.

In the last 20 years, there have been serious efforts at addressing rural water supply and sanitation in Nigeria. Some of the initiatives that emerged during the period includes the following: The National Borehole Programme, DFRRI/RUWATSAN Programme, UNDP-World Bank Projects, Department for International Development (DFID) Water and Sanitation Projects, National Water Rehabilitation Programme, Petroleum Trust Fund (PTF) Water Supply and Sanitation Projects, FGN/UNICEF Water and Environmental Sanitation (WES) Programme, Water Supply Projects of the Agricultural Development Programmes as well as intervention programmes on improved National access to water supply and sanitation. Sadly enough, except for the Joint Federal Government of Nigeria and UNICEF WES Programme, which has consistently been implemented throughout the 20 years of the Decade and post decade period to date, most of these programmes and projects were interventionist, sporadic, short-

lived, pilot or demonstrative in nature. Despite these bold and elegant initiatives, there has not been a comprehensive National Rural Water Supply and Sanitation Programme framework to ensure coordination, streamlining and lending of focus and thrust to all these initiatives. The Rural Water Supply and Sanitation Sector Strategy and Action Plan, developed in 1992, after a major review, did not lead to the planning and implementation of a National Rural Water Supply and Sanitation Programme. Not until the year 2000, National Water Supply and Sanitation Policy, which defines policy objectives and targets for the entire sector was formulated. The first edition of the policy needs to undergo further review to provide more balance between Water Supply and Sanitation.

### **Policy framework/guidelines in the context of the international development targets and the millennium development goals**

The need to urgently lend coherence to the policy framework/guidelines for rural water supply and sanitation has become increasingly important (Nwankwoala and Mmom 2008; Nwankwoala, 2009; Okeke and Uzoh, 2009). The International Development Targets (IDTs) and the Millennium Development Goals (MDGs) which were agreed at the Second World Water Forum and the Millennium Summit envisaged that, by 2015, the reduction by half of the proportion of people without access to hygienic sanitation facilities and adequate quantities of affordable and safe water and, the attainment of water, sanitation, and hygiene for all by 2025. There is no gainsaying the fact that the International Development Targets (IDTs) and the Millennium Development Goals (MDGs) as well as the National Water Supply and Sanitation Policy objectives, targets and safe water consumption standards have implications for the National Rural Water Supply and Sanitation (RWSS) programme. The National Water Supply and Sanitation Policy which was developed and issued in the year 2000, stipulates the main objectives of the sector to be the provision of sufficient potable water and adequate sanitation to all Nigerians in an affordable and sustainable way through participatory investment by the three tiers of government, the private sector as well as the beneficiary. In this context, the specific elements of the policy objectives are:

- increase service coverage for water supply and sanitation nationwide to meet the level of socio-economic demand of the nation in the sector;
- Ensure good water quality standards are maintained by water supply undertakings;
- Ensure affordability of water supply and sanitation services for citizens;
- Guarantee affordable access for the poor to the basic human need level of water supply and sanitation services;
- Enhance national capacity in the operation and management of water supply and sanitation undertaking;
- Privatize water supply and wastewater services (where feasible) with adequate protection for the poor;
- Monitor the performance of the sector for sound policy adjustment and development for water supply and sanitation;

- Legislations, regulations and standards for water supply and sanitation; and
- Reform of the water supply and sanitation sector to attain and maintain internationally acceptable standards.

In order to consolidate, increase and sustain the above policy goals and objectives, the following must be considered: water as an economic good, participation, equity and poverty alleviation, management at the lowest appropriate level, regulatory role of government and legislative provisions.

**Water as an economic good:** Adequate and sustainable provision of water supply and sanitation services can only be feasible if water is recognized as an economic good, subject to the relation of supply and demand. This is so because the people's demand for water is a function of the price of water. Their willingness to pay for water is influenced by the level of service delivery. As the price of water depends on the cost of systems, appropriate technologies that conform to consumers' demands and willingness to pay should be adopted. Treating water as an economic good enhances financial viability, by ensuring that tariffs cover the costs of investments, operation and maintenance.

**Participation:** Increasing the coverage and quality of services to the Nigerian growing populations will require the involvement of important segment of the society that has been traditionally excluded. The private sector, NGOs and communities have a role to play in the planning, design, financing, implementation and operation of water supply and sanitation systems. Their potential for additional finance and technical expertise should be tapped. In order to ensure adequate water supply and sanitation administration reflects fundamental individual and collective interest, incentives and opportunities for significant citizen participation at all levels and at all stages of water resources development should be provided at all times (Ajayi, 2006). Other benefits derivable from participation include transparency, efficiency, and accountability to the consumers as well as self-sufficiency.

**Equity and Poverty Alleviation:** The lack of access to water and sanitation services affects the poor segments of the population. Government subsidies to the water and sanitation sector in Nigeria have in the past benefited the rich disproportionately. In addition, women bear an unfair burden, not only in performing household/domestic chores, but also in coping with-borne diseases in their families, particularly children. Thus, reforms in the sector should be in the provision of water and sanitation in an equitable manner, while balancing economic and social considerations. Appropriate target subsidy arrangement is therefore urgently desirable and necessary to ensure access for the poorest segments of the society.

**Management at the Lowest Appropriate Level:** The need to manage water at the lowest appropriate level (appropriate being key and a function of the specific conditions in the concerned areas and communities) cannot be overemphasized. This principle promotes consumer appreciation for the value of water and sanitation investments. If local conditions and demands are taken into consideration in the planning, financing, implementing and operation of water supply and sanitation systems, the sense of ownership and willingness of

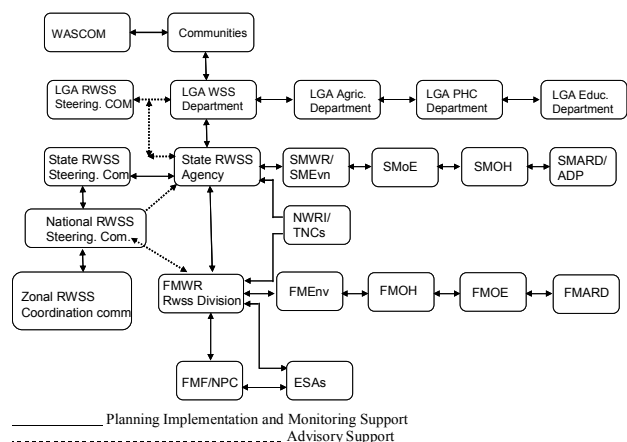
communities to share in the cost and operations and maintenance will be greatly enhanced, thereby increasing the sustainability of the system. Generally, community contributions have several benefits. For investment costs, they provide a means to direct scarce government funds to communities that really want an improved water supply and sanitation system and will maintain it; and for operations and maintenance costs, they ensure more systematic preventive maintenance, timely repair of malfunctioning water points, and more reliable service.

**Regulatory Role of Government:** This principle reaffirms the fundamental role of the government as a facilitator, setting the macroeconomic and sector policies that create an enabling environment, ensuring coordination among stakeholders as well as overseeing the performance of utilities to accomplish its socio-economic development objectives. At the same time, it precludes its intervention in the actual delivery of services which are more efficiently accomplished by autonomous entities, operating along commercial practices and enjoying incentives to perform efficiently and to increase coverage. This principle requires that the roles and responsibilities of government, utilities and other stakeholders be clearly spelt out.

**Legislative Provisions:** Adequate and enforceable legislative backing should be given to the policy for proper implementation.

## INSTITUTIONAL ARRANGEMENTS FOR RURAL WATER SUPPLY AND SANITATION IN NIGERIA

In Nigeria, there is the need for reforms in institutional and financial arrangements to create a more effective and efficient process. Ajayi (2006), stated that there can be no substitute for an elective institution, such as, the special water district organization, to improve water service delivery and advance public welfare and that the absence of such an institution in Nigeria creates a vacuum at the interface of the water resources system, and the social system, which must be filled up if the quality of water resources administration is to be improved. Consequently, efforts made in this regard will greatly improve sector performance for a total quality and result-based management. Figure 1 below summarises the institutional arrangement for the National Rural Water Supply and Sanitation Programme Management.



**Fig. 1: Institutional Arrangement for Rural Water Supply and Sanitation in Nigeria**

One of the major reasons for the current poor performance of the sector is inefficient sector management and uncoordinated approach (Ezeigbo, 2003; Goni, 2006; Hanidu, 2003; Offodile, 2009; Oteze, 2006, Nwankwoala, 2009), resulting in duplication of efforts and waste of scarce resources which could have been used in improving access to safe water and sanitation. There is therefore the urgent need to have an efficient system within the context of the present political dispensation in order to achieve the goals and objectives of the programme. In order to achieve the goals and objectives of Rural Water Supply and Sanitation, monitoring and evaluation are important. The key aspects of the monitoring and evaluation process should include:

- Review of existing monitoring systems and identification of constraints
- Identification of core indicators for monitoring
- Mobilization and/or sensitization of key actors
- Involving functionality of monitoring network at all levels
- Engendering the political monitoring will in allocation of resources and capacity building
- Testing monitoring systems through detailed Assessment, Analysis and Action.

More importantly, in order to measure the efficiency, effectiveness and impact of the sector, it is recommended that monitoring and evaluation on periodic basis should be employed as a management tool to improve sector performance of all tiers of government. Therefore, documentation to establish an effective Management Information System (MIS) for the provision of information to support planning, control and operation are needed. In addition, a regular and effective channel of communication should be established to promote mass consciousness and mass participation for effective information dissemination geared towards programme implementation.

## CONCLUSIONS

The need to improve rural water supply and sanitation as a way of meeting growing demand cannot be overstressed. This paper has looked at the challenges facing the sector and recommended guidelines/strategies and has also shown that, there is a clear recognition that, as in other sectors and as stipulated in the national policy, the government, the private sector as well as the communities need to enter into partnerships for the development of sustainable systems for the delivery of safe water and sanitation services. Following on from the above, it requires a clear understanding of institutional responsibilities and functions. This collaborative approach and partnership the paper noted is a key strategy for ensuring effective delivery of support at each level of programme implementation. More importantly, the adoption of user-accountable organizations at the local level is capable of laying a proper foundation for improving the effectiveness of water institutions in Nigeria.

Finally, water supply and sanitation legislation should serve as a policy instrument that will address pertinent issues such as, water supply, water quality monitoring/surveillance, water works regulation, equipment standardization and funding.

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