



THE IMPACTS WATER CRISES POSE ON THE ACADEMIC PERFORMANCE OF PUPILS OF SELECTED SECONDARY SCHOOLS IN CALABATOWN – EAST DISTRICT; WESTERN AREA: FREETOWN, SIERRA LEONE.

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ABSTRACT

The study investigates the relevance of water crises on the academic performance of pupils of selected secondary schools in the east district of Freetown, Calabatown. To achieve this purpose, five research questions guided the study. The study adopted the survey research design. The population comprised Pupils of selected schools, teachers, community members, and SALWACO. Multi-stage sampling techniques were used to select the sample which comprised 100 respondents 25 from each category. Data were collected through the use of questionnaires and interview guides. The quantitative data were analyzed using frequency counts and percentages, while the qualitative data were analyzed thematically.

The study found among others, that many out of the 100 respondents contacted, about 85% of respondents stated that, the availability of water had extreme relevance to improving students' performances in schools around the Calabatown-wellington axis and beyond. About 5% stated that it is just relevant while 10% stated that it had been fairly relevant. 98% of the respondents stated a 'Yes' indeed, there had been impacts created by the current water scarcity in the area whilst the other 2% denied this submission to having impacts within the Calabatown periphery. Out of 100 respondents, about 95% respondents had confirmed that there had been challenges faced in tackling the problems while the other 5% stated that, there had not been any challenges. Out of the 100 respondents reached, about 49 of these respondents stated yes, that there had been mechanisms to combat this issue and the other 51% stated that there had not been any

mechanism to respond to the challenges faced. Based on the responses above, it could be noticed that 40% of respondents stated the structure had been fairly effective with lower percentages for other options.

Keywords: *Impact*, Crises, Performance, Water, School.

Introduction

More than 850 million people worldwide lack access to a water supply, and more than 2.5 billion lack access to sanitation facilities (WHO and UNICEF, 2010). There is robust evidence of the impact of improvements in access to water, sanitation, and hygiene (WASH) at home on the health of children under 5 years. Improved school WASH conditions- for example, increasing water quality, and quantity, hygiene education, provision of soap, improved latrine access or cleanliness, and drinking may reduce pupil absence by providing services for all pupils in school.

(2001 Annamraju et al.) Water shortage is a problem that has been for many years and even today the problem remains despite the moves that have been made by both national and international actors to salvage the situation. Clear evidence of this shortage could be seen at the beginning of the UN water decade in 1981 when it was estimated that 1.9 billion people lacked access to safe water. The problems further compounded as it was captured that, nearly two decades later in 2000, more than 1.1 billion still lacked access to water. ¹

In this same publication it was made clear that over the centuries, water was accessed from unreliable sources. In response to this, a water supply network emerged along with the construction of cities and villages. References were made to the Romans who according to history developed an organized and centralized system by private water carriers of canals, siphons, and collection used for water. This was used right into the Middle Ages during which slight changes were made and the distribution of water then became the responsibility of humans who intervened, partly by private water carriers (Annamraju, 2001).

It was after the empirical methods of the 19th century, the first modern societies about water supply were borne with a little convenient and adequate chain of supplying water for both commercial and domestic consumption. From a historical perspective, it could be noticed that the current global situation with water is the product of social, economic, and ideological developments attending the advent of industry among another consumption line some two hundred years ago, within the period 1800-2000 (Nwankwoala, 2011).²

Nwankwoala (2011) opines that, for several years now, many governments around the world have been grappling with issues around the adequate supply of water thereby emphasizing the need for sustained rural water supply and sanitation respectively. Despite the international actions and domestic concerns raised, it is evident that up till today, the effects of all actions and collaborations are far from the reality. Since the independence of many African countries in 1960, rural water supply and sanitation development in Africa has without doubt been inconsistent with the growing population and the various needs.

However, notwithstanding the meaningful efforts at addressing water supply and sanitation issues, there became the International Drinking Water Supply and Sanitation Decade (IDWSSD) from 1981 to 1990, which was believed to have established a target of universal coverage (Hanlon, 2007). ³This was followed

immediately by the World Summit for Children in 1990 which established goal of the universal access to safe water and sanitation on the basis that shortage of water has a serious impact on the performance of school pupils because they go in search of this water thereby impacting on the time they would have spent for schooling or other academic work. There was also the intervention of other partners who played a crucial role from 1981 to 2010 in water and sanitation development and among these have been UNICEF and Water Aid (1986-2010).

Water despite the fact it seems scary sometimes is the source of life, and is the most precious and important of all natural resources. It is clear that without water, the human species cannot survive on this earth considering the role water plays in the ecosystem. Despite this huge relevance posed by water and its distribution, access to safe water has been seen as a global problem (Acamo, Floerke, and Maerker, 2007). There have been three reasons why access to safe water is considered fundamental human rights and among these three reasons are: ensuring access to clean water could substantially reduce the global burden of disease. Millions of people are affected each year by a range of water-borne diseases. Second, the privatization of water, which exploits the view that water is a commodity rather than a public good, does not result in equitable access. Third, the world is changing in ways that will both exacerbate water scarcity and threaten the quality of the current water supply (Balance and Tremolet, 2005).⁴

Taking into account its relevance, water is indispensable for life. Supply of water is problematic globally since being a constant resource, many people from different areas and for different purposes have demanded it. This problem is serious, especially in Africa. It has been predicated by Khatri & Vairavamoorthy (2007) that by 2020 75% of the African continent's population will be water-stressed. This is because; population increase which has been the order of the day as a result of poor family planning-related activities reduces per capita water availability.⁵ The outcome may be conflict or cooperation which may be the outcome as different water users compete for the basic resource that will be available and which may not be able to adequately respond to the basic needs of water within the continent (Ragheb, 2011.). Safe clean drinking water is basic for living and economic development in Africa including Sierra Leone and other parts of the world.⁶ There has been a reference made to Kenya where according to Karugu & Kanyagia (2007), 80% of Kenyans face challenges in accessing water for drinking purposes and other relevant uses. The little they have is obtained through very unreliable means.⁷ As such, they spend much time acquiring water. In most of Africa, having water through pipes provided by service providers has been a great challenge. Instead, where many have got it through kiosks, vendors, illegal connections, or wells as the case may be. It had made it obvious that only a few access water through pipes 24 hours per day (Nyangeri &

Ombongi, 2007). The few who have this water daily face challenges with the way such supply is rationed to enable others to have it.⁸

It is however believed that water is a foundation of life and livelihoods and without doubt seems to be key to sustainable development (Jennifer, 2017).⁹ Considering the relevance it owes to development, successful water management will serve as a foundation for the achievement of many of the 17 Sustainable Development Goals (SDGs), as well as for SDG 6 - which is to 'Ensure availability and sustainable management of water and sanitation for all' (WRG, 2019).¹⁰ Irrespective of the huge relevance water and its management poses to world development, it is becoming a challenge to access it in almost everywhere in the world with more difficulties faced in Africa. Water has therefore become a critical national concern for most governments especially when predictions are made about its access in the future. It has however been posited that by 2035, up to 40% of the world's population will be living in seriously water-stressed areas and the ability of ecosystems to provide fresh water supplies will become increasingly compromised (OECD, 2012)¹¹.

It has therefore been considered by many as the most important issue affecting the globe in the 21st century. Nowadays, many areas of the world are affected by water scarcity. The projected increase in the world population growth rate suggests that higher food demand is expected in the future, with a direct effect on agricultural water usage taking into account the strategic role played in the agricultural sector (FAO, 2019).¹² Notwithstanding the above, as a result of the increased water scarcity and drought due to climate change as it is experienced in most places including Africa, extensive water use for irrigation is expected to occur in the context of increasing competition between agriculture and other sectors of the economy (OECD, 2012).¹³

Sierra Leone is among the many countries in Sub-Saharan Africa that are faced with challenges to access water and clean water. As a result, there are many options used to access this water, and the key among them has been using school pupils to fetch at hours very sensitive to their academic work. In Wellington, the study area, there is an influx of pupils fetching water every day and this has been discovered to be very negative on their academic performance. It is against this backdrop this study is commissioned to assess the impact water scarcity has on the performance of pupils in Wellington.

Problem Statement

Over the years the notion many go with that water is plentiful – it covers 70% of the planet – is false, as only 2.5% of all water is freshwater which makes it further complicated especially when it comes to discussing water that could be used for everyday activity (Jennifer et al, 2017). As water availability

decreases, it has also been observed with dismay that competition for access to this limited resource has increased thereby further compounding the problem. ¹⁴It has also been estimated that 60% of all surface freshwater comes from internationally shared river basins (Zhang et al, 2015).¹⁵ Many studies that have been conducted on social issues have confirmed that more people are affected by drought than any other disaster type in the whole world. In 2016 only, 411 million people in total were said to be affected by disasters and 94% of those were drought-affected related incidences. Droughts are also the costliest disasters, with significant impacts on agriculture in particular among other life-sustaining facilities (Chen et al, 2014).¹⁶

The outcome has been many people suffering and dying because of the inadequate supply of water and its related consequences on diseases (diarrhoea, dysentery, or cholera) mostly from consumption of untreated water. It is however also a fact that where this problem is not adequately attended to, rapid urbanization and population growth mean worse conditions for millions of people who go without water.

In Sierra Leone, the situation seems extremely worse where many approaches are used to get water for not only drinking purposes but also for home use. In many of these instances, school-going children are depended upon to adequately supply such water as and when necessary.

The recent water crisis in Freetown has been beyond everyone's expectations. From March to nearly the end of May of every year, access to safe drinking water in Freetown has been very problematic. The same situation has been the case in many other cities and towns in the country. For millions of people in Sierra Leone, the dry season has come to be associated with severe water scarcity. This is despite the country's ideal location within the tropics with heavy rainfall, high temperatures, and vast natural vegetation which creates a sound climate to provide residents with a regular supply of safe drinking water. Coupled with our vast water resources as a country – the numerous rivers that traverse its terrain as well as the creeks, – Sierra Leone is in pole position to provide all its cities, towns, and villages with a continuous supply of safe drinking water. However, the adequate supply through mechanizing a more effective way of harvesting this water has been the issue (Macarthy, 2016).¹⁷ Where such problems continue to exist, children become the target to fetch water thereby impacting negatively their performance in school. This has been the problem to be investigated by this study to provide answers to which impact has been on the performance of students as a result of water shortage in Freetown with a special reference to Calabatown, the eastern part of Freetown.

RESEARCH QUESTIONS

1. What is the relevance of water availability in enhancing the academic performance of pupils
2. What are the impact water crisis poses on the performance of pupils in Calabatown
3. What are the challenges faced in tackling water shortage in Calabatown
4. What structures have been set to address such challenges?

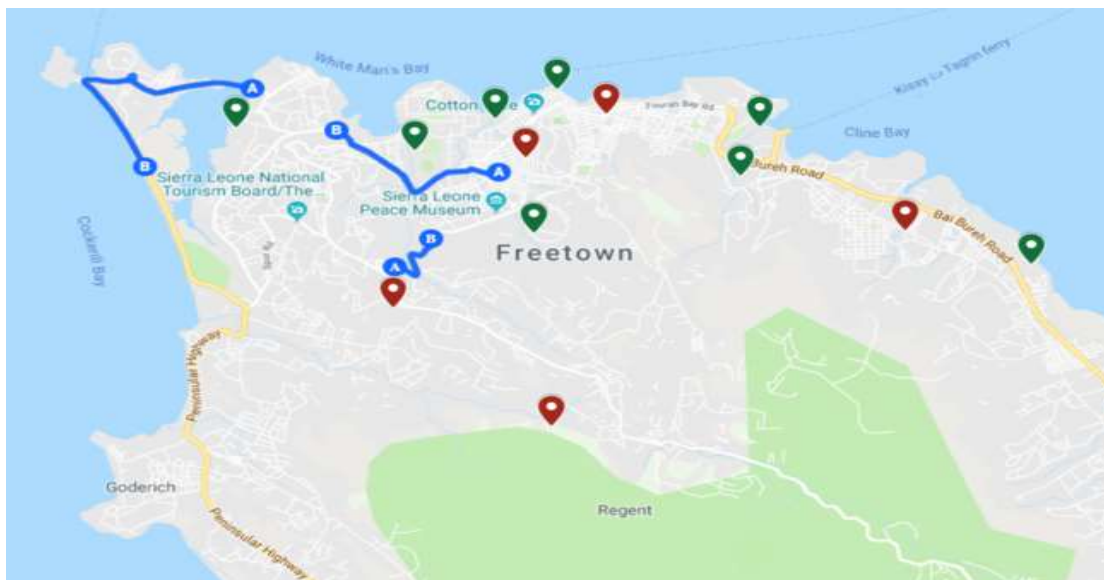
Methodology

Research Design

The study employed a survey design because of its broad capability to solicit objective responses from the sample on the subject under consideration (Fowler Jr, 2013).

Population

The population comprised pupils, teachers/principals, community stakeholders, SALWACO in Sierra Leone.



Map of Freetown, the Study Area: Source:

Research Instrument

Questionnaires made up of three sections and composed of open and closed-ended items were adopted from the research officer and used to collect data from the respondents

The study will be made of both qualitative and quantitative tools to elicit data from a sampled population through the use of questionnaires and in-depth interviews. These three different tools that will be explored in the study are based on the assumption that they will provide more valid and reliable data that will inform the audience of this study by critically assessing the implications of water shortage on the performance of students in schools.

Sampling

Two sampling techniques will be used in conducting this study. One among them will be probabilistic whilst the other, non-probabilistic. This is to ensure that detailed information. The said three sampling techniques are: simple random, systematic, and purposive.

Simple Random: this as the name implies will be used to elicit information from a handful of respondents of whom questionnaires will be administered face-to-face. In the area under review, respondents will first

consent if they would allow the researcher to put them in a group. After this respondents will be selected randomly to answer questionnaires.

Purposive Sampling: as one of the non-probabilistic sampling tools, this will be used to get key respondents who may not only fully aware of water shortage issues and their implications on student performance in Sierra Leone. These respondents the researcher will consider key respondents who will be purposely selected based on either their unique experience with water shortage or its implications on students' performance in Sierra Leone.

SAMPLE DISTRIBUTION OF RESPONDENTS

The sample frame of this study will comprise state actors drawing from teachers/ principals from schools, community stakeholders, pupils in the selected schools, and other people as may be deemed necessary by the researcher.

Table 1: Showing the sample frame and number of respondents that will be selected from each unit.

FRAME	RESPONDENTS
School pupils	25
Community stakeholders	25
SALWACO	25
Teachers/principals	25
TOTAL	100

The total sample size will be 100 respondents including respondents that will be selected for interviews and questionnaires respectively. The strategic selection of these respondents the researcher assumes will positively impact the findings and will inevitably enable more valid and reliable data that will reflect present occurrence.

Data Collection

The instruments were administered by a research officer for selected secondary schools in Freetown, Evans International High School, Idrssa Memorial Secondary School, Chapel Secondary, and stakeholders closer to these communities.

Data Analysis

The quantitative data collected were analyzed using frequency counts and percentages while the qualitative data were analyzed using the thematic analytical approach. In analyzing the relevance of water pose on the academic performance of pupils.

Data Presentation and Analysis

The Personal Bio-Data of Respondents

Four categories of respondents were used to access information using simple random and purposive sampling techniques respectively.

Table 1 Total Number of Questionnaires Collected and Distributed

Respondents	Questionnaires distributed	Questionnaires received
Community Stakeholders	25	25
Teachers/Principals	25	25
school pupils	25	25
SALWACO	25	25
Total	100	100

Source: Questionnaires

Response to the questionnaire has been very positive considering the return rate which was 100%. The same number of questionnaires distributed to the different categories has been the same received from these different categories of respondents making the sample frame of the work.

Gender of Respondents

The table above has sought to test the level of participation of both men and women during the study from the information provided it became clear that both parties are widely knowledgeable about the purpose of the research. However, more females contributed than males with thirty-three (33) and sixty-seven (67) respectively.

Category of Respondent

Level of education	Frequency	Percentage
Primary	12	12%
Secondary	35	35%
Tertiary	45	45%
None	8	8%
Total =	60	100%

Source: Questionnaire

Relevance of Water Availability in Enhancing the Academic Performance of Pupils

It is believed that education is one of the most important drivers behind helping people in developing countries, especially in Sierra Leone considering the weak socio-economic status of many Sierra Leones who believe sending their children to school will adequately improve their development. It is clear that in these schools located around Wellington, there is high absenteeism and factors responsible for this have been compelling with the scarcity of water being among those fundamental.

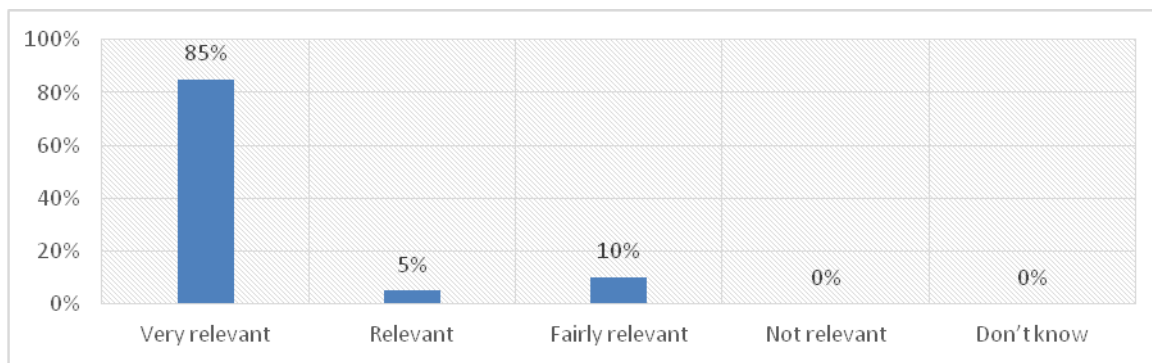
It is a fact that receiving a good quality education is one of the most important factors in enabling children to fulfill their potential in later life and reduce poverty thereby improving socio-economic development. Attaining great heights in education is also associated with substantial health gains, especially in child health in future generations, including a reduction in child mortality as the case may be. Important gains in child health may be associated even with future mothers' improved access to primary education with the availability of environmentally friendly attributes prompting the frequent attendance of the pupil. The importance of access to education is reflected within the Millennium Development Goals of the commitment to ensure that all children can complete a course of primary education. There are many reasons for the reduced educational contact time in low-income countries like Sierra Leone some of which are institutional such as teacher absenteeism, frequent school closures, etc. However, even when schools are open, pupil absenteeism can be high depending on the circumstances with special reference to the non-availability of water and its impact on the pupil. On this note, the availability of water has huge relevance to improving the students' performance which this section will critically explore.

Respondents were therefore asked to state how relevant the availability of water is to improve the performance of pupils in schools.

How relevant has the availability of water been to improving the performance of students in schools?

Options	Frequency	Percentage
Very relevant	85	85%
Relevant	5	5%
Fairly relevant	10	10%
Not relevant	0	0%
Don't know	0	0%

Source: Research questionnaire



Source: Research questionnaire

Out of the 100 respondents contacted, about 85% of respondents stated that the availability of water had very strong relevance to improving students' performance in schools around Wellington and even beyond. About 5% stated that it had been just relevant whilst the other 10% stated that it had been fairly relevant. This finding has however indicated that water and its availability had had strong relevance to improving the performance of students in schools. According to respondents' water had been very key to the students and even their parents which is why many have boycotted classes to fetch water in the Wellington area thereby creating much absenteeism among them.

Respondents were therefore asked to state reasons why in their view water had been very relevant to improving the performance of students in schools. The following were the views given by respondents:

Reduces absenteeism thereby preventing the scout for water: 12 respondents were of the view that the availability of water in Calabatown will reduce drastically the absenteeism by students and teachers at Calabatown. This is because where there is water and its availability, there is always access thereby enabling students to complete their house chores as early and go to school. But where water is lacking, the student spends considerable time at places where water is fetched, and by the time they come to school, they would have been late. What happens next is that they go home.

Clean up the School Environment: 4 other respondents mentioned that the availability of water serves as a way of cleaning up the environment; this goes for both school environments and those at home. Many students find it hard to get water and clean their homes and also other school equipment. But where the water is available, they do all these with the relevant ease and within the stipulated time without having cause to go to distant places and fend for water.

Helps in other house chores: These respondents believe that where water is available, it also helps in the speedy completion of other assignments and house chores. Where a student at home is responsible for washing siblings, washing vehicles, and washing house utensils, water plays a very big role in accomplishing these tasks without which it becomes almost impossible. The situation therefore has been that these students who are mostly responsible for doing these house chores are seriously stressed considering the distance from their homes to the place where these water facilities are in Calabatown. As a result, they find it hard to complete the responsibilities given to them at home. However, where water is available, respondents mentioned that the process of completing those other house chores is simple and fast.

Reduces thirst for water: Also, it has been agreed that thirst for water has also contributed to truancy in schools that do not have water pipes and make water easily accessible. Therefore, it is in the view of respondents that where these facilities are available, it becomes easier for students to have water when and how they want without having reasons to go out and find somewhere to fetch water. But where they lack, it poses serious challenges in that whenever they need water they go out and by so doing it makes it difficult for them to concentrate on their academic work.

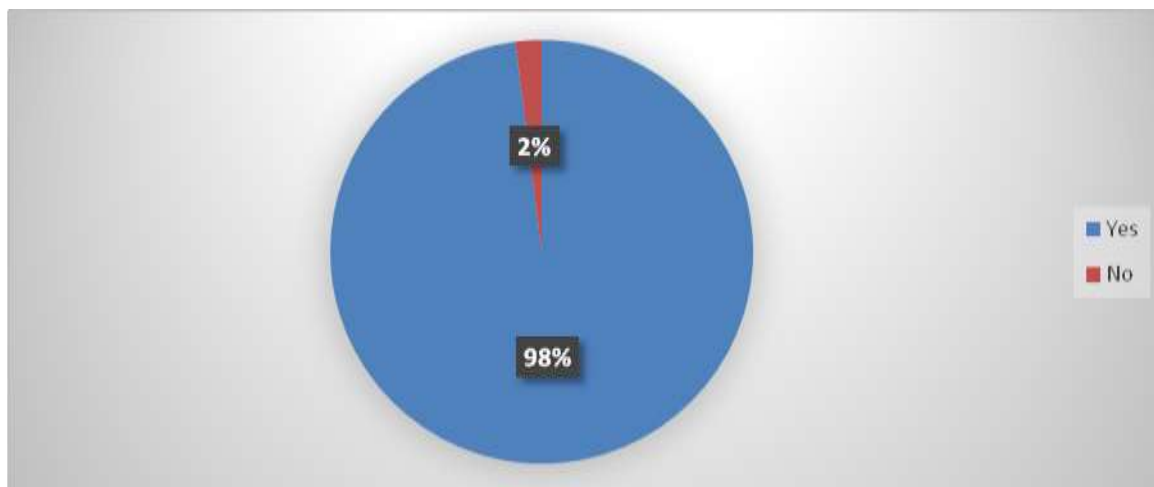
The Impact of Water Crisis on the Performance of Pupils in Calabatown.

It has however been made clear by the study that water scarcity is seen as a major challenge in the case study area. However, the researcher wanted to identify the impact that has been created so far by the current water crisis system in Wellington. Respondents were therefore asked.

Is there any impact created by the Water crisis problem in Calabatown?

Options	Frequency	Percentage
Yes	98	98%
No	2	2%

Source: Research Question



Source: Research questionnaire

98% of respondents had stated ‘Yes’ there had been an impact created by the current water scarcity in the area whilst the other 2% stated ‘No’ there had not been any impact created in Calabatown. This finding has indicated that the water crisis problem has created a negative impact on the performance of pupils in Calabatown.

The study went further to provide evidence of that impact by asking respondents to state their views on what they think were some of the impacts created as a result of the water crisis problem in Calabatown.

It is however believed that education is critical for breaking the cycle of poverty, especially in developing countries like Sierra Leone where the least a poor family could depend on is the end product of getting their

children to school. However, despite the importance water availability poses in schools, it has been observed that many places in Freetown apart from the study area (Calabatown) face problems with water. And yet over half of the country's communities lack access to safe water and sanitation facilities and this has impacted their performance negatively in schools.

In the study, it has been discovered that the Lack of clean water has serious effects on students' academic performance and attendance rates considering the strategic role it plays in enhancing the learning environment. One of the respondents in interviews mentioned that the lack of safe water can cause even the best students to lose momentum as they deal with stomach pains and diarrhea from disease and hunger having connections with the non-availability of water in homes and school environments.

Some stated that many students in Calabatown miss class to go fetch water, or to care for sick parents or siblings especially when they need water at home. There are situations even where teachers, guardians, and other important people get sought because of the non-availability of water. When these happen, teachers find it difficult to come to school thereby creating a vacuum in school and the outcome becomes a low performance of students in examinations as a result of the absenteeism experienced by teachers. Schools cannot run programs if they cannot provide water to students, faculty, and their families because water is seen as supportive of the school system and the environment as a whole.

Other respondents have been able to link the importance of water and its impact on issues of equity. In their view, a lack of water means a lack of equity. This is because many girls at home are given the responsibility to fetch water every morning and every evening. Where there is no water, these girls are not given equal access to education hence all they do is to fetch water. Men are not given such tasks and, in the process, allowed to learn but women are given enormous responsibilities which has also reduced their performance in school in a bid to satisfy the home and their school authorities.

It is also believed that for girls, the situation is especially troublesome. That is why some respondents believe that if schools do not have proper toilets, girls drop out once they reach puberty for fear of always being sent to fetch water, and not doing that will attract other disciplinary actions. Traditionally in Sierra Leone and the case study area to be specific, it has been a norm that Further, the typical responsibility of the women is to fetch water thus limiting their access to both education and other career-building programs. In the case study area (Wellington) it has been observed that every day, women and young girls carry containers of water from sources and take them over 4 miles from their homes and in other instances from their school environments. This leaves them with little time for education which is critical to changing the long-term prospects of developing nations, especially in Sierra Leone where it is believed that where you educate women, you have educated the nation. It is of the view that with the many additional burdens that a lack of clean water brings, education simply becomes less of a priority in Wellington. This undoubtedly sets up an unfortunate cycle of poverty and inequality, especially for women without a proper education plan and support.

The Challenges Faced in Tackling Water Shortage in Calabatown

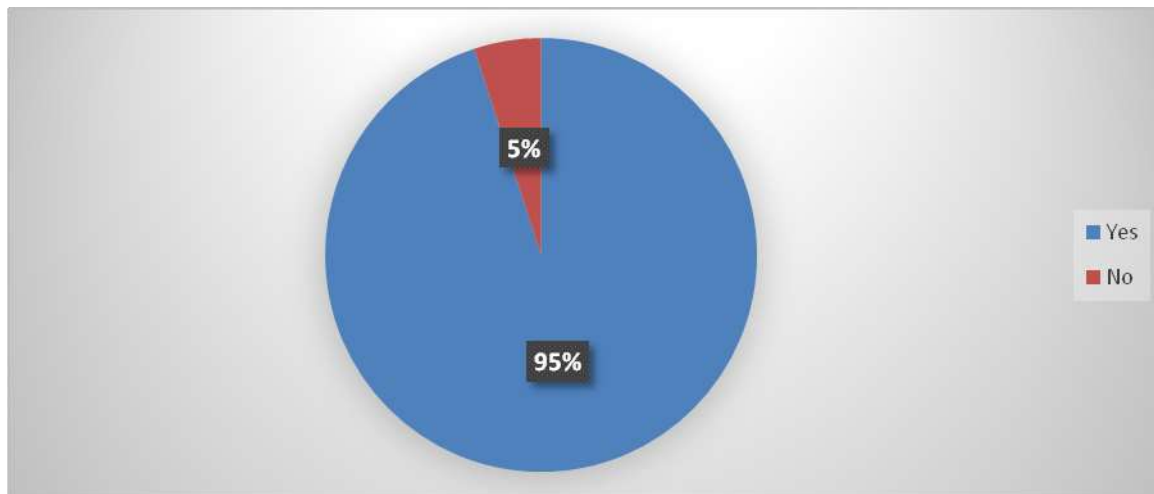
The study found that there were many attempts made to tackle the current water shortage problem. Despite the many attempts that have been made, the problem seems disturbing and warrants the investigation of the researcher to find out what has created these impediments.

The study therefore wanted to confirm whether there have been challenges faced in this drive and therefore asked respondents to confirm whether there had been any challenges faced in the process. The result of this is presented in the chart below:

Options	Frequency	Percentage
Yes	95	95%
No	5	5%

Source: Research Questionnaire

Figure 5



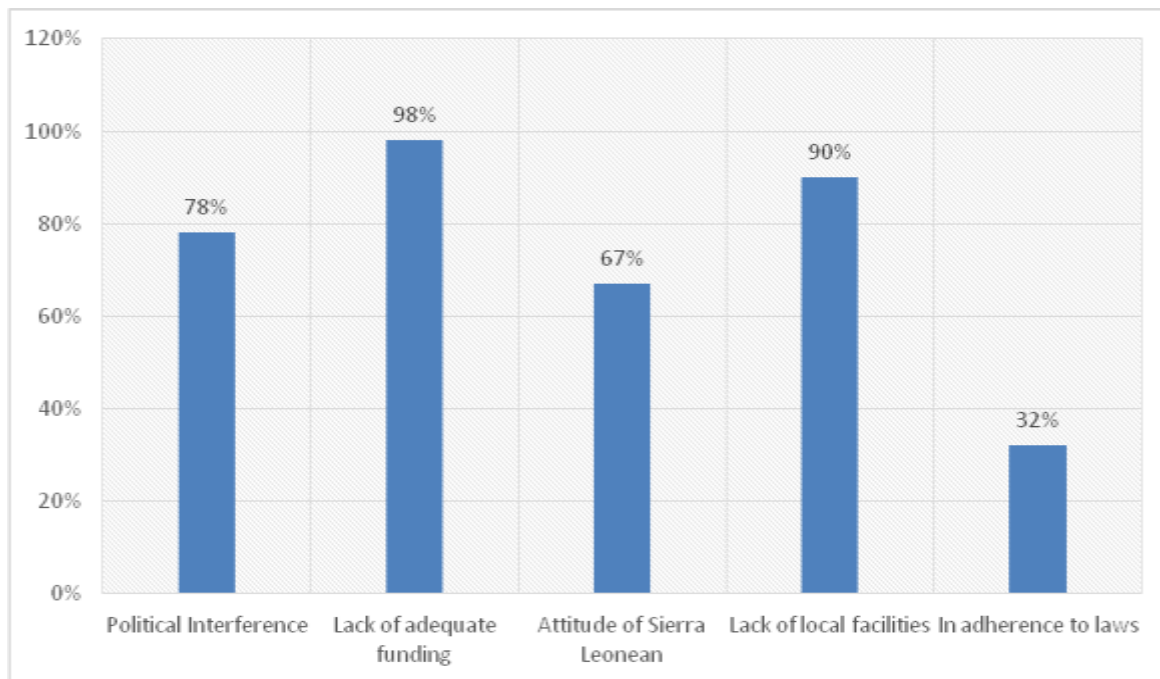
Source: Research Questionnaire

Out of 100 respondents, about 95% of respondents had confirmed that there had been challenges faced in the process of tackling the problem whilst the other 5% stated there had not been any challenge. The finding has however proved that there had been challenges faced by not only the government but also other key players in the process of tackling the issue of water scarcity.

The researcher had to identify various challenges asking respondents to choose from the variety of what in their view had been the challenges faced in this drive. The findings are displayed in the chart below:

Options	Frequency	Percentage
Political interference	78	78%
Lack of adequate funding	98	98%
Attitude of Sierra Leonean	67	67%
Lack of local facilities	90	90%
In adherence to laws	32	32%

Source: Research questionnaires

Figure 6

Source: Research questionnaire

In a multiple-choice question, 98% of respondents stated that the challenge had been a lack of adequate funding to effectively implement projects meant to tackle the water shortage crisis problem in Calabatown. Another 90% of respondents mentioned a lack of local facilities that will support project initiatives. In their view, it had serious problems. Others mentioned political interference and adherence to laws that will further protect water facilities in the few areas where they are situated. All of these as mentioned by respondents negatively impacted the moves made by local partners and the governments in their bid to provide water facilities in Calabatown.

In the area under study, there had also been other challenges mentioned by respondents and key among these have been the following:

Not recognizing water scarcity as a problem: Respondents made it clear that there are some authorities even in the local community who have not recognized this issue as a problem. In that direction, what has normally happened is treating the issue with a pinch of salt. Where the issue has not been recognized as a problem, it becomes difficult for it to be treated with the concern and utmost priority it demands. As a result, there were many areas where water would have been sourced in the locality but stakeholders within the Wellington axis had not been doing anything to get water scarcity solved together.

Lack of Experts: It is also the view of respondents that the non-availability of experts in the field has also negatively contributed to compounding the problem. In the Calabatown area, it was discovered during the study that there had not been anyone who could be an expert in handling the problem faced with water scarcity. This issue had also further created challenges in handling the water crisis they faced respondents believed.

Poor management of the available water facilities: It is the view of many respondents who were interviewed that the available water that is in use is not properly managed. As a result, some is wasted thereby creating a rush for water around the community. Where there is effective management, they believed, the situation would not have been as it stands now. However, the current situation many respondents referred to as wasteful will not help the current water scarcity in Calabatown.

Water pollution: Other respondents stated that another challenge caused has been the pollution of water by the downstream sector in the Calabatown axis. Considering its strategic location very close to the sea, there have been installations of oil companies based in different areas around the Calabatown axis and this situation has created a challenge of constant pollution of water in certain areas. Even where amendments are made, other facilities will remain polluted because of factory activities and other unfriendly activities taking place within the locality.

Structures That Have Been Set in Addressing Such Challenges

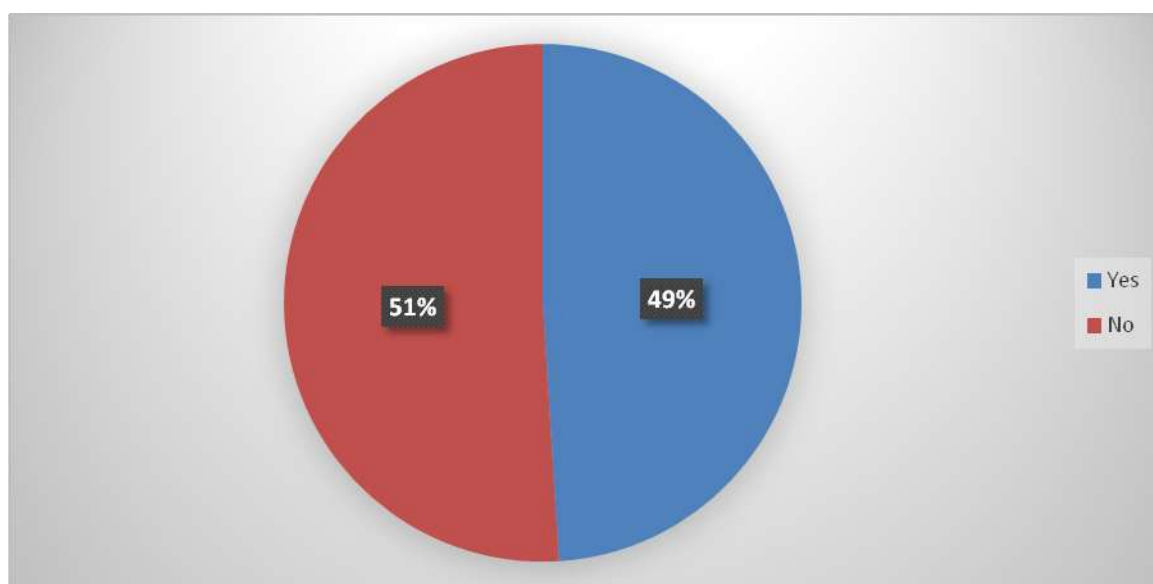
The study has also concentrated on the availability of structures within the community that will adequately look at the challenges and get them settled. On this note, respondents were asked to state whether they were aware of any structure that is currently in place set by either the community people or the government that will look into water crisis issues in Calabatown.

Had there been any mechanism put in place by the government of Sierra Leone or the people around the community to handle the challenges faced with water scarcity within Calabatown?

Options	Frequency	Percentage
Yes	49	49%
No	51	51%

Source: Research questionnaire

Figure 7



Research questionnaire

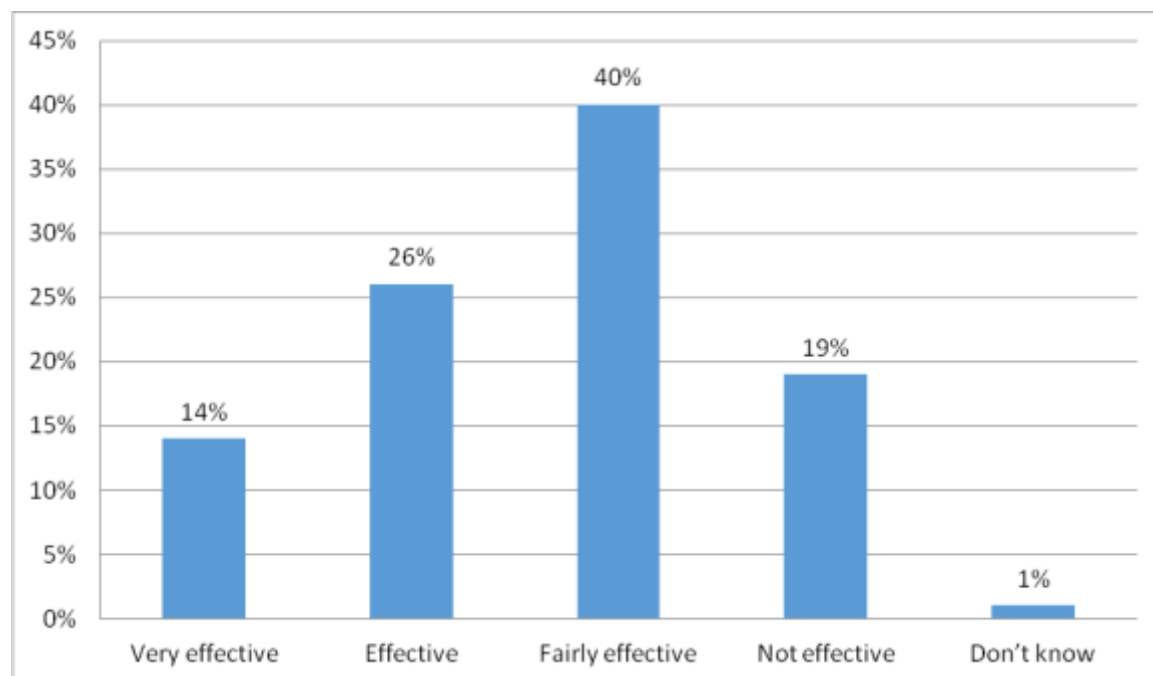
Out of the 100 respondents about 49 of these respondents stated yes, there had been a mechanism and the other 51% stated no, there had not been any mechanism put in place to respond to the challenges faced. This finding has indicated that the mechanism has been there but not aware of by most of the respondents based on the results of this investigation.

Those who said there had been a mechanism were asked to state the mechanism but only stated that there had been a community management team to strategize ways that would reduce the water shortage problem. However, the truth according to respondents had been that many of these issues had not been seriously dealt with. Most of those who had been part of the committee had just been doing part-time to the process thereby leaving many other important actions to have been taken than just allowing the problem to accumulate.

The researcher also wanted to know how effective this structure had been and therefore requested respondents to assess the structure they are aware of and state its effectiveness. The graph below will explain the findings:

Options	Frequency	Percentage
Very effective	14	14%
Effective	26	26%
Fairly effective	40	40%
Not effective	19	19%
Don't know	1	1%

Figure 8



Based on the responses above, it could be noticed that 40% of respondents stated the structure had been fairly effective with lower percentages for other options. This has indicated that the process had not been fully effective. There would have been structures as had been captured by the study but that structure had not been fully effective.

Summary of Findings and Conclusions

The specific objectives of this study are: to explore the effect of water shortage on the academic performance of pupils; find out the impact the water crisis poses on the performance of pupils in Calabatown; assess the challenges faced in tackling water shortage in Calabatown; examine structures that has been set in addressing such challenges and to suggest ways that will improve the availability of water in Freetown with special reference to Wellington.

Among the findings of the study have been the following:

- Out of the 100 respondents contacted, about 85% of respondents stated that the availability of water had very strong relevance to improving students' performance in schools around Wellington and even beyond. About 5% stated that it had been just relevant whilst the other 10% stated that it had been fairly relevant.
- 98% of respondents had stated 'Yes' there had been an impact created by the current water scarcity in the area whilst the other 2% stated 'No' there had not been any impact created in Calabatown.
- Out of 100 respondents, about 95% of respondents had confirmed that there had been challenges faced in the process of tackling the problem whilst the other 5% stated there had not been any challenge.
- Out of the 100 respondents about 49 of these respondents stated yes, there had been a mechanism and the other 51% stated no, there had not been any mechanism put in place to respond to the challenges faced.
- Based on the responses above, it could be noticed that 40% of respondents stated the structure had been fairly effective with lower percentages for other options.

Conclusion

The availability of water and its quick supply and access has been a problem for many countries especially in Africa and beyond. Its extension among other things has been connected with the fact that not much is done by leaders to ameliorate these problems hence they further become compounded. Sierra Leone is among other countries in Africa that are going through a similar situation and the mechanisms put in place to tackle this problem still further create issues considering its effectiveness and inefficiency. However, the research has made it clear that water supply has huge relevance to the performance of students in schools, and the reasons for this are connected with the well-being and health-related issues of students and teachers who as well have been discovered to need water supply for their sustenance.

In addition to its relevance, there has been a positive impact created where water is available and also a negative impact where water is not available. These impacts have been discussed and critically analyzed in the research. However, the negative impacts where water is scarce are many and will lead to many health problems apart from the lack of concentration and absenteeism it creates for both students and teachers in these schools. It is believed that many school children have suffered from the lack of adequate water supply

and the girls have borne the brunt of even their male counterparts who have only been assigned to other assignments than fetching water based on what is discovered in the community.

The challenges faced in tackling water shortage are numerous and they have threatened the academic performance of students considering the impact it has on their stability and attendance as well. There have been moves made to reduce the acute problem but, any of the strides taken have been challenged by a lack of adequate funding from either the government or local authorities. The study has outlined the attitude of Sierra Leoneans as being another key challenge and the adherence to laws that call for the respect of water properties when and where they are installed.

As a way of responding to the acute problem, the local authorities have made it possible to make some structures that will intervene to reduce the problem. However, the lack of commitment that has been shown has further challenged the process. It is the view of the researcher that water supply in the areas under investigation has strong relevance to the improved performance of students. Where it lacks, many students have suffered and some have dropped out of their programs. Others have abandoned their schools for areas where water could be easily accessed.

The way forward and suggestions for further study

Based on the study and its findings, the following have therefore been suggested:

To the Government

The government should enact laws that will protect school pupils/students from always fetching water. They should be given time to study and embark on their academic work rather than always fetching water. This should go along with very strict measures that should be enacted by parliament.

The Government should also see the supply of water as an investment and a core priority for people living around Wellington and its environs. Where this happens the performance of students will thereby increase and improve taking into account the time spent by students only in fetching water.

To the community people

The local people have an information-sharing system that will help tackle and reduce the acute shortage of water either through sharing preventive approaches or other forms of reserving water for use. This will reduce the challenges students face in fetching water within the area under question.

The community people should inculcate the habit of Preservation thereby making it possible to reduce the wastages that are noticed about the use of water and its adequate storage. This will reduce the shortage and enable students to concentrate on their academics.

Community people should also try to change the role distribution of fetching water to always be the responsibility of students. Rather, other people should also be appointed and where necessary specific persons hired for this role.

To Donor Funds

Donor partners should ensure that they provide the Calabatown. People with the requisite funding will be able to construct areas and sources of water. This will improve their water availability sources thereby reducing the burden on students to be always fetching water.

Limitation of the Study

The major limitation is that the Ministry of Education was not part of this interview.

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