



UDC 332; DOI 10.18551/rjoas.2022-10.04

**ASSESSMENT OF COMMUNITY PARTICIPATION IN RURAL INFRASTRUCTURAL DEVELOPMENT THROUGH SELF-HELP APPROACH IN VANDEIKYA LOCAL GOVERNMENT AREA OF BENUE STATE, NIGERIA**

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**ABSTRACT**

The study assessed community participation in rural infrastructural development through self-help approach in Vandeikya Local Government Area of Benue State, Nigeria. A multi-stage sampling technique was used to select 150 respondents for the study. Data collected was analyzed using descriptive statistics, four (4) point Likert scale and logit regression model. Results from the study showed that majority (81%) of the respondents were male and were 43 years on average. 93% of the respondents were married with majority (67%) having secondary education. The respondents had an average household size of 7 persons and about 79.0% were in the informal sector like farming, trading and artisans. The average monthly income of the respondents was N31716. Schools (65%), roads (58%), health care centers (44%), local bridges /culverts (33%), boreholes (18%), local markets (13%) and electricity transformers (4%) were the infrastructures that were initiated and implemented by community self-help approaches in the study area. Community members exhibited high level participation in the areas of cash contribution ( $\bar{x}=3.2$ ), maintenance and sustainability of projects ( $\bar{x}=31.1$ ), participation in meetings for planning/decision making ( $\bar{x}=2.8$ ) and provision of physical labour on site ( $\bar{x}=2.7$ ). Educational status, major occupation, membership of community based organizations and monthly income were significant factors that influenced participation of respondents in community self-help projects. Major constraints to participation in community self-help projects in the study area were financial constraints (57%), lack of government support (47%), inefficient community leadership (37%), mismanagement of projects funds (27%), sentiments on project location and lack of interest by some community members. Government is admonished to support community development efforts inform of counterpart funding or provision of inputs. Participatory leadership, transparency and accountability in leadership should be encouraged at all the levels where possible as it encourages the community members from participating in community development projects.

**KEY WORDS**

Assessment, community, participation, self-help projects, Vandeikya.



Nigeria's rural dwellers are the most deprived when it comes to socio-economic infrastructure compared to the urban dwellers. They form substantial part of the nation's population but have the least access to modern infrastructure facilities and services (Mshelia and Guli, 2018). Rural sector account for about 70 percent of the country population and produces much of the natural resources (Federal Ministry of Agriculture and Rural Development, 2004). In spite of its contribution to national economy, poverty, malnutrition, high mortality rate, unemployment, infrastructural decay and poor access to basic health care are features of rural Nigeria. This unimpressive state of major indicators of development such as employment, education and health has seen rural communities remain perpetually underdeveloped (Udo-Imeh *et al.*, 2015). The importance of infrastructural facilities for agricultural growth and development is well established. Public infrastructure such as good roads, rural water supply, rural electricity, transportation, reliable communication, irrigation services, agricultural research, education and health do not only affect total factor productivity, but also contribute directly to substantial reduction in rural poverty (Atagher and Atagher, 2014). Infrastructure can be better understood as those specialized elements in the development process that bring about improvements in the socio-economic welfare of the masses (Oguzor, 2011; Oisasoje and Ojeifo, 2012). They are catalysts of development and at the same time their presence can be an indicator of the level of development. Infrastructure generally are community services such as communication, health, education and security that are fundamental to the society where they are provided as statutory right to everybody (Shaibu, 2014). The need for rural infrastructure towards socio-economic development of any nation cannot be easily ignored. As a matter of fact, the rural areas are known for primary economic activities which formed the foundation of economic growth and development (Coker and Obo, 2012).

One of the critical problems facing developing countries is the inadequate provision and maintenance of rural of infrastructure. The poor state of infrastructure in rural areas poses a great challenge to rural economic development efforts as it affects the level of productivity and inhibits full realization of potentials of farm households thereby leading to low agricultural productivity, low level of income, a fall in standard of living and a high rate of poverty among the rural dwellers. The infrastructural facilities that should be a catalyst of encouragement for the agricultural production are simply not available. Moreover, the inadequacy of these infrastructures that can improve the quality of life of the people is one major factor that impedes rural socioeconomic transformation (Abumere, 2002; Adeoye, *et al.*, 2011). The development of rural infrastructure must be seen as an integral part of the entire economic growth and development. In Nigeria, a major problem is the pattern of distribution of these basic infrastructures which exhibits urban bias; hence poverty is at a higher level in the rural areas than urban areas. A considerable emphasis is placed on the development of urban infrastructure either directly or indirectly to the almost neglect of the rural areas (Oguzor, 2011). Apart from poverty problem, the prime factor for rural-urban exodus is the attraction of the infrastructural facilities placed in the few urban cities and this trend will continue unabated until such facilities are equitably provided and sustained in the rural communities. Aderamo and Magaji, (2010) remarked that the sustainability of the provision, operation and maintenance of appropriate rural infrastructures has eluded the hopes and aspirations created in the minds of rural folks. The poor state of infrastructural facilities in most communities has been a major factor responsible for the slow pace of industrialization of the country. The problems of low and epileptic electricity supply, inadequate and unreliable water supply, and poor telecommunication network have affected industrial activities and establishments and consequently results into high cost of production. The neglect of rural areas by one sided government policies which tends to concentrate development in urban areas led rural dwellers to embark on self – help projects as means of developing their areas.

Over the past decades several debates among authors, philosophers, and community development practitioners emerged surrounding the meaning of community participation within the development discourse. According to Kumar (2002) as cited in Ndungea and Mbukusa (2020), participation means different things to different people. As such the



definition of participation is rooted in both the context and background in which it is applied. Conversely, the view of participation varies significantly amongst various authors. Development practitioners such as Nelson and Wright (1995), Dalal-Clayton and Dent (2001) view participation as means used to achieve some predetermined goals. It is a way of harnessing rural people's physical, economic, and social resources to achieve the aims and objectives of development programs and projects more efficiently and effectively. According to these development practitioners, participation is an active, dynamic, and genuine process that unfolds over time, and the purpose of which is to develop and strengthen the capabilities of rural people to intervene more directly in the development initiatives. The Self-Help strategy connotes a program of activities involving concerted efforts of members of a given community aimed at providing some basic amenities in that community. It is an inward-looking approach to self or group improvement, which relies solely on own efforts and largely for own benefit (Ebong *et al*, 2013). Self-help in the content of rural development is “the carrying out of developmental and capital projects in the rural areas through community participation” (Ogunleye-Adetona & Oladeinde, 2013). According to Udo-Imeh *et al.* (2015) self- help entails the development of the resources of the community by the efforts of members of that community alone, instead of relying on outside initiatives or assistance. Under the self-help approach to rural development, the logic is that individual or community effort determines their fate. This philosophy of development, according to Figueroa (2000) is an attempt made at enlisting and inspiring people in the determination of desirable change in goals and in the implementation of program to bring about the change deemed desirable. It also highlights community development as the involvement of the people. Self-help projects are focused on local participation by the people, who identify their needs, plan, take decisions and implement them to enhance their living. The idea involves the spirits of “give and take’, joint efforts, social cooperation and self-reliance (Udo-Imeh *et al.*, 2015). Self-help approach to community development seeks to optimally harness the resources (human and material) of the affected community in order to improve the living standard of members of that community. Community self-help for rural development could be seen as a movement to promote better living for the whole community, with or without external assistance (Ebong *et al*, 2013). Ultimately, community self-help for rural development has to do with inducing change in the rural areas for the achievement of an enhanced welfare for rural dwellers. Self-help is predicated on two major principles: the principle of individual and corporate survival and the principle of societal felt-need. These principles are responsible both for galvanizing communities into pursuing self-help development initiatives, and moderating them as they do so. The principle of individual and corporate survival hangs on the need for security and corporate coexistence. The instinct to survive is strong not only in the individual but also in the community. This causes people to come together especially when societal existence/or survival is threatened. According to this principle, self-help effort is a way of bringing the people in a community together to think and act jointly for the common good of the individual and the community. The principle of felt-need, on the other hand, assumes that within every community there exist certain needs, which are generally recognized and agreed upon by members of that community as posing a problem and therefore needing a solution (Ebong *et al*, 2013).

Nowadays increasing numbers of government as well as national and international development agencies have become aware of the importance of full community self-help participation in environmental projects skills knowing the fact that they can no longer finance all developmental projects, such as basic infrastructure like roads, electricity, drainages, water supply, health care etc. (Ogunleye *et al*, 2013). Community infrastructural projects are basic requirements by any settlement for its effective and proper functioning and vital for the overall regional development of the area. Provision of these services and facilities to the rural populace should be seen as one major goal of development. In so doing, the rapid rate of urbanization and its associated problems taking place as result of the influx of youth to urban centers will be drastically reduced. Shaibu (2014) observed that no modern settlement can survive on its own without adequate provision of community infrastructural facilities such as modern markets, water facilities, adequate roads network system, health facilities,



communication network facilities and many others to mention a few. The provision of adequate and functional community infrastructure has direct bearing on the economic and overall growth of any community. The poor state of rural and urban road network system have brought bottlenecks in the movement of goods and services in the country. Tackling rural underdevelopment remain a central debates in development issues and the challenges are enormous. The transformation of the rural area is a key issue in the overall development of a nation. Community self-help projects are very important intervention strategies for social empowerment, alleviation of poverty, income generation and provision of employment. They act as a catalyst for social development in the rural areas. In cities, these types of projects are typically planned ahead of need, and services are often provided by a single governmental body. However, in rural areas, services and infrastructure may be provided by a number of different entities, including non-profit corporations. Thus, the main idea of self-help projects and rural development is that a community should help itself by providing its felt needs (Okwakpam, 2010). It is in this regard that the rural communities jointly complements or fills the shortcoming of government efforts in the development of the community. It is the belief, therefore, that through self-help projects, various communities can develop better.

*Statement of the Problem.* Attempts at solving the rural problems had been the main objective of development planning in Nigeria since the inception of planning periods. Examples of such activities are evidenced in the following programs, Operation Feed the Nation (OFN); the National Accelerated Food Production Program (NAFPP) and the Directorate of Foods, Roads and Rural Infrastructure (DFRRI). The intention of policy makers is that rural infrastructure, if adequately provided, can enhance the quality of rural life. However, it is observed that the rural people have benefited very little from most rural development programs. It has been observed that in spite of abundant natural, physical and human resources Benue state is endowed with, there is still high incidence of poverty in the state especially in the rural areas. A cursory look at the communities within the Vandeikya Local Government Area reveals the neglect of these communities by the government. The communities are characterized by unavailability of motorable roads, poor housing conditions, irregular power supply, inefficient communication systems, absence of relaxation centers, dearth of job opportunities, as well as intolerable living conditions. Most of the communities lack or have poor access to portable water, and are consequently faced with high rate of diseases associated with water and unhygienic environment. Primary facilities or services may be available in larger communities but within a reasonable distance. For example, most small communities lack hospitals, students may need to go some distance to attend school. The lack of basic infrastructure such as access roads, markets, health centers, potable water, schools, among other, ensures that rural areas loses men of enterprise and initiatives to the urban centers. Absence of access roads limits agricultural production and sales and makes rural dwellers effectively isolated. The rural areas are at the backwaters of the development channel. People in rural areas are neglected by the larger society. Resources allocated to them fail to trickle-down. As a way forward, it is important to highlight the role community self-help projects play in the development of rural areas in order to encourage more rural dwellers to be more involved in such projects. The involvement of local people in the conception, execution, monitoring and evaluation of development projects has become very central to attaining sustainable development. Like other parts of Nigeria, many rural communities in Vandeikya local Government Area have planned and executed a number of different rural infrastructure ranging from community schools, health centers, markets, paved roads, bridges/culverts etc. through the instrumentality of self-help initiatives with the realization that government alone cannot provide all their needs. However, a study is yet to critically assess the different forms of rural development projects embarked upon and implemented by the community members. It is also not clear what factors actually affects community participation in community self-help development program in the study area. This has created a research vacuum which this study intends to fill. The broad objective of the study therefore, is to assess community participation in rural infrastructural development through self- help approach in Vandeikya Local Government Area of Benue State, Nigeria. The specific objectives are to:



- Describe the socio-economic characteristics of the respondents in the study area;
- Identify the various community development projects carried out by self-help initiatives in the study area;
- Ascertain the areas and level of participation of community members in the community self-help projects in the study area;
- Determine the socio-economic factors influencing community members participation in community self-help projects in the study area;
- Identify the major constraints to participation in community self-help projects in the study area.

## MATERIALS AND METHODS OF RESEARCH

Vandeikya LGA was carved out of Gboko LGC in 1976. It is located between longitude 8°30' to 9° 00' East and latitude 6°30' - 7°00' North of Greenwich. The projected population of the local government from the 2006 National Population Census stands at 316,600 (National Population Commission, 2006). It has a landmass of 183,939 square metres. The local government is made up of twelve administrative wards namely Mbaitough, Mbakaange, Mbayongo, Ningev, Nyumangbagh and Township (making up Tiev constituency). Other wards include: Mbadede, Mbagbam, Mbagbera, Mbajor, Mbakyaha, and Tsambe (making up Kyan constituency). Vandeikya The dry season is witnessed between the months of November and March while the wet season is witnessed between April and October. The climate is the tropical humid type with very high temperatures between March and April. The cool, dry harmattan weather is witnessed between December and February. The terrain is undulating, low-lying and is drained mainly by Rivers Aya, Sambe, Be, and Uaghshu. Vandeikya is in the South-Eastern part of Benue State and shares boundaries with Obudu and Bekwara in Cross River State to the East, Ushongo to the North and Konshisha LGA to the West. The Vandeikya people are hospitable and are predominantly Christians with a few traditionalists. Vandeikya Local Government area is dominated by undulating terrain with much of the area being below 183 m (600 ft) above the sea level. Agriculture is the mainstay of the people; with arable land for sheep, goats and cattle rearing. Over 80% of the population is directly engaged in the peasant farming of virtually all major food crops, with a concentration on yams, rice, sweet potatoes, cassava, sorghum, citrus, spices, pepper, groundnut and bambara nuts (Vandeikya Local Government Information Office).

*Sources of Data.* Both primary and secondary sources were used to generate the data for the study. The primary data were collected through administration of questionnaire as a major research instrument for the study. Secondary sources included documented materials from official gazettes, research reports, journals, published conference proceedings, unpublished articles, books and on-line materials. The basic rural infrastructure considered in this study includes; schools, health-care facilities, boreholes, access roads, bridges/culverts, electricity and markets.

*Sampling Technique.* Vandeikya Local Government Area is divided in two development areas or constituencies namely; The Tiev and the Kyan constituencies. A multi-stage sampling technique was used to select respondents for the study. The first stage involved the purposive selection of Kyan constituency which comprises of Mbadede, Mbagbam, Mbagbera, Mbajor, Mbakyaha, and Tsambe. For ease of administration, the Kyan constituency is further divided in to two micro zones namely; the upper Kyan and the lower Kyan. The upper Kyan consists of Mbagbera, Mbagbam, Mbakyaha and Ningev districts while the lower Kyan consists of Mbadede, Mbajor and Tsambe. The second stage involved a purposive selection of lower Kyan (Mbadede, Mbajor and Tsambe) for the study. The selected wards were rural based and characterized by absence of rural infrastructure occasioned by Government neglect of the area. The third stage involved a random selection of fifty (50) community members from each of the selected wards giving a total of one hundred and fifty (150) respondents for the study. The choice of this sampling technique is premised on the fact that community self-help projects require the participation of all members of the community. This implies that every adult within the selected communities



qualifies as a respondent in this study. However, to ensure a hitch free and reliable data gathering, some members of community development organization, women organization, youth organization and opinion leaders who have been promoters and beneficiaries of the various self-help projects undertaken in their various communities were identified and randomly selected as respondents for the study. The primary data was obtained with the use of structured questionnaire and oral interviews.

*Analytical technique.* Data collected were analyzed using descriptive statistics (frequency count, percentages, mean), four (4) point Likert scale as well as logit regression model.

*Four point type Likert scale.* Level of participation of the respondents in rural infrastructural development via self-help approach was measured using a four- point Likert. Here participation score was calculated by plotting eight statements regarding the areas of participation in CSHP against a four-point scale: 'highly participated (HP), participated (P), rarely participated (RP) and never participated (NP)' weighted as 4, 3, 2 and 1, respectively. The score of the eight statements (areas of participation) were summed to calculate the participation score of every respondent. Based on the 4- point scale, a mid-point of 2.50 was established i.e.  $4+3+2+1 \div 4 = 2.5$ . Thus a decision rule was that, a mean value of 2.5 was used as cut-off point to determine the level of participation of the respondents with respect to each of the participation indicators. Highly participated and participated were treated as positive response (High participation) while rarely participated and never participated were treated as negative response (Low participation). Thus, participation indicators with mean score equal or above 2.5 were regarded as those that receive high level of participation by community members while those with score below 2.5 indicated low participation by the community members i.e. participation index score: high participation:  $\geq 2.50$ , low participation:  $< 2.50$ .

*Logit Model Specification.* The logit regression model is a unit or multivariate technique which allows for estimating the probability that an event occurs or not by predicting a binary dependent outcome from a set of independent variables. The logit model is based on cumulative logistic probability function and it is computationally tractable. According to Gujarati and Porter (2009), it is expressed as:

$$P_i = E(Y = 1 | X_i) = B_1 + B_2 X_2 \dots \dots + B_3 X_3 \dots \dots \dots B_n X_n \quad (1)$$

For ease of estimation, equation (1) is further expressed as:

$$P_i = \frac{1}{1 + e^{-z_i}} = \frac{e^{-z}}{1 + e^{-z_i}} \quad (2)$$

Where:  $P_i$  = probability of an event occurring;  $P_i = B_1 + B_2 X_i$ .

The empirical model of the logistic regression for study assumed that the probability of the farmers' participation in community self-help projects is expressed as:

$$P_i = \frac{e^{b_0 + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_4 + b_5 X_5 + b_6 X_6 + b_7 X_7 + b_8 X_8}}{1 + e^{b_0 + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_4 + b_5 X_5 + b_6 X_6 + b_7 X_7 + b_8 X_8}} \quad (3)$$

$P_i$  ranges between zero and one and it is non-linearly related to  $Z_i$ , .  $Z_i$  is the stimulus index which ranges from minus infinity to plus infinity and it is expressed as:

$$Z_i = \ln \left( \frac{P_i}{1 - P_i} \right) = b_0 + b_1 X_1 + b_2 X_2 \dots \dots \dots + b_8 X_8 + u \quad (4)$$

To obtain the value of  $Z_i$ , the likelihood of observing the sample was formed by introducing a dichotomous response variable. The explicit logit model was expressed as:

$$Y = b_0 + b_1 X_1 + b_2 X_2 \dots \dots + b_8 X_8 + u \quad (5)$$



Where:  $Y$  = Participation index of the respondents (i.e. mean index of 2.5 and above = High participation, index below 2.5 = Low participation);  $X_1$  = Age of farmers (Years);  $X_2$  = Gender (1 if male, 0 if female);  $X_3$  = Marital status (1 if married, 0 if otherwise);  $X_4$  = Educational level of farmers (Years of formal education);  $X_5$  = Household size (number of persons in the household);  $X_6$  = Major occupation (Informal occupations i.e. farming, trading, artisans= 0, civil servants=1);  $X_7$  = Membership of community based organization (1 if yes, 0 if otherwise)  $X_8$  = Monthly income of household head (Naira);  $b_1 - b_8$  = Coefficients to be estimated;  $b_0$  = Constant term;  $u$  = error term.

## RESULTS AND DISCUSION

The results of the socio-economic characteristics of the farm households are summarized in tables 1 below. Age distribution of the respondents revealed that the majority (42%) of the sampled respondents aged between 41– 50 years. The mean age of the respondents in the study area was 43 years. This shows that majority of the sampled respondents were in their economically active age and hence can be actively engaged in community development activities. This implies that they are matured and experienced in life and thus may make valuable decisions and contributions towards community development.

Gender of the respondents revealed that 81% of the respondents were male while the remaining 19% were females. The implication of this is that both sexes are involved in community participation of self-help projects even though more male-headed households dominated the captured respondents in the study area. This finding is in coherence with Sosanya (2013) who advocated for gender inclusiveness in community development projects. This is important because of the role women play in community development and in particular households.

As regards marital status 93% were married while only 7% were single. The result is not unrelated with the culture, religion and norms of the people. It indicates the importance attached to marriage institution in the study area. The fact that majority of the respondents across the communities were married is an indication that they are viewed as responsible and mature adults who are ready to contribute to the development of their communities. The result also implies that since there were many married middle age and few unmarried, infrastructures such as the maternity centers and educational facilities should be provided and made available in order to cater for the expected increasing number of children (Ipingbeni, 2008).

Educational status of the respondents showed that 67% of the sampled respondents had secondary education, 29% had tertiary education while 4 % had only primary education. This in effect shows that majority of the respondents in the study area have at least one form of education hence are expected to have proper understanding of the importance of communal efforts. This finding is in agreement with Okunlola and Mafimisebi (2013); Adesida and Okunlola (2015) who in their separate studies stated that educational status influences the level of community participation.

The household size of the respondents showed that 54% of the respondents had between 6-10 members, 31% of the respondents had 1-5 members while the remaining 15% had a household size of 10 members and above. The average household size in the study area was found to be 7 members. By implication, more hands will be available for community participation. Adeoye *et al*, (2011) had remarked that the household size is an important variable especially in situation where human energy is a major source of power for carrying out farming activities.

Findings in Table 1 also revealed that about 79.0% are in the informal sector like farming, trading and artisans while just about 21% were civil servants. This result is not strange as the study area is predominantly agrarian. This implies that most of the respondents rely on farm products as their major source of food and income. This type of occupational structure afford people more time to participate in the self-help projects that the community embarked upon in terms of direct labour than the civil servants and the self-employed. (Ogunleye-Adetona and Oladeinde, 2013).



Results in Table 1 also revealed that majority 85% of the respondents were members of at least one community based organization. The membership of community based organization (CBO) could avail members the opportunity to obtain grants or support from government and non-governmental organizations for community development.

The average income of the respondents was N64875. Income is a major determinant of any development project in any area. It can be seen from this result that the monthly income of the respondents in the study area is fair enough to enable them to contribute to community projects. The higher the income of the people, the more they contribute to the development of their environment. With this type of income distribution; it is likely that more people will be able to contribute financially to the self-help project that the community embarks upon.

Table 1 – Distribution of Respondents Based on their Socio-economic Characteristics (n=150)

Variable	Frequency	Percentage	Mean
Age (years)			
21-30	12	8.0	
31- 40	55	37.0	
41-50	74	49.0	43.0
50 above	9	6.0	
Sex			
Male	122	81.0	
Female	28	19.0	
Marital status			
Single	11	7.0	
Married	139	93.0	
Educational level			
Primary	6	4.0	
Secondary	101	67.0	
Tertiary	43	29.0	
Household size			
1-5	46	31.0	
6-10	81	54.0	
>10	23	15.0	7
Major occupation			
Civil service	32	21.0	
Farming	79	53.0	
Trading	28	19.0	
Artisans	11	7.0	
Membership CBO			
Yes	128	85.0	
No	22	15.0	
Monthly income (N)			
10,000- 20,000	15	10.0	
21,000-30,000	63	42.0	
31,000-40,000	46	31.0	
41,000-50,000	15	10.0	
>50,000	11	7.0	31716

Source: Field survey, 2022.

*Survey of Available Self-help Projects in the study Area.* The Table 2 below seeks to identify the various infrastructural facilities provided in the study area through community self-help approach. Among the infrastructure that received attention by the community members, schools came first with 65.0% followed by roads (58%), health care centers (44%), local bridges and culverts (33%), boreholes (18%), local markets (13%) and electricity transformers (4%). Schools, access roads, health care, bridges and culverts ranked high amongst the self-help projects in the study area. These infrastructures were the felt needs of the communities hence members contributed funds and in some instances provided the required labour and materials for the projects. A closer look at the result reveals that educational infrastructure received the highest attention in the study area through self-help approaches as indicated by 65% of the respondents. Findings revealed that some well to do



individuals in the local government operating under the non-directive approach established secondary schools such as; Mbaakon Grammar School, Mbaakon, Mbawuar Secondary School Ihugh, Tsendzughul Memorial Secondary School Atayo, Tiley Gyado College, Ihugh, Lone Star Academy Mbajor, Ray of Hope Academy Abenga-Mbausuu, Happy Science Academy Mbaakon, Kever Igyor Secondary School Ihugh among Others. The missionaries equally intervened in this direction leading to the springing up of such schools like St. Jude Technical College, Tse-Mker, St. Perters Secondary School Mede, St. Winifred Girls Secondary School Ihugh etc. The community development associations were not left out in this drive as their efforts also paid off into such schools like: Mbara Community Secondary School, Ihugh, Mbajor Community Secondary School Mbajor, now St. Winifred Secondary School Mbajor, Tsambe Community Secondary School, Adeiyongu etc.

The next infrastructure that received much attention by the community members was in the area of access roads. The study area has a good number of unpaved roads constructed and maintained through community efforts as indicated by 58% of the respondents. There is only one major tarred road connecting the local government with other towns. There is absence of government intervention in the provision of motorable roads linking the communities. The unpaved roads which link the entire community with markets and other towns were constructed locally through community efforts and are often washed away during rainy seasons thereby making movement of goods from the hinterlands to the markets difficult.

Health care facilities also receive attention of the community members as attested by 44% of the respondents. There are many private primary health centers in the community that cater for the health needs of the people in the area. The missionaries equally intervened in this direction leading to the establishment up of health centers like St Thomas Hospital Ihugh, N.K.S.T Hospital Mbaakon, N.K.S.T Health Center Adeiyongu etc. It has been estimated that only about 57 percent of the country's population has access to modern health care services, with urban centers having a better share than the rural area. The Local Empowerment and Environmental Management Project (LEEMP) in collaboration with the local communities also initiated and executed various projects across the local government such as: construction of boreholes, class room blocks, single cell box culverts across some streams, construction of bridges across some rivers, health clinics etc. most of this projects have been completed and are put to use. The study also revealed that there is one major market (Ihugh market) and many other small markets which serve as commercial centers in the study area. They are the daily and weekly markets, which attract many traders from within and outside the state on every market day. The effect of these markets in terms of generation of income for those who engage in trading in this community cannot be overemphasized. The Local Government is noted for the cultivation of agricultural produce such as yams, cassava, rice, beans, corn, sorghum etc in large commercial quantity.

The respondents unanimously affirmed that there is strong existence of community development through self-help approach in the local government. Investigations further revealed that rural development through self-help approach has a long history in Vandeikya Local Government which can be traced back to the early 60's as greater part of rural infrastructure in the local government especially in the area of education, road construction, health care and local bridges have been provided through its instrumentality.

Table 3 – Distribution of respondents based on rural infrastructure provided through Self-help approach

Self-help project	*Frequency	Percentage
Roads	87	58.0
Bridges/culverts	49	33.0
Boreholes	27	18.0
Schools	98	65.0
Health centers	66	44.0
Electricity transformers	6	4.0
Markets	19	13.0

\*Multiple responses.



*Areas and Level of Participation of Community Members in Self-help Projects.* There were eight key areas in which respondents participated in community self-help projects. They included meetings for planning/decision taking, cash contribution, monitoring and evaluation of projects, provision of food for workers on site, maintenance and sustainability of projects, donation of physical project materials, provision of physical labour on site, vigilante group for security of projects.

Community members were asked their level of participation in the community self-help projects. Four (4) out of the eight (8) areas of participation had mean values above the cut off mean of 2.50 implying high level of participation. The results in Table 3 shows that participation in cash contribution had the highest mean of ( $\bar{x}=3.2$ ) followed by maintenance and sustainability of projects ( $\bar{x}=3.1$ ). Participation in meetings for planning/decision making came third ( $\bar{x}=2.8$ ) while Provision of physical labour on site came fourth ( $\bar{x}=2.7$ ). Finance is one of the most important factors in the implementation of community projects. This must have informed the decision of majority of the respondents to participate overwhelmingly in the contribution of funds for community projects. With this understanding, community members are always willing to tax themselves to raise funds for projects that are capable of taking them out of poverty and improving their standard of living. Participation in community development projects also leads to ownership and sustainability. Thus the strong sense of ownership among the stakeholders becomes a strong factor in sustainability of the projects as the people are more willing to ensure that projects which they are part and parcel of are adequately maintained. Kwaja's (2001) found a strong association between participation and sustainability and asserted that projects managed by communities are more sustainable than projects managed by government because of better maintenance. Participation in the decision making processes provides the opportunity for the beneficiaries to be carried along and their inputs and contributions utilized. Rural projects like unpaved roads, construction of local markets, local bridges etc. which do not necessarily require the services of experts are usually executed by community members through direct labour. Usually, strong and active members of the community would come together on agreed days to execute these projects while the women provide food for the workers. By so doing, both the men and women participate actively in community development.

The areas of participation whose mean score were below the cut-off mean of 2.50 included monitoring of projects ( $\bar{x}=2.4$ ), donation of physical project materials ( $\bar{x}=2.3$ ), vigilante group for security of site ( $\bar{x}=2.2$ ) and provision of food for workers on site ( $\bar{x}=2.1$ ). This might be due to fact that financial contributions raised for the projects covered the cost of employing the services of experts to monitor and evaluate the projects against standard and therefore do not require the physical participation of the respondents. Similarly, Project materials, payment for vigilante and food for workers were usually factored in the budget. The communities were mostly required to identify the project, provide the funds for almost every other thing and, work with the experts to monitor the project but not to be directly involved in every sphere of the project physically.

Table 4 – Distribution of Respondents based on Level of Participation in Self-help Projects

Area of participation	Level of participation					Sum	Mean
	AP(4)	P(3)	RP(2)	NP(1)			
Meeting for planning/decision taking	188	153	66	19	426	2.8*	
Cash contribution	228	213	36	4	481	3.2*	
Monitoring and evaluation	108	93	146	19	366	2.4	
Provision of food for workers on site	68	63	146	39	316	2.1	
Maintenance/sustainability of projects	224	183	52	7	466	3.1*	
Donation of physical project materials	84	99	134	29	346	2.3	
Provision of physical labour on site	164	153	70	23	410	2.7*	
Vigilante group for security	92	75	122	41	330	2.2	

\*Multiple responses. Note: AP=Always participated, P= Participated, RP=Rarely participated, NP= Never participated.



*Factors Influencing Participation in Community Self-help projects.* The Logit model was used in estimating factors that influenced participation in community self-help projects in the study area. The log-likelihood function (-76.08) shows that the estimated model including a constant and the set of explanatory variable fit the data better. This implies that all the variables included in the Logit model are jointly significant in influencing participation in community self-help projects. According to the results presented in Table 5, four out of eight predictors namely; educational status, major occupation, membership of community based organizations and monthly income were statistically significant factors that influenced participation of respondents in community self-help projects.

Educational level correlates significantly and positively with participation in community self-help projects (CSHP) at 5% level. The implication of this finding is that as one attains a higher level of education, attitude towards participating in community development projects is likely to be more favourable. In essence the higher the educational level attained the more favourable the attitude towards participating in community development projects. Abiona (2012) in support of this assertion posits that it is easier to communicate and decide lines of action on issues involving the community if members of the community are literate. It is also easier for the self-help group to attract outside assistance like grant and exposed to the outside world if members are literate. Effective participation obviously requires communicative and human relational skills which must be learned; hence those who are better educated would be better empowered for participation because their attitude would likely be favourable. The educated people would most likely appreciate community development better than the less educated. If the people appreciate community development, their attitude towards participating in community development projects is likely to be favourable. This implies that education level of the community affects the participation level of respondents (Karunakaran, 2019).

The result shows that there is positive correlation between family size and level of community participation in self-help projects which is significant at 5% level. A large household size could mean over dependency on scarce resources which could stimulate yearning for better conditions of life and thus lead to participation in community projects which are capable of transforming lives. This finding however disagree with the assertion by Mohammad (2010) that people with lower family size tend to participate more in development programs due to the fact that small family size households enjoy better economic and social life which has great influence on better understanding of developmental programs

The coefficient of membership of community based organization was significant at 5% correlating positively with participation in community self-help projects. Membership of community based organizations increases the probability of participating in in community self-help projects. Community based organizations invest their own resources in activities perceived to be beneficial to them and to their community. Members are prepared to take leadership roles, responsibility, and work in collaboration with the national government and also devise means to sustained community initiated projects.

Table 5 – Logit regression results on Factors Influencing Participation in Community SHP

Variable	Coefficient	Standard error	Z	P-value
Constant	16.8951	6.6256	2.55	0.011
Age	2.5581	1.6822	1.52	0.128
Gender	-.3138	.2302	-1.36	0.173
Marital status	.4421	.4351	1.02	0.310
Education status	.0958	.0562	1.70	0.088**
Household size	.0107	.5669	0.02	0.985
Major occupation	-.0538	.0283	-1.90	0.057**
Membership of CBO	1.2086	.5732	2.11	0.035**
Monthly income	2.0490	.6040	3.39	0.001***
Number of observations	150			
LR Chi <sup>2</sup> (8)	30.17			
Log likelihood	-76.0870			
Pseudo R <sup>2</sup>	0.1654			

Note: \*\*, Significant at 5%, \*\*\*, Significant at 1%.



Table 6 – Constraints to Participation in Community SHP

Constraints	Frequency	Percentage
Inefficient community leadership	56	37.0
Financial constraint	86	57.0
Mismanagement of project funds	43	27.0
Lack of government assistance	71	47.0
Sentiments on project location	32	21.0
Lack of interest by some community members	15	7.0

\*Multiple responses.

The coefficient of annual income is significant at 1% and correlated positively with participation in community development projects. This implies that there is a direct relationship between income and participation in community self-help projects. There is an assumption that the higher the income, the higher the participation. This means as the income level of the respondents increases, the probability of participation in community self-help projects increases as well. This finding is consistent with results of Aschalew and Teferee (2016) who in their study on determinants and levels of community participation in agricultural development programs in Aleta Wondo District of Southern Ethiopia found significant relationship between income and level of participation.

*Constraints to Participation in Community Self-help Projects.* Any developmental effort is usually associated with certain problems. This was evident in this study too. Major problems found to be associated with most of the projects executed or on – going in the study area included; financial constraints (57%), lack of government support (47%), inefficient community leadership (37%), mismanagement of projects funds (27%), sentiments on project location and lack of interest by some community members. From the result, financial constraints appear to be the major constraints to community participation in CSHPs. This is true considering the poor nature of the rural people whose main source of income is from peasant agriculture. Such people are not financially disposed to finance capital projects without any assistance from outside. Lack of government support in financing those projects initiated by community members is nearly absent as indicated by the respondents even when it was entrenched in the national development plan that government should give technical and financial assistance to communities that embark upon projects. The problem of inefficient leadership on the part of community leaders is another constraint limiting participation. This is particularly true in situations where the leaders are corrupt and out to enrich themselves at the expense of the masses. The respondents' also alleged mismanagement of project funds by the handlers of community projects. These cast doubts in the minds of the people in contributing for projects for fear of embezzlement. Sentiments on where projects are located also played a role in discouraging others from participating. Investigations revealed that some people feel marginalized when projects are not cited in their immediate communities. Others are indifferent or lack interest in participation may be due to ignorance or lack of effective mobilization and orientation on the benefits of self-help efforts in community development since the government cannot do it all.

## CONCLUSION

The research was conducted in Vandeikya Local Government Area of Benue State with the aimed of investigating community participation in rural infrastructural development through self- help approach in the area. The study showed that several infrastructural facilities such as schools, roads, health care centers, local bridges and culverts, boreholes, local markets and electricity transformers were initiated and implemented through community self-help approaches in the study area. Community members exhibited high level participation in the areas of cash contribution, maintenance and sustainability of projects, participation in meetings for planning/decision making and provision of physical labour on site. Educational status, major occupation, membership of community based organizations and monthly income were significant factors that influenced participation of respondents in



community self-help projects. Major constraints to participation in community self-help projects in the study area were financial constraints, lack of government support, inefficient community leadership, mismanagement of projects funds, sentiments on project location and lack of interest by some community members.

## RECOMMENDATIONS

Based on the findings from the study, the following recommendations were made:

- Self-help projects need adequate financial backing before it could be successfully implemented. The major problem faced by the community members on the implementation of the projects is inadequate financial backing. Members of the rural community barely have enough to eat, talk less of financing projects. It is recommended that community members under the auspices of community based organizations seek external funding from government and non-governmental organizations to fund community self-help projects;
- Government is admonished to support community development efforts inform of counterpart funding or provision of inputs. Both the government and the community members should work hand-in-hand to see that projects are initiated, completed and sustained;
- Project implementers and strategists should at all level employ democratic leadership as it favors the community members' ability and willingness to participate in community projects. Participatory leadership, transparency and accountability in leadership should be encouraged at all the levels where possible as it encourages the community members from participating in community development projects;
- Participatory decision making in relation to fair distribution of projects should be an integral part of community self-help development projects. This will remove issues of sentiments and marginalization in the location of projects.
- The community members should be educated on the importance of self-help strategy of development so that they can see the value of participating in community based development projects.

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