
The Effect of Water Project Dumping on Sustainability of Water Facilities in Bayelsa State Nigeria.

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ABSTRACT

The study is on the effect of project dumping on the sustainability of donor assisted water facilities Bayelsa State, Nigeria. Nine self-selected small towns in two pilot intervention local government areas (Kolokuma-Opokuma and Brass LGAs) in Bayelsa state, Nigeria were used for the study. The study relied on UNICEF (2013) baseline survey which estimates the population of the two LGAs at 117,026. A sample of 383 respondents were initially sampled using Epi Info sample calculator and confirmed with SurveyMonkey sample calculator, out of which 364 were eventually used for the study. The research design adopted for the study is the survey design. One questionnaire was developed and validated from which copies were made and administered to 383 respondents out of which 364 were validly retrieved and formed basis for the study. Analysis of the questions was done majorly using simple percentages in contingency table format. One hypothesis was tested using Chi square (χ^2) at 5% level of significance. The Chi square calculated is 24 while the critical value is 7.185. The result of the study shows that water project dumping significantly affects sustainability of water facilities in Bayelsa State. The study concludes that water project dumping have a significant but effect sustainability of water facilities in Bayelsa State. The study recommends as follows: (1) Governments, Corporate organisations and Donor agencies should consider the needs assessment and priorities of proposed benefiting communities before siting water projects (2) That participatory project planning and implementation should be encouraged for communities to ensure sustainability of the water facilities.

Key words: Project dumping, participatory, Sustainability, Self-selected

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1. INTRODUCTION

A project is a singular effort of defined duration, quality and cost. It comprises of different activities which if completed marks the project completion. Every project is unique, in other words there are no two projects that are exactly the same (PMI, 2006). A water project similarly is a singular effort of defined duration, quality and cost that comprises different activities which if completed marks the project completion. A water project is said to be completed when the facility produces water in the required quantity, quality at a given time the beneficiaries.

Water is life and life without water cannot be imagined, this probably explains why governments at different levels, corporate organisations as well as local and international donor agencies have tried to provide portable water to enhance the wellbeing of the populace. Unfortunately, consciously or unconsciously most of these water facilities that were supposedly provided to serve the water needs of the people were merely dumped projects. This explains why in spite of global awareness and efforts to tackle the problem of water, portable water still remains a global challenge.

Water is the millennium development goal (MDG) seven and according to WHO/UNICEF (2012) even though the water target of the MDG seven has been met, more than one tenth of the global population relied on unimproved drinking water sources. In access to safe water, there is huge disparity in coverage with only 61 per cent in sub-Saharan Africa while inequities existed within countries between the rich and poor and, between those living in rural and urban areas. WHO/UNICEF (2013) further note that, water quality and safety parameters were not available for monitoring, which could have reduced access based on presence of less than 10CFU/100ml of water. By the end of 2011, 83% of the population without access to an improved drinking-water source lived in rural areas.

As noted earlier conscious and consistent multi-level efforts have been on to provide portable water for the teeming population globally and in Nigeria in particular. These efforts obviously have failed to yield the needed result to reduce the population without access to portable water. This nagging portable water problem in the Nigerian context in the opinion of the researchers may not be partly unconnected to the problem of water facilities project dumping. This study therefore seek to find out if the paradigm shift from the conventional supply driven-to demand-driven approach to water facility provision have significant positive effect on the effectiveness of donor provided water facility.

1.1 Objective of the Study

This study seeks to determine the effect of project dumping on the sustainability of donor assisted water facilities Bayelsa State.

1.2 Research Question

Does project dumping have any significant effect on the sustainability of donor assisted water facilities Bayelsa State?

1.3 Research Hypothesis

project dumping does not have any significant effect on the sustainability of donor assisted water facilities Bayelsa State

2. WATER SITUATION IN NIGERIA

Nigeria has an estimated population of 180 million (Vision, 20:2020, 2009) and the population with access to safe drinking water increased from 47% to 61% between 2008 and 2011, with a gap of 14% to meet the 75% target for Nigeria on the MDG target (WHO/UNICEF, 2013). On sanitation, Nigeria is 5th highest in hierarchy in Open Defecation practise, after India (626m), Indonesia (63m), Pakistan (40m) and Ethiopia (38m) despite the fact that about 12.37 million people gained access to improved sanitation between 1990 and 2008 (WHO/UNICEF, 2012). Based on available statistics, Nigeria did not achieve the MDGs sanitation target of 63% access to improved sanitation by 2015 as nearly 100 million people lacked access to improved sanitation, and a large portion of the population (34 million people) practice open defecation (WHO/UNICEF, 2013).

2.1 What is Project Dumping?

Project dumping is a relatively new construct used to describe projects that are either fully or partially implemented for any other reason but not intended to benefit the supposed recipient(s) Project dumping come in diverse form and cut across different sector. In the water sector, project dumping come in the form of projects implemented to serve the interest of individuals or groups other than the host. Sometimes a dumped project serves the interest of the dumper alone. Projects can be consciously or unconsciously dumped. A project is said to be consciously dumped if from the outset the initiators know it will not serve the purported purpose. On the other hand the initiator or the implementer either by omission or commission manages the project in such a way that the original aim of the project is defeated. Obsolete design, use of substandard materials, use of unqualified personnel among others which could lead to abandonment are some examples. Dumped project and abandoned project are sometimes used synonymously. An abandoned project can be completed to deliver intended output to serve the recipient but a dumped project even on completion do not serve any purpose.

2.2 What is Project Sustainability?

This is a systematic concept relating to the continuity of economic, social, institutional, and environmental aspects of human society as well as the non-human environment. Project sustainability, a common approach related to the management of projects, programs, institutions, organizations, people, and other entities requiring effective and efficient production, marketing, distribution, and the delivery of products and services. This requires a comprehensive analysis of the social, economic, legal, cultural, educational, and political environments for project implementation. There should be a sustainability plan were the project philosophy, mission, vision, values, goals, and objectives are fully articulated and stated. The involvement of stakeholders and advocates is also of paramount importance (Morfaw, 2011).

3. METHODOLOGY.

The methodology applied is a mixed one and it was carried out in three stages to elicit valid data used for the study (both qualitative and quantitative data). Stage one was mainly pre-field activities and focuses on developing the survey instrument (questionnaire construction), validity and reliability tests of the instrument and logistic arrangement for mobilisation to field. There was also sensitization and awareness creation among WCA executives / members and other stakeholders on the purpose for which this survey was carried. Stage two focused mainly on the actual data collection activities / field work. Questionnaire and interview administration, coding of interview responses, editing and retrieval of completed questionnaire were done in this stage. The third stage comprises of post-field activities; this stage involves data presentation, analysis, interpretation, findings and conclusions.

3.1 Research Design

Given the nature of this study, which requires collecting primary data from respondents through the use of questionnaire and interview, the researcher adopted the survey design. This survey method facilitates a systematic study of the population of interest through the use of questionnaire and interview to generate valid and reliable data for analysis. Secondary data was also relied on in the study.

3.2 Population of the Study

The population of this study comprises of all the adult water consumers in the self-selected nine (9) small towns in the two (2) self-selected LGAs: Twon-Brass, Okpoama & Odioama in Brass LGA and Igbedi, Kaiama, Odi, Okoloba, Sabagreia and Sampou in Kolokuma/Opokumma LGA. The population of the two LGAs according to UNICEF(2013) base line survey is estimated at 117,026.

3.3 Sample Size Determination

A sample size of 383 respondents was decided using Epi Info sample calculator and confirmed with SurveyMonkey sample calculator, out of which 352 were validly returned and eventually formed basis for the study. Both sample size calculators are computer aided and obtainable online .

3.4 Sampling Technique

Quota sampling technique was applied in the selection of samples for questionnaire administration. The towns were split into different units in line with the existing compound, village or quarter structure in the small town. The copies of the questionnaire were carefully administered such that there is adequate representation of the different groups in the small town.

3.5 Sources of Data

The data for study were drawn mainly from both primary and secondary sources. Data relating to the population and sampling frame were from secondary sources (UNICEF, 2013) while those elicited from the respondents through the use of questionnaire were from primary sources. The primary data particularly the ones elicited from the respondents through the use of questionnaire formed basis for the analysis.

3.6 Description of Research Instrument

The survey design was adopted for this study thus necessitating the construction and use of questionnaire. The questionnaire for the survey comprised mainly of closed ended questions. The questionnaire is split into three sections; personal characteristics, Social characteristics and sources of water. The questionnaire was subjected to validity and reliability tests as described herein below

3.7 Validity and Reliability

Validity test was carried out on the instrument (the questionnaire) to ensure that it measures what it is designed to measure. Content validity test was adopted for this study to ensure the questions contained therein are adequate both in content and scope. The survey instrument was also subjected to reliability test to ascertain the degree of consistency of the measurement instruments if applied in the same circumstance and environment repeatedly overtime. The test retest method was applied and a correlation of 0.85 was obtained implying a strong measure of reliability.

3.8 Questionnaire Administration

The final copies of the questionnaire was made ready after the pilot testing of the instrument since the measure of consistency obtained (0.85) from the test is acceptable. The questionnaire was deemed ready for

distribution thus 383 (Three hundred and eighty three) copies were made in line with sample size for the survey and administered to the respondents.

The mode of distribution was by hand through the researchers and adhoc survey assistants that were trained by the researchers for the purpose. All completed questionnaire were retrieved by hand as well. A retrieval rate of 92% was achieved and a total of 352 copies of the questionnaire were retrieved and eventually became the actual sample size that formed basis for the analysis in this survey.

4. Procedure for Data Analyses.

One hypothesis was tested using Chi square (χ^2) at 5% level of significance. The Chi square calculated is 9.20 while the critical value is 7.185. The result of the study shows that water project dumping significantly affects sustainability of water facilities in Bayelsa State. The study concludes that water project dumping have a significant but effect sustainability of water facilities in Bayelsa State. See table 1.1 below.

Table 1.1 Calculated Value of χ^2 at 5% level of significance

Observed Frequency (fo)					
	SA	A	D	SD	Total
Brass	68	39	15	0	122
KOLGA	111	62	46	11	230
Total	179	101	61	11	352
Expected Frequency (fe)					
	SA	A	D	SD	Total
Brass	60.65	35.05	21.14	5.3	122
KOLGA	114.34	65.99	39.85	9.8	230
Total	179	101	61	11	352
$(fo-fe)^2$					
	SA	A	D	SD	
	54.02	15.60	40.96	26.01	
	11.15	15.92	37.82	1.44	
$(fo-fe)^2/fe$					
	SA	A	D	SD	
	0.89	0.44	1.93	5.1	
	0.097	0.24	0.37	0.14	
$\chi^2 = \sum (fo-fe)^2/fe = 9.20$					

Source: Survey Data 2018

4.1 Conclusion.

The study concludes that the demand driven approach guarantees the effectiveness of donor assisted and donor provided water facilities in Delta State.

4.2 Recommendations

The study recommends as follows: (1) Donor agencies should first ascertain the need and secure the commitment of proposed benefiting communities before siting the project (2) That donors should encourage and practice participation and not paternalism in siting water projects to ensure sustainability of the facilities after construction.

REFERENCES

1. SITAN, (2010) Situation Analysis (SITAN) of Water, Sanitation and Hygiene. Technical Report Submitted to UNICEF Abuja Country Office (Contract No: SSA/NGRA/ 2010/00002203-0). UNICEF Nigeria,.
2. Cairncross S, Bartram J, Cumming O, Brocklehurst C. (2010). Hygiene, sanitation, and water: what needs to be done? *Plos Med* 7(11):e1000365; doi:10.1371/journal.pmed.1000365 (Online 19 December 2017).
3. Jain, N. 2011. Getting Africa to Meet the Sanitation MDG: Lessons from Rwanda. Washington, DC: World Bank Water and Sanitation Program. Available: <http://www.wsp.org/sites/wsp.org/files/publications/wsp-rwanda-sanitation-lessons.pdf> (Accessed 13 December 2017).
4. Morfaw, J. (2014). Fundamentals of project sustainability. Paper presented at PMI® Global Congress 2014—North America, Phoenix, AZ. Newtown Square, PA: Project Management Institute. <https://www.pmi.org/learning/library/fundamentals-project-sustainability-9369> (Accessed December 10, 2017)
5. Naing, L., Winn, T., & Rusli, B. N. (2006). Practical issues in calculating the sample size for prevalence studies. *Archives of Orofacial Sciences*, 1, 9e14.
6. Nigeria Vision 20: 2020. (2009). Economic Transformation Blueprint. Federal Government of Nigeria.
7. Nigeria's Multi-indicator Cluster Survey, 2011
8. PMI (2006) What is Project Management. <https://.pmi.org/Default.aspx>
9. WHO (World Health Organization)/UNICEF.(2012). Progress on Drinking Water and Sanitation: 2012 Update. (Geneva and New York WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation). Available: <http://www.unicef.org/media/files/JMPReport2012.pdf> (Accessed 13 December 2017).
10. WHO (World Health Organization)/UNICEF. (2013). Progress on Drinking Water and Sanitation: 2013 Update. (Geneva and New York WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation). Available: <http://www.unicef.org/media/files/JMPReport2013.pdf>(Accessed 13 December 2017).
11. WHO (World Health Organization)/UNICEF. 2014. Progress on Drinking Water and Sanitation: 2013 Update. (Geneva and New York WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation). Available: <http://www.unicef.org/media/files/JMPReport2014.pdf> (Accessed 10 December 2017).
12. WIN (2009), Water Integrity Network. Increasing Transparency, Accountability and Participation in the Water Sector. <http://www.win.org>
13. World Bank. 2013. How We Classify Countries. Available: <http://data.worldbank.org/about/country-classifications> (Accessed 13 December 2017).