



Water Governance And Service Delivery In The Water Sector In Niger-Delta

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ABSTRACT

This work examined water governance and service delivery in the water sector in Niger-Delta. The study specifically examined the effect of Accountability, Poor financing, Mismanagement on service delivery. Relevant literature was reviewed under conceptual framework, theoretical framework, theoretical exposition and empirical literature. Theoretical framework was on Ostrom Common Pool Resource Theory, Public Choice Theory and General Systems Theory by Ludwig Von Bertalanfy. The study adopted survey research design. The population of the study comprised all the water sector in Niger-Delta of Nigeria. Sample size of five hundred and seventeen (517) respondents was selected for the study using Borg and Gall formula. Questionnaire was employed as the main instrument of data collection. Face and content validity was used in this employed to ensures validity of instrument. Internal consistency and Cronbach's alpha was employed to verify and to achieve reliability of the instrument used. The data generated were analyzed using frequency, percentage analysis, descriptive statistics, correlation analysis and multiple regression analysis. It was found responsiveness was found to had an insignificant effect on customer satisfaction in banks in banks in South East Nigeria. The study also found that Accountability had a significantly positive effect on service delivery in the water sector. Sector financing has a significantly positive effect on service delivery in water sector. Therefore, the study concludes that good water governance enhance service delivery in the water sector in Niger Delta region. The study recommended among others that In order to promote accountability, citizens should be given opportunities to participate in the planning, design and management of services. There is need for strong political will and commitment toward the development, adoption and implementation of water law in Niger Delta region to drive the process of water sector reform for accelerated service delivery.

Keywords: Accountability, Poor financing, Mismanagement and Service Delivery

INTRODUCTION

Nigeria is a federation with a population of about 150 million people (2006 national census figures). Nigeria is the 4th largest country in Africa and the continent's most populous nation. It comprises 36 states and the Federal Capital Territory. The states are further divided into 774 Local Government Areas (LGAs). 2008 National Demographic and Health Surveys (NDHS-2008) estimated Nigeria population to be about 150.6 million with 3.2 percent annual growth. The Niger-Delta region has a steadily growing population estimated at more than 30 million people in 2005, and accounts for more than 23% of Nigeria's total population. The population density is also among the highest in the world, with 265 people per square kilometre, It comprises the 6 states in the South South geopolitical zone as well as one from the south west (Ondo) and two from south east (Abia and Imo). This area occuppies about 70,000kmsq of the landmass of Nigeria, according to the Niger Delta Development Commission (NDDC, 2008).Every year, about 4.8 million babies are born. A steep population growth creates enormous pressure on available resources, development infrastructure and basic services, especially for the most vulnerable. Children, young people and women carry the brunt of poverty and population growth.

There is enough water on earth for all, even in areas where temporary shortages may exist. Managing water for all is not only a question of resources availability and money, but equally a matter of good governance. Water is essentially a local issue and involves a plethora of stakeholders at basin, Local Government Areas (LGAs), states, regional, national and international levels. In the absence of effective public governance to manage interdependencies across policy areas and between levels of government, policymakers inevitably face obstacles to effectively designing and implementing water reforms. World Health Organization/ (WHO/UNICEF) Joint Monitoring document (2010 updated) indicates 69 million in Nigeria people do not have access to improved source of water. This is a far larger number of unsaved people than in the majority of countries in the developing world and is a significant portion of the population in Africa. The absolute number of unsaved people might be higher because the level of non-functioning water supply systems in the rural areas is estimated to be about 40% in some states. In addition, wide disparities persist across zones and within states, especially in rural and urban communities, which aggravate the situation leaving more children and women vulnerable to sickness and poverty. Out of the total estimated 58,911 public schools, only one third have access to improved source of water. Diarrhoea is the second largest killer of children, responsible for 16 per cent of child deaths every year. In the new United Nations Children's Fund (UNICEF) Global Water, Sanitation and Hygiene (WASH) Strategy, by considering the situation, Nigeria has been identified as one of 60 priority countries in need of support in its efforts to attain the *Millennium Development Goals (MDGs)* 4 (reduce child mortality) and MDG 7 Target 7C (ensure environmental sustainability/ reduce by half the proportion of people without sustainable access to safe drinking water (UNICEF, 2010). Despite the fact that the nine states of the Niger Delta receive a larger share from the oil and gas income than the other States, the water resources management in the 9 States remain low, institutions are not accountable and insensitive to users and customers, conflict among and between communities remains high. Furthermore, according to WHO/UNICEF Joint Monitoring report (updated 2010), access to adequate sanitation in Niger Delta is below the national average.

This study is to address effects, challenges and knowledge gaps that are relevant to water governance and service delivery within the context of Niger Delta (ND) Region. It is not intended as a comprehensive thesis of water governance and service delivery in the water sector as recent related researches are on-going.

Statement of the Problem

According to the National Demographic and Health Surveys (NDHS-2008), the annual population growth rate in Nigeria is 3.2 percent. This implies that the Niger Delta region has a steadily growing population estimated at more than 44 million people in 2020. The region's water sector has witnessed increasingly poor supply with increasing water pollution in the available water resources due to oil extraction resulting in increasing death rate due to water borne and water related diseases.

Furthermore, one of the eight (8) Millennium Development Goals (MDG) declared by UNDP as a means to poverty reduction is reducing by half the proportion of households that do not have access to safe water by 2015. In this connection, the World Bank (2010) has observed that poor access to water supply is often a result of poor policies and management practices. According to the UNDP (2012), 2040 is a more likely date for this goal to be achieved in Africa. European Union Delegation in Nigeria (EUD, 2010) opines that water resources management in Niger Delta States is not at its optimal level. Stakeholders recognize that in Niger Delta states, as it is true for the whole of Nigerian, the water and sanitation sector is faced with problems of; i) weak sector institutions that are unable to deliver on their mandates; ii) low technical and managerial expertise; iii) poor financing, and sometimes, inefficient use of available resources; iv) poor service delivery orientation (institutions are not accountable and insensitive to users and customers); v) poor stakeholder participation; vi) inadequate sector policy and legal framework. The consequence of these problems is that water sector institutions cannot deliver sustainable water and sanitation services to the population. People, especially children, often suffer from water-related diseases.

In Bayelsa, Delta and Rivers States for example, there are no public water supply, and in other states where public water supplied, less than 5% have access to the supply system, or it is either supplied in the Commissioner's quarter and Government houses only. There is an urgent need for research to enhance

sustainable development in the water sector in Niger Delta region. All in all, instances of portable drinking water supply scarcity are still very prominent in Niger Delta as shown by statistics on (WB, 2013), (EU 2010), (UNICEF 2017), (USAID, 2020). In a nutshell, the major issue addressed in this study is how water governance and service delivery have worked in the provision of portable drinking water supply in the Niger Delta region of Nigeria. Specifically, to what extent has good water governance improved service delivery approach and increased access to portable water supply in terms of cost, time and scope to customer service delivery quality?

Objectives of the Study

The overall objective of this thesis is to examine the effect of good water governance in enhancing service delivery in the water sector in Niger Delta States. However for purpose of clarity and better understanding, this broad objective is broken down into more specific ones which are to:

1. Evaluate the extent to which accountability affects service delivery in the water sector in the Niger-Delta.
2. Explore the effect of poor financing on service delivery in the water sector in the Niger-Delta.
3. Investigate the extent to which mismanagement can affect service delivery in the water sector in the Niger-Delta.

Research Questions

Those reported below are the key questions the thesis tried to answer:

1. To what extent does accountability affect service delivery in the water sector in the Niger-Delta?
2. To what degree does sector financing affect service delivery in the water sector in the Niger-Delta?
3. To what extent does mismanagement affect service delivery in the Niger-Delta?

Hypotheses

In line with our statement of the research problem and objectives of the study the following hypotheses were formulated to guide our investigation:

H₀₁Accountability has no significant positive effect on service delivery in the water sector in the Niger-Delta.

H₀₂Sector financing has no significant positive effect on service delivery in the water sector in the Niger-Delta.

H₀₃Mismanagement has no significant positive effect on service delivery in the water sector in the Niger-Delta.

REVIEW OF RELATED LITERATURE

Conceptual Framework

Water Governance

Water governance relates to the range of political, social, economic and administrative systems that are in place to develop and manage water resources and the delivery of water services at different levels of society (Rogers & Hall, 2003). Put more simply, water governance is the set of systems that control decision-making with regard to water resource development and management. Hence, water governance is much more about the way in which decisions are made (how, by whom, and under what conditions decisions are made) than the decisions themselves (Moench 2003). Water governance covers the manner in which allocative and regulatory politics are exercised in the management of water and other natural resources and broadly embraces the formal and informal institutions by which authority is exercised. The relatively new term for discussing this combination of formal and informal institutions is distributed governance. There is a profoundly political element to water governance and as such systems of water governance usually reflect the political realities at international, national, provincial and local levels. As a result, the more general definition of governance (as opposed to water governance) is also contested as those who promote different visions of the future tend to define governance in terms which are consistent with their own vision and no other (Green, 2007). So, Neo-Liberals define bad governance very specifically in terms of the existence of inadequate markets and excessive government.

The problems of governance are to Neo-Liberals limited to removing the constraints which prevent the operation of a market-based economy and of minimising the role of government. Conversely, others

define governance from the perspective of a democratic deficit, defining governance therefore in terms of transparency, accountability and subsidiary. Consequently, there are obvious benefits in adopting a definition of governance which describes what it is without prescribing what it should be. One of the most frequently cited definitions of governance is thus:

“The exercise of political, economic and administrative authority in the management of a country’s affairs at all levels. Governance comprises the complex mechanisms, processes, and institutions through which citizens and groups articulate their interests, mediate their differences, and exercise their legal rights and obligations” (UNDP 1997).

Governance has received increasing attention from DFID in recent years as signified by the publication of the 2006 White Paper: “Eliminating World Poverty: Making Governance Work for the Poor”. This paper along with a series of speeches by the Secretary of State for International Development recognised the depth of the historical roots of governance problems in poor countries; the need to help governments to exercise real authority, as well as to become more democratic, participatory and law-regarding; the limits on the ability of aid donors to contribute to solving these problems through direct interventions; a practical grasp of the differences among a range of African countries often treated as a homogeneous mass; a genuine willingness to rethink what are known in the business as ‘aid modalities’; and an awareness that many governance problems are seriously exacerbated by international factors over which rich countries have some control (Moore and Unsworth, 2006).

Governance comprises the range of measures, rules, decision-making bodies, information services and supervisory bodies which make it possible to guarantee the proper functioning and monitoring of a State, organisation or, in this case, a sector. Its main concern is to ensure that the interests of “rightholders” (citizens, public authorities, partners) are respected and it is underpinned by four fundamental principles: accountability, participation, inclusion and transparency. Integrated Water Resource Management (IWRM) is the approach that implements governance measures aimed at conserving and ensuring the sustainability of water resources.

Services Delivery

Delivering services of high quality is an important pursuit for service providers that seek to create and provide value to their customers (Grönroos and Ravald, 2011). Through the provision of high levels of service quality, companies can achieve increased customer satisfaction, loyalty and therefore long-term profitability (Zeithaml and Bitner, 2000). In order to provide high levels of service quality and therefore create value for their customers, service organisations need to plan the delivery of their services and to ensure the successful implementation of the actual plan (Parasuraman, Berry and Zeithaml 1988). Therefore, good planning and effective implementation of the developed delivery plans are key factors for the Service Delivery System (SDS). Furthermore, continuous improvement of service procedures contributes to the optimisation of SDS and enhances the organisation’s standards of service.

Many scholars have argued that the main aim of a service delivery system is to bridge the gap between customer expectations and customer experience (Lovelock, 1984; Armistead, 1990). The SDS is in fact the medium through which service employees attempt to meet the quality standards set by the management, in order to close the third gap of services quality, which refers to the gap between service quality specifications and the actual service delivery (Parasuraman et al, 1985). Services are deeds, performances and processes provided or coproduced by one entity or person for and with another entity or person (Zeithaml et al, 2009). This definition of service includes both core service and physical goods. Vargo and Lusch (2004) provided a more inclusive definition of service with the derived service perspective, suggesting that all products and physical goods are valued for the inherent service they provide and that the value derived from physical goods is really the service provided by the goods not the good itself.

Theoretical Framework

As mentioned earlier, the theoretical application of an analytical framework for this research is drawn from the General Systems. The systems concept is not relatively new. It dates back to the mid 1940’s with the earlier works of Ludwig Von Bertalanffy a German biologist and Kenneth Boulding an

American economist as some of the earliest contributors to this concept and was brought into organizational setting by Katanz and Khan (1966), (Ottih 1996; Jones and George 2002; Gomez-Mejia and Balkin 2005). Further to and in support of the foregoing, Chand (2015) in an article titled "System Approach to Management: Definition, Features and Evaluation," says that the application of system theory can be used to explain a specific approach to management. Chand explains that in the early 1960s, an approach to management appeared that was then known as the "systems approach." Its early contributors included Bertalanffy, as well as Lawrence J. Henderson, W.G. Scott, Daniel Katz, Robert L. Kahn, W. Buckley and J.D. Thompson.

General systems theory (GST) is a collection of ideas from diverse discipline but mainly from the natural and social sciences as well as engineering. In applying this concept to our object of analysis integrated water resources management, an attempt will be made to define the concept in order to sharpen our focus. However, it must be noted as Ottih (1996) did indicate that "the definitions of system are as varied and ubiquitous as systems themselves". The GST likens an organisation to an organism with interdependent parts, each with its own specific function and interrelated responsibilities in pursuance of a collective goal. A system is an object or an entity made up of different parts, components, units, compartments systematically arranged to interact with one another in a systemic manner, that the overall goal of the system is achieved. It is a framework through which one can investigate, describe and/or understand any group of objects that work together to produce some expected result. Systems theory can apply a single organism, any electromechanical or informational artifact, a society or within the context of our discourse, an organization or a sector, including the water sector and the business organizations therein. Rather than reducing an entity to the properties of its parts or elements, systems theory focuses on and encourages the arrangement of and interfaces and relationships between the parts which connect them into a whole. This particular organization and or arrangement determine a system, which is independent of the concrete substance of the elements leading to higher goal attainment.

Cleland and King (1975) as in Ottih (1996) define this concept as an organized or complex whole, an assemblage or combination of things forming a complex or unitary whole. With foregoing definitions, a clearer and near-enough picture of the systems concept as it relates to the subject of discuss can be achieved by looking further into some salient and key elements in these definitions. These are as follows; parts, relationship, whole, common objective or goal, systemic and systematic. Every system is made up of different parts known in systems language as subsystems, which within the context of this discuss could be likened to the different aspects of the water sector; the institutions, programmes, projects, concepts like Ministry of Water Resources, Rural Water and Sanitation Agency, State Water Corporation, Civil Societies, Water Consumers and other stakeholders, technology, markets, suppliers etc, which interactions one way or the other could affect service delivery in the sector. The subsystems relates with one another and are related in and interdependent in one form or the other. The subsystems are related in such a manner that the boundary of the system is reasonably definable and or identifiable. Implicit of this, is that the focal system's Water sector can be clearly isolated from other systems (non-water related activities) but a subsystems of another but larger system the global system. Subsystems for instance the member nations of the Ministry of Water Resources, State Water Corporation, Water Consumers Association, CSOs among others have a unity of purpose and function in such a manner that the overall goal is fulfilled. Subsystems do not work at cross-purposes but do contribute their own quota towards accomplishing the systems objective. Systemic here refers to the interaction and interface among the subsystems, the interrelationships among the subsystems. Systematic on the other hand refers to the orderly placement or positioning of the subsystems or system part. It is the structuring of the system, the orderly functioning of the parts of the system parts and the entire process Ottih (1996) paraphrased.

Aside from the foregoing, there are four systems constructs / concepts which are also some of the characteristics of systems that could help to espouse the position of the researcher in this study, these are; negentropy, equifinality, dynamic homeostasis and synergy. The coinage negentropy is derived from entropy a chemistry concept, which means tendency towards disorder, deterioration, spoilage or natural death. Every system particularly living organisms tends towards entropy. Systems tend to reverse or

counter this trend and this process is known as negative entropy or negentropy. The water sector is an exemption to this law. This explains why diverse maintenance activities are carried out on water facilities and utilities, introduction of water programmes and projects, water sector reforms leading to crafting of new policies and laws for improved performance, outputs and outcomes. When entropy set in the system will loses its steady state or equilibrium known in systems parlance as dynamic homeostasis and will need some conscious and concerted effort to reverse. This reversal can be done through equifinality a systems concept that advocates the attainment of systems goals through diverse means recognising that “there are so many ways to skin a cat”. All the efforts and approaches targeted at achieving a system’s goal is equifinality.

There are challenges in the water sector like those of lack of accountability, transparency, participation culminating in service delivery problems which this study focuses. These imbalances will need to be fixed by applying different means “equifinality” in different areas of the water sector to resolve. Each of these means applied can turn out to throw up opportunities and or challenges to different stakeholders to the water sector in order to achieve dynamic homeostasis or steady state. Synergy simply put, means the result of the subsystems or parts working together is greater than the sum of the individual units or subsystems working in isolation of or independent of the others. Thus in systems theory, $2+2=5$.

Empirical Review

The researcher in this section examines empirical literature and findings with relation to governance and service delivery in the water sector Jerome, Gitu, Ubi, Emiri, and Friday (2019) investigation on poor water quality supply in Calabar the study was conducted to investigate the challenges influencing the implementation of water sector reforms in Cross River State water board limited and to address the poor water quality service delivery which is evidence, leading to inadequate delivery of clean, safe and reliable water to Cross River State people, with an aim of coming up with recommendation that will enhance the policy makers in the water sector for a successful and faster implementation. The research was delimited to the target population of 500 which include senior staff, junior staff, contract staff and residence living in Calabar South, Calabar Municipality, Akpabuyo, Odukpani, Akamkpa and its environs. The study utilizes both primary and secondary data. The secondary data were gathered through review of the relevant studies. Primary data on the other hand was collected through the use of questionnaires. Self-administered questionnaires were used to gather data and to control the amount of data collected. It is therefore recommended that the board should established water appeal board dedicated to resolve complaints, government and agencies responsible for maintenance and repairs of vandalize water facilities and to restrained people from building on the existing facilities on the water board pipes to avert possible outbreak of water borne diseases in the affected areas.

Abasilim, Gberevbie, & Ifaloye, (2017) Attaining a better public service delivery through E-governance adoption in Nigeria. The study adopts the ex-post-facto research design and found that there are several barriers arising from the adoption of the usual traditional public administrative system standing against the implementation of e-governance in the public service that would have metamorphosed into better service delivery. It is in line with the above findings that the paper argues that public service delivery could be better achieved through e-governance implementation in Nigeria. Governments all over the world, Nigeria inclusive desire ways to provide welfare services to citizens with fewer resources, enhance transparency and accountability of public servants. As a result, the goals of the public service in terms of enhanced service delivery come to mind. This is because it serves as the major machinery through which governmental policies are implemented. However, the public service in Nigeria has witnessed widespread criticism as it pertains to the way and manner in which services are delivered. The inability of the public service to achieve its goals has necessitated the call for reform in the public service. In this regard, e-governance seems to be the probable solution.

Aluta, (2016) examined the participatory water governance in Nigeria Nigeria’s legal framework for supporting the supply of potable water has not proven to be effective. This is primarily due to the non-participation of a broad spectrum of stakeholders, particularly rural community members. A contextualised policy re-orientation through the use of participatory governance may, however, support

the development of a more sustainable potable water supply for rural communities. A novel participatory water governance framework, designed to enable effective potable water management for rural communities, has been developed in this study. A conceptual framework drawing on a synthesis of the extant literature provides the basis for a qualitative empirical inquiry. Semi-structured interview with participants who were selected by using a purposive strategy, helped to inform the development of the proposed framework. A key factor of the framework is the establishment of a rural advisory board, which may explore relevant techniques relating to transparency, accountability and participation, customary norms and values, laws, regulations, policies and community task forces. The findings identify that rural community members have capacity to collaborate with state actors and donors in governing their own potable water, enhanced by proximal relationships. This may be inferred from an existing culture of participation in Nigeria, with its own enforcement of customary norms and values through ostracism, enabling compliance and enforcement to governance rules. The findings support a power shift from the centralized government institutional management to a governance of pluralistic process incorporating localized cultural norms. Thus, participatory democratization may be reasonably institutionalized by using established decision-making processes. These findings have been incorporated into a refined conceptual framework, validated by using the mixed methods approach. The study contributes to knowledge by the theoretical formulation and proposition that participation theory may support the effectiveness of potable water management, while contextualized participatory water governance techniques may be specifically explored to support the legal framework for water supply. The use of socio-legal research methodology provides a further contribution to knowledge, through the exploration of the qualitative approach. The approach provides empirical understanding and interpretation of inquiry, based on several techniques via thematic content analysis. In its conclusion, the study makes recommendations to water resource stakeholders to adopt the practices of decentralization, integration and co-ordinated decision-making in participatory water governance, which may include ostracism for compliance and enforcement of governing rules, under a rural advisory board

Ajibade, Adewumi, Ojo, Babatola, and Oguntuase, (2015) studied the issues, challenges and management of water supply and sanitation in Nigeria. The current inadequate drinking water services and sanitation problems have incited the need for a better management strategy by the country's water and sanitation organizations. In this study, a logical review of the water supply and sanitation origin and management structures was done to suggest a plausible management option in Nigeria. The paper also revealed that the overall management practices of these organizations at the three tiers of governments (federal, states and local) are very poor and uncoordinated which have resulted in low level of water and sanitation coverage. Thus, in order to ameliorate these problems, the study recommends sector wide reforms with the aim of radical improvement in the management processes of these organizations. Other proposed improvement strategies include: private sector participation, effective and reasonable tariff regime for effective cost recovery, increment in political support and leadership commitment, introduction of benchmarking amongst the utilities to encourage healthy competition, strengthening of the legislative and institutional framework- that will enhance the autonomy of these organizations, improvement in the issues of accountability, transparency and stakeholders involvement in the activities of these organizations. It is hoped that the adoption and implementation of these strategies will lead to attainment of improved and sustainable water supply and sanitation coverage that will meet current and future demands.

Chukwu, (2015) assessed the role of local government in service delivery with a specific focus on Kaduna North local government from 1999-2011. It sought to identify services delivered by local government and to ascertain the impact of the services on the wellbeing of the people. Two sets of questionnaires were designed and administered i.e. one for the inhabitants of the area and the other for employees of the local government, so as to capture both the views of the inhabitants of the area and the employees of the local government. Questionnaires were conveniently distributed to 360 inhabitants and 314 were returned. Questionnaires were also conveniently distributed to 30 employees of the local government and the 30 were returned. This was further aided by interviews, focus group discussions, personal observation and the review of relevant literatures. The study revealed that, mismanagement of funds, joint account system, lack of transparency and accountability and restricted revenue sources available to local government and

inability to effectively utilize its internal sources of revenue generation had impacted negatively on the provision of public goods at the local level. This is evidence in the poor educational facilities, poor healthcare centres, roads, etc; several problems were however identified as constraints to the service delivery efforts of the local government. These are; lack of viable sources of revenue, mismanagement, joint account, undue interference from state government etc. Hence, this study therefore recommends for the full autonomous status of local government both financially and administratively in order to fully deliver on its mandate, viable sources of revenue and a leadership recruitment process that is merit driven and people of unquestionable character and integrity should be at the helm of affairs, among others.

Chukwu, (2015) examines the widening gap between water need and supply in the wetland despite continuous efforts made to develop the regions' vast surface and groundwater resources. The study employed the review of literature on water supply management policy documents and other works so as to understand the challenges of water supply management in the wetland. The research adopted survey research design. The study revealed that the challenges facing sustainable water supply management in the Niger delta wetland include lack of effective compliance to policies, fragmented responsibility, poor state of infrastructure, corruption, and low rate of costs recovery. In order to ameliorate these challenges, the researcher recommends the need to comply with water management policies that aim at economic efficiency, encourage stakeholder participation, and enforce existing laws and regulatory responsibilities.

Terfa (2015) investigated community water management and sustainability. Particularly, it will investigate the sort of community management that may make rural water supply sustainable. The research uses the case study of Ilala community, Kwara State, and was undertaken through review of relevant documents, of personal observations and of interviews with Ilala community members and government officials. Both content and quantitative analysis were used to analyze data. This thesis contributes to the debate about the sustainability of community-managed water supply. Field data from Ilala reveal that community water management is sustainable in Ilala. Furthermore, the research findings show that the motivation of beneficiaries to utilize the improved water source was necessary for sustainability. Second, community practice of maintenance in the absence of formal support structure significantly enhanced the sustainability of the water scheme. More so, regular contribution for water tariff enforced by the traditional ruler was also instrumental to the continuous functionality of the water scheme. Lastly, the existence of a strong Community Development Association and the availability strong leadership in the community provided support to the community-managed water scheme and enhanced sustainability. Field data further show that the state created and empowered agencies such as the Kwara State Community and Social Development Agencies and Kwara State Rural Water Supply and Sanitation Agency to provide support to rural communities to manage their water. Ilala community did receive government assistance to construct the community water scheme, but that one-off support is arguably inadequate. Providing on-going support to rural communities is necessary to ensure sustainability in rural water supply. The report concludes with some suggestions for improvement in state policy.

Malawi (2015) studied governance and corruption baseline Survey to identify the locus and extent of corruption in the country water sector. The survey indicated that: Nine out of ten Malawians perceived corruption to be a serious problem which destroys people's confidence in public institutions. Sixty percent believed that it is common to bribe public officials in order to be served. It was further pointed out that money received was portioned out between superiors (26.9%), colleagues in the organization (21%), politicians or political parties (24.6%) and the recipient. The survey added that Malawi society perceived public institutions as deliverer of inferior service and the departments identified in this regard were the Directorate of Road Traffic, office of the Director of Public Procurement, Administrator General, Malawi Revenue Authority, Malawi Housing Corporation and the Department of Immigration, which ranked high as departments particularly prone to corruption. The survey placed special emphasis on the need for the establishment of good governance in these institutions

Tikue (2014) conducted a study, worth mentioning, on the role of good governance in local development. This study aimed to examine the performance of good governance in Tigray Regional State. It assesses the performance of good governance in land administration. More specifically, the study assessed the performance of good governance in terms of transparency, accountability and responsiveness. The study

was conducted using 182 household heads selected via convenience sampling. Furthermore, focused group discussion, interview and secondary data were employed to gather relevant data. The study found out that local governments that achieved better transparency, accountability and responsiveness are more likely to about development than their counterparts. The study finding also indicates that the performance of land administration pertaining to transparency is still at its infancy. With regard to accountability, land administration has installed accountability mechanisms where administrative accountability could be ensured. In spite of that, the practicability of these accountability mechanisms and tools in the land administration is in its early stage. The study also established that there is a dearth of downward accountability. Furthermore, the performance of responsiveness was also found unsatisfactory. Finally, despite the prioritization of the agenda of good governance, the overall performance was found still to remain low, which makes it difficult to conclude that there is significant change. The study also found that the prime factors that inhibit the performance of good governance in the land administration include; corruption, poor public education, weak monitoring and evaluation system, low implementation capacity, low participation and low coordination among stake holders and low incentives among government employees. Thus, if good land governance is to be ensured, the study recommends that the government should concentrate on overcoming the above bottlenecks by setting out clear guidelines and service standards, employing civic engagement on monitoring and evaluating service delivery process, providing adequate incentives to land committees and local councils and setting up a code of conduct for land administrators.

METHODOLOGY

Survey design was adopted for this work. The study was carried out in Niger Delta region that comprises nine (9) states with a combined population of about 30 million people divided among 40 ethnic groups and with a significant percentage of the population still living well below the poverty line. The population of this study comprises 9 Ministry of Water Resources Development, Water Corporations and Rural Water Supply and Sanitation Agencies in the Niger Delta region of Nigeria. They include: 6 states in the South South geopolitical zone as well as one from the south west (Ondo) and two from south east (Abia and Imo). The target population was disaggregated into three (3) tiers of workforce set to include specific staff for Tier 1 (Grade level 1 – 6 lower level), Tier 2 (Grade level 7 -12 middle level) and Tier 3 (Grade level 13 and above). Each discipline that provides essential services has specific responsibilities and practice. Tier 1 (Grade level 1 – 6 lower level). The data for this study were drawn from primary sources. Bill Godden formula was applied for the determination of the sample size 3000 for the study. Structured questionnaire was generated primary data for the study. Content and construct validity tests were adopted for test of validity. Internal consistency and Cronbach's alpha was used to verify the internal consistency of each construct in order to achieve reliability. The data generated in the study were analyzed using the research questions and test of hypotheses. The research questions were analyzed through the application of summary statistics of percentages and the data that were presented in a Likert scale format, the hypotheses were tested using multiple regression analysis. All tests were conducted at 0.05 level of significance.

DATA PRESENTATION AND ANALYSIS

Five hundred and fifty copies of the questionnaire were distributed to the respondents, out of which five hundred were properly filled and found relevant to the study. This shows a response rate of 100 percent. The table also shows that out of the 550 copies of the questionnaire distributed, 500 copies were found relevant. This shows a response rate of 91 percent. The table also shows that 50 copies of the questionnaire distributed were not properly filled. Therefore, the analysis in this section was based on the five hundred relevant copies.

Test of Hypotheses

The hypotheses were tested by simple and multiple regression analysis through the use of SPSS Computer Package Version 23. Hypotheses one to six were tested by the use of Simple Regression Analysis,

Hypothesis One

Ho: Accountability has no significant positive effect on service delivery in the water sector

Hi: Accountability has a significant positive effect on service delivery in the water sector

Model Summary^b

Model	R	R Square	Adjusted Square	RStd. Error of the Estimate	Durbin-Watson
1	.935 ^a	.873	.873	.51439	.080

a. Predictors: (Constant), Accountability

b. Dependent Variable: Service Delivery

ANOVA^a

Model		Sum Squares	ofdf	Mean Square	F	Sig.
1	Regression	835.335	1	835.335	3156.979	.000 ^b
	Residual	121.187	458	.265		
	Total	956.522	459			

a. Dependent Variable: Service Delivery

b. Predictors: (Constant), Accountability

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.696	.052		-13.324	.000
	Accountability	.976	.017	.935	56.187	.000

a. Dependent Variable: Service Delivery

R = 0.935

R² = 0.873

F = 3156.979

T = 56.187

DW = 0.080

Interpretation:

The regression sum of squares (835.335) is greater than the residual sum of squares (121.187), which indicates that more of the variation in the dependent variable is explained by the model. The significance value of the F statistics (0.000) is less than 0.05, which means that the variation explained by the model is not due to chance.

R, the correlation coefficient which has a value of 0.935, indicates that there is positive relationship between accountability and service delivery. R square, the coefficient of determination, shows that 0.873% of the variation in service delivery is explained by the model.

With the linear regression model, the error of estimate is low, with a value of about .51439. The Durbin Watson statistics of 0.080, which is not more than 2, indicates there is no autocorrelation.

The accountability coefficient of 0.935 indicates a positive significance between accountability and service delivery, which is statistically significant (with t = 56.187). Therefore, the null hypothesis should be rejected and the alternative hypothesis accordingly accepted. Then we can state that accountability has a significant positive effect on service delivery in the water sector.

Hypothesis Two

Ho: Sector financing has no significant positive effect on service delivery in the water sector

Hi: Sector financing has a significant positive effect on service delivery in the water sector

Model Summary^b

Model	R	R Square	Adjusted Square	RStd. Error of the Estimate	Durbin-Watson
1	.627 ^a	.393	.392	.03514	.143

a. Predictors: (Constant), Sector financing

b. Dependent Variable: Service delivery

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	317.735	1	317.735	296.529	.000 ^b
1	Residual	490.752	458	1.072		
	Total	808.487	459			

a. Dependent Variable: Service delivery

b. Predictors: (Constant), Sector financing

Coefficients^a

Model	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.674	.080		8.416	.000
	Sector Financing	.753	.044	.627	17.220	.000

a. Dependent Variable: Service delivery

R = 0.627

R² = 0.393

F = 296.529

T = 17.220

DW = 0.143

Interpretation:

The regression sum of squares (317.735) is less than the residual sum of squares (490.752), which indicates that more of the variation in the dependent variable is not explained by the model. The significance value of the F statistics (0.000) is less than 0.05, which means that the variation explained by the model is not due to chance.

R, the correlation coefficient which has a value of 0.627, indicates that there is positive relationship between sector financing and service delivery. R square, the coefficient of determination, shows that 0.39.3% of the variation in service delivery is explained by the model.

With the linear regression model, the error of estimate is low, with a value of about .03514. The Durbin Watson statistics of 0.080, which is not more than 2, indicates there is no autocorrelation.

The absolute customer focus coefficient of 0.627 indicates a positive significance between Sector financing and service delivery, which is statistically significant (with t = 17.220). Therefore, the null hypothesis should be rejected and the alternative hypothesis accordingly accepted. Therefore we can say that sector financing has a significant positive effect on service delivery in the water sector.

Hypothesis Three

Ho: Mismanagement has no significant positive effect on service delivery in the water sector.

Hi: Mismanagement has a significant positive effect on service delivery in the water sector.

Model Summary^b

Model	R	R Square	Adjusted Square	RStd. Error of the Estimate	Durbin-Watson
1	.987 ^a	.974	.973	.24104	.162

a. Predictors: (Constant), Mismanagement

b. Dependent Variable: Service delivery

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	978.416	3	326.139	5613.147	.000 ^b
	Residual	26.495	456	.058		
	Total	1004.911	459			

a. Dependent Variable: Service delivery

b. Predictors: (Constant), Mismanagement

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.447	.031		-14.324	.000
	Mismanagement	.411	.022	.287	18.561	.000
		.653	.014	.741	45.707	.000
	Service delivery	.017	.023	.016	.739	.460

a. Dependent Variable: Service delivery

R = - 0.987

R² = 0. 974

F = 5613.147

T = (18.561; 45.707; 0.739)

DW = 0. 162

Interpretation:

The regression sum of squares (978.416) is greater than the residual sum of squares (26.495), which indicates that more of the variation in the dependent variable is explained by the model. The significance value of the F statistics (0.000) is less than 0.05, which means that the variation explained by the model is not due to chance.

R, the correlation coefficient which has a value of -0.987, indicates that there is positive relationship between mismanagement and service delivery. R square, the coefficient of determination, shows that 0.97.4% of the variation in service delivery is explained by the model.

With the linear regression model, the error of estimate is low, with a value of about .24104. The Durbin Watson statistics of 0.162, which is not more than 2, indicates there is no autocorrelation.

The mismanagement coefficient of -0.987 indicates a negative significance mismanagement, and services delivery, which is statistically insignificant (with t = 18.561; 45.707). but mismanagement which is not statistically (with t = 0.739). Therefore, the null hypothesis should not be rejected and the alternative hypothesis should not be accepted. Therefore we can say that Mismanagement has significant negative effect on service delivery in the water sector.

Discussion of Findings

The study examined good water governance in enhancing service delivery in the water sector in Niger Delta States. Data was sources from primary source and was analysis using simple regression analysis. It was discovered that accountability had a significant positive effect on service delivery in the water sector. This finding agrees with Gauthier and Reinikka, 2007; Awortwi, 2012 who affirm that accountability had a significantly positive effect on service delivery in the water sector. This is supported by Birner, 2007 who posit that sustainability and effectiveness of short route accountability depend on developing strong accountability relations between policymakers and citizens, and between policymakers (specially, regulatory agencies) and providers.

The result of the second hypothesis shows that sector financing has a significant positive effect on service delivery in water sector. This result tally with Camdessus Report (2003) that sees investment finance can be raised through loans – commercial, local or international, including from international financial

institutions or equity shareholders, but loans have, of course, to be repaid and equity investors will require dividends and/or expect their shareholding to increase in value.

The result of third indicates that mismanagement had a significant negative effect on service delivery in the water sector. The result also agreed with Chukwu, (2015) Obaje (2015) widely perceived to be in the midst of a “world water crisis and the crisis is commonly believed to be one of scarcity that the world is running out of water. But in fact, the “crisis” is mainly one of mismanagement, not absolute scarcity. Freshwater ecosystems worldwide have been dammed, drained and pumped dry to supply inefficient and inequitable irrigation schemes, leaky water mains and wasteful overconsumption. Ganiyu, Akintunde Oguntoyinbo, Olusegun, and Salihu(2017) result indicates a positive significance between Sector financing and service delivery Mismanagement indicates a negative significance effect on services delivery.

Summary of Findings

1. Accountability had a significant positive effect on service delivery in the water sector. Accountability had coefficient of 0.935, indicating a positive significance with service delivery, which is statistically significant at 0.000)
2. Sector financing had a significant positive effect on service delivery in the water sector. Sector financing coefficient of 0.627 indicates a positive significance between Sector financing and service delivery, which is statistically significant at 0.000.
3. Mismanagement had significant negative effect on service delivery in the water sector. Mismanagement coefficient of -0.987 indicates a negative significance effect on services delivery, which is statistically insignificant 0.739

CONCLUSION

The study examined the effect of good water governance in enhancing service delivery in the water sector in Niger Delta region was subjected to various statistical tests. From the analysis, it was discovered that accountability had a significant positive effect on service delivery in the water sector. Sector financing had a significant positive effect on service delivery in water sector; institutional framework had a significant positive effect on service delivery in water sector. Policy framework had a significantly positive effect on service delivery in the organizations under study; stakeholders’ participation had a significant positive effect on service delivery in the organization under study. Mismanagement was found to significant negative effect on service delivery in the water sector. Therefore, the study concludes that good water governance enhance service delivery in the water sector in Niger Delta region.

RECOMMENDATIONS

Based on the findings and conclusions drawn, the following recommendations were made:

The need to strengthen accountability: Water sector and service delivery institutions should introduce a system of information that is sensitive to supply and demand oriented information. They have to introduce a system that ensures periodic flow of information to customers with and without specific request. In order to promote accountability, citizens should be given opportunities to participate in the planning, design and management of services.

The need to strengthen sector financing: Federal, State and Local governments all need to be more transparent about their water sector investments. All three tiers of government need to work closely together to improve water sector financing and ensure that the approved annual budgetary provisions made for the sector are released completely and as at when due. Furthermore, the three tiers of government should avoid delay in the release of water sector budgetary allocations; reduce procurement protocols and inflexible conditions that are barriers to financial absorption.

The need to strengthen policy framework: There is need for strong political will and commitment toward the development, adoption and implementation of water law in Niger Delta to drive the process of water sector reform for accelerated service delivery.

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