

## Original Research Article

### **Evaluation of Sustainable Ibadan Project's (SIP) difficulties: A case study of Ayeye **portable** water supply in Ibadan, Oyo State, Nigeria**

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#### **Abstract**

The development and administration of urban infrastructure in the majority of developing nations has faced significant challenges in recent decades due to enormous urbanization. However, in light of the declining urban environment, it has frequently been questioned whether traditional urban planning techniques are still effective for improving the circumstances of the urban environment. Finding novel strategies has become essential, especially when dealing with impoverished metropolitan areas. In order to promote a participatory approach to the development and administration of the urban environment, international organizations like the United Nations Development Programme (UNDP) and the United Nations Centre for Human Settlements (UNCHS) have recently started to implement plans. The Sustainable City Programme (SCP) is one of these tactics; its goal is to give public, commercial, and community sector partners as well as municipal authorities in the city a better capacity for environmental planning and management. The Sustainable Ibadan Project (SIP), located in Ibadan, Nigeria, is one of the cities in the poor world where the program is being implemented.

This study looks at the SIP's collaborative approach to managing, developing, and improving Ayeye portable water supply in Ibadan.

From the research work, it was revealed that 16.6 % of the respondents indicated that nine (9) application letters for the request of water supply were received by the office of SIP and out of the nine (9) applications received in a month, only 18.5% of the **respondets** agreed that all were approved, the remaining 81.5% of the respondents disagreed. All the respondents (100%) agreed that physiochemical survey were needed to decide where facilities are located, 75% of the respondents agreed that water supply are adequately and spatially distributed while the remaining 25% of the respondents disagreed. Also, 75% of the respondents agreed that water facility are adequately distributed, water supply are adequately maintained and **regularly** flushing of the water facility by geologist, community participation in water management and regular visitation of the SIP staff to the project site were highly needed. Moreover, **91.8% of the respondents agreed were able to access water facility** when they are in need of it and the remaining 8.2% of the respondents disagreed, 52.6% of the respondents said they were satisfied with **conditon** of the facility and and the remaining 47.4% of the respondents disagreed. Finally, 92.7% of the respondents agreed that the number of the water facilities are enough for their area and the remaining 7.3% of the respondents disagreed.

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Conclusively, it was revealed that regular flushing of the water facility by geologist is highly needed and community participation cannot be rule-out in maintaining the effective water facility and the SIP staff **need to be visit the site of the** water facility from time to time for good monitoring and evaluation.

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**Key words:** Sustainable Ibadan Project, Ayeye Portable Water Supply.

## 1. INTRODUCTION

The provision of environmental infrastructure services, particularly in low-income communities, is one of the main issues posed by urbanization in developing countries. It is inadmissible to argue that the conventional planning techniques that these nations inherited from their colonial overlords are acceptable and sustainable. Following the economic downturn, governments in a

number of developing nations were forced to abandon their traditional methods of providing infrastructure because of declining public funds. This was one factor that led to the poor and deteriorating state of the urban environmental infrastructure[1].The quality of life, economic output, and health of the populace are all significantly impacted by access to a healthy water source. However, one of the main issues Nigeria's rural communities are currently confronting is providing for this demand. [2]

Water quality is used to indicate how suitable and sustainable water is for different purposes or processes. Water quantity is just as significant as quality because both have an impact on the amount and quality of available water. It is influenced by several different natural and human factors, with hydrological influence being the most significant natural one [3].

Water accessibility is determined by calculating the proportion of the population that can reasonably obtain enough safe water for drinking, washing, and other basic household needs [2].

It is an indicator of the population's health as well as the nation's ability to gather, purify, and supply water to users. Both treated surface water and untreated but uncontaminated water from natural springs, sanitary wells, and protected boreholes are considered safe sources of water. A person requires roughly 20 liters of clean water per day on average to suit their daily demands for home, metabolism, and hygiene. In cities, the source might be a public standpipe that is 200 meters or less distant. According to the World Bank Group (2002), the definition in rural areas suggests that household members do not have to spend an excessive amount of time obtaining water [4]

Nigeria's efforts to combat poverty, boost the economy, guarantee food security, and preserve ecological systems depend heavily on the management and use of its water resources. It is regrettable that up to 43% of Nigerians still do not have access to clean water after over 60 years of improvements to the country's water supply. In comparison to urban areas, the situation is especially dire in rural areas [5].On the other hand, disease and death are exacerbated when there

is insufficient access to clean, safe water, particularly for young people. Therefore, increasing access to water is essential to lowering underage mortality and morbidity, especially in impoverished rural communities. One important aspect of initiatives to reduce poverty is having access to water, which means that women and children might spend more of their time on other activities instead of fetching water, which saves much of their time. Children and the elderly are the most vulnerable demographics, however not all of these individuals reside in low-income nations. Many water-related illnesses, including cholera, hookworm, and bilharziasis, affect millions of people globally. The health and standard of living of individuals often improve when water supply and sanitation services are improved [6].

The country's poor water management, which has implications for both socioeconomic growth and environmental sustainability, has led to the current democratically elected administration developing a new national policy on the development of water resources. Providing rural residents with high-quality, reasonably priced drinking water is one of the policy's goals. In order to accomplish this goal, a deeper comprehension of the limitations and difficulties associated with rural water provision is required. In addition to tackling the problems of adequate technology, cost recovery, and participatory governance, it is necessary to consider the values, attitudes, preferences, and capacities of the various parties involved in the administration and supply of water in rural regions. A slum is defined as a collection of buildings or an area that exhibits a number of unsanitary conditions, overcrowding, deterioration, or lack of basic amenities such as potable water, a drainage system, schools, health facilities, parks, and a post office, among other things [7]. The Ayeye area of Ibadan falls into this category.

Slums generate spontaneously and are in some cases, a direct result of the prevalence of poverty experienced by the inhabitants of cities. Slums, which are regarded as an element of urban decay, also result from congestion in overcrowded cities where poor immigrants seek to settle for just any available accommodation irrespective of quality.

Therefore, the new integrated approach to sustainable water supply requires greater knowledge and understanding of the technological, social, economic and ecological dimensions of water resource management and how they are inter-related. Developing the capacity to engage in integrated sustainable development planning from the community level to the highest national decision-making level, remain a major challenge in Nigeria and many other African countries.

The United Nation (2002) has estimated that a third of world's urban population today does not have access to adequate housing, and lack access to safe water and sanitation. Rapid progress in industrialization and urbanization has resulted in creation of more slums, with dilapidated facilities, which is prevalent in the developing and urban area without exclusion to water facilities. The provision of sanitary tools and infrastructures are overwhelmingly deficient as most residents of Ibadan do not have access to a hygienic toilet. Also slum houses in the urban blighted zones lack toilet provisions and structures, resulting in indiscriminate littering of streams with human faecal materials and other wastes [8]. The faecal wastes and other solid wastes are discharged to the environment without adequate treatment, while liquid wastes from sewage is being released into rivers and ponds untreated. Therefore, the quality of water affected has significant impact on the spread of infectious disease and quality of life. This can therefore be accessed using the biological water parameters in bacterial analysis. The contaminants will be identified to quantify the sanitation of the slum area. Most slum areas are noted for lack of reliable sanitation services, supply of clean water, reliable electricity, law enforcement and other basic services. The major features of slum are known with poor housing and planning systems, which can be seen in the water quality and sanitary facility [9]. Therefore, since water is an invaluable resource to man, essential for sustenance of life, this project work is very essential for the peoples of Ayeye area in Ibadan.

### **1.1 Main Objective**

The broad objective of the study **was to evaluation** of Sustainable Ibadan Project's (SIP) difficulties: A case study of Ayeye portable water supply in Ibadan, Oyo State, Nigeria

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## 1.2 Specific Objectives

1. Determine the physico-chemical properties of Ayeye portable water supply.
2. Assess the level of concentration of heavy metals in the Ayeye portable water
3. Compare the quality of water over space within the study area.
4. Compare the quality of water from different water sources within the study area.

## 2. MATERIALS AND METHODS

### 2.1 The Study area

Ibadan was founded in the year 1829 primarily as a refugee and war camp. It has an estimated population of three million people. The city is strategically located in the South Western part of the country, serving as a transit point between the coastal port of Lagos and the northern hinterland. It is also a centre of trade for farm products, a manufacturing centre and hosts several research institutes, a renowned university and a polytechnic. Politically, Ibadan has been government headquarters since the pre-colonial era. It was the headquarters of the old Western Region and the old Oyo State and remains the capital of the new Oyo State of Nigeria. Currently, Ibadan consists of 11 Local Government Areas, five being urban while the other six are classified as rural or peri-urban local governments. The employment structure of Ibadan weighs heavily in favor of trade, public administration and service industries. The city is facing serious environmental issues relating to its high rate of urbanization accompanied by acute shortage of water supply and poor management of solid and liquid wastes. Ibadan is the capital city of Oyo State, Nigeria. It was founded in the early 19th century by fleeing refugees from the old Oyo

Empire, following Fulani invasion of Yoruba land. Ibadan is designated as largest city in the West Africa and the most populous in Black Africa. It is mainly inhabited by the *Oyo* –a *Yoruba* sub-group with an estimated population of 1,829,187. Ayeye is one of the oldest **community** of Ibadan and it is being regarded as slum because of lack of basic amenities [10].

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## 2.2 Target population

The research shall involve a survey of the existing Sustainable Ibadan Project (SIP) of Ayeye **portable water** **IN** Ibadan North-West Local Government area of Oyo State. The target population comprised residents in the selected eleven (11) communities in **table 1**

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**Table 1: Execution Dates of Water Projects in Ibadan**

S/N	Environmental Issues	Project Executed	Dates
1	Water	Water Development of Akeu Spring	1997
2	Water	Development of Agbadagbudu Spring	2002
3	Water	Moga Natural Spring Project	2002
4	Water	Odo Ona/Gada Borehole Project	1998
5	Water	Deep Wells at Oke-Ado and Oja Oba	2002
6	Water	Bodija Market Borehole Project	1999
7	Water	Seni Village Borehole Project	2004
8	Water	Adegbayi Natural Spring Project	2003
9	Water	Onipasan Natural Spring Project	2004
10	Water	Sango/Isopako Natural Spring Project	2003
11	Water	Ayebale Rain Harvest Water Project	2002

All the eleven (11) demonstration water projects were visited and both primary and secondary sources of data was employed. **It was as well reviewed the management** system of the water

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facilities and also assessed the user satisfaction of the facilities and how they are maintained and sustained. Four major steps were adopted in this research. These are

a) **Reconnaissance survey:** Reconnaissance survey of all the existing water facilities in the study areas was carried out; this is with the view to assess the number, type, location as well as the cleanliness of the facilities in the study area.

b) **Taking Inventory of existing facilities:** Inventory of the result of the reconnaissance survey carried out was taken for further research

c) **Review of management system:** The management systems of the existing water facilities in the study areas was reviewed basically through interviews. This was to assessed the management and policy decisions on the provisioning system of the facilities, the investment decision by private providers as well as the problems encountered etc.

d) **User satisfaction survey:** Survey on user satisfaction was also carried out basically through the use of questionnaires to assessed user's conveniences of the facilities in terms of location, number, payment system and cost, cleanliness of the facilities etc.

### **2.3 Data Collection Instruments**

Three sets of data collection instruments were employed in the research, the first was the administration of questionnaires while the remaining two involved the use of both interview and field manuals.

#### **2.3.1 Use of questionnaire**

Questionnaires were administered on the users of the water supplied by Sustainable Ibadan Project (SIP). This is to determine the level of satisfaction of the facilities in terms of

- i. How accessible the facilities are?

- ii. Frequency of use of the facilities,
- iii. Number of users of the facilities per day
- iv. Opinion on payment system or cost of services,
- v. Cleanliness of the facilities etc.

### 2.3.2 Use of interview manual

A face-to-face interview **will be conducted** to some management staff of Sustainable Ibadan Project (SIP). This **will** focus on determining the following|

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- i. Management system of the facilities.
- ii. Policy decision on the **provisioning** of system and
- iii. Control measures of the provision of the facilities

### 2.3.3 Use of field manual

Some observations were made in the field, most especially about the accessibility and efficiency of the facilities, the condition of the water system etc. This is basically about the physical inventories in the activities areas.

## 2.4 Data Collection Procedure

### 2.4.1 Questionnaire Application

#### 2.4.1.1 Sample frame and sample size

Eleven (11) selected communities being the case study of the research was where the sample was drawn. A sample size of twenty (20) questionnaires was randomly administered on the users of the water facilities in each selected communities study area making two hundred and twenty (220) respondents. The sample frame for the research comprises of the management staff of the SIP

where eight (8) respondents **was choose**, the workers of the water facilities where two (2) respondents **was choose** per selected communities making a total of twenty-two (22) and the users of the water supply **was** two hundred and twenty (220). Therefore, the total sample size is two hundred and fifty (250).

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**Table 2. Sampling Size**

S/N	Population of the categories	Sample size considered
1	Staff of SIP	2
3	Workers	8
3	Users	220
<b>Total sampling size</b>		<b>230</b>

**Source: field survey, 2023**

### 2.5 Sampling procedure

Two (s) management staff of the SIP **was** considered based on his/her status in the office, 8 workers, and 220 users **would randomly sample** using a simple random sampling technique where every population of the sample frame have an equal chance of been picked as a respondent.

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### 3.6 Techniques of Data analysis

Descriptive and Inductive Statistical methods of data analysis and inference deduction was employed to analyze the data collected and make inferences. Analyzed data was then present in tabular form.

## 3.0 RESULTS AND DISCUSSION

### 3.1 Introduction

the results of data collected on the challenges of Sustainable Ibadan Project (SIP), Ayeye portable water supply, Ibadan Oyo State Nigeria was displaced and discussed here. The sample frame for the research comprises of the management staff of the SIP where eight (8) respondents would be choose, the workers of the water facilities where two (2) respondents would be choose per selected communities making a total of twenty-two (22) and the users of the water supply would be two hundred and twenty (220). Therefore, the total sample size is two hundred and fifty (250).

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**Table 3: Educational Qualifications of the staff of the SIP**

<b>Educational Qualifications of respondents</b>	<b>Frequency</b>	<b>Percentage (%)</b>
O/L	1	12.5
NCE/OND	1	12.5
HND/DEGREE	4	50
Above Degree	2	25
Total	8	100

The highest percentage of the respondents (50%) goes to HND/Degree category, Both O/L and NCE/OND category have 12.5% each while the remaining respondents goes to above degree category with 25%.

**Table 4: Rank of the staff of the SIP**

<b>Rank of respondents</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Junior Cadre	1	12.5

Senior Cadre	2	25
Mangement Cadre	4	50
Professional Cadre	1	12.5
Total	8	100

The highest percentage of the respondents (50%) goes to management cadre category, Both junior and professional cadres have 12.5% each while the remaining respondents goes to senior cadre with 25%.

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**Table 5: Responsibilities of the staff of the SIP**

Responsibilities of respondents	Frequency	Percentage (%)
Monitoring and Evaluation	4	50
Supervision	1	12.5
Funding disbursement	2	25
Others	1	12.5
Total	8	100

The highest percentage of the respondents (50%) goes to monitory and evaluation category, Both supervision and others category have 12.5% each while the remaining respondents goes to funding disbursement category with 25%.

**Table 6: Year of Joining the SIP**

Year of Joining the SIP	Frequency	Percentage (%)
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Under One year	1	12.5
1 - 5 years	3	37.5
6 - 10 years	2	25
10 - 15 years	1	12.5
over 15 years	1	12.5
Total	8	100

The highest percentage of the respondents (37.5%) goes to 1-5 years category, 25% of the respondents goes to 6-10 years category and all the remaining category of years ( under 1 year, 10-15 years and over 15 years) have 12.5% each.

**Table 7: Number of application for water supply**

Number of application for water supply	Frequency	Percentage (%)
1	6	11.1
2	4	7.4
3	9	16.6
4	7	13
5	5	9.3
6	6	11.1
7	8	14.9

8	9	16.6
Total	54	100

The highest percentage of the respondents (16.6%) goes to both number 3 and 8 respondents, 14.9% of the respondents goes to number 7, 13% of the respondents goes to number 4, 11.1% goes to both number 1 and 6 of the respondents, 9.3% of the respondents goes to number 5 and remaining percentage (7.4%) goes to number 2 of the respondents.

**Table 8: Number of water supplies approved**

Number of water supplies approved	Frequency	Percentage (%)
1	3	11.1
2	2	7.4
3	5	18.5
4	3	11.1
5	2	7.4
6	3	11.1
7	4	14.9
8	5	18.5
Total	27	100

The highest percentage of the respondents (18.5%) goes to both number 3 and 8 respondents, 14.9% of the respondents goes to number 7, 11.1% goes to number 1, 4 and 6 of the respondents, 7.4% of the respondents goes to both number 2 and 5

**Table 9: How do you decide where facilities are located?**

<b>How do you decide where facilities are located?</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Physiochemical survey	8	100
Weather forecasting	0	0
Community Involvement	0	0
Total	8	100

All the respondents agreed that physiochemical survey **only** was used to decide where facilities are located.

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**Table 10: Are the water facilities adequately and spatially distributed**

<b>Are the water facilities adequately and spatially distributed</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Adequate distributed	6	75
Spatially distributed	2	25
Total	8	100

The highest percentage of the respondents (75%) agreed that water facility are adequately distributed while the remaining 25% of the respondents agreed that water facility are spatially distributed.

**Table 11: Condition of the existing water supply**

<b>Condition of the existing water supply</b>	<b>Frequency</b>	<b>Percentage (%)</b>
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Adequately maintained	5	62.5
satisfactorily maintained	2	25
poorly maintained	1	12.5
Total	8	100

The highest percentage of the respondents (75%) agreed that water supply are adequately maintained, 25% of the respondents agreed that water supply are satisfactorily maintained while the remaining 12.55 of the respondents agreed that water supply are poorly maintained.

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**Table 12: What are your suggestions for improving the facility?**

What are you suggestions for improving the facility?	Frequency	Percentage (%)
Regular flushing of the water facility by experts	1	12.5
Community participation	1	12.5
Regular visitation of the SIP staff	1	12.5
All of the above	5	62.5
Total	8	100

The highest percentage of the respondents (75%) agreed that all of the suggestions are needed for improving water facility (Regular flushing of the water facility by experts, community participation water supply and regular visitation of the SIP staff), 12.5% of the respondents each agreed that regular flushing of the water facility are needed for improving water facility, regular

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visitation of the SIP staff are needed for improving water facility and community participation are needed for improving water facility

**SECTION B: Worker Questionnaires**

**Table 13: Educational Qualifications of the workers**

<b>Educational Qualifications of respondents</b>	<b>Frequency</b>	<b>Percentage (%)</b>
<b>Primary</b>	6	27.3
<b>Secondary</b>	8	36.4
<b>Tertiary</b>	5	22.7
<b>Non – formal</b>	3	13.6
<b>Total</b>	22	100

The highest percentage of the respondents (36.4%) goes to secondary school holder, followed by 27.3% of the respondents that are primary school holder, followed by 22.7% of the respondents that are tertiary certificate holder and the remaining 13.6% of the respondents goes to non-formal category.

**Table 14: When do you open and close**

<b>When do you open and close</b>	<b>Frequency</b>	<b>Percentage (%)</b>
<b>Morning</b>	8	36.4
<b>Afternoon</b>	6	27.3
<b>Night</b>	3	13.6

<b>Any time</b>	5	22.7
Total	22	100

The highest percentage of the respondents (36.4%) goes to morning period, followed by 27.3% of the respondents that goes afternoon, followed by 22.7% of the respondents that goes **to** any time and the remaining 13.6% of the respondents **goes** night period.

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**Table 15: Days of operation specify**

<b>Days of operation specify</b>	<b>Frequency</b>	<b>Percentage (%)</b>
<b>Morning</b>	6	27.3
<b>Afternoon</b>	8	36.4
<b>Night</b>	5	22.7
<b>Any time</b>	3	13.6
Total	22	100

The highest percentage of the respondents (36.4%) goes to afternoon period, followed by 27.3% of the respondents that goes morning, followed by 22.7% of the respondents that goes to night and the remaining 13.6% of the respondents **goes** any time.

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**Table 16: Rate charged for the services provided**

<b>Rate charged for the services provided</b>	<b>Frequency</b>	<b>Percentage (%)</b>
<b>Between N5-N10 per bucker</b>	8	36.4
<b>Between N10-N15 per bucker</b>	6	27.3

<b>Between N15-N20 per bucket</b>	5	22.7
<b>Between N20-N30 per bucket</b>	3	13.6
Total	22	100

The highest percentage of the respondents (36.4%) goes to between N5-N10 per bucket, followed by 27.3% of the respondents that goes to between N10-N15 per bucket morning, followed by 22.7% of the respondents that goes to between N15-N20 per bucket night and the remaining 13.6% of the respondents goes to between N20-N30 per bucket.

**Table 17: Reaction of the users regards to the fees you charge**

<b>Reaction of the users regards to the fees you charge</b>	<b>Frequency</b>	<b>Percentage (%)</b>
<b>Too high</b>	8	36.4
<b>Moderate</b>	6	27.3
<b>Low</b>	3	13.6
<b>No idea</b>	5	22.7
Total	22	100

The highest percentage of the respondents (36.4%) say the fees charged are too high, followed by 27.3% of the respondents that say the fees charged are moderate, followed by 22.7% of the respondents that say they have no idea and the remaining 13.6% of the respondents say the fees charged are low.

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**Table 18: How many users come to you on daily basis?**

<b>How many users come to you on daily basis</b>	<b>Frequency</b>	<b>Percentage (%)</b>
<b>Between 1-100</b>	6	27.3
<b>Between 101-200</b>	8	36.4
<b>Between 201 to 300</b>	5	22.7
<b>Uncountable</b>	3	13.6
Total	22	100

The highest percentage of the respondents (36.4%) goes to between 101-200, followed by 27.3% of the respondents that goes to between 1-100, followed by 22.7% of the respondents that goes to between 201 to 300 and the remaining 13.6% of the respondents goes to uncountable

**Table 19: Total income per day**

<b>Total income per day</b>	<b>Frequency</b>	<b>Percentage (%)</b>
<b>Less N,1000</b>	8	36.4
<b>Between N1000 and N2000</b>	6	27.3
<b>Between 2000 to N3000</b>	3	13.6
<b>Above N3000</b>	5	22.7
Total	22	100

The highest percentage of the respondents (36.4%) say they realised less than N1000 per day, followed by 27.3% of the respondents that say they realised between N1000-N2000 per day, followed by 22.7% of the respondents that say they realised above N3000 per day and the remaining 13.6% of the respondents say they realised between N2000 - N3000 per day.

### SECTION C: Users Questions

**Table 20: Age of the users**

Rank of respondents	Frequency	Percentage (%)
Less 20 years	87	39.5
Between 21-30 years	45	20.5
Between 31-40 years	64	29.1
Above 41 years	24	10.9
Total	220	100

The highest percentage of the respondents (39.5%) goes to less 20 years category, followed by 29.1% of the respondents that goes to between 31-40 years category, followed by 20.5% of the respondents that goes to between 21-30 years category while the remaining respondents goes to above 40 years category with 10.9%.

**Table 21: Educational Qualifications of the users**

Educational Qualifications of the users	Frequency	Percentage (%)
Primary	98	44.5

<b>Secondary</b>	117	53.2
<b>Tertiary</b>	3	1.4
<b>Non – formal</b>	2	0.9
<b>Total</b>	220	100

The highest percentage of the respondents (53.2%) goes to secondary school holder, followed by 44.5% of the respondents that are primary school holder, followed by 1.4% of the respondents that are tertiary certificate holder and the remaining 0.9% of the respondents goes to non-formal category.

**Table 22: What part of Ibadan **does** you reside**

<b>What part of Ibadan <b>does</b> you reside</b>	<b>Frequency</b>	<b>Percentage (%)</b>
<b>Ibadan major city</b>	104	47.3
<b>Ibadan less city</b>	114	51.8
<b>Outside Ibadan</b>	2	0.9
<b>Total</b>	220	100

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The highest percentage of the respondents (51.8%) **goes to peoples live in Ibadan less city**, followed by 47.3% of the respondents that lives in Ibadan major and the remaining 0.9% of the **respondents goes peoples lives outside Ibadan**

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**Table 23: Do you use water supply facilities**

<b>Do you use water supply facilities</b>	<b>Frequency</b>	<b>Percentage (%)</b>
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<b>Yes</b>	198	90
<b>No</b>	22	10
<b>Total</b>	220	100

The highest percentage of the respondents (90%) goes to **peoples** that used water supply facilities and the remaining 10% of the respondents goes **peoples** that do not used water supply facilities

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**Table 24: When in need of the facility, do you easily access the facility**

<b>When in need of the facility, do you easily access the facility</b>	<b>Frequency</b>	<b>Percentage (%)</b>
<b>Yes</b>	202	91.8
<b>No</b>	18	8.2
<b>Total</b>	220	100

The highest percentage of the respondents (91.8%) goes to **peoples** that easily access water facility when they are in need of it and the remaining 8.2% of the respondents goes **peoples** that do not easily access water **afcility** when they are in need of it.

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**Table 25: How would you describe the condition of the facility?**

<b>How would you describe the condition of the facility?</b>	<b>Frequency</b>	<b>Percentage (%)</b>
<b>Very satisfactory</b>	102	46.6
<b>Satisfactory</b>	116	52.6

<b>Unsatisfactory</b>	2	0.8
Total	220	100

The highest percentage of the respondents (52.6%) said they are satisfactory with **conditon** of the facility followed by 46.6% of the respondents that **sais** they are very satisfactory with the condition of the facility and the remaining 0.8% of the respondents said they are unsatisfactory with the condition of the facility.

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**Table 26: Is the number of the facilities enough for your area**

<b>Is the number of the facilities enough for your area</b>	<b>Frequency</b>	<b>Percentage (%)</b>
<b>Yes</b>	204	92.7
<b>No</b>	16	7.3
Total	220	100

The highest percentage of the respondents (92.7%) goes to peoples that says the number of the facilities are enough for their area and the remaining 7.3% of the respondents goes to peoples that says the number of the facilities are not enough for their area

#### **4.0 CONCLUSION AND SUMMARY**

In the research carried out by the researcher and the information given through the questionnaires show the following were obtained;

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Table 3 indicates educational background of the respondents and shows that the highest percentage of the respondents (50%) goes to HND/Degree category, Both O/L and NCE/OND

category have 12.5% each while the remaining respondents goes to above degree category with 25%.

Table 4 reveals the rank of the staff of SIP and shows that the highest percentage of the respondents (50%) goes to management cadre category, Both junior and professional cadres have 12.5% each while the remaining respondents goes to senior cadre with 25%.

Table 5 shows responsibilities of the staff of SIP and indicates that the highest percentage of the respondents (50%) goes to monitoring and evaluation category, Both supervision and others category have 12.5% each while the remaining respondents goes to funding disbursement category with 25%.

Table 6 indicates years of joining the SIP and shows that the highest percentage of the respondents (37.5%) goes to 1-5 years category, 25% of the respondents goes to 6-10 years category and all the remaining category of years (under 1 year, 10-15 years and over 15 years) have 12.5% each.

Table 7 shows numbers of application received for water supply and this indicates that the highest percentage of the respondents (16.6%) goes to both number 3 and 8 respondents, 14.9% of the respondents goes to number 7, 13% of the respondents goes to number 4, 11.1% goes to both number 1 and 6 of the respondents, 9.3% of the respondents goes to number 5 and remaining percentage (7.4%) goes to number 2 of the respondents.

Table 8 shows numbers of water supply approved and this indicates that the highest percentage of the respondents (18.5%) goes to both number 3 and 8 respondents, 14.9% of the respondents goes to number 7, 11.1% goes to number 1, 4 and 6 of the respondents, 7.4% of the respondents goes to both number 2 and 5

Table 9 shows how do we decide where facility are located and this indicates that all the respondents agreed that physiochemical survey aonly was used to decide where facilities are located

Table 10 shows whether the water supply are adequately and spatially distributed and this indicate stha the highest percentage of the respondents (75%) agreed that water facility are adequately distributed while the remaining 25% of the respondets agreed that water facility are spatially distributed.

Table 11 shows conditions of existing water supply and this indicates that the highest percentage of the respondents (75%) agreed that water supply are adequatly maintained, 25% of the respondents agreed that water supply are satisfactorily maintained while the remaining 12.55 of the respondents agreed that water supply are poorly maintained.

Table 12 shows severakl csuggestions for improving water supply and this indicates that the highest percentage of the respondents (75%) agreed that all of the suggestions are needed for improving water facility (Regular flushing of the water facility by experts, community participation water supply and regular visitation of the SIP staff), 12.5% of the respondents each agreed that regular flushing of the water facility are needed for improving water facility, regular visitation of the SIP staff are needed for improving water facility and community participation are needed for improving water facility

Table 13 discussed about the educational qualification of the workers and this shows tha highest percentage of the respondents (36.4%) goes to secondary school holder, followed by 27.3% of the respondents that are primary school holder, followed by 22.7% of the respondents that are tertiary certifcate holder and the remaining 13.6% of the respondents goes to non-formal category.

Table 14 discussed about the time the water facility open and close and this show that the highest percentage of the respondents (36.4%) goes to morning period, followed by 27.3% of the respondents that goes afternoon, followed by 22.7% of the respondents that goes to any time and the remaining 13.6% of the respondents goes night period.

Table 15 discussed about the days of operational specify and this shows that the highest percentage of the respondents (36.4%) goes to afternoon period, followed by 27.3% of the respondents that goes morning, followed by 22.7% of the respondents that goes to night and the remaining 13.6% of the respondents goes any time.

Table 16 discussed about the rate charged for the service provided and this shows that the highest percentage of the respondents (36.4%) goes to between N5-N10 per bucket, followed by 27.3% of the respondents that goes to between N10-N15 per bucket morning, followed by 22.7% of the respondents that goes to between N15-N20 per bucket night and the remaining 13.6% of the respondents goes to between N20-N30 per bucket.

Table 17 discussed about the reactions of the users regarding to the fees charged and this indicate that the highest percentage of the respondents (36.4%) say the fees charged are too high, followed by 27.3% of the respondents that say the fees charged are moderate, followed by 22.7% of the respondents that say they have no idea and the remaining 13.6% of the respondents say the fees charged are low.

Table 18 discussed about how to decide on where the facility are located and this shows that all the respondents agreed that physiochemical survey aonly was used to decide where facilities are located.

Table 19 discussed about the total income of the service provided per day and this shows that the highest percentage of the respondents (36.4%) say they realised less than N1000 per day,

followed by 27.3% of the respondents that say they realised between N1000-N2000 per day, followed by 22.7% of the respondents that say they realised above N3000 per day and the remaining 13.6% of the respondents say they realised between N2000 - N3000 per day.

Table 20 discussed about the age of the users and this indicates that the highest percentage of the respondents (39.5%) goes to less 20 years category, followed by 29.1% of the respondents that goes to between 31-40 years category, followed by 20.5% of the respondents that goes to between 21-30 years category while the remaining respondents goes to above 40 years category with 10.9%.

Table 21 discussed about the educational qualification of the users and this shows that the highest percentage of the respondents (53.2%) goes to secondary school holder, followed by 44.5% of the respondents that are primary school holder, followed by 1.4% of the respondents that are tertiary certificate holder and the remaining 0.9% of the respondents goes to non-formal category.

Table 22 discussed about the parts of Ibadan the users reside and this shows that the highest percentage of the respondents (51.8%) goes to peoples live in Ibadan less city, followed by 47.3% of the respondents that lives in Ibadan major and the remaining 0.9% of the respondents goes peoples lives outside Ibadan

Table 23 discussed about the usage of the water facility and this indicates that the highest percentage of the respondents (90%) goes to peoples that used water supply facilities and the remaining 10% of the respondents goes peoples that do not used water supply facilities

Table 24 discussed about the possibility of using the water facility when in need of it and this shows that the highest percentage of the respondents (91.8%) goes to peoples that easily access

water facility when they are in need of it and the remaining 8.2% of the respondents goes peoples that do not easily access water facility when they are in need of it.

Table 25 discussed about the description of the water facility and this indicate that the highest percentage of the respondents (52.6%) said they are satisfactoty with conditon of the facility followed by 46.6% of the respondents that sais they are very satisfactory with the condition of the facility and the remaining 0.8% of the respondents said they are unsatisfacotry with the condition of the facility.

Table 26 discussed about the whether the numbers of water facility are enough for the area and this shows that the highest percentage of the respondents (92.7%) goes to peoples that says the number of the facilities are enough for their area and the remaining 7.3% of the respondents goes to peoples that says the number of the facilities are not enough for their area

**Comment [O34]:** You suppose to summarize the findings and make recommendation based on the study.

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