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Assessment of Rural Households' Participation in Rural Health Infrastructure Governance in Ondo State

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Abstract:- Rural health infrastructure is important to the physical wellbeing of rural households. However, their interests or participation are rarely mainstreamed into the governance of rural health infrastructure. The focus of this study is to assess the participation of rural household heads in decision-making for the governance of rural health infrastructure in Ondo State. Nine hundred and ten rural household heads were interviewed using simple random sampling from 30 rural settlements in three selected Local Government Areas (Irele, Ondo East and Akoko North West) in Ondo State. The data collected were analysed using descriptive and inferential statistics. Findings show that occupation, level of education and age group have negative effect while ethnic group indicates positive and significant effect on attendance in meetings whenever the decision on rural health infrastructure was to be taken. No doubt, if the decisions of rural dwellers are mirrored into rural health infrastructure development, it will improve the quality of their provision, finance and maintenance.

Keywords:- *Rural, Infrastructure, Governance, Health, Participation.*

I. INTRODUCTION

Rural infrastructure are physical, social and institutional facilities such as; healthcare centres, markets, flood-control structures, roads, schools and others located in rural settlements for economic revitalization and growth (Okosun & Olujimi, 2016; Mubila & Yepes, 2017). Rural settlements are sparsely populated communities with a population less than 20,000 persons, who are largely agrarians and are in need of quality infrastructure to boost their agricultural and economic productivity (Ambe et al., 2018). In spite of the relevance of infrastructure to rural development, the administration and control of its provision, finance and maintenance is becoming a cause of concern in current global debates (O'Brien & Pike, 2015), which bothers on rural governance. The International Geographical Union Commission on Geography of Governance (IGUCGG) in its 2019 Conference held in Cape Verde, defined rural governance as the process of directing and controlling the physical, social and economic affairs of rural jurisdictions (IGUCGG, 2019). Infrastructure development is within the purview of these rural affairs.

Three World Roundtables on Infrastructure Governance were organised by the World Bank and other agencies such as the Asian Development Bank, Organisation for Economic Cooperation and Development (OECD), Global Infrastructure Hub and other countries' governments in South Africa in 2017; Ivory Coast in 2018 and Korea in 2019 (World Bank, 2019). In these Roundtable debates, emphasis was on the challenges of infrastructure governance such as corruption issues through the course of infrastructure financing; regulatory design for infrastructure maintenance; mainstreaming consultation procedure into infrastructure planning; coordinating infrastructure policies across all tiers of government, and designing an infrastructure vision for communities to capture divergent interests. These challenges pose a threat to policymaker and community partnerships and are encountered in the process of providing, financing and maintaining infrastructure in rural areas (Greve & Hodge, 2010). According to Schoburgh and Ryan (2016), infrastructure governance refers to the various procedures in which government and non-government actors (citizens, their development associations and traditional institutions), interact to coordinate the affairs geared towards the delivery, provision, mobilization of financial resources and maintenance of infrastructure. Effective infrastructure governance intends to ensure that the needed infrastructure occur in a way that is cost-effective, acceptable by the beneficial population, and trusted by end-users while reflecting their needs. Rural health infrastructure governance deals with how the rural governments, rural dwellers, health policymakers, their development associations and indigenous village leadership interact to manage the development of health facilities located in rural areas (Lahmar et al., 2020). It is sandwiched in the principles of management on one hand and development concerns of rural infrastructure planning on the other hand (Anheier, 2017).

There are different types of infrastructure in rural settlements in Ondo State; nevertheless, health infrastructure is vital to the overall development of these areas. This is because healthy rural communities have a role to play in rural development. Most of the foods consumed in urban centres are produced in rural areas. This suggests that rural dwellers involved in agrarian occupation should be of sound health and have access to rural health facilities. Rural dwellers in Ondo State patronise higher-order health facilities in urban areas when the facilities to cure their ailments are not found in rural areas. This eventually increases the pressure on healthcare facilities in urban areas. The healthcare infrastructure in Ondo State is developed as a three-tier systems such as primary health centres for the provision of basic health services;

general hospitals for the provision of secondary health services and teaching hospitals of State Universities for the provision of tertiary health services. In the context of this research, rural health infrastructure refers to the primary health facilities located in the rural settlements.

Financial challenges are primary concerns of rural health infrastructure development. However, the governance viewpoint puts forward the intensification of awareness on decision making, participatory and administrative procedures and the clarity of responsibilities of stakeholders in any locality regarding its provision, funding and maintenance. In planning for the provision of rural health infrastructure, consideration is based on needs and the demographic characteristics of rural communities and funding arrangement of such infrastructure either solely by policymakers or in partnership with beneficial rural communities (Halseth et al., 2018; Ryser et al., 2018). Subsequently, the maintenance of rural health infrastructure and their management sustainability should include the efforts of stakeholders such as village heads, rural dwellers, Community-Based Development Associations and the policymakers within such jurisdictions (Shrestha, 2019). This study, therefore, intends to assess the participation of rural household heads in decision-making on the governance of rural health infrastructure in Ondo State.

II. LITERATURE REVIEW

Healthcare delivery in the rural areas bothers on the administration of provision, finance and maintenance of health facilities in rural settlements (McGrail *et al*, 2005). Different actors are involved in the administration of rural areas including village heads, policymakers, Community-Based Development Associations and rural dwellers in a participatory framework. Participatory Planning takes its roots from the United Nations' document on "Building Bridges between Citizens and Local Governments to Work More Effectively Together: through Participatory Planning". In this document, Participatory Reflection and Action (PRA) is identified as an essential tool in planning (Fisher, 2001) which later metamorphosed into the participatory planning concept. Participatory planning is one of the concepts of Urban and Regional Planning procedure such as rational comprehensive planning, mixed scanning and incremental planning, which suggests the harmonisation of the views of all participants (policy-makers, the community and their associations) in the development of rural infrastructure (Melendez & Parker, 2019). Infrastructure governance is therefore, considered as the various ways in which governments, village institutions, citizens and their development associations coordinate the administration of the delivery, funding and maintenance of infrastructure development (Yilema & Gianoli, 2018).

Funding and the sources of funding for rural infrastructure cannot be overemphasised. In most cases, poor governance leads to failed financial plans for the provision and maintenance of rural infrastructure. Finance is *sine-qua-non* in the development and maintenance of rural infrastructure; however, policymakers alone cannot fund all rural infrastructure projects from government treasury. There is need to consult with Community-Based Development Association and rural communities in financing rural infrastructure. Okosun and Olujimi (2016) describe maintenance as a way of keeping in good condition and shape all infrastructure that are of benefit to the people. There is a heighten response to finance and provision of rural infrastructure as opposed to its maintenance which is a major reason infrastructure in rural areas depreciate in value and functionality. As population increases in rural areas, the maintenance culture of rural dwellers towards rural health infrastructure in rural communities should improve. Households are the infrastructure junctions in sustainable development efforts (Rohracher & Kohler, 2019) as the end users of infrastructure who should influence the municipal or local government visions for rural infrastructure development and communicate their infrastructure needs through their indigenous civic associations to such governments. These households should have a measure of control in deciding how proposed installations of rural infrastructure should be allowed in their vicinity.

The end-users' opinion about the procedure for governing rural infrastructure development is necessary for successful delivery of rural infrastructure, hence, the need for policymakers to include their opinions and reflect their diverse interests in rural infrastructure development. Community members are keen to participate in the governance of rural health infrastructure but some factors determine their level of participation or even in worst cases non-participation. Literature has identified age and marital status as the main social factors. In certain rural locations in Tanzania, for instance, the age and marital status of people are basic criteria considered for inclusion in the governance of rural infrastructure (Karamunya & Cheben, 2016).

Consultation, as an act of communicating the ideas of a course of action with a person or group of persons before implementation is another critical factor. Integrating a consultation strategy in the governance of rural health infrastructure is crucial. Failure to consult with rural communities before the development is being initialised or lateness to respond to their aspirations can be detrimental to the successful execution of rural health infrastructure (Walsh *et al.*, 2017).

III. MATERIALS AND METHODS

A. Research Locale

Ondo State is located in South-Western Nigeria. The location of the State is between the latitudes and longitudes of $5^0$45' and $7^0$48' North of the Equator and $4^0$45' and $6^0$00' East of the Greenwich Meridian respectively as illustrated in Figure 1. The State lies entirely in the tropics and its relative location is such that it borders Ekiti State to the North, Kogi State to the North-East, Edo State to the East, Delta State to the South-East, Ogun State to the South-West, Osun State to the North-West and the Atlantic Ocean to the South. The locations of the three LGAs selected for the study is showed in Figure 2. Ondo State is about 280 kilometres to Lagos State (former Federal capital) and it occupies a total land area of 14,788.723 km^2. According to National Population Commission of Nigeria (NPC), the human populations of

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Ondo State, Irele, Ondo East and Akoko North West LGAs were 2,249,548, 100,127, 42,611 and 119,278 respectively, based on the population census conducted in 1991. Using an assumed growth rate of 2.6% suggested by the United Nations Population Division, 2019, and the exponential population projection method, the projected populations of Ondo State, Irele, Ondo East and Akoko North West LGAs from 1991 to 2021 are 219,372, 93,358, and 261,330 respectively. Ondo State has a climate similar to that of tropical rain forest with wet and dry seasons occurring in distinct periods and annual rainfall ranges from 1500mm to 2000mm (Oyekale & Oladele, 2012). The soil is well-drained, suitable for the cultivation of all crops and the resources of geological formation include coal, bitumen, limestone, granite, petroleum, gypsum and others (Mogaji & Olayanju, 2011). Socio-economic activities undertaken by people in Ondo state include trading, public service employment, and agriculture in descending order of importance (Olugbamila & Adeyinka, 2017). There is high demand for food products within Ondo State. These include cassava, maize and vegetables, such as aubergine, pepper and others (Ajayi & Olutumise, 2018). Cocoa farming is practiced in Irele, Akoko North West and Ondo East Local Government Areas (Akinneye *et al.*, 2018).

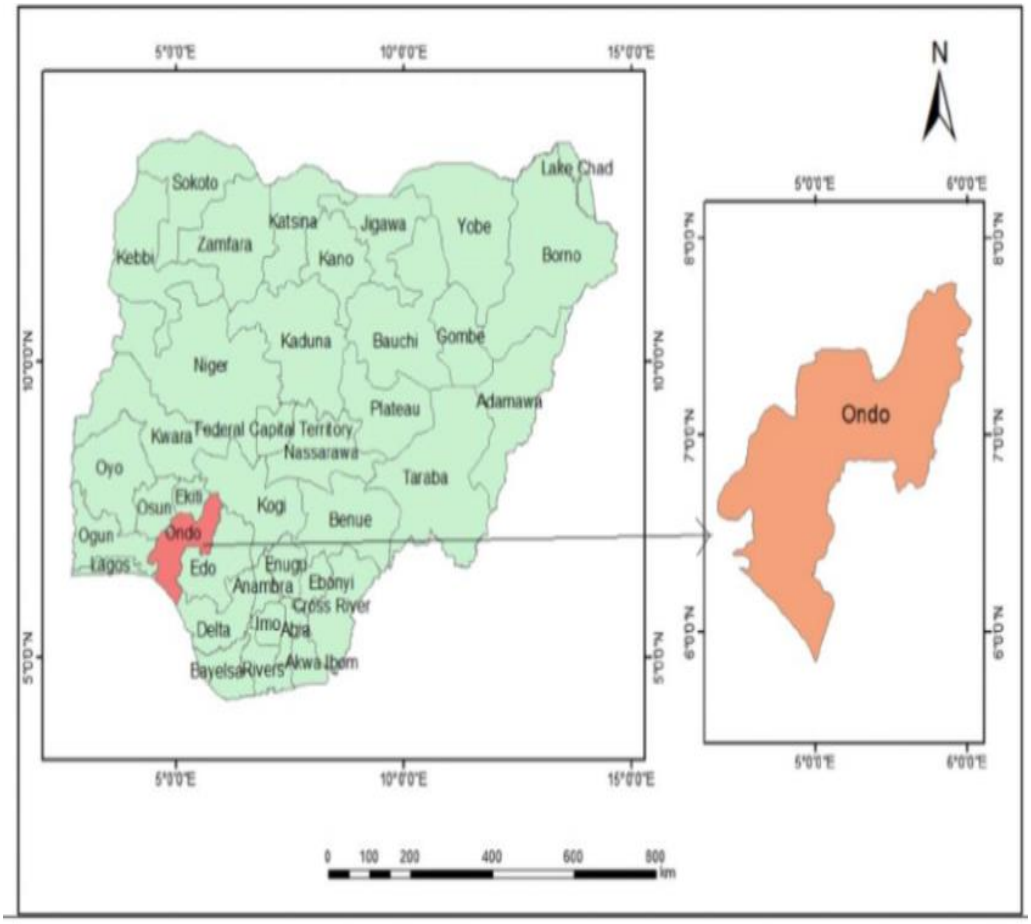

Fig. 1: Ondo State in National Setting

Source: Adewumi and Ajibade, 2019, p. 270

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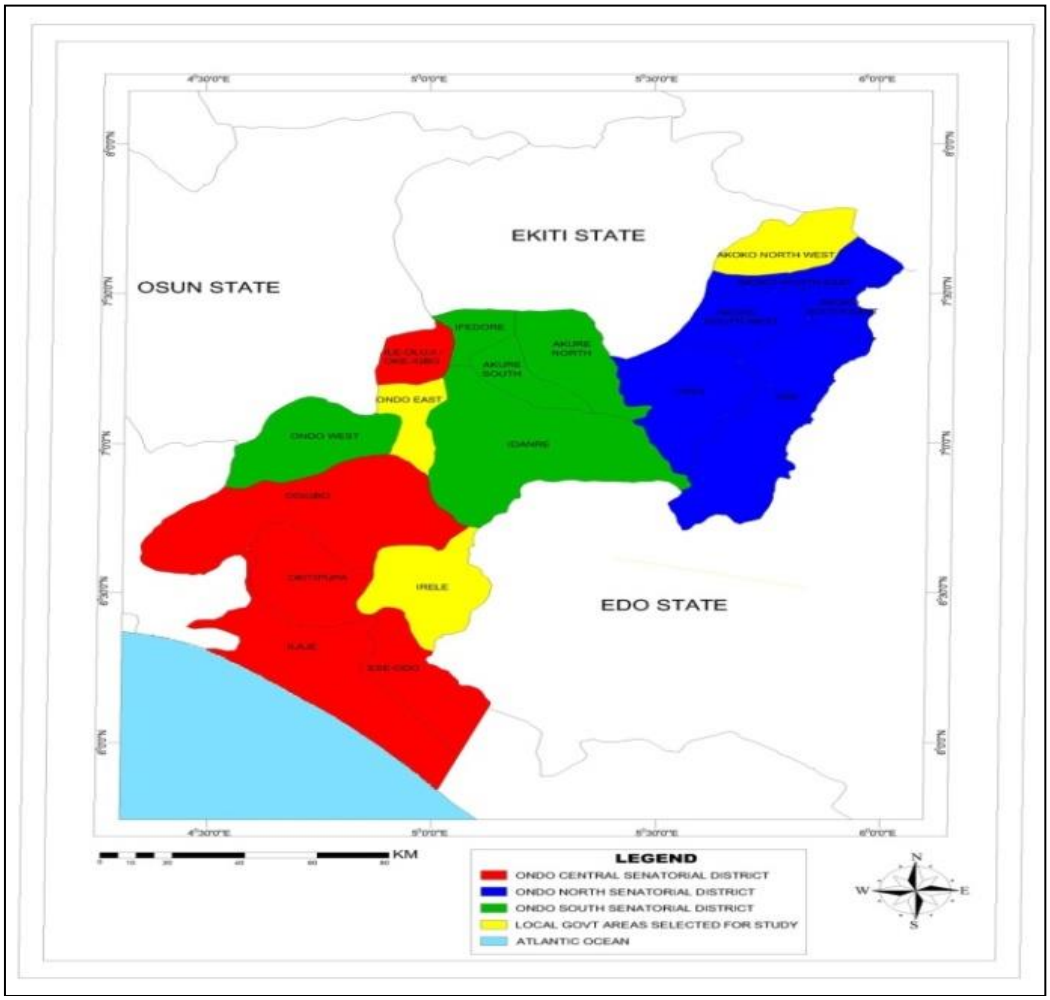

Fig. 2: Selected LGAs of study in their Senatorial Districts

Source: Ondo State Ministry of Physical Planning and Urban Development, Akure, 2021

B. Methods

The survey research design was adopted for this study. Data were obtained from primary source such as field surveys and observations, as well as secondary sources including published books, articles in journals, monographs, maps, and conference papers. The research population comprises rural household heads in the selected rural settlements in Irele, Akoko North West and Ondo East LGAs in Ondo State. These LGAs were randomly selected from the three Senatorial Districts of Ondo State using an online random number generator (calculator.net). A total of two hundred and fifty-two (252) rural settlements were identified in Ondo East, Irele and Akoko North West LGAs after projecting the populations of each settlement in the three LGAs from 1991 to 2021 (Table 1).

In the adoption of percentage of these 252 rural settlements for the conduct of the survey, relevant studies were considered. These include Emmanuel and Akinbode (2012) that used 10% in the sampling of settlements in their study of "Communal Facilities in Coastal Settlements of Ondo State, Nigeria: Assessment of Community-Based Organisations' Efforts Using the Facility Contributory Index Model" while the International Institute for Population Sciences (2017) used 15% in the study of the National Family Health Survey in India. For these reasons and others such as; the heterogeneous nature of the rural settlements; manageability of data; and ensuring that the sampling frame is adequate and representative of the total rural settlements in the three LGAs, 10% of the rural settlements was adopted as the sampling frame for the study.

The settlements in the selected LGAs for the study were grouped into five categories and each category has a population interval of 5,000 persons. This procedure was utilised to exclude the urban settlements in each LGA in the study of Olujimi (2003). Thereafter, 10% of the settlements in each rural category were adopted as the sampling frame for each LGA. However, in Groups II and III of Akoko North West LGA and Group II of Irele LGA only three (3) rural settlements were identified. Similarly in Groups III and IV of Irele LGA and Group IV of Akoko North West LGA, only one (1) rural settlement was identified. For proper representation of all the rural settlement groups, one (1) rural settlement was picked from such rural groups and captured in the sampling frame. Group V in Table 1, will be excluded from the study because it represents the urban settlements in the selected LGAs. The total number of rural settlements sampled in the survey at 10% is thirty (30) rural settlements. In all, sixteen (16) rural settlements for Irele LGA, 5 for Akoko North West LGA and 9 for Ondo East LGA will represent the sample frame for this study.

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Table 1: Sampling Frame for each LGA of the Study

Group	Settlement Type	Population Interval	Irele LGA		Akoko North West LGA		Ondo East LGA	
			Number of Settlements Identified	Rural Settlements Sampled at 10%	Number of Settlements Identified	Rural Settlements Sampled at 10%	Number of Settlements Identified	Rural Settlements Sampled at 10%
I	Rural	Below 5,000	131	13	15	2	94	9
II	Rural	5,000- 9,999	3	1	3	1	0	0
III	Rural	10,000-14,499	1	1	3	1	0	0
IV	Rural	15,000-19,999	1	1	1	1	0	0
V	Urban	20,000 and above	1	0	5	0	0	0
		Total number of rural settlements	136	**16**	22	**5**	94	**9**
						30		

Sources: Adapted from Olujimi (2003); Emmanuel and Akinbode (2012); International Institute for Population Sciences (2017); Authors' Compilation, 2021

The thirty (30) rural settlements for the survey were purposively selected because they are considered to represent the spread of public primary health facilities in the rural locations of the selected LGAs and information obtained from these settlements will reveal the state of rural-health infrastructure governance in the study area. In order to determine the sample size for the study; the raster images of the thirty (30) rural settlements were obtained from Google Earth Pro and digitised to determine the number of buildings in each settlement. Subsequently, 25% of the buildings in each rural settlement were obtained. The 25% sample of buildings in each rural settlement was adopted after reviewing the percentages used by scholars in similar rural studies such as Langer *et al* (2016) and Sun *et al* (2017). The sample size for Akoko North West, Irele and Ondo East LGAs are 285, 268 and 395 respectively (Tables 2 to 4). Therefore, the sample size for the study is 948 rural household heads (RHH) (Table 5).

Table 2: Sample Size for Akoko North West LGA

S/No	Name of Rural Settlements Sample	Projected Population (2021)	Number of Buildings	25% Sample of Buildings	Sample Size (One RHH Per Sampled Building)
1	Eriti	1,853	170	43	43
2	Afin	10,602	312	78	78
3	Oyin	6,581	189	46	46
4	Erusu	11,320	243	61	61
5	Ikeram	17,618	227	57	57
	Total	**47,974**	**1,141**	**285**	**285**

Source: Authors' Projections and Compilation (2021)

Table 3: Sample Size for Irele LGA

S/No	Name of Rural Settlements Sampled	Projected Population (2021)	Number of Buildings	25% Sample of Buildings	Sample Size (One RHH Per Sampled Building)
1	Salawo Odo	179	23	6	6
2	Shobomi	217	37	9	9
3	Adugbe	336	44	11	11
4	Agbesingba	548	48	12	12
5	Otugbembo	687	63	16	16
6	Legbogbo	1,018	80	20	20
7	Odugbenro	693	35	9	9
8	Abusoro	1,052	50	13	13
9	Ijuosun	4,053	102	26	26
10	Barogbo	2,130	52	13	13
11	Iyansan	5,173	85	21	21
12	Irele I	5,741	90	23	23
13	Akotogbo II	6,339	117	28	28
14	Irele II	5,041	101	25	25
15	Irele III	2,211	69	17	17
16	Irele IV	1,453	74	19	19
	Total	**36,871**	**1,070**	**268**	**268**

Source: Authors' Projections and Compilation (2021)

Table 4: Sample Size for Ondo East LGA

S/No	Name of Rural Settlement Sampled	Projected Population (2021)	Number of Buildings	25 % Sample of Buildings	Sample Size (One RHH Per Sampled Building)
1	Asantan Oja	1,007	224	56	56
2	Mobaolorunduro	888	177	44	44
3	Aiyetoro	1,294	150	38	38
4	Ilutitun	1,054	111	28	28
5	Obada	763	89	22	22
6	Oja Fagbo	2,604	192	48	48
7	Owena	1,097	121	30	30
8	Bolorunduro I	3,333	371	93	93
9	Oboto	2,536	145	36	36
	Total	**14,576**	**1,580**	**395**	**395**

Source: Authors' Projections and Compilation (2021)

Table 5: Sample Size for the Study

S/No	Local Government Area	Number of Rural Settlements Sampled	Sample Size (Total Number of RHH to be Sampled)
1	Irele	16	268
2	Akoko North West	5	285
3	Ondo East	9	395
	Total	**30**	**948**

Source: Authors' Projections and Compilation (2021)

Simple random sampling was used to administer 948 copies of questionnaires to Rural Household Heads (RHH) in the sampled rural settlements. However, only 910 questionnaires were successfully administered. Frequency tables, chart, and percentages were used to describe the number of occurrences of the responses to the questionnaires for the rural household heads. Questionnaires were administered to one rural household head per sampled building in the selected rural settlements in the LGAs with the help of ten (10) Field Assistants in sixty (60) days. The languages of administration for the field survey were Yoruba, Pidgin and English in order to overcome communication barriers during the survey. The time of administration of the questionnaire to rural household heads was between 9am and 4pm respectively. Multiple regression analysis was used to determine whether socio-economic attributes of rural household heads have significant effects on meeting attendance of rural health infrastructure decisions.

IV. RESULTS AND DISCUSSIONS

The socio-economic characteristics of the respondents were first considered in order to examine the plausibility of the responses obtained from the respondents as this might have influenced the outcome of the study significantly. The socio-economic variables considered for this study were, gender, occupation, income, marital status and education. Others are ethnicity, age, religion, duration of stay and household size.

Sex distribution of the respondents as shown in Table 6 revealed that 98% and 2% of the respondents were males and females respectively. Their response implies that majority of the rural household heads in the study area are males who were interested in responding to questions related to the governance of rural healthcare infrastructure when the study was carried out. Ovwigho (2011) and Ramasubramanian *et al* (2021) also confirmed that the male gender is more responsive in coordinating the physical, social and financial affairs of rural households. The occupational distribution of the respondents indicated that 45.1% of the respondents were farmers, 27% were civil servants, 27.5% were traders and 0.4% were unemployed. This implies that farming is the major source of livelihood for rural households in the study area. This assertion agrees with Adegboye (2021), that farming and agriculture-oriented activities are the major occupation of rural households.

The annual income distribution of the respondents reveals that 74.7% of the respondents had an annual income of ₦120,000 and above, 23.7% realised between ₦60,000 and ₦89,999; 1.1% between ₦30,000 and ₦59,999 and 0.4% realised between ₦90,000 and ₦119,999. Their responses suggest that majority of the respondents are living below the monthly minimum wage of ₦30,000 stipulated by the government. The study revealed that 0.9% were single; 97.3% were married, 0.9% were divorced and 1.0% were widows/widowers. This implies that majority of the rural household heads in the study area are currently married. It can equally be deduced that majority of the respondents are married adults who are capable of responding to governance-related issues of rural health infrastructure.

This study reveals that 23.2% of the respondents had non-formal education, 2.2% had basic education, 69.6% had secondary education and 4.9% had tertiary education. The claim of the respondents implies that 76.8% are educated and could engage in quality discussions on governance of rural healthcare infrastructure in Ondo State. The ethnicity of the respondents shows that 75.4% were Yorubas, 24.6% were Igbos and 1.0% were Hausas. The dominance of Yorubas is envisaged being Yoruba speaking communities where the ethnic group are more likely to feel the effectiveness or ineffectiveness of rural health infrastructure governance.

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About, 72.2% were between the ages of 46 – 59 years, 27.1% between 31 – 45 years, 0.4% between 18 – 30 years and 0.2% were 60 years and above. Nearly 99.8% of the respondents are within the working age group who are in constant need of healthcare in the study area. It can also be deduced that the governance of the provision of rural health infrastructure should not neglect the healthcare needs of the senior adults.

The religious distribution of the respondents reveals that 77.9% were Christians, 21.8% were Muslims and 0.3% were traditional worshipers. No doubt, majority of the people practice Christianity. Swanson and Schoenberg (2017) had reported that faith-based institutions have been shown to be effective for promoting the development of rural health infrastructure but are rarely considered about the health priorities of rural communities and the promotion of rural health preferences.

Information on the duration of stay of people in the various settlements indicates that 21.9% had stayed between 10 – 14 years, 22.9% between 15 – 19 years and 55.3% for 20 years and above, which means that virtually all have resided in the study area for at least ten (10) years. It also implies that majority of them have indigenous knowledge of the lack or development of rural health infrastructure. As posited by Cooper (2019) there is always positive impact of indigenous knowledge on the governance of rural infrastructure.

The household sizes of the rural people are fairly large as 51.9% of the respondents had a household size ranging from 0 – 4, 5 – 9 (47.7%), 10 – 14 and 15 – 19 (0.2%) respectively. Invariably, 48.1% of the respondents have a household size of five (5) persons and above which implies that almost half of the rural population in the study area had large families and as such will demand more Primary Healthcare Centres in the nearest future. It can equally be deduced that the current situation of rural health infrastructure governance in the area will require the maintenance of existing provisions and proactive decisions for improvement.

Table 6: Socioeconomic attributes of the Rural Household Heads

Socioeconomic variables	Classification	Rural Household Heads	Per cent
Sex	Male	892	98.0
	Female	18	2.0
	Total	**910**	**100**
Occupation	Farming	410	45.1
	Civil Service	246	27.0
	Trading	250	27.5
	Unemployed	4	0.4
	Total	**910**	**100**
Annual income (₦)	30,000 – 59,999	10	1.1
	60,000 – 89,999	216	23.8
	90,000 – 119,999	4	0.4
	120,000 and above	680	74.7
	Total	**910**	**100**
Marital status	Single	8	0.9
	Married	885	97.2
	Divorced	8	0.9
	Deceased Partner	9	1.0
	Total	**910**	**100**
Level of education	Non-Formal	212	23.3
	Basic	20	2.2
	Secondary	633	69.6
	Tertiary	45	4.9
	Total	**910**	**100**
Ethnic group	Yoruba	677	74.4
	Igbo	224	24.6
	Hausa	9	1.0
	Total	**910**	**100**
Age group (in Years)	18 – 30	4	0.4
	31 – 45	247	27.1
	46 – 59	657	72.3
	60 and above	2	0.2
	Total	**910**	**100**
Religion	Christianity	709	77.9
	Islamic	198	21.8
	Traditional	3	0.3
	Total	**910**	**100**
Duration of stay (in years)	10 – 14	199	21.8
	15 -19	208	22.9
	20 and above	503	55.3

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	Total	**910**	**100**
Household size	0 – 4	472	51.9
	5 – 9	434	47.7
	10 – 14	2	0.2
	15 – 19	2	0.2
	Total	**910**	**100**

Source: Authors' Fieldwork, 2021

Further analysis of findings indicates that 99.8% of the rural household heads had never attended any meeting regarding the decisions for improvements of rural health infrastructure of their communities. Only 0.2% of the rural household heads claimed awareness of such meeting, an indication that they are rarely involved in deliberations and decisions geared towards the provision, funding and maintenance of rural health infrastructure. Even when they are included, their opinions are not usually mainstreamed into the governance of rural health infrastructure in their communities. The reason for their low attendance in meetings may be related to lack of awareness of notices to that effect or poor dissemination of information to rural household heads regarding such meetings.

Table 7 presents the respondents suggestion of the stage of implementation during which their interests can be included for participation in rural health infrastructure governance. The respondents strongly agreed that they should be included before the implementation stage (M = 4.99, SD = 0.091). Other respondents agreed that they should be included during the implementation and rehabilitation of infrastructure (M = 4.21; SD = 0.407 and M = 4.16 and SD = 1.627) respectively. However, few respondents strongly disagreed with the inclusion of rural household heads' during utilization and decommissioning of infrastructure (M = 1.64; SD = 1.234; and M = 1.02; SD = .283).

Before the implementation of rural health infrastructure, rural households can suggests appropriate locations for provisions or maintenance initiatives. During the implementation, rural dwellers can lobby for improved building materials for a given rural health infrastructure. The decommissioning refers to the official closure of non-functional health infrastructure by policymakers, and in this process, rural household heads can participate in suggesting locations that are functional. During the utilization, rural dwellers can suggests appropriate measures for maintenance because they are in constant observation of the level of the use, abuse and disuse of such health infrastructure. This implies that the rural health infrastructure governance should encourage the inclusiveness of rural households' interests before and during implementation, as well as the rehabilitation of previously implemented rural health infrastructure. Popoola et al (2022) also reiterated the necessity of integrating rural households' interests in the process of rural infrastructure provision and maintenance.

Table 7: Stages for the inclusion of rural households' participation

Stages	**Mean**	**Standard Deviation**	**Remark**
Before the implementation	4.99	.091	SA
During the implementation of infrastructure	4.21	.407	A
During the utilization of infrastructure	1.64	1.234	SD
During the decommissioning of infrastructure	1.02	.283	SD
Rehabilitation of infrastructure	4.16	1.627	A

Source: Authors' Fieldwork, 2021

It was discovered that majority of the respondents (99.8%) had not been charged any levy in form of tax as an addition to the receipts of payment for engaging the services of medical and health workers in rural healthcare centres. The remaining 0.2% were not sure if such tax or levy beyond the charges of accessing rural healthcare services existed. Policymakers rarely introduce any rural health infrastructure tax for the fear of non-compliance by rural dwellers. They perceive that majority of the rural dwellers have low income, and may lack the willingness to pay if such rural health infrastructure tax is imposed. The introduction of such tax may lead to the non-utilization of the health centres and the return to the non-conventional methods of rural healthcare. These findings imply that rural health infrastructure tax has not being introduced as a strategy to improve the governance of rural health infrastructure finance in Ondo State which would have served as a provisional fund to aid the provision and maintenance of rural health infrastructure.

Table 8 presents the multiple regression results used to assess the effect of socio-economic characteristics of rural household heads on meeting attendance regarding rural health infrastructure decisions. The study statistically establishes answer to this research hypothesis; "Socio-economic Characteristics of Rural Household Heads has no significant effect on meeting attendance for rural health infrastructure decisions". The result indicates that occupation (B = -0.017, t = -4.355, p< 0.05); level of education (B = -0.008; t = -2.568, p < 0.05) and age group (B = -0.018, t = -2.513, p < 0.05) have negative and significant effect on the meeting attendance in the communities regarding the decisions of rural health infrastructure.

Farmers, civil servants and traders are the predominant workers in the three rural settlements of this study. Hence, there is a high tendency that they focus more on their occupational sites (farmlands, governmental offices and shops) with little or no time to attend meetings regarding the provision, maintenance and finance of rural health infrastructure. The chances that only the unemployed rural household heads will attend meetings is high because they have sufficient time to attend such meetings. Education can also play a negative role on the level of attendance of the meeting by rural dwellers in Ondo State. The educated in this context have at least basic education and for this reason they may be engaged in formal employments, hence, may have little or no time to attend meetings on rural health infrastructure. The rural dwellers with non-formal education may desire to attend meetings but may be discouraged to attend due to the inability to fully articulate their thoughts in such meetings except in cases where indigenous languages are used in communication. The working age population that represents 99.8% of the rural household heads are engaged in various occupations to earn a living, and as such may have little time, to attend meeting for improving the development of rural health infrastructure in Ondo State.

However, ethnic group (B = 0.014, t = 2.014, $p < 0.05$) has positive and significant effect on meeting attendance of rural household heads regarding the decisions of rural health infrastructure. The predominant ethnicity in the study area is Yoruba, thus, implying that the use of indigenous language as a mode of communication in meetings will improve the level of attendance in meetings regarding the governance of rural health infrastructure. The Adjusted R-square value of 0.019 indicates that 1.9% of the variation in meeting attendance of rural household heads regarding the decisions of rural health infrastructure is explained by the socio-economic characteristics of the respondents. The F score (10, 899) = 2.75 with p-value < 0.05 indicates that the result is significant.

Table 8: Multiple regression coefficient result of socio-economic characteristics of Rural Household Heads and Meeting Attendance

Socioeconomic Characteristics	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	T	Sig.
(Constant)	2.094	.037		56.168	.000
Sex of Respondent	.006	.013	.019	.481	.631
Occupation	-.017	.004	-.312	-4.355	.000
Annual Income	-.003	.004	-.064	-.918	.359
Marital Status	.004	.007	.022	.582	.561
Level of Education	-.008	.003	-.152	-2.568	.010
Ethnic group	.014	.007	.134	2.014	.044
Age group (in years)	-.018	.007	-.181	-2.513	.012
Religion	-.001	.006	-.010	-.170	.865
Duration of stay (in years)	.000	.004	-.004	-.055	.956
Household size	-.007	.006	-.078	-1.234	.217

Dependent Variable: Existence of any meeting attended regarding the decisions of rural health infrastructure
R= 0.172; R-square = 0.030; Adj R-square = 0.019; F(10, 899) = 2.75; p-value = 0.003
Source: Authors' Fieldwork, 2021

V. CONCLUSION AND RECOMMENDATION

The participation of rural household heads is vital in the governance of rural health infrastructure in Ondo State. The inclusion of their ideas and decisions will help policymakers make right choices in terms of the location of primary health facilities to be provided and their maintenance. In terms of finance, the introduction of a tax system mainstreamed into the service cost of accessing primary health facilities in rural areas will improve the funding of the provision and maintenance of rural health infrastructure. It is, therefore, recommended that the participation of rural household heads should be encouraged by policymakers in Ondo State by adhering to their interests whenever it is expressed as well as supporting them financially for improved provision, finance and maintenance of rural health infrastructure.

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