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Title

**COMMUNITY PARTICIPATION IN WATER SUPPLY  
SCHEMES IN OKE-OGUN ZONE, OYO STATE, NIGERIA.**

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**ABSTRACT:**

The study evaluates community participation in rural water supply scheme in Oke-Ogun area of Oyo State, Nigeria. The specific objectives for the study include examination of socio-economic characteristics, identification of rural water supply schemes, appraisal of the level of community participation in planning and implementation of water supply scheme, examination of problems and offering practicable and appropriate measures of improving the level of community participation in rural water supply scheme.

The data were collected through questionnaires prepared for community members. A total of 1,193 respondents were interviewed using random sampling techniques. Data were further analyzed using both descriptive and analysis of variance (ANOVA).

The findings revealed presence of low income, lack of formal education, bad leadership, low level of participation in rural water supply schemes. It was concluded that there is need to seek greater involvement in planning and implementation of water facilities, so as to facilitate greater efficiency in the delivery of water supply to the rural communities.

**KEYWORDS:** Community, Participation, Water Scheme, Poverty alleviation and sustainability.

**1.0 Introduction:**

Over the last decade, community participation in water supply planning has been the trend of rural development (Ester et. al.2002). It started with community involvement in rural water system construction which later developed into full community participation and management of water supply schemes. In the process, the responsibility of service provision gradually moved from government to rural communities (Evans et al, 1993 Pretty 1995-URT 2005).Community participation in water supply was a response to the failures of large government sponsored water development projects. These projects failed because they excluded the beneficiaries from all the processes related to project formulation ,design and implementation (Adesina,1987).For example, the Aguthi phase1 water supply scheme in Kenya failed because World Bank ,the initiator of the project did not involve the rural communities in planning and implementation of

water supply. Water supply scheme was therefore, plagued with problems such as construction delays, budget over runs, and discord over consumer's payment methods (Kumar 2002, Narayan 1994, UNICEF and WHO, 2005).

Similar report was also given by Odumosun (1995) of non-involvement of rural community members in water supply schemes for Otan Ayegbaju in Osun state, Chinene community of Gwoza local government in Borno state and Agabe Community of Gwer west local government in Benue state. Odumosun reiterated that, it might be the reason for the negligence of these rural communities as regards water supply schemes provided by the government. Are (1982) also maintained that the way to end up 'top down strategy typical of water schemes mentioned above was to adopt participatory method in rural development projects. Effective water resources planning and management are however recognised as the key components of environmentally sustainable development and bad management of the resource can easily lead to poor socio-economic development of the nation.

The aim of the study is to examine the involvement of rural communities members in the planning and implementation of rural water supply schemes in Oke-Ogun zone. The specific objectives of the study are: (i) to examine the socio-economic characteristics of respondents in the study area, (ii) identify and categorize the types of water supply schemes, (iii) determine community involvement in planning and implementation of water supply schemes and (iv) examine the associated problems of community participation in water schemes in the study area. The research hypothesis in the null form states that there is no significance difference in the levels of participation among rural communities in the study area.

## **2.0 Methodology:**

### ***The study area***

The study was conducted in ten local governments in Oke-Ogun zone in Oyo state. Oyo state is located in the south western geo-political zone of Nigeria. It is bounded in the west by Republic of Benin, to the east by Osun State, to the north by Kwara State.

The study area focuses on Oke-Ogun rural settlements in Oyo state. Oke-Ogun is located on latitude  $6^{\circ}08^1$  north of the equator and  $3^{\circ}00^1$  east of Greenwich meridian. Oke-Ogun area consist

of ten local government namely: Oorelope, Irepo, Olorunsogo, Saki East and West ,Itesiwaju, Atisbo, Iwajowa, Kajola and Iseyin. The people in the study area are mostly Yorubas. The Yoruba who formed majority of the rural community were interviewed with some few ethnic groups such as Hausa, Igbo and Ibariba.

The study area was grouped into four contiguous zones. Within each zone, a random sampling technique was adopted to select five villages. The samples consist of the following rural settlement namely: Dogo, Kondoro, Ajegunle, Sooro, Alaguntan, Igbope, Ogbooro, Agbonle, Ago-Amodu, Ekokan, Imua, Igbojaye, Aba-Are, Baasi, Agunrege, Sabe, Iwereile Ijio, Gbenleke, Ipapo and Baba-Ode. Respondents were household heads. A 2.5% sample size of the household heads was chosen for the purpose of questionnaire administration, and respondents were selected on systematic sampling. One household was selected from every five housing units. This was based on the reconnaissance survey. Where the respondent was not available at the first visit, a return visit was made to get in touch with him or her. In the process, a total of 1,193 respondents were interviewed for the study.

Data on socio-economic characteristics were obtained in the first part of the questionnaire raising questions about gender, age, marital status, ethnicity, educational qualifications, occupation and income of respondents in the study area. These questions were reflected in the two main questionnaires used.

Information on the sources and characteristics of water supply in the study area was obtained from respondents and confirmed through direct observations and frequency counts of the water sources and schemes in the communities sampled. The sources were mainly the natural ones such as rivers, streams, and ponds and those provided by government, non-governmental organizations, community efforts and inter-aids. The latter focused upon are the ones regarded as schemes. Available water supply facilities in each community was exhaustively enumerated and recorded during the research survey. The water supply sources were not the same in quality. Therefore, a reconnaissance study was undertaken to examine the importance attached to each water supply scheme to obtain a rating scale. This was attempted to quantify the number of water supply facilities to each community in the area. Also, the water supply sources and facilities enumerated and quantified were used in rating the communities sampled.

As indicated above, two-stage approach was adopted in obtaining information on participation of the community on water supply planning and implementation in the study area. The first one was through personal and observational view on participation from community leaders. The information here was collected from opinion leaders in the communities. They were to give information about their own participation and the participation of others they knew in the village in the planning and implementation of water supply projects. The second set of data was obtained from the general members of the community. The information was about their perception of the participation of the community in water supply process in the study area. However, the direct experience of the opinion leaders and the perception of the general public were to provide baseline information on community participation in rural water supply schemes.

Data were further analyzed using both descriptive and analysis of variance [Anova] to affirm the significance difference between socio- economic characteristics and level of community participation in rural water supply schemes

### **3.0 Results and Discussion:**

a. Socio-economic characteristics of the respondents were adult and married. Female respondents (52.9%) were higher than male respondent (47.1%). Literacy rate was average among the respondents with only 49.1% respondent having one form of formal education or the other.

Majority of the respondents were Christians by 59.0%, Muslims 36.7%, Traditional herbalist 4.7% and others 2.6%.most of the respondents engaged in farming and trading as their major and minor occupations respectively. For instance 53.4% were farmers, 12.9% Artisan, 18.7% civil servant, 13.9% traders and others (1.1%). The income level of respondents was very low for them to contribute in community in community development programme in the study area. For instance about 42.1% respondents income fell between 6,000 naira- 10,000 naira with the highest being 21,000 naira and above (11.7%). A greater proportion of the population in the study area is Yoruba (79.6%) and are subsistence farmers cultivating maize, yams, cassava and millet. Production is low because most farmers are using traditional tools of hand hoe. Hausa constituted about 14.8% and are businessmen and women, the Igbos 4.9% mostly businessmen

and women and other tribes of 1.3% such as Ibariba, Idoma, Igala, Fulani and Ghanaians most of who are artisan, craft men and other informal jobs.

## II. Sources and types of water supply schemes

The sources of water supply to community members in the study area are rainwater, stream/pond, traditional dug-well, hand-pumps, boreholes and dams. But their utilization varies. Three types of water schemes were identified in the study area namely: hand-pumps (33.2%), boreholes (40.8%) and dam found in Igbope, Ijio and Iwereile. The majority of the respondents indicated that hand-pump and bore-hole water supply were more predominant and used for domestic purposes. 48.2% respondents indicated that the hand-pump water were used for domestic purposes and this was followed by borehole (35.3%). The donor agencies include local communities, individuals in community, government and inter-aids such as WATSAN and UNDP among others.

Shallow wells and streams/ponds were the most common alternative sources of water supply found in the communities followed by rain harvesting. Rain harvesting as an alternative source of water was only practised nearly everywhere in the study area mainly because a good number of houses in the area were roofed with iron sheets. The major reason why rural communities stop contributing user fees for borehole water supply in the raining season was that other alternative sources of water in the area were enough for the people to survive.

## III. Appraisal of community participation in water supply scheme(s) in the study area

Rural communities in the study area participated in decision making through initiations and formulation of water supply schemes. When local governments or donor water supply agencies approved plans of water supply schemes, rural community members were cut off from plan implementation of the water project(s). The findings reveal that community members participated in the rural water supply schemes through their attendance in planning meetings, decision making process, formulation of plans for rural water schemes, supervision of construction financial contribution of rural water scheme.

**Table 3.1: SUMMARY OF THE LEVEL OF PARTICIPATION IN WATER SUPPLY SCHEMES IN THE STUDY AREA.**

Source of variation	Sum of squares	D f	Mean square	F	Sig.	Remarks
Households attended planning meetings	150.000	3	50.000	9.307	.000	Significant
Household aware of project prior to construction	12.300	3	4.100	.718	.542	Not significant
Household that took part in decision making process of community	27.695	3	9.232	3.876	.009	Significant
Household that participated in more than one decision	17.783	3	5.928	3.750	.005	Significant
Household that took part in plan formulation of community water	19.644	3	6.548	4.244	.005	Significant
Household that supervised construction of community water	16.558	3	5.519	3.719	.011	Significant
Household that contributed financially to water project	78.235	3	26.078	12.544	.000	Significant

Source: Authors field work,2010.

Level of participation of community members in water supply for bore-holes, hand-pumps and earth dams in the study area varies at different stages of water supply scheme. The variations shows that there were significant differences in the participation of households at the different stages of water supply schemes among the rural communities as indicated in Table 3.1. these

variation occurs from households that attended planning meetings with f-value (9.307), household that was aware of project prior construction (.718), household that took part in decision making process in the community (3.876), household that participated in more than one decision (3.750), household that took part in plan formulation of community water (4.244), household that supervised construction of community water scheme (3.719) and household that contributed financially to water project (12.544). Hence, there is significant difference in the levels of participation of community members in rural water supply schemes in the study area with P value less than 0.05 degree of freedom.

#### **IV Problems militating against community participation for the study:**

It was revealed that many problems militated against community participation in planning and implementation of rural water supply schemes in the study area. These include inadequate finance (47.6%), bad leadership (13.1%), lack of cooperation among community members (6.4%), frequent changes in government (1.5%) high cost of materials 17.4%, embezzlement of project fund 12.2%, too much government control (1.8%).

#### **4.0 Recommendations:**

On the basis of the findings of this study, the following recommendations are advanced for necessary actions and policy formulation towards improving rural water supply schemes in the study area in particular and rural communities in Nigeria in general.

The local government councils and inter-aid agencies such as RUWATSAN, UNDP, should carry out community assessment situations of the needs of each community and the socio-economic characteristic of the rural community in the study area.

The types of rural water schemes to be cited in a particular community should be determined by the socio-economic characters of the people and availability of trained personnel to handle the major repairs of the projects. Local community members should be engaged to actively participate in all phases of rural water supply scheme so as to develop a sense of ownership and responsibility in local community members.

In view of the low literacy level of the people and the existing shortage of water supply in the study area, the partnership approach should be pursued with relevant stakeholders in the delivery of water supply in the study area.

Adequate enlightenment should be given to community members through mass media such as Radio, Television, Jingles, Rally and other sensitization programmes that can give members sense of belonging.

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