



## **Sustainable Management of Community Development Projects: A Study of Selected Macro and Mini-Water Projects in Akwa Ibom North-East Senatorial District, South-South, Nigeria.**

by

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### **Abstract**

*This paper was premised on the fact that even with increasing government efforts and interests in formulating effective policies for rural community development (specifically water) in Akwa Ibom State, rural communities still seem to lack sustainable community water projects to show for. This paper is an ex-post facto evaluation and assessment of selected failed/collapsed mini-water projects in communities in Akwa Ibom North-East Senatorial District (a.k.a. Uyo Senatorial District), Akwa Ibom State. Interest was, among others, in investigating the reason so many community water projects become moribund soon after completion or commissioning, and weather issues of sustainability related to technical, social, human and environmental factors played a critical role in the problem. Interest was also on finding out why measures of sustainability were not incorporated during the initiation, implementation and evaluation phases of community projects. Specifically, the focus of this paper was on the prospects and problems facing the sustainable management of community water projects. Survey and content analysis approaches were adopted in the research. Critical issues bordering on the sustainability of community water projects were examined. The findings of the study showed a multiplicity of factors such as non involvement of the intended beneficiaries, use of sub-standard materials and poor community management approaches.*

**Key Words:** Sustainable management, Community development, Water needs, Macro-Water Project

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### **1. Introduction**

The issue of sustainability in community development projects is very important as most project interventions “die” after the completion of such projects. Collapsing, collapsed or failed macro and mini-water projects (whether implemented through community-based, self-initiated efforts, government-sponsored/initiated approach, donor

interventionists approaches), constitutes one of the greatest challenges of our times, facing the effective service delivery of many development programmes, which is also aligning into the focus of national development programmes or strategies. The multi-dimensional nature of the study requires a sociological approach/analysis as a frame of reference.

Though sustainable management of community development project is not only colloquial but of antiquity, the issues of sustainability had bordered on the socio-durability of such projects. Community (rural) development projects the world over (particularly in the developing countries), are concerned with the following:

- i) they are designed to improve, either directly or indirectly the capabilities and well-being of the rural poor;
- ii) they require the tailoring of development initiatives to particular local potentials and constraints of the rural poor;
- iii) they incorporate as part of their design, the continuous participation of the rural poor in project identification, implementation and decision-making as well as monitoring and evaluation. Helping rural people in different environments solve their own problems is the essence of rural (community) development projects;
- iv) they have agricultural production or other employment and income generating activities as their primary thrusts (World Bank, 2002).

Water projects constitute one important aspect of sustainable community development, which if effectively and efficiently harnessed, contribute to improved rural and urban livelihoods, wellbeing and high standards of living of the people under study.

According to NEEDS-2 (2008-2011), of the basic human needs (water, food, health, education, peace, security, esteem/social needs, and other psychological needs), water is a common factor to the others. It is also generally agreed that meeting most of the eight (8) MDGs is closely tied to water, which cuts across most of the goals and targets. In particular, problems of poverty are inextricably linked with those of water – its availability, its proximity, its quantity and its quality. It is seen as a core element of poverty reduction and conflict prevention. Improving the access of poor people to water has the potential to make major contributions towards poverty reduction (NEEDS-2, 2008-2011).

In the analysis of various sectoral aspects of the country, NEEDS – documents (2007 and 2011) acknowledged the pivotal role of water in national development, human welfare and poverty alleviation; and viewed the resource not just sub-sectorally, but through an integrated approach that looks beyond water supply and sanitation to the bigger picture of water resources which had to be properly addressed. It is only then that the sub-sectoral components such as hydro-power, irrigation (the principal key to food security in the long run, be it in the traditional or modern large-scale mode) can be appropriately located.

Water project management is a complex function, which includes regulatory, supportive and operational activity. Any review of water project management and institutions, requires a critical look at factors that could ensure cost effectiveness, local peoples' participation and the sustainability measures of such projects/programmes. The

types of access and quantum of water supply available to a household or community determines the real impact such water schemes and projects have on the sustainable livelihood of the rural poor. This is because the infrastructural facilities associated with water are closely related.

Interventions in water supply projects in both rural and urban areas in Nigeria is not new, as the quest for sustainable water projects in rural and urban communities has resulted in several approaches aimed at addressing the yearning water crisis during which unsafe drinking water came to account for substantial part of the disease and mortality burdens in various local communities. Several government policies and programmes have often placed emphasis on providing water as one of the basic needs for human existence. Right from the era of the different phases of the National Development Plans, the National Rolling Plans, Vision 2010, Vision 20-20-20, NEEDS 1 and 2, etc, the supply of accessible, adequate and quality water was recognized as a vital factor in the determination of health, welfare and productivity of the population.

As already noted in the preceding part of this paper, water is an economic, environmental and social goal, also an elixir of life. With a huge population of about 150 million people in Nigeria, about 450 million cubic metrics of safe water is needed daily to meet the demand for agriculture, domestic and industrial sectors. Therefore, in assessing issues of sustainability of water projects, it is apt to look at the variables/factors associated with the final judgement of the impact of such projects, sustainability of results and contributions to capacity development of such interventions.

This paper is an expository assessment, a qualitative discourse, a terminal and ex-post facto evaluation of macro and mini-water projects as aspects of rural (community) development in selected communities in AkwaIbomState. In this paper, the author discusses the idea of sustainability as well as the types of water project management that can be done to improve the quality of life within communities under study. Sociological approach was adopted in tackling the pertinent questions associated with sustainable water management.

## **2. Statement of the Problem**

Water needs as social, economic, technological, environmental goals recently assumed prominence in international discourses such as the MDGs. Halving by 2015 the proportion of people without sustainable access to safe drinking water and basic sanitation, constituted the 10th target of the 7th goal of the Millennium Development Goals (MDGs). The specific indicators for measuring and monitoring progress of this goal are:

- Proportion of population with sustainable access to improved water source, urban and rural;
- Proportion of population with access to improved sanitation, urban and rural
- These MDGs and targets initiated and implemented since 2000 by the World Leaders in both developed and developing countries was meant to be achieved in 2015 (the terminal year). Progress reports on the attainment of these goals and

targets are full of dismal pictures of performances, and have continued to remain a mirage and a paradox.

The drinking water and sanitation decade (1981-1990) in giving credence to the need for massive investments in water supply and sanitation, emphasized that this need represents one of the strong versions of the basic needs approach (BNA) which served a variety of useful functions, one of which is improving the quality of peoples' lives (WHO, 1981b:5).

Several national, state governments and international body's interventions in the water supply project and management in the country have noticed a dismal water situation in both urban and rural areas, and have made enormous financial provisions for achieving this goal. Upon the creation of AkwaIbomState on 23rd September, 1987, the provision of potable water in both the rural and urban areas was one of the main objectives of the state's policy thrust on rural development in meeting the Federal Government's policy on water supply and sanitation. The state government's rural water supply programme was stepped up by the sinking and development of boreholes, installation of hand pumps, rehabilitation of community-initiated water schemes through the supply of UPVC pressure pipes for water distribution and the supply of electricity generating sets or water pumps where applicable, as well as surface/spring water development. In pursuance of this, the Directorate for Rural Development and the Rural Water and Sanitation Agency (AK-RUWATSAN) programme of the directorate was designed to promote the provision of portable water supply, promote the health of the rural population and facilitate their participation in the rural development process. Apart from government efforts, non-governmental agencies, and donor-funded interventionists organizations such as the World Bank, EU, DFID, UNICEF, UNESCO, etc have engaged themselves in collaboration with host communities, in the provision of various development projects, including water projects. In all these, the choice of beneficiary communities was based on felt needs and participation in the model community programme (DFFRI, 1989).

It is not out of place to state that in most rural (community) development projects (such as electricity, feeder roads, food and agricultural programmes, water supply, educational projects etc), one of the most common projects that has the potency to fail or become collapsed and moribund is water projects. This accounts for the high number of abandoned, wasted or failed water projects in the rural areas/communities. There are complexities as to the factors for such failures.

As asserted by Ukpong (1991), 12% villages, out of 676 villages surveyed had portable water from boreholes provided by communities, government, wealthy community leaders and UNICEF (a donor body). The balance of about 88% of the villages in the survey obtained their drinking water from nearby or distant streams. This picture further portrayed a data on the dearth of viable, sustainable and clean water in the state.

The emphasis of this study on sustainability of community water projects cannot be over-looked given the increasing volumes of water consumed by the rural populace (measured in litres). Water is used for many purposes, both domestically and industrially.

Sustainable water management is therefore one of the ingredients of enduring rural development programmes.

Results from debates and presentations at the International Fresh Water Conference in Bonn in 2011 (one of the most important international events of the United Nations “International Year of Fresh Water”), showed a serious link between water crisis and poverty levels. It also showed the relationship between water crises as a food crisis, due to the continuing World population growth. Already, 70% of global water consumption is accounted for by farming (Mercker and Baz, 2003).

Between 1989 and 1990, DFRRI through the AK-RUWATSAN programme embarked on a good number of water projects in the state (DFRRI, 1989); all these projects have since ceased to function, thereby defeating the very essence for which they were established. Reliably, published data by the State Water Board (cited in Obot, 1994) on the estimated number of boreholes and functional boreholes spread across twelve (12) Local Government Areas in Akwa Ibom State, out of the then twenty four (24) local governments areas, showed that half the number of local government areas in the state had no potable water projects at all. Statistically, the figures showed that out of one hundred and fourteen (114) estimated requirements for boreholes in Abak, Eket, Etim Ekpo, Etinan, Ikono, Ikot Abasi, Ikot Ekpene, Itu, Mbo, Oron, Ukanafun and Uyo Local Government Areas, there were only 27 functional boreholes provided, some of which had failed. Also, published data on access to water and sanitation in the country as at 2000 shows a declining trend from the peak levels achieved in the 1980s and 1990s. Access to safe water supply declined significantly to as low as 50% (Oladipo, 2000). This could be attributed to the lack of sustainability of executed water projects.

The state is endowed with abundant supply of water because of the high annual rainfall of about 350mm. The problem according to Obot (1994) is that during the rainy season, there is not enough water for industrial and domestic use. The infrastructure for this is not there. It seems only the urban areas are supplied with pipe-borne water, the per capita daily consumption in the urban areas is below the national average of 114 litres. The reason for this, according to Obot (1994), is the frequent breakdown of water works, pipes and irregular electricity supply for pumping water, and in other cases, the pipes have dried up. Similarly, socio-economic survey reports carried out in the state (AK-BASE, 2005-2006), shows an existing situation of serious inadequacy in both rural and rural water supply. It is acknowledged that whereas a minimum of 100 gallons a day per capita consumption of water in urban areas is regarded as standard; many, not more than 10% of rural dwellers had access to pipe borne water and have to rely on streams, ponds and shallow wells with the attendant disease implications.

As asserted by (WHO, 1981b), the problem associated with community water supply has been systematically misconceived. The water Decade authorities such as WHO diagnosed the problem as one of the ineffectiveness in the provision of water. They described an administrative problem, the difficulty of “extending coverage”, when “there seems always to be a shortage of trained manpower”, and systems not being maintained”, and when institutions and agencies...become overstretched”, and financing is inadequate,

and “there is little coordination of water-supply development, sanitation and public hygiene” (WHO, 1981b).

In relation to the initiation and management of rural water supply, it is often asserted that one of the problems associated with government-sponsored and donor agencies interventionist projects, mostly in the provision of water projects, is the “balloon effects” that are associated with these projects implemented under their schemes. Some of these interventionist projects suffer defects, or become failed projects once the accompanying flow of external supports (grants/aid) to the project collapses. Water projects implemented and financed by international donor agencies require sufficient information to justify such interventions and demonstrate how it will affect target groups. In most cases, however, actual implementation required the adaptation of activities to changing circumstances in the localities that are being served (FAO, 1986).

For any development process to be meaningful, then the people – “the beneficiaries” – must be able to “initiate, sustain and manage the entire enterprises known as development. Development, according to Olurode (2001:386), when imposed from above may produce the opposite of development. This is because there are projects which are top-down in approach (in design and implementation) and whose lifespan is brief (shortly after completion and handing over).

Also worth mentioning at this point is the unfortunate situation of failed water projects and the failure to learn from past mistakes, mostly in the implementation of water projects. Many of these programmes and projects were planned and implemented in the rural areas without an evaluation and monitoring, forgetting the facts that these two twin concepts cannot be separated. Rather, they are interlinked. Most water projects were planned and implemented without an evaluation of the strengths and weaknesses of the project(s). Without proper evaluation, planners and implementers of water projects have been unable to improve upon past mistakes and so wasted a lot of resources on projects which had failed previously.

The current stages of monitoring and evaluation have failed to account for the high rate of water project collapse or abandonment. This is partly because beneficiaries and other development partners, have never or are not involved in the crucial assessment of the performance and impact of these development programmes and projects. It is, therefore, not surprising that in spite of many monitoring reports that indict programmes and projects implementing institutions and agencies, there has not been any significant improvement in the performance delivery of water projects/programmes. In many instances, many water development projects and initiatives fail not because of lack of effort or intention on the part of those involved, but because of deficiency in skills and understanding relating to the diverse roles and responsibilities required for the protection and management of these projects. The likelihood of success for such projects, therefore, requires theoretical and practical capacity in project planning, management and evaluation.

Given that the two critical criteria of success of a project or programme are “impact” and sustainability” or “the durability of project results”, this study is anchored

on the application of some of the variables mentioned in the preceding part of the study in understanding water project management and sustainability as aspects of rural community development.

### **3. Objectives**

This paper as an ex-post-facto study, it is aimed at a qualitative and social impact assessment (SIA) of the sustainability of water projects in selected communities in Akwa Ibom North-East Senatorial District (a.k.a Uyo Senatorial District).

Specifically, the study is aimed at:

- identifying existing and pre-existing water projects in the study area, with a view to ascertaining their impact, functionality and non-functionality;
- ascertaining the factors and problems affecting the durability and sustainability of such projects;
- suggest measures that will help in reducing or checking the rampant cases of failed/abandoned water projects in the study area.

### **4. Methodology**

Given the lack of data-base on the actual number of functional and non-functional water projects in the State, a cursory self-assessment of identified water projects was carried out in the selected communities. The study adopted the qualitative approach and the purposive sampling technique. The qualitative methodology rather than the quantitative approach offered the author a better understanding of the real situation rather than empirical data of the problem. A survey involving about 100 respondents using Focused Group Discussion (FGD) was also adopted for the study.

#### **4.1 Conceptual Issues and Clarification**

For the purpose of this paper, the following concepts and issues are reviewed with a view to understanding the underlying currents involved in assessing the state of failed water projects in the study area. The concepts are:

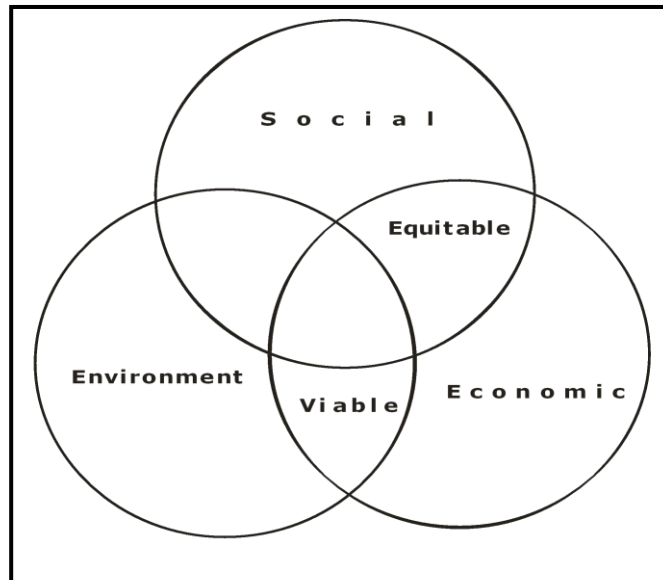
- Sustainable Community Development
- Generating self-sustaining rural development
- Failed project

#### **4.2 Sustainable Community Development**

Sustainability can be defined as the practice of maintaining processes of productivity indefinitely—natural or human made by replacing resources used with resources equal or greater without degrading or endangering natural biotic systems (Kable and Gurrell-Atay, 2014). Sustainable development ties together concern for the carrying capacity of natural systems with the social, political and economic challenges faced by humanity. According to the World Commission on Environment and Development (WCED, 1987), sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it, two key concepts:

- The concept of ‘needs; in particular, the essential needs of the world’s poor, to which overriding priority should be given; and
- The idea of limitations imposed by the state of technology and social organization of the environment’s ability to meet present and future needs.

A 2013 study concluded that sustainability reporting should be refrained through the lens of four (4) interconnected domains: ecology, economics, politics and culture (Magee *et. al.*, 2013).



#### 4.3 Scheme of Sustainable Development

According to Swisher and Monaghan (2003.), in an article titled sustainable communities are:

- **Environmentally Sound:** Decision making focuses on reducing the impacts of population growth and development on natural resources and the environment. Environmental sustainability is meant to keep environmental impact at acceptable levels (that is, the negative effects);
- **Economically Productive:** Community members making local capital investments that will sustain local human and natural resources and yield adequate financial returns to those investments. Economic sustainability is meant to guarantee return on investment, increase production and growth of the other sectors such as agriculture, electricity generation and increase private sector participation;
- **Socially Just:** Equitable access to resources and decision-making processes foster the distribution of goods and benefits across all sectors to the community held with the host communities, expected to create a good working relationship between the proponent and the project affected communities;



- **Technical Sustainability:** This is meant to meet the prescriptions of international and nationally acceptable standards throughout all phases of the project development

#### **4.5 Project Sustainability and the process of Generating Self-Sustaining Rural Development Benefits**

The need for designing sustainability into community development projects cannot be over-emphasized. Project sustainability according to Ering (n.d.) has several dimensions: financial, institutional, political and environmental, successful implementation and operational sustainability of a project cannot be guaranteed unless the project is financially sustainable. This author contends further that it is necessary for adequate financial resources to meet both recurrent and capital costs associated with the project. Cost recovery may be introduced through appropriate user charges; and for projects with private sector beneficiaries, financial profitability must be encouraged

Similarly, to avoid serious problems of implementation and operation, there must be emphasis on institutions, sustainability and participatory approaches which tend to stimulate and sustain the interest of project beneficiaries, encourage community involvement and use of local institutions, and reflect sensitivity to the existing social organizations, traditions, values and culture of the intended beneficiaries. It is therefore important at the design stage of the project to identify and understand the socio-cultural and demographical characteristics of the target group or community; the cultural acceptability of the intended project activities and their compatibility with the behaviour and perceived needs of the target beneficiaries.

The position of the FAO (1986) with respect to generating self-sustaining development benefits is based on the following considerations:

- i). the development initiative must be suitable in the localities served. The technological, package, organizational arrangements, and service delivery system should be acceptable to the intended beneficiaries and maintained with a minimum of external inputs.
- ii). The economic and financial returns of the project initiatives have to be sufficiently high to provide an incentive for, and cover the costs of continuation after Okon, D. E.
- iii). Sufficient resources have to be invested in building the technical, organizational and management capacities of key institutions so that the needed support can be provided.
- iv). Macro-economic policies must not be inconsistent with the development initiative and the benefits derived.
- v). The institutions involved have to programme sufficient manpower and financial resources to cover the recurrent cost of the development initiative

Another overall consideration in achieving sustainable benefits from community projects (such as water) is the sequencing and timing of activities. In order to build capacity and confidence, the project should start with a few simple activities that will

yield immediate results. With this foundation and with a clarification of operational procedures, more complex activities may be initiated. A plan for phasing out project inputs in a way that helps the government and intended beneficiaries to carry on the development initiatives should also be built into the project design

**Project Failure and Levels of Project Failure(s)**

Operational and conceptual connotations associated with project failure or collapse are many and varied. For the purpose of this study, the term project failure, project collapse or moribund project will be used interchangeably. According to Layton cited in Ladipo (2008) project failure is defined as “the inability of a project to deliver the intended benefits to the identified beneficiaries”. He further explained that failure is realistic, and there are many levels of failure ranging from complete failure to mild failure and each of these can be seen in context.

**Table 1: Levels of Project Failure**

<b>Failure Type</b>	<b>Characteristics</b>
Complete failure	<ul style="list-style-type: none"> <li>• Cancelled before completion</li> <li>• Failure after implementation</li> <li>• Abandonment.</li> </ul>
Serious failure	<ul style="list-style-type: none"> <li>• Continues its operations, but does not achieve full benefits.</li> <li>• Functions at low capacity.</li> </ul>
Medium failure	<ul style="list-style-type: none"> <li>• Project still functions</li> <li>• Some benefits derived, but not all</li> </ul>
Mild Failure	Largely meets benefits to the intended beneficiaries, but at the same time, hindered by costs, quality, time, risks and other technical defects.

**Source:** Adapted from Layton, Roger (2007). *Project failure Model: Lessons from the Field.*

**Empirical Cases of Selected Failed/Collapsed Water Projects in Selected Rural Communities in Akwa Ibom North-East Senatorial District**

Based on the analysis of secondary data and the purposive sampling carried out on both donor-aided projects, government funded projects and community-based, self-initiated projects, the following failed/collapsed/moribund water projects are collated for empirical analysis. This is without bias(es) to other failed projects within the study area which the author could not access, or could directly identify even with the aid of field assistants.

**Table 2: Empirical Cases of Failed Water Projects in Selected Communities and Local Government Areas in Akwa Ibom North-East Senatorial District**

S/N	Project Type/Description	Location	PresentState	Remarks
1	Mini-water Project Sponsored by CrossRiver Basin Development Authority (CRBDA)	Ikot Onoi, Ayadehe Clan, Itu Local Government Area (with pipeline extension to Ikot Udo and Ikot Akpabio) in Etinan Local Government Area.	<ul style="list-style-type: none"> <li>• Completely out of use by the communities barely two years after completion.</li> <li>• Several redrilling, change of pipes and repairs by the donor body and the community failed.</li> </ul>	<ul style="list-style-type: none"> <li>• Completed but failed project (Moribund).</li> </ul>
2.	Mini-water project sponsored by Cross River Basin Development Authority.	Eman Ikot Ebo, Uruan Local Government Area (2003).	<ul style="list-style-type: none"> <li>• Completed, but completely out of use three years later</li> <li>• Abandoned site</li> </ul>	<ul style="list-style-type: none"> <li>• Completed but failed (Moribund).</li> </ul>
3.	World-Bank Sponsored Assisted Mini-Water Project	Ikot Obio Atai, Ibiaku Itam, Itu L.G.A	<ul style="list-style-type: none"> <li>• Completed, commissioned and handed over to the community.</li> <li>• Technical default</li> <li>• Project out of use</li> </ul>	<ul style="list-style-type: none"> <li>• Failed</li> <li>• Cannot pump water for use by the community</li> </ul>
4.	Mini-Water Project sponsored by Cross River Basin Development Authority.	Ikot Obio Offong, Ibesikpo Asutan L.G.A	<ul style="list-style-type: none"> <li>• Completely out of use over ten years ago.</li> <li>• Abandoned</li> </ul>	<ul style="list-style-type: none"> <li>• Failure due to technical default and poor management</li> </ul>
5.	DFPRI/AK-RUWATSAN Sponsored Macro-Water Project	Obio-Ibiono, Ibiono Ibom L.G.A. (1988/1989)	<ul style="list-style-type: none"> <li>• Completely out of use</li> <li>• Dilapidated structure</li> </ul>	<ul style="list-style-type: none"> <li>• Completed but failed</li> </ul>
6.	DFPRI/AK-RUWATSAN Sponsored macro-Water Project	Ndiya, Nsit Ubium L.G.A. (1988/1989)	<ul style="list-style-type: none"> <li>• Completely out of use</li> <li>• Technical Faults</li> </ul>	<ul style="list-style-type: none"> <li>• Completed but failed</li> </ul>
7.	IFAD – Funded Mini-Water Project	Nung Ukana/ Ikot Obio Akpa,	<ul style="list-style-type: none"> <li>• Technical default, and</li> </ul>	<ul style="list-style-type: none"> <li>• Completed, but not fully used.</li> </ul>

		Ibesikpo-Asutan L.G.A. (2003)	partially used. <ul style="list-style-type: none"> <li>• Poor management of the facility</li> </ul>	
8.	NDDC Sponsored Macro-Water Project	Obong Itam, Itu L.G.A. (2008)	<ul style="list-style-type: none"> <li>• Not put to use by the benefiting community</li> <li>• Not completed</li> </ul>	<ul style="list-style-type: none"> <li>• Abandoned</li> </ul>
9.	Government initiated Macro-Water Scheme	Idu Uruan, Uruan L.G.A.	<ul style="list-style-type: none"> <li>• Collapsed, and not used by the Community for many years now.</li> </ul>	<ul style="list-style-type: none"> <li>• Abandoned</li> </ul>
10.	DFRRI/AK-RUWATSAN Sponsored Water Project	Nung – Ukana, Ibesikpo Asutan L.G.A. (1988/1989)	<ul style="list-style-type: none"> <li>• Not put to use by the benefiting community.</li> <li>• Technical default.</li> </ul>	<ul style="list-style-type: none"> <li>• Moribund and abandoned for many years now.</li> </ul>
11.	NNMC Sponsored Macro – Water Project	Ikot Antuen, Oku Iboku, Itu L.G.A. (1988)	<ul style="list-style-type: none"> <li>• Technical default, not put to use for so many years now.</li> </ul>	<ul style="list-style-type: none"> <li>• Abandoned and moribund for years.</li> </ul>
12.	Government/Community Sponsored Mini-Water Projects	Located at Ikot Abiyak, Ikot Ntu and Ikot Essien Villages in Oku Iboku, Itu L.G.A. (2003/2004).	<ul style="list-style-type: none"> <li>• Technical default, projects not in use by the community for so many years now.</li> </ul>	<ul style="list-style-type: none"> <li>• Completed, handed over, but developed defects.</li> <li>• Partially failed.</li> </ul>
13.	UNDP Assisted Hand Pumped Water Project.	Ikot Ebo, Ikono-Uyo, Uyo L.G.A. (1999).	<ul style="list-style-type: none"> <li>• Not put to use again.</li> <li>• Poor management</li> </ul>	<ul style="list-style-type: none"> <li>• Failed project</li> </ul>
14.	EU-Funded Mini – Water Scheme/ Project	Ikot Ayan, Ikono Uyo, Uyo L.G.A. (2009)	<ul style="list-style-type: none"> <li>• Not put to use again.</li> <li>• Developed technical problems.</li> </ul>	<ul style="list-style-type: none"> <li>• Partially failed project.</li> </ul>
15.	Mini-Water Project Sponsored by Uruan Local Government Council	Ekpene-Ibia, Central Uruan, Uruan L.G.A. (2007)	<ul style="list-style-type: none"> <li>• Completely out of use for many years now.</li> </ul>	<ul style="list-style-type: none"> <li>• Abandoned and completely failed.</li> </ul>
16.	EU-MPP6 Mini Water Project/ Scheme.	Udua Mkpafi, Etinan L.G.A	<ul style="list-style-type: none"> <li>• Ill-functioning</li> <li>• Put out of use.</li> </ul>	<ul style="list-style-type: none"> <li>• Partially failed project.</li> </ul>

**Source:** (i) Personal visits to the failed projects location

(ii) *DFFRI in AkwaIbomState – Projects and achievements (1989).*

## **5. Conclusion and Recommendations**

Water management cuts across features of sustainable community development. Government is still committed to eradicating water borne diseases and also improved water supply and management for productive economic activities. This paper in underlining the importance of managing water resources in an integrated and sustainable manner concludes that water project management must involve all the stakeholders (the government, opinion leaders, politicians and the target communities).

There is also the need for effective mobilization of communities through sensitization and training to achieve ownership, in order to ensure actual implementation of projects and continuity of these projects.

Based on the findings of this study, the following policy recommendations are proffered:

- Community members should identify their own water needs by drawing up Community Action Plans to address them.
- Government and benefiting communities should undertake the reactivation of abandoned water boreholes.
- It is also necessary for government to review the present state policy on rural water supply to ensure increased access to quality water on sustainable basis.
- There is also the need for increased partnership with Cross River Basin Authority, donor bodies, etc in the provision of water.
- Benefiting communities are also expected to ensure the up-keep and maintenance of water facilities in their localities through their own community management initiatives.
- The use of sub-standard materials for water projects by communities and donor agencies should be discouraged. Most often, the use of poor and obsolete materials often leads to failed water projects, and this cost a lot to benefiting communities, thus frustrating development efforts.
- Community water projects should be placed on lease/contracts with community members and private firms to ensure efficiency and sustainability.
- For sponsored water projects, it is also recommended that the community should be involved in all the stages of the project implementation as this will give them the capability to control and implement the project. This will also enable them to have the capacity to sustain such community-based projects without the support from the external partners.

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