

UNIVERSITY FOR DEVELOPMENT STUDIES, TAMALE

**INCREASING ACCESS TO IMPROVE SANITATION AND HYGIENE SERVICES
AT TAILOR-KURA IN THE EAST GONJA DISTRICT OF GHANA.**

JOHN BIBIRIM



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BY

JOHN BIBIRIM

[UDS/MDE/0015/14]

**PROJECT WORK SUBMITTED TO THE DEPARTMENT OF DEVELOPMENT
EDUCATION, FACULTY OF EDUCATION, UNIVERSITY FOR
DEVELOPMENT EDUCATION IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE AWARD OF MASTERS OF ARTS DEGREE IN
DEVELOPMENT EDUCATION**

AUGUST, 2017



DECLARATION

Student's Declaration

I hereby declare that this Project work is the result of my own original work and that no part of it has been presented for another degree in this University or elsewhere.

Student's Name: JOHN BIBIRIM

Student's ID: UDS/MDE/0015/14

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Date.....

Supervisor's Declaration

I hereby declare that the preparation and presentation of the dissertation was supervised in accordance with the guidelines on supervision of dissertations laid down by the University for Development Studies.

Supervisor's Name: DR. MAMUDU A.AKUDUGU

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Date.....



ABSTRACT

Improved sanitation is fundamental to improved health and standard of living of people. However, many communities especially those in developing world, despite several campaigns and sensitization are still living without access to improved sanitation and hygiene services. This project adopted action research method employing Community-Led Total Sanitation (CLTS) tools to improved sanitation and hygiene practices in Tailor-kura. The project used a households structured questionnaires to ascertain the baseline information (Appendix A) and community assessment and monitoring template to assess the post intervention results (Appendix B). A sample size of thirty (30) was used to ascertain the sanitation status of the community. With the use of participatory methods, such as focus group discussions and interviews, community stakeholders were facilitated to come out with local-based strategies and draw their action plan to address the sanitation menace in the community. The analysis of the pre-intervention data shows that poverty, lack of government commitment, availability of open spaces, and inadequate knowledge on effects of poor sanitation are some of the main causes of poor sanitation in the community. The facilitation of CLTS process in the community has resulted in an increase in access to sanitation and hygiene services in the community. Before intervention, there was zero coverage of sanitation and hygiene facilities, but after intervention, all the households now owned and used household toilets, wash their hands with soap at critical points and undertake general sanitation cleanliness. It is therefore convincing to conclude that CLTS approach is the best rural sanitation strategy. However, effective community mobilisation, stakeholder engagements, mentoring and regular monitoring, as well as the promotion of communal spirit are essential in ensuring the effectiveness of CLTS interventions in rural communities.



ACKNOWLEDGMENT

Much of my heartfelt gratitude goes to my supervisor; Dr. Mamudu A. Akudugu for sacrificing his precious time to direct me and for making useful suggestions and corrections throughout this research. I also wish to acknowledge Mr. James Achana; the East Gonja District Environmental Officer for realizing Field facilitators to support me during community sensitization and monitoring. I will not also forget to mention the contribution of the community Natural Leaders and opinion leaders during the project implementation stage. In addition, I wish to acknowledge the contributions of my dearest wife, children and siblings, as well as any other person who might have supported me in diverse ways to successfully complete this study. I say ‘May God, Almighty protect us all’.



DEDICATION

I dedicate this work to my dearest parents, Mr. Naabu Bibirim and Mrs. Naabu Azara for their love, support and encouragement throughout my educational endeavours.



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LIST OF ACRONYMS

AIDS-----Acquired Immune Deficiency Syndrome

CBOS-----Community Based Organizations

CDD-----Centre for Democratic Development

CC-----Community Clubs

CLTS-----Community-Led Total Sanitation

CTC-----Child to Child

DEHU-----District Environmental Health Unit

GDP-----Gross Domestic Products

KVIP-----Kumasi Ventilated Improved Pit

MDGS-----Millennium Development Goals

ODF-----Open Defecation Free

PRA-----Participatory Rural Appraisals

PHAST-----Participatory Hygiene and Sanitation Transformation

PPP-----Public-Private Partnership

SDGS-----Sustainable Development Goals



SARAR-----Self-Esteem, Associative Strength, Resourcefulness, Action
Planning and Responsibilities.

TSSM-----Total Sanitation and Sanitation Marketing

UN-----United Nations

USAID-----United States Agency for International Development

WASH-----Water, Sanitation and Hygiene

WC-----Water Closet

WHO-----World Health Organization

WSP-----Water and Sanitation Programme



CHAPTER ONE

INTRODUCTION

Chapter Overview

This chapter presents the background and problem rationalization of the project. It further contained the project aim and objectives, as well as the summary of project outcomes and risks.

1.1 The Background

Sanitation is one of the major essential social services to decent human living. Improved sanitation and hygiene are fundamental to improvement of health and economic wellbeing of individuals, communities and nations (Ministry of Local Government and Rural Development , 2010). Thus, sanitation and hygiene improvements form part of the global development agenda for over a decade. In 2000, the world adopted an ambitious plan, thus, the Millennium Development Goals (MDGs), which among others seeks to reduce in more than half of the world population without access to improved sanitation and hygiene services by 2015 (Wellington, 2005). Though, tremendous achievement has been made in providing the population with access to improved drinking water, the same cannot be said in the sanitation and hygiene sector. The country is still engulfed in poor sanitation and hygiene challenges (UNICEF, 2012). Afro-barometer report ranked Ghana as the third in terms of poor sanitation among 32 African countries (CDD-Ghana, 2015). However, Ghana has pledged and committed to contribute substantially in meeting the vision of Sustainable Development goals, especially in water and sanitation. To achieve this, Ghana



has recently created Water and Sanitation Ministry to facilitate smooth implementation of water and sanitation programmes (Ghana Decides, 2017).

Statistically, about 2.4 billion people do not have access to improved sanitation, while more 1.1 billion people practise open defecation in Africa in which Ghana is not in exception (UNICEF, 2016; World Health Organisation, 2017). Available data showed that less than 5% of Ghanaians owned and used improved sanitation facilities, means over 80% practices open defecation and used unhygienic sanitation facilities (UNICEF, 2016). The menace of sanitation is more pronounced in the three Northern regions. While the Eastern and Ashanti regions recorded 5.4% and 5.5% respectively of their population living without access to improved sanitation facilities, Northern region recorded 75.9% (MLRD/EHSD, 2010). This means, over 70% of the people in the Northern region defecate in the open. The situation is even worse-off in the East Gonja district where Tailor-kura is situated. According to Ghana Statistical Service (2014), more than 83% of the inhabitants in the East Gonja district have no access to improved sanitation facilities. Further Research revealed weaknesses of the district assembly in promoting the wellbeing of the people. For instance, that out of the 216 districts in Ghana, East Gonja District ranked 214th position in terms of districts compliance in promoting the wellbeing and socio-economic development of its people (UNICEF/CDD Ghana, 2016).

The inability of the country to break through in the sanitation sector is attributed to the less involvement of local people in planning and implementation of WASH interventions, as well as inadequate financial commitment to the sector (USAID, 2010). This necessitates the need for an innovative approach which will enable the local people to participate in the provision, maintenance and ownership of sanitation and hygiene facilities in their



communities. This project adopted Community-Led Total Sanitation approach as a main advocacy tool to address the sanitation menace in Tailor-kura.

1.1.1 Rationalisation of the Problem

Access to improved sanitation is positively related to improved health, increase income and standard of living (WHO, 2011). However, majority of the inhabitants in Tailor-kura in the East Gonja District of Northern region of Ghana have inadequate access to water and sanitation facilities. According to the District Environmental Health Unit (DEHU) report, out of the total of 25 households, there was no single latrine in the community. This means, 100 percent of the population has no access to improved sanitation and therefore defecate in the open (DEHU Report, 2016). This exposes the people especially children to direct oral contacts with faeces, as flies, fowls and animals get in touch with the faeces and contaminate their food. Also, rain water washes away the open faeces to their water bodies (lake) which the people depends on as their sources of drinking water. In such situation, the people are exposed to all kinds of sanitation and water related diseases, such as diarrhoea, cholera, dysentery, among others. This consequently affects their economic fortunes, as many households will often visit health centers for medical treatment. Obviously, the income which they could have used to meet their development needs, such as building decent houses, investing in their income generation activities, investing in children education among others are diverted in meeting medical expenses.

In a related development, the practice of hand washing with soap in the community rarely exists. Children especially don't wash their hands after visiting toilet and most women do not wash their hands with soap before cooking and after cleaning their babies' toilet. This



phenomenon is a potential foundation for sicknesses, such as diarrhoea, cholera and malaria among others to thrive and further compound the health and economic development of the community (WHO, 2017).

Though several health programmes and activities, such as hygiene education, hand washing with soap education, environmental campaigns among others have been carried out by the District Assembly, Ghana Health Services and development partners, but no results have been achieved especially in improving their access to decent sanitation and hygiene services.

This project adopted Community-Led Total Sanitation (CLTS) approach to promote improved sanitation and hygiene practices in the community. The strategy was chosen because it offered the local people the opportunity to participate in analysing their sanitation challenges; and collectively developed their local initiatives, implemented the plans and achieved the desired outcome of increasing access to improved sanitation and hygienic practices.

1.2 Project Aim and Objectives

1.2.1 Main Aim

The Project seeks to contribute to improve health and the standard of living of Tailor-kura people through the promotion of appropriate sanitation and hygienic practices.



1.2.2 Objectives

The specific objectives of the study are:

1. To increase access to and use of sanitation facilities through community driven strategies
2. To increase the practice of hygiene among the community people through local based strategies
3. To increase community capacity to manage and sustain sanitation and hygiene facilities

1.3 Project Significances/Outcomes

This project seeks to increase access to and use of improved sanitation and hygiene services in Tailor-kura, so as to contribute to improve health and standard of living of the community people. As a result, the project adopted a self-help model and locally driven strategies to enhance good sanitation and hygiene practices in the community. As a framework, the project outlined series of local-based activities adopted to address the menace of poor sanitation in the community. This information is therefore relevant to researchers and development practitioners in the WASH sector; whose ultimate objective is to identify, promote and upscale sustainable methods of promoting WASH related interventions in community especially those methodologies that meets the needs of the vulnerable in society.

In addition, development practitioners such as Non- Governmental Organisations (NGOs), Government agencies, students and Community-Based organisations (CBOs) among others



can adopt the strategies adopted in this project in a similar socio economic and cultural environment, so as to improve sanitation and hygienic practices.

1.3.1 The Project Outcomes

After successfully carrying out the project activities, the following results and outcomes were obtained:

1. Increased access and used of household latrines in all households in the community.
2. Increased knowledge among the people on the effects of poor sanitation and hygiene
3. Community stakeholders' capacity in the provision and management of sanitation and hygiene facilities improved
4. General environmental sanitation and hygiene among the people has improved in the community
5. Households water transport and storage system improved
6. Community solidarity and social organisation enhanced
7. All households constructed hand washing with soap facilities (Tippytap)
8. Community people now practice hand washing at critical times (before and after eating, after visiting toilet, before cooking and after cleaning babies faeces).



1.4 Project Assumptions/Risks

Although the project was successfully carried-out and sanitation and hygiene situation improved in the community, the following are some assumptions and risk that the project envisaged to affect the sustainability of the project intervention:

1. Community people may lack knowledge in dislodging the waste products (faeces) after manholes are full, which may compound the sanitation problems in the community; as a result further research should be conducted to identify strategies to minimize the effects in the lives of the community people.
2. Community members may relapse due to lack of post implementation monitoring.
3. The households latrines constructed at homes if not properly covered may serve as mosquitoes breeding places, which can result in rampant occurrence of malaria.



CHAPTER TWO

LITERATURE REVIEW

2.0 Chapter Overviews

This chapter presents the conceptual analysis of the project. The project adopted the social norm theory as the main theoretical framework underlying the issues of open defecation and poor sanitation practices in the community. The chapter also presents a review of the literature under two thematic areas. The first part is on the effects of poor sanitation globally and more especially in Africa. The second aspect is on strategies and methods adopted in the provision of sanitation and hygiene facilities, as well as some challenges and obstacles impeding the provision of sanitation facilities, especially in Africa. It further reviewed literature on the community –Led Total Sanitation (CLTS) approach as the main advocated model adopted in this project.

2.1 Conceptual Analysis

2.1.1 Sanitation

Sanitation according to UNICEF refers to the “process whereby people demand, effect, and sustain a hygienic and healthy environment for themselves by erecting barriers to prevent the transmission of disease agents” (UNICEF, 1997). Sanitation can therefore be seen as any behaviour or activity of people in the society that results in a clean and decent surrounding, hence contributing to improving the health and wellbeing of the people.



2.1.2 Hygiene

Hygiene is a process of keeping oneself and environment neat and tidy with the aim of avoiding sicknesses and ensuring human dignity (UNICEF & WaterAid, 2008). A hygienic person practises hand washing with soap before and after eating, before cooking, after cleaning babies' toilets and after visiting toilets (UNICEF & WaterAid, 2008). On the other hand, for an environment to be considered hygienic, the people should constructs soakways to avoid running waters especially behind their bath houses, dispose waste in the proper manner, ensure proper water storage and transport system, as well as ensure proper keeping of food for both commercial and domestic purposes (UNICEF & WaterAid, 2008)

2.1.3 Sanitation and Hygiene Promotion

Sanitation and hygiene promotion is a process of developing and implementing programmes to change the behaviour of people to change from the practice of bad sanitation and hygiene to the practice of good sanitation and hygiene (UNICEF & WaterAid, 2008). It involves the analysis of people beliefs and practices, and infusing messages to better the behaviour pattern of the people. Sanitation and hygiene promotion must be all-inclusive and community-led, so as to bring about sustainable policies and programmes.



2.2 Effects of Poor Sanitation

Recently, access to improved sanitation for households and communities has gained widespread international attention. The lack of improved sanitation is one of the major drawbacks to the attainment of the Millennium Development Goals (Inter-Action Council, 2011), and this could equally be an impediment against the realisation of the Sustainable

Development Goals (UNICEF, 2015). According to United Nations Children Fund (UNICEF) and World Health Organization (WHO), poor sanitation contributes to contaminated water sources, poor hygiene and result in widespread diseases, such as diarrhoea, cholera, respiratory infections, and intestinal worms among others. For instance, it is estimated that about 90% of all the 1.6 million diarrhoea related deaths globally are mostly children from developing world; which is attributed to poor sanitation and hygiene (UNICEF, 2015).

UNICEF further noted that, inadequate water, sanitation and hygiene services have a direct bearing on the economic development of countries. It reduces the productivity of women, affects children enrolment and retention in schools and threaten national peace and security (Inter Action Council, 2011; Duncan, Jon, Beth, & David, 2010). Available data also showed that about 5.5 billion productive days are lost annual due to Diarrhoea diseases (UNICEF, 2015). This means sanitation is key in contributing to the achievement of global agenda on health, environment, food security and nutrition, women empowerment, quality education among others, especially in developing countries. This therefore implies that until every community in the world gain access to improved sanitation, the current global Sustainable Development Goals (SDGS) cannot be met. This conclusion reflects the statement made by the United Nations Secretary General; Ban ki-moon that “access to sanitation is deeply connected to virtually all the Millennium Development Goals in particular those involving the environment, education, gender equality, the reduction of child mortality and poverty” (Water and Sanitation Programme, 2015). The World Bank group president; Dr. Jim Yong Kim further remarked that “we



have to fix sanitation if we want to end extreme poverty by 2030 and boost the incomes of the poorest 40 percent” (Water and Sanitation Programme , 2015)

Indeed, the cost of poor sanitation and hygiene within countries is huge. In Cambodia, the cost of poor sanitation stood at US\$448 million annually while in India, the cost is US\$53.8 billion and in Indonesia and Nigeria, the costs are US\$6.3billion and US\$3 billion respectively (World Bank, 2008; UN Water Fact Sheet No.2, 2015; WaterAid, 2011). Recent research data confirmed that poor sanitation cost the global economy to the tune of US\$222.9 billion for the period 2010 to 2015 (WaterAid, 2016). This cost is related to the loss of time due to open defecation, death and sanitation disease burden on children as well as the productivity loss due to effects of poor sanitation. This situation could be more devastating in the entire African continent. For instance, Sameer and Amsalu revealed that, 37% of the 40% population in the world without access to sanitation is from Africa (Sameer & Amsalu, 2008). Inferring from this, one could conclude that overwhelming majority of sanitation related burdens is in Africa. In addition, World Bank observed that Africa countries lose between 1percent to 5percent of Gross Domestic Product (GDP) annually due to poor sanitation practices (Water and Sanitation Programme, 2015). This data therefore could present a compelling evidence for the need to adopt a comprehensive approach and holistic commitment to end this menace.

In a similar dimension, Mwanza (2001) brought to light that the cost of poor sanitation and non-availability of improved water services predominately affects women and children. The reason is that, in Africa, issues of water and sanitation is primarily the responsibility of the women and that of children (Mwanza, 2001). This sentiment has also be observed by other researchers. According to UNICEF, the achievement of gender equality in Africa is



hindered due to lack of water and sanitation facilities at the household levels and hence women and girls have to travel long distance in search of water and sanitation facilities to the detriment of their economic activities and enjoying quality education (Inter-Action Council, 2011). WaterAid (2007) also revealed that about 6% of global deaths is attributed to lack of improved sanitation services, while about 90% of all sanitation and water related deaths affects children under five years. Considering this analysis, it is logical to recommend that, for countries to improve upon child health and welfare, issues of sanitation should be considered as the top-most priority. Further researchers concluded that until the menace of sanitation in Africa is addressed, the continent developmental efforts will be a mirage (WaterAid, 2011). Indeed, sanitation is seen as a driving force to the development of other sector of the economy, such as agriculture, health, environment, human security, employment, women empowerment, quality education among others (Inter-Action Council, 2011). On this basis, Mahatma Ghaddi, 1923, noted “Sanitation is more important than independence” (Duncan, Jon, Beth, & David, 2010). This could mean access to improved sanitation enable individuals regardless of his or her socio-economic status enjoy some greater relief from sickness, hunger, malnutrition and consequently led to a higher standard of living. Duncan et al (2010), further related the positive effects of improved sanitation to human dignity. A household with toilet facility is less prone to embarrassment, enjoy high social status and reduce the discomfort of external disturbances, such as rain, snake bites, just to mention but few (Duncan, Jon, Beth, & David, 2010).



2.2.2 Strategies and Challenges in Addressing Sanitation

The challenges in addressing water and sanitation crisis in Africa are the lack of private sector investment in the sector (Mwanza, 2001). Many Africans still hope that water and sanitation should be provided free of charge and as a result unwilling to pay for the services provided (ibid). This undoubtedly serves as disincentive to private sector investment in the provision of sanitation and water services (Mwanza, 2001). As captured in Ghana environmental Sanitation policy document, that the major setbacks in achieving the sanitation objectives in Ghana is inadequate financial resources allocated to the sector; as well as the lack of commercialization of sanitation business (Revised Environmental Sanitation Policy, 2010). This observation however contradicts the findings of the recent researchers. According to UN, the majority of the 2.5 billion people without access to improved sanitation facilities are “willing to pay for improved sanitation services”, hence represents a great opportunity for business men and women to maximize profit in the sanitation sector (UN Fact sheet No.2, 2015, p1). This view has also been shared by the Water and Sanitation Programme. The programme drew lessons from the field experiences over the years, concluded that the most sustainable sanitation strategy which can propel sanitation drive in Africa and developing world in general is the promotion of sanitation demand and supply, other word known as “sanitation marketing”(Water and Sanitation Programme, 2004,p1).

Duncan *et al.* (2010), however sees the main challenges to be the lack of community involvement and the earlier adopted top-down approaches to sanitation services delivery. Citing instances in India, where many toilet facilities constructed by government and civil society organizations were abandoned and diverted as animal’s pens and in some cases



storage of fire woods, among others (Duncan et al, 2010). On the other hand, a pilot project, using community-Led Total Sanitation (CLTS) approach in Indonesia, Uganda, among others countries by Plan International in 2015 resulted in about 97% increase in access to improved sanitation services within the project operational areas (Plan International, 2015). As a result, they advised that, to sustain and upscale sanitation facilities, local people should be facilitated to analyse their sanitation situation and develop their own action plans and targets to mitigate their sanitation challenges (Plan International-Uganda, 2015, Plan International-Indonesia, 2015). Inferring from the preceding analysis, it is recommended that for countries to achieve in their sanitation targets, community involvement should form part of the planning, implementation and evaluation processes.

The choice of strategies and technologies should be cultural accepted and reflect the needs of the masses. UNICEF (2013) confirmed that to achieve open defecation free (ODF) target in communities and improve sanitation and hygiene practices, more energy should be gear toward mobilizing local available resources and totally avoid the subsidy approach. Similarly, Sameer and Amsalu (2008) noted that, the failure of Africa sanitation drives were as a result of “top-down” approach in tackling sanitation issues. According to them, this mode of solving sanitation challenges disregard local ownership and treat the beneficiaries as recipients rather than the drivers of their own development. In their view, to achieve effective community sanitation drive, more emphasis will be placed on community driven initiatives and avoid the technical and subsidy based model of improving community sanitation.



Other researchers observed that, the slow progress in sanitation sector in developing world is as result of lack of women and children involvement. While issues of WASH in Africa is mainly women affairs, decision about the provision, siting and financial investment is solely directed by men (Water and Sanitation Programme (WSP), 2004). Another factors serving as obstacles to the provision of sanitation facilities include the landlords and landladies unwilling to invest in sanitation for their tenants while tenants also lack capacity to demand the house owners to construct latrines (ibid). Also, the lack of information about the safety of various technological options makes people unwilling to construct household latrines. There are myth of children falling into sanitation pits due to poor constructions defectsn (WSP,2004). In addition, local people are uncertain about how the sewage will be managed, hence raises questions of their public safety and sustainability of owing household toilets (WSP,2004). Summarising the sanitation challenges in Africa, the Ministry of Foreign Affairs of Demark noted that, among others, the lack of political will, limited involvement of the market, poverty, limited information on the appropriate technological option and limited funds allocation to the sector are the core challenges facing Africa sanitation drives (Ministry of Foreign Affairs, Demark, 2010).

2.3 Advocacy Model being Implemented

The main advocacy model being adopted by this project to help increase access to improved sanitation and hygiene practices in Tailor-kura is Community Led Total Sanitation (CLTS). CLTS is a tool that was developed by Kamal Kar between 1999 and 2000 in Bangladesh (Kamal & Robert, 2008). It is one of the Participatory Rural Appraisal (PRA) tools that seeks to stimulate local people to change their behaviours and take



collective decision to provide sanitation services for themselves and their communities (Kamal & Robert, 2008).

CLTS is based on certain vision and defined principles. The vision of CLTS is to end open defecation in the community and as a result contribute to improve health and standard of living of the people (ibid). CLTS is based on the following principles.

1. It is a non-subsidy approach. It uses the available resources and synergy of the community members without direct external material support, except capacity building.
2. The tools focus on total sanitation. Every aspect of sanitation in the community, such as toilet construction, hand washing with soap, construction of soakways and general environmental cleanliness.
3. The approach targets in changing the behaviour of the entire community as a unit and not individual.
4. It is based on community innovations and immediate action (Kamal & Robert, 2008).

The implementation process of CLTS activities is also sequential and orderly. There are three main stages. These are pre-triggering, triggering and Post-triggering activities (Kamal & Robert, 2008).

1. Pre-triggering involves the selection and community entry processes. During this stage, the facilitator meets with community leaders, the chief, opinion leaders and head of women (“Mangazia”) in the community. This is a stage of self-introduction and statement of mission and purpose, so as to gain support and co-



operation with the local people. The facilitator also need to build rapport with some local people, thus exchanged of phone numbers and later phone calls. To understand the community better, the researcher need to undertake some basic survey in order to get the baseline data which will serve as a point of reference for measuring future changes. After this, the facilitator needs to set date for entire community gathering for actual triggering activity be carried (Kamal & Robert, 2008,p17).

2. Triggering is a stage of “stimulating” the community members to realize the feco-oral transmitting route. In other words, facilitating the community people to visualize the processes human faeces can pass in order to enter human mouth, and by so doing create some kind of shame and disgust among them. Indeed, the aim of the facilitator is to create awareness among the people about the negative effectives of open defecation in the lives of the community members and hence challenge them to develop local based strategies to address the challenge. A successfully triggered community must take immediate decision to end the opening defecation by coming out with an action plan to guide their next course of action (“Match box in gas station”). The associated techniques during triggering include defecation area walk of shame, shit calculations and medical expenses, drawing of defecation map, among others (Kamal & Robert, 2008).
3. After successfully triggered a community, the next important stage is monitoring. This is what is termed as Post-triggering. In CLTS, post triggering activities must be holistic and community-based. It involved the identification of Natural Leaders, coaching the community-leadership to improved their sanitation, Training of



technical volunteers in the community, mobilising children to stop open defecation, reviews of community action plan, promotion of hand washing with soap education, construction of latrines and tippy-taps and general environmental cleanliness. It also involved community self-assessment and verification among others (Kamal & Robert, 2008).



CHAPTER THREE

METHODOLOGY

3.0 Chapter Overview

This Chapter presents the methodologies adopted and specific activities carried-out in order to improve sanitation and hygiene situation in Tailor-kura. The reason for the choice of approach is also analysed. In addition, the section further presents the profile of the project area, the characteristics of the beneficiaries.

3.1 Profile of Project Site or Beneficiaries

3.1.1 Background of the District

The East Gonja District is one of the oldest districts in Ghana. The district was created by a legislative Instrument (LI 1938) in 1988 and later (LI1938) in 2007 when Kpandai and Pru districts was carved out (Ghana Statistical Service, 2014). It is located at the South-eastern part of the Northern Region of Ghana. The district lies within Latitude 8°N and 9.29°N and, Longitude 0.29°E and 1.26°W. It shares boundaries with the Mion District and the Tamale Metropolitan Assembly to the North, Central Gonja District to the West, Nanumba North, Nanumba-South and Kpandai Districts to the East, and the Brong-Ahafo Region to the South (ibid). The total land area of the district is 8,340.10 square kilometers, occupying about 11.95 percent of the landmass of the Northern Region making it the largest district in the country (Ghana Statistical Service, 2014).



3.1.2 Demography Characteristics

The district has a total population size of 134,450 and covers an area of about 8,340.1 km square. It has a population density of about 16 persons per square km. The total number of males is 69,721 and that of females is 65,729. The population of the district is predominantly rural farmers representing about 81 percent of the total population of the district (Ghana Statistical Service, 2014).

3.1.3 Geography of the Project Area

The district has a number of large water bodies that flow throughout the district. These include the Volta Lake and the Dakar River both of which run across the district. A number of streams, dugouts, valleys, hills and mountains are also found at various locations in the district, as part of the natural environment. The confluence of the Volta and some of its major tributaries including the White Volta and the Dakar River are found in the district (Ghana Statistical Service, 2014).

The soils in the district can be classified into two major groupings. These are: Alluvial soils generally classified under Gleysols which are found around the Volta Lake, particularly in the drawdown zone of the Volta Lake. The soils along the Lake are medium textured and moderately well drained in parts. The soil is potentially fertile and is suitable for a variety of crops, especially vegetables and rice (Ghana Statistical Service, 2014). The loose soil along the communities in the Volta Lake serves as a major obstacle in the construction of toilet facilities, since suitable technology is needed before household toilet construction will be possible (ibid).



3.1.4 Literacy and Education

As much as 68.1 percent of the population has no formal education while about 24.2 percent have only basic education. Also, 83.9 percent of the married population has no education with about 11.2 percent having only basic education. Persons married with education beyond the basic level account for less than three percent each. The proportion of females with “no education” is higher (72.7%) compared to the proportion of males with “no education” (63.8%). Amongst the total married male population of 19,943, about 80.1 percent have no education with 12.8 percent having only basic education (Ghana Statistical Service, 2014). The low level of education in the district means majority of the population lack basic knowledge on the effects of poor sanitation and hygiene practices.

3.1.5 Economic Activities and Employments

Out of a total population of 75,864 aged 15 years and older in the district, 70.1 percent are employed, 2.3 percent are unemployed while 27.6 percent are economically not active. The age group with the highest proportion of the employed population is 35-39 constituting 86.5 percent of the labour force. The age groups 60-64 are in the majority of those unemployed 4.4 percent and the least 0.2 percent is age 65 and older. Majority of persons who are economically not active in the district fall within the age group 15-19 which accounts for 49.8 percent. There are more males who are employed (74.7 percent) than females (65.4 percent). Similarly, more females within active labour force are unemployed (2.5 percent) than males (2.2 percent). The employment is severe within the youthful categories. For instance, unemployment among females age 15-19 years stood at 52.7 while that of male youth is 23.1 percent (Ghana Statistical Service, 2014).



Agriculture, forestry and fishery industry engaged the highest proportion of the employed population in the district with more than three-quarters of the employed population. The proportion of males (85.6%) engaged in farming industry is higher as compared to that of the females (65.8%). The manufacturing industry engaged the second highest (9.5%) of the employed population followed by the wholesale and retail –repair of motor vehicles and motorcycles - which constituted 6.6 percent. About 17 percent of the females were engaged in manufacturing as against three percent for the males (Ghana Statistical Service, 2014).

3.1.6 Health, Water and Sanitation

Though, there are number of health facilities within the major towns in the district, the crude death rate is still high. Out of the total population of 135,450 in the district, about 761 deaths have been recorded in all households in the district giving a crude death rate of 5.62 per 1000 population (Ghana Statistical Service, 2014). Available data further confirmed that about 10 per of the death is cause by accident, suicide and violence related, while about 90 per of the death is related to other environmental causes, which are mostly related to water and sanitation (Ghana Statistical Service, 2014).



Over 30 percent of the households in the district get their drinking water from rivers and streams making it the most common source of drinking water. This is closely followed by protected wells, which also accounts for 23.8 percent of households with drinking water. Other sources include borehole/pump or tube/well, 15.8 percent while dugout/pond/lake/dam/canal constitute 19.6 percent. Pipe-borne water inside dwelling, one of the improved water sources is less than two percent and; pipe-borne outside dwelling accounts for 1.6

percent while public tap/Stand pipe is less than one percent (Ghana Statistical Service, 2014).

Majority of the households (78.8%) in the urban communities obtain water for drinking from protected wells. Only 4.8 percent get their water from pipe-borne sources inside their dwelling, 3.2 percent obtain theirs from borehole/pump/tube or well. About 3.2 percent drink sachet water, and while 3.2 percent depend on unprotected wells. In the rural communities in the district, the major sources of drinking water for households include river/stream (38.7%), dugout/pond/lake/dam/canal (25.3%), borehole/pump/tube well (19.0%) and protected wells (7.7%) (Ghana Statistical Service, 2014). The above analysis imply that majority of the rural population drinks contaminated water since the practice of open defecation could contaminate their water sources which are the dams, rivers, streams and so on.

Bathing facilities in dwelling units can be categorized primarily into four main types: bathroom for exclusive use, shared bathroom in the same house, shared open bathing cubicle and others. The proportion of dwelling units with bathrooms exclusively used by household members is 35.3 percent, while 25.3 percent dwellings units have separate bathroom shared with no other household members. About nine percent (8.4%) share an open cubicle as a bathroom with others in the compound. About 1.4 percent of the dwelling units have no bathing facilities. Households that use open spaces for bathing also stood at 16.6 percent, while 1.6 percent bath in rivers, lakes and ponds (Ghana Statistical Service, 2014).



The availability of toilet facilities within households for effective human waste disposal is a critical factor for ensuring hygienic human dwellings. Most common toilet facilities in the district include public toilet (11.0%), pit latrine (1.3%), water closet (WC) (0.9%) and Kumasi Ventilated Improved Pit Latrine (KVIP) (2.9%). About 83.3 percent of the dwelling units in the district are without sanitation facilities (DEHU, 2016, Ghana statistical Service, 2014). This suggests that the occupants could be using the bush/beach/open field, a major course of reported water and sanitation related diseases in most of the health centres in the district. Available data also shows some proportion (0.2%) of inhabitants defecating in buckets/pans and disposed-off indiscriminately (Ghana Statistical Service, 2014).

Nearly one in nine dwelling units (92.8%) in the area have no toilet facilities and resort to the use of bush, beach or open fields. The trend shows a deteriorating human waste disposal in system in the rural localities. Public toilet is the highest reported facility in urban localities while in rural areas the most predominant toilet facility is open defecation in bushes, fields and beaches. In the urban localities, 33.5 percent of the dwelling units use public toilets while 4.5 percent use public toilets in rural localities. The use of pit latrines constitutes about 1.5 percent among urban areas and 1.3 in rural localities. The use of the KVIP in urban and rural localities is 9.8 percent and 0.9 percent respectively (Ghana Statistical Service, 2014).

The main modes of solid waste disposal are public dump site (41.2%) dumping indiscriminately 29.1 percent. Indeed, dumping in public containers that are emptied periodically is 11.6 percent. This rather percentage could be due to the ineffectiveness or poor supervision of private waste management firms contracted by the District Assembly.



Almost ten percent of the dwelling units dispose of their solid waste by burning. Available data shows that in the rural communities 44.5 percent of the dwelling unit dispose of their solid waste at dump sites (open spaces) while 30.2 percent of the dwelling units in the urban areas also disposed of their solid waste in open spaces, while 44.2 percent of the dwelling units in the urban areas also disposed off their solid waste in public containers for periodic collection (Ghana statistical Service, 2014). More than half (51.8%) of the dwelling units in the district throw their liquid waste on to the street/outside. The proportion of dwelling units that disposed of their liquid waste by throwing onto the street/outside is slightly higher in urban areas (59.0%) than in rural communities (49.7%). Again, about 36.3 percent disposed of their liquid waste by throwing onto compounds while less than six percent dispose liquid waste through the sewerage system and drainage system (Ghana Statistical Service, 2014).

3.1.7 Profile of Tailor Kura

The beneficiaries of this action research are the inhabitants of Tailor-kura. Tailor-Kura is one of the rural communities in the East Gonja District that have inadequate social amenities such as education, health facilities, water and sanitation facilities among others.

The population in the community currently stands at 250 people, made up of 160 males and 90 females (DEHU, 2016). The main economic activity in the community is farming.

The activity of charcoal producers is also visible and widely practised. The people of Tailor-kura lacked potable water and sanitation facilities. They also lacked requisite knowledge on basic hygiene and sanitation practices (DEHU). As a result, the practice of open defecation is rampant, and the community people, especially children rarely wash their hands with soap at critical times, such as after toilet, before eating, before cooking,



and after cleaning children when they defecate, among others. Household bathing facilities lack soak away, hence stagnant waters are available and serving as breeding places of mosquitoes. These practices expose the people to various water and sanitation related diseases, such as diarrhoea, cholera, dysentery, and malaria and so on (District Environmental Health Unit Report, 2016)

3.2 Pre-intervention Analysis

Prior to the triggering activities or main sensitization, the facilitator undertook a basic survey in the community to ascertain the sanitation status of the community. Since the project seeks to develop an intervention so as to address the sanitation challenges in the community, the design and the methodology used were of phases. First, pre-intervention stage and second, the post intervention stage.

During the pre-intervention phase, an intensive field survey was carried out. This was done through a structured questionnaire (see appendix A). The idea was to gather baseline information specifically on the causes and effects of poor sanitation in the community, availability of household latrines, soakways, community knowledge on effects of hand washing with soap and community's socio-cultural and political organisation.

The second survey was the post intervention survey, which seeks to measure achievements of the project implementation strategies toward improving the sanitation situation. It was also to ascertain the community capacity and knowledge gained with regards to the issues of sanitation and hygiene. In this survey, the facilitator used a community self-assessment and monitoring form (as shown in appendix B) to track the progress made after project implementation.



3.2.1 Data Collection Instruments

As noted earlier, the facilitator used a structured questionnaire in gathering relevant information in the community. This was administered through face to face interviews with the respondents. The facilitator asked the questions, while the interviewee answer the questions on the subject matter. This method was adopted because of the high illiteracy level of the people in the community. It also offered the facilitator the opportunity to probe the interviewee for clarity and avoid inconsistencies.

Beside face to face interview, the facilitator also adopted the focus groups discussion method to obtained in-depth knowledge especially their altitudes, beliefs and feeling about the sanitation menace in the community. Three different focus groups discussions were held, thus separately for men, women and children. A focus group discussion refers to a situation where about six (6) to twelve people are brought together to discuss issues of importance, with a facilitator as a moderator (Baral, Uprety & Lamichhane, 2016). In this project the facilitator identified interested persons to be part of the focus group discussions. The facilitator intentionally stimulates a topic and allows the participants to deliberate freely on the topic under discussion.

3.2.2 Sampling and Sampling Procedures

Two (2) main sampling procedures were adopted in gathering data relevant to this project. These were quota sampling and random sampling. The quota sampling was used to ensure the representation of all categories group of people, such as men, women and children are giving equally chance of being interviewed (Yang, Keming and Banamah, Ahmad, 2014). A sample size of thirty (30) was selected, and the facilitator intentionally selected ten (10)



men, ten (10) women and ten (10) children for the surveys. Amidst the quota is the accidental sampling technique, which was adopted during the administration of the questionnaires. In the process, the facilitator just interviewed any person in the community who was available and willing to give information. However, care was taken in order not to exceed any quota allocated. In addition, the facilitator interviewed the District Environmental Sanitation Unit (DESU) officer to ascertain more facts on the sanitation in the community especially the government sanitation intervention and strategies.

3.3 Project Inputs

The researcher used the following resources and materials to be able to promote sanitation and hygiene practices in Tailor-kura community: Flip chart and markers were used to help the community members to be able to draw their action plan which served as a guide for implementation and monitoring activities. Additionally, cement, sand and water were used to aid in the construction of household toilets. Beside these, the researcher with community members adopted the empty-cans as hand washing facilities (tippytap technology). More importantly, fuel was used to support the movement of the facilitator in and out of the community for implementation activities.

3.4 Project Activities (Intervention Procedures)

3.4.1 Main Activity

Theoretically, a number of methods and strategies have been used to promote good sanitation and hygiene practices in communities. These strategies are grouped into two main approaches. The first approach is the participatory based approach, comprising Community-Led Total Sanitation (CLTS), Participatory Hygiene and Sanitation





Transformation (PHAST), Participatory Rural Appraisal (PRA), Self-Esteem, Associative Strength, Resourcefulness, Action Planning and Responsibilities (SARAR), Child to Child (CTC) and Community Clubs (CC), among others (WaterAid,2013). The second is the Social Marketing Approach, such as Public private Partnership (PPP) and Total Sanitation and Sanitation Marketing (TSSM) and so on (WaterAid, 2013). In analysing the above approaches, it can be deduced that no one approach is universally applicable and therefore the choice of method should be acceptable to the local condition and reflect the values and beliefs of community members so as to ensure sustainability. As a result, this project, upon careful analysis of the major factors that impede sanitation and hygiene interventions in Tailor-Kura community adopted the CLTS strategy. This strategy was complimented by CTC and TSSM. These strategies offered the local people opportunity to analyse their own sanitation situation and collectively develop actions to end open defecation and improve the general sanitation situation. The situational analysis results shows that the major challenge mitigating against the implementation of Water, Sanitation and Hygiene (WASH) programmes in the community was inadequate active involvement of the intended beneficiaries. Most previous interventions targeted largely at the aged-men and women who are always available at home. This means the youth, children and the energetic men and women who can dig and provide financial support are often left out. This resulted in the failure of many past interventions. The CLTS, CTC and TSSM methods ensure all-inclusive decision making and action planning, and as such motivates the local people to lead in their development process (Peter, 2009; WaterAid, 2013)

3.4.2 Specific Activities

The project specifically adopted the following specific activities to be able to change the behaviour of the people of Tailor-kura to construct individual households' toilet facilities, practise hand washing with soap, especially after visiting the toilet and periodically carrying out general environmental cleanliness. Indeed, these specific activities follows the recommended steps in CLTS process, namely, pre-triggering, Triggering and Post Triggering activities (Kar, 2005). These activities carried out are outlined in the proceeding subsections.

3.4.2.1. Pre-triggering/Community Entry

Pre-triggering was the first activity carried out in the community. This involved a meeting with community leaders, the chief, opinion leaders and head of women (“Mangazia”) in the community. This was a stage of self-introduction and statement of mission and purpose, so as to gain support and co-operation with the local people. The facilitator also built rapport with some local people, thus exchanged of phone numbers and later phone calls. The facilitator took time to properly study the political issues and some basic cultural connotations, such as their ways of greetings. After a successful introduction, the community leadership and the researcher unanimously agreed on the specific date for the entire community meetings. In other words, the dates in triggering activities are to be carried out.

3.4.2.2 Triggering (Interventions)

According to Kamal and Robert (2008), the initiator of the CLTS strategy, the triggering is a main sensitization process that get the various stakeholders in the community ignited to



take appropriate local interventions to end open defecation and improve general sanitation status of the community (Kamal & Robert, 2008). Within this context, the facilitator adopted the following triggering tools, which resulted in a collective action by the community members to promote their sanitation and hygiene practices.

3.4.2.2.1 Drawing of Community Defecation Map

On the day of the triggering, community members gathered at a spacious spot where they sat in a circle form. The facilitator then greeted the entire community members and proceeded to do self-introduction of the facilitating team. Thereafter, the community members were given opportunity to sketch their community map on the floor and use local available materials, such as leaves, sticks, containers, stones, ash, and charcoal among others to identify the various available resources in the community (houses, chief palace, schools, clinics, toilet facilities or places of defecation, water sources, like dam, stream, rivers among others).





Plate 1: Project Team facilitating the Community to Realize feco-oral Transmission Route.

Having facilitated the community members to sketch the community map and realising that the community members practise open defecation, the project team then began to ask questions about the relationship between the open defecation and the open dams and rivers; and whether it is possible for the faeces defecated in the bush and around the homes get into contact with human mouth? All these methods of questioning and re-questioning were to enable community members visualize and realize the various routes that faeces can pass through in order to get into human system as well as the effects thereof. With this realization, the community members were disgusted, ashamed of themselves and took immediate steps to end open defecation and improve their sanitation practices.



3.4.2.2.2 Community Walk of Shame

In addition to community defecation mapping, the facilitator undertook a walk with the local people to practicalize their observations during the defecation mapping. Through this exercise, the community people observed the manner in which house flies as well as fowls, dogs, goats and other domestic animals perk on faeces and transferred the faeces home. This made them see the need to develop a collective plan to end the practices.

3.4.2.2.3 Identification of Local Based Strategies

Having ascertained the people perception of the causes and effects and other pre-intervention data, the facilitator then facilitated the community people to designed local based interventions to address the sanitation menace in the community. The appropriate approach that fit in the strategies of the local people was community-Led Total Sanitation (CLTS). This was successful in the community because it gave all stakeholders (women, men, youth and the aged) an opportunity to participate and analyse which local actions was to be adopted in order to solve their sanitation challenges without external financial resources. It was also an appropriate strategy to adopt since the facilitator had no external funds to support the local people to construct sanitation facilities.

Through the involvement of the community people, the strategies and activities (Table 1.1 on pages 30-31) were identified. Also, the implementation action plan was drawn (Table 1.2) which was applied and thus resulted in the improvement of sanitation situation in the community.



3.4.2.2.4 Local-based Strategies to Address Menace of Poor Sanitation and Hygiene

Table 3. 1: Local Based Strategies/Activities

No.	Identified broad strategies	Specific strategies/activities
1	Law enforcement	Ban open defecation in the community Ensure that all households build simple toilets
2	Involvement of women/ Formation of women advocacy team	Women to make sure children wash their hands with soap/ash Wash bath house Wash dishes regularly Collect children faeces into toilet Cover water sources Make sure children are given hot food. Bath children regularly Wash children clothing regularly
3	Involvement of children and youth	Children support parents in washing and cleaning Children serving as watch dogs to offenders Children report offenders, including visitors to the opinion leaders for action. Children fetching water for building
4	General clean up exercise on every Friday (to be led by Natural leaders)	Sweeping and clearing bushes and rubbish around compound Digging soak away around the back of bath rooms.
5	Communal labour to dig toilet (involvement of men)	Men support one another in digging and building households toilets Support vulnerable household to dig toilets
6	Use of local available materials e.g. wood, grass to construct toilet	Cut wood to deck the toilet by men Use sand and water by men Use grass to roof by men Use local empty-cans for hand washing facilities



		Use ash as substitute to soap
7	Involvement of local based Masons	Offer technical support in construction

Source: Field work, February, 2017

3.4.2.2.5 Drawing Community Action Plans

Immediately after the transect walk, the facilitator facilitated the community members to draw the community action plans detailing series of activities they wish to undertake in order to improve their sanitation and hygiene status. The variables under consideration included increase availability of household toilet facilities, construction of soak a ways, hand washing with soap at critical times, ensure clean surroundings and lastly ensure that domestic water sources are well stored. The action plan was drawn by all stakeholders in the community, thus the women, children, youth and opinion leaders. The table 2 on page 32 details the action plan drawn by the community with the facilitation of the project team.



Table 3.2: Action Plan to Address Sanitation Menace

Expected outcomes	Specific strategies/activities	Time line	Persons Responsible
Increased access to toilet facilities	-ban open defecation in the community -ensure that all households build simple toilet	31/03/2017	-Chiefs, opinion leaders to lead in the process -Children serves as watch dogs to offenders.
Improved hygiene practices	-women to make sure children wash their hands with soap/ash -Wash bath house -Wash dices regularly -collect children faeces into toilet -cover water sources -make sure food is hot before giving to children -bath children regularly Wash children clothing regularly	All times	Women advocacy team to lead the process and carry out regular inspections, in consultation with opinion leaders in the community.
Increased sanitation of children in the community	-Children support parents in washing and cleaning -Children serving as watch dogs to offenders -Children report offenders, including visitors to the opinion	All times	-Children clubs to lead the process of implementation

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		leaders for action. -Children fetching water for building		
Clean environment	tidy general	-Sweeping and clearing bush and rubbish around compound -Digging soakways around the back of bath rooms	Every Friday	Lead by the community opinion leaders and sanitation and hygiene volunteers
Enhance community solidarity	ity solidarity	Support one another in digging and building households toilets Support vulnerable household to dig toilets	31/03/17	Youth groups to lead in the digging and building of toilet
Increase access to affordable and hygienic technology	affordable and on and hygiene	Cut wood to deck the toilet Use sand and water Use grass to roof Use local empty-cans for hand washing facilities Use ash as substitute to soap	All times	Youth groups to lead in the digging and building of toilet
Enhance construction capacity in toilet facilities	capacity in let facilities	Engage local technical contractors in construction	All times	Local masons and hygiene volunteers to lead in the process

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Source: field work- February, 2017

3.4.3 Post-triggering (Monitoring)

After facilitating community members to draw their action plans, the researcher returned home and came back within three days to observe the progress of implementation in the community. This follow up visit is termed as post- triggering. The below activities were carried out in this stage.

3.4.3.1 Identification of Natural Leaders/Community Champions

During this follow up visit, it was realized that some individuals have taken initiative to clean their surroundings, construct soak away while others were yet to start, and some others were not having plans to start. Thus, the first starters were mobilized, encouraged and coached to become champions or natural leaders and this is consistent with description by Kamal and Robert (2008). These individuals were then the first point of call when visiting the community. Their involvements were necessary because they know the political, social and economic organisation of the community, hence were in a better position to offer constructive measures in overcoming any power play and conflict of interest in the community (Kamal & Robert, 2008).

3.4.3.2 Identification of Community Technical Volunteers

There were some local technical persons who were also identified to support in the construction of simple household latrines. These individuals were encouraged to consider the households latrine construction as a business, and as a result they were motivated to sensitize households without toilets to do so, and thereby contributing to the promotion of sanitation objectives and ensuring sustainability. The rationale was that, their presence in



the community keeps the construction of the household latrines and hygiene promotion going.

3.4.3.3 Coaching of Natural Leaders and Community Technical Volunteers

The two groups of people (community champions or natural leaders and technical volunteers) were then merged as one and given orientation on their roles and responsibilities, bearing in mind their desire to end open defecation and improve the general sanitation in their community. They are to ensure the implementation of the community sanitation and hygiene plans. These individuals were made to understand that they were not to be paid nor given any allowance, but they were encouraged to make use of any business opportunities in the sanitation sector that may arise in the course of their duties. Periodically, they are to meet to discuss progress, identify challenges and suggest possible remedies to address the challenges.

3.4.3.4 Children Stand-Up for Good Hygiene and Sanitation Practices

The facilitator also adopted children centered strategy to get them involved in promoting good sanitation and hygiene practices. Children were facilitated to draw their own plans showing the strategies and activities they proposed to improve sanitation and hygiene practices. Songs, dances and storytelling were mainly adopted by the facilitator to get the total attention of the children.





Plate 2: Children at Tailor-kura Demonstrating Good Hand Washing with Soap/ash

3.4.3.5. Community Self-assessment for Open Defecation Free (ODF)

Having succeeded in stimulating community members to begin to improve sanitation and hygiene practices, the facilitator then facilitated the community to undertake self-assessment regarding their current sanitation status. The community people reflected on their previous sanitation and hygiene practices to that of their current practices. Check list (see appendix “C”) was adopted to assess the availability of households’ toilet and use, the availability of soak away, hand washing facilities, uses of ash or soap for washing hands, covering of water pots and containers at homes and so on.




3.5 Monitoring and Evaluation Plan

Table 3.3: Monitoring and Evaluation plan

Outcome	Indicator	Means of verification	Responsible person	Timing	Remarks
To access of facilit comm driven	% of household with household latrines % of households defecating in household latrines	Households interviews, observation. Transact walk	Natural leaders and Facilitator	By the close of August, 2017	85% of households to own and use latrines before community can attain open defecation free status
Increase practi hygien the people local strate;	%. of soakways constructed %. of households with Tippytap %. of people practicing hand washing with soap at critical times %. of households	Observation	Natural Leaders and facilitator	By August, 2017	85% of households own hand washing facilities and practise hand washing at critical times.

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<p style="writing-mode: vertical-rl; transform: rotate(180deg);">UNIVERSITY FOR DEVELOPMENT STUDIES</p>	<p>with hand washing with soap facilities (Tippytap)</p> <p>% of households covering their water sources at home</p> <p>% of households practising safe disposal of household waste</p> <p>No. of women and children participating in sanitation decision making</p>				
<p>comm capaci enhan manag sustain and facilit</p> 	<p>No. of community leaders with knowledge on latrine construction</p> <p>No. of community people with knowledge on tippytap and</p>	<p>Interviews, Work progress report</p>	<p>Natural leaders and Facilitator</p>		

	soakaway construction				
To assess the current and situation community	Community sanitation baseline data is available	Baseline report	Facilitator		Baseline data collection before intervention.

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CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.0 Chapter Overview

The section presents the results of the study. The bar charts in Figure 4.1 (p44) illustrate the causes of poor sanitation in the community; the spiral diagram in Figure 4.2 (p48) shows the effects of poor sanitation in the community while the figure 4.3 (p52) summarizes the status of sanitation facilities in the community before project interventions. The diagrams in Figures 4.4 (p59) illustrate sanitation situation after the implementation of the project, using the local identified strategies. In addition, the enhancement of the capacities of the local stakeholders in the provision of sanitation and hygiene services has also been discussed as can be seen in table 4 (p62).

4.1 Pre-intervention Results

The preliminary survey revealed the sanitation and hygiene situation of the community, such as the availability of households' latrines, status of soakways and availability of hand washing with soap, as well as community perceptions of the causes and effects of poor sanitation, the challenges and possible local strategies that could be adopted to improve sanitation in the community. The perceived causes and effects of poor sanitation are presented in the following subsections.



4.1.1 Causes of Poor Sanitation and Hygiene in Tailor-kura

Majority of the people of Tailor-kura are peasant farmers with varying sanitation challenges. The community people were practising open defecation and disposing their waste indiscriminately. However, they blamed government for not providing improved sanitation facilities, amidst their poverty situation. As can be seen from the situational research carried out before intervention (Figure 4.1, p45), from the 30 respondents interviewed individually, four main factors have been identified as the causes of poor sanitation in the community as analyzed in the preceding sections:

4.1.1.1 Poverty

The findings from the interviews revealed that the lack of access to financial and materials resources is perceived to be one of the main factors contributing to the lack of access to improved sanitation and hygiene services in the community. As indicated earlier, the people of Tailor-kura are small-scale farmers, who produce mostly for subsistence consumption. They relied on the traditional methods of farming, and cutting of wood for charcoal. In addition, the people have inadequate knowledge on the operations of small scale micro schemes, hence lacked access to micro-credit facilities in order to expand their businesses. In such situations, they find it difficult to expand their economic activities, so as to be able to provide their basic necessities of life, including providing sanitation and hygiene needs. This finding is consistent with the view of the Ministry of Foreign Affairs of Denmark (2010) that; “without accelerated economic growth and social development it is unrealistic to expect significant advances in rural sanitation coverage (p11)”. This means for countries to achieve increase in access to sanitation services, concrete measures should



be taken to enhance the economic potentials of the individuals especially the poorest of the poor.

4.1.1.2 Lack of Government Commitment

The lack of government commitment to the provision of sanitation facilities has also been identified during the pre-survey interviews as one of the major causes of poor sanitation in the community. Generally, it is the responsibility of the central government through the decentralized local government system, thus the district assembly to ensure that citizens have access to the essential social services, including improved Water, Sanitation and Hygiene (WASH) services. However, this has not been the case in Tailor-kura, and many other rural communities. According to the community, the failure of government to provide them with social amenities, including sanitation services has resulted in the poor state of their environmental sanitation. Even though, the research has revealed that the District assembly through the Environmental Sanitation Unit has been collaborating with development partners to carry out sanitation advocacy programmes, but no efforts has been made to support the community with materials and inputs for the construction of sanitation facilities. These findings confirmed the observation of the Ministry of Foreign Affairs of Denmark (2010) that lack of government commitment is the brain behind Africa sanitation menace. It also implies the weaknesses of the traditional top-down strategies of providing sanitation services, as earlier noted by Duncan *et al.* (2010), that the technical approach to sanitation delivery is a failure. Their responses were also observed by Plan International (2015) that inadequate engagement of communities in the provision of sanitation interventions lead to the failure of most sanitation interventions.



4.1.1.3 Non Availability of Donor Support

The non-availability of donor support to the community has been identified by the community as cause to their inability to provide sanitation services. The study revealed that the community has never received any support from donors for any economic activity. As a result, they lacked requisite technical and financial resources to provide their basic needs. While they mentioned donors supporting other communities with water, toilets, agriculture support services, education and so on, Tailor-kura community has not receive such assistance, apart from hygiene sensitization periodically carried out in by donors and environmental health.

4.1.1.4 Inadequate Knowledge on the Effects of Poor Sanitation

Inadequate knowledge on the effects of poor sanitation by the people in the community also causes poor sanitation in the community. Though, there has been series of hygiene education, some people still lacked basic knowledge on the effects of poor sanitation especially on their economic activities. This explain why some people in the community still believed that there are open spaces in the community, hence they find no need to construct households sanitation facilities. The study revealed that most of the hygiene education programmes benefits mostly the aged to the neglect of the youth and the children. The reasons are that the youth and the energetic men and women are always busy with their economic activities, (farming), leaving the aged at home. Also, most educational programmes are carried out in a rush without conscious efforts to involve all stakeholders in the community. Therefore, to increase the community knowledge on effects of poor sanitation and hygiene, there was the need to adopt participatory and community led



analysis and planning while considering the availability of all stakeholders. Thus, engaging all stakeholders to unanimously agree on the time of education.

4.1.1.5 Lack of Law Enforcement

The survey results show that the inability of the district assembly to enforce sanitation by-laws also make people to indiscriminately dispose- off household waste. According to the community members, if the district assembly can pass and enforce sanitation laws, people will desist from throwing waste indiscriminately.

4.1.1.6 Availability of Open Space for Defecation

Tailor Kura is located far between Abrumase and Talkpa, which are small towns. As a rural community, there is vast land, characterized by trees and shrubs. This served as a convenience ground for open defecation to thrive. This means, the community members have a place to hide themselves and defecate freely without being seen by others, and therefore not ashamed of themselves. This confirmed that lack of knowledge on the effects of poor sanitation and hygiene among the people.

4.1.1.7 Inadequate Time to Construct Toilet Facilities

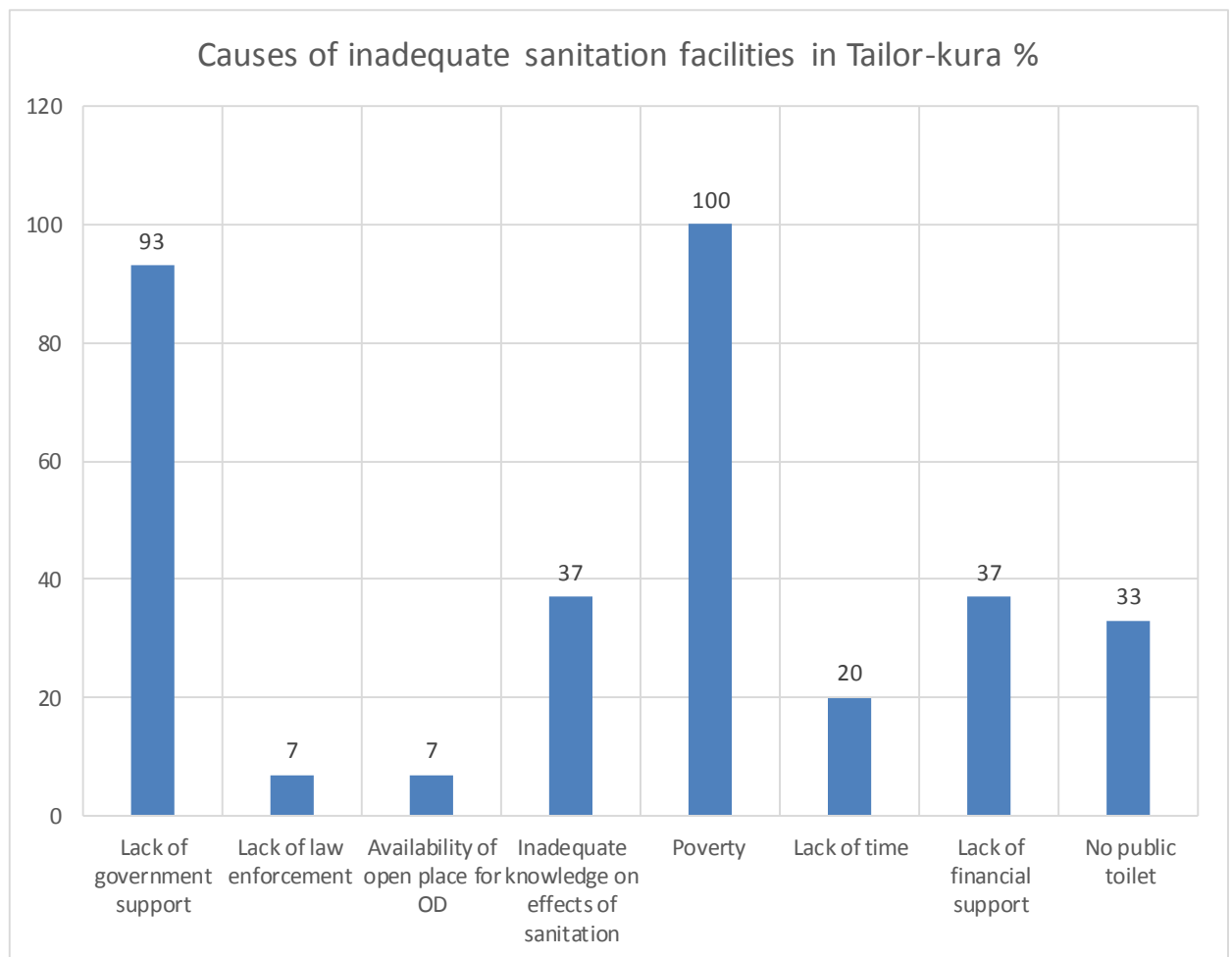
Inadequate time and lack of technical knowledge on the part of the community members serves as an obstacle for the construction of household latrines. Most often, the community people especially the energetic ones are busy with their farming and charcoal production activities and leave the aged and sometimes the little children at home. The young men and women will not compromise their livelihood activities to construct toilets facilities that will consume more of their time and the aged also lack the energy and



resources to provide such facilities. This challenge portrayed that the previous programmes interventions do not take the views and concerns of the local people into consideration; and as a result, community mobilization and inclusive decision makings were not achieved. This confirmed the views of Duncan *et al.* (2010) that inadequate community involvement in programme design and implementation accounted for the inadequate sanitation facilities in Africa.



Figure 4. 1: A Bar Chart Showing Causes of Poor Sanitation in Tailor Kura



Source: Field Survey, February, 2017.

4.1.2 Effects of Poor Sanitation and Hygiene in Tailor-kura

The people of Tailor-kura had basic knowledge on the effects of poor sanitation and hygiene in their lives, however, no action was taken to minimize the effects. The pre-intervention survey results revealed that poor sanitation and hygiene causes various diseases, such as diarrhoea, cholera, malaria among others in the community. This ranked first in the spiral diagram in figure 4.2 (page 49). Out of the total of 30 people interviewed, all of them mentioned that poor sanitation causes illness and diseases among them especially children.

4.1.2.1 Diseases Burden

One of the major effects of poor sanitation in Tailor-kura is the high rate of disease burden in the community. As shown in the figure 4.2 (p49), 100% of the respondents identified Diarrhoea, malaria and cholera as the most occurrence diseases in the community. They further noted that, children are those who frequently fall sick from these diseases. Even though, the findings did not detail the number of people who died as a result of water and sanitation related diseases, but all the respondents confirmed that children especially do die from malaria and Diarrhoea. This confirmed the earlier findings of UNICEF (2015) and WaterAid (2016), among other organisations that poor sanitation, coupled with unhygienic lifestyle is the main causes of death among children (UNICEF, 2015, WaterAid, 2016). In such situation, parents and caretakers often spend substantial amount of their time and incomes in seeking medical services and hence compounding their poverty situation. On the other hand, children performance in schools will be negatively affected since they will be away from school and miss vital academic sessions during the period of sickness. These



multiplier effects necessitated the conclusion by world leaders such as Ban Kin -moon and Dr. Jim Yong Kim among others that without access to sanitation, it is impossible to achieve other Sustainable Development Goals (SDGs).

4.1.2.2 Low Productivity

Low production has also been identified as other major effects of poor sanitation and hygiene practices in the community. The results of the study shows that households especially women spend most of their time in caring for the sick persons at home and the hospital to the detriment of their economic activities while men also provide resources to cater for medical bills. The money used for medical expenses could have been invested into their economic activities to increase production. As shown in figure 4.2 (p49), over 50% of the respondents identified that poor sanitation and hygiene affects their productivity and income levels. The project findings confirmed the views of UNICEF (2015) that about 5.5 billion productive days are lost annual due to Diarrhoea diseases .

4.1.2.3 Low Income

The pre-intervention result shows that the practice of poor sanitation and hygiene in the community negatively affects the income level of the people. As shown in figure 4.2 (p49) over 75% of the responded indicated affirmative that poor sanitation and hygiene has greatly drain their income levels. According to the respondents, most people especially the children are rush to health center at Abrumase for medical care, in which they spend a lot of money during the period. The most devastating movement as remarked by one of the respondents is that of raining season, when everybody is busy in their farms while you and your family are lying in the health center because of malaria or diarrhoea of your child; and



if your child doesn't recover fast, you will farm little and also missed essential rain for your crops. At the end, you will harvest little, get little income and eventually relied on borrowing to eat and meet other social obligations, such as funerals, naming ceremonies and marriage. This narration revealed the extent to which poor sanitation and hygiene affects the income level of the people of Tailor-kura. This subsequently affects the standard of living of the people and result in abject poverty in the community.

4.1.2.4 Loss of Dignity and Discomfort during Raining Reason

The inconveniences caused and eventual loss of dignity has also been identified as another effects of lack of access to improved sanitation facilities. Even though, the community is a rural community and the people spend most of their time on the farm, but some people especially the elderly undergoes some difficulties in attending toilet. Majority of the elderly are inconvenient due to lack of toilet facilities at their home levels. They have to trek a long distance to hide themselves and defecate. Sometimes, they are seen by the pass-by farmers who are either returning from their farm or going to farm. This brings shame and discomfort to their personality and loss of their dignity. Similarly, during raining season, people find it difficult to go to toilet in the bush especially when it is raining. The research also revealed that the community people do feel ashamed of themselves when a visitor who is not used to open defecation want to go to toilet but find none in the community.

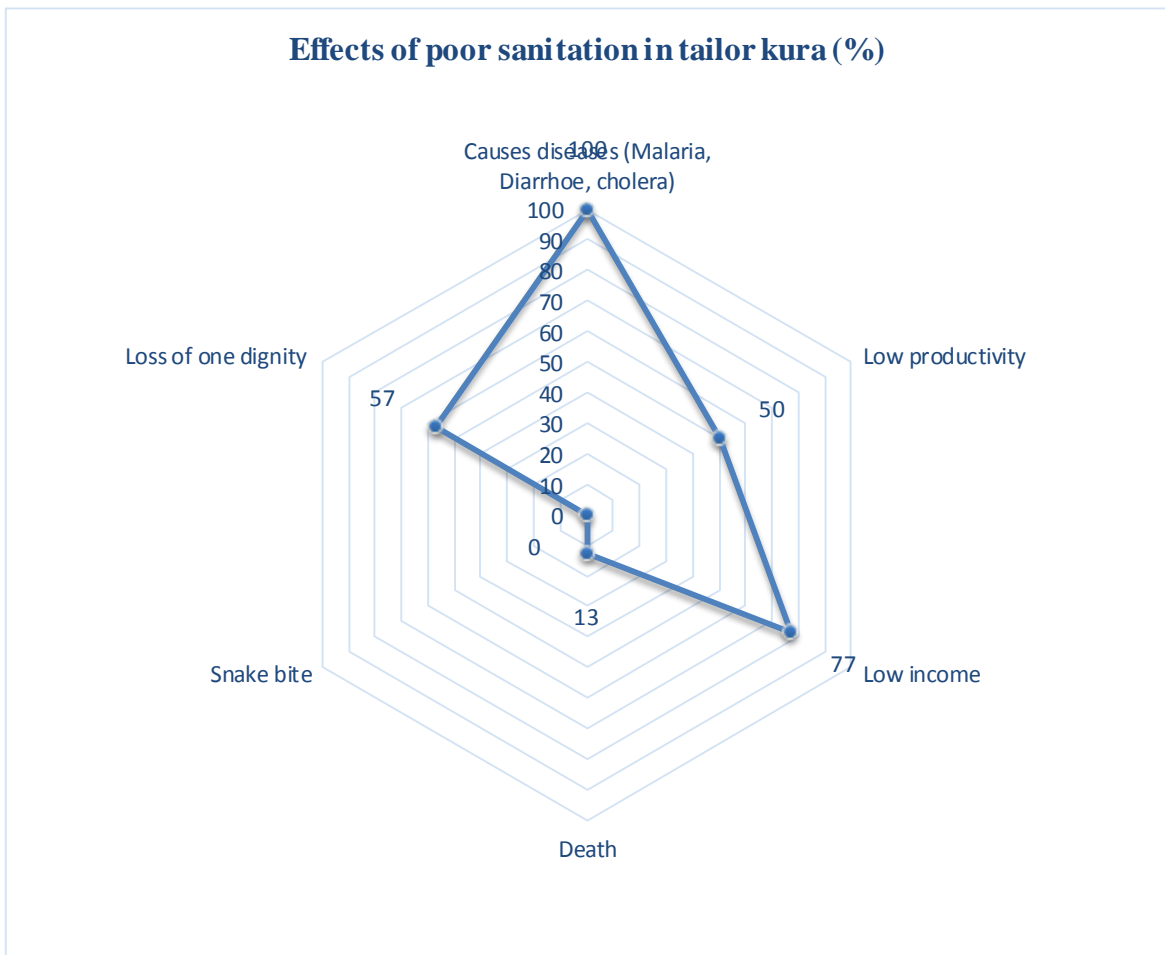
4.1.2.5 Snake Bite

Though others literatures revealed that poor sanitation brings about snake bites, the situation was different in Tailor-kura. As shown in figure 4.2 (p49), none of the



respondents mentioned that poor sanitation or the lack of sanitation facilities brought about snake bite among the people. However, upon further explanation and discussion, community people agreed that they often kill snakes near their homes, but snakes have never bitten somebody in the house or when trying to go to toilet in the bush.

Figure 4.2: Effects of Poor Sanitation in Tailor-Kura



Source: Field Survey, February, 2017.



4.1.3 Sanitation Status before Intervention

4.1.3.1 Availability of Soakways

The availability of soakways could reduce stagnant waters behind households and communities and hence improved environmental cleanliness and consequently help in reducing hygiene related diseases. However, before the project interventions, all households in Tailor-kura were without soakways. There were stagnant waters in and around their houses especially behind their bath houses. The existent of stagnant waters serves as breeding places of mosquitoes. This exposes the community people to the risk of malaria infections and thus leading to poor health of the people. The lack of soakways in the community also results in contamination of food stuff. It was observed that domestic animals, such as fowls and ducks normally steps and swims in the stagnant waters in the bath houses and come home to peck on children food or any other food stuffs that has been put in the open space to dry. In such situation, the food stuffs are contaminated. This also resulted in all kinds of sanitation and hygiene related diseases in the community. Similarly, the stagnant water equally comes along with air pollutions. The pre-intervention observations revealed the high odor from the stagnant waters serving as the major air pollution in the community. The bar chart in figure 4.3 (p53) shows the status of soakways in the community before the project interventions.

4.1.3.2 Availability of Household Toilets

The pre-intervention survey results revealed that there was zero (0) access to improved sanitation facilities in Tailor-kura. None of the eighteen (18) houses in the community own a household latrine or defecate in a public KVIP latrine. The community people totally attend their “nature call” in the bushes around the community. This practice of open



defecation further compounds the poor water situation in the community. During rains, the running water carries away the waste materials to dams, streams and wells which serves as the main drinking water sources in the community. Again, domestic animals like dogs, fowls and so on do get in contact with the faeces and transfer the faeces home. This normally result in contamination of food, water and other essential needs of the community people. It was also observed that, the community people especially the aged find it difficult to go to bush to defecate when it is raining. This causes discomfort to the elderly and waste of time for the energetic people to do their economic activities.

4.1.3.3 Availability of Hand Washing with Soap

The practice of hand washing with soap is essential to improve health. However, the situation in Tailor was different. The pre- intervention results shows that the people of Tailor-kura lack access to hand washing with soap facilities, hence do not practise hand washing with soap especially at critical times. As shown in the figure 4.3 (p53), it is clear that there was no hand washing facilities or tippytap constructed in any of the households. It is to note that the people in the community do not have knowledge regarding the construction of tippytap in order to promote easy hand washing with soap practices. This unhygienic practices exposes the people to various diseases such as diarrhoea, cholera among others. As UNICEF estimated that about 90% of all the 1.6 million diarrhoea related deaths globally are mostly children from developing world; which is attributed to poor sanitation and hygiene (UNICEF, 2015). Therefore, in order to improve the health of the community in Tailor-kura, the hygiene situation in the community must be improved.



4.1.3.4 Household Water Transport and Storage

The pre-intervention result shows that access to improved water facilities in the community has been a challenge. The community lack access to potable water sources, such as boreholes, pipe borne water among others. Compounding this situation is the poor water transport and water storage system. As can be seen in the bar chart (Figure 4.3, p53), only 23% of households practise improved water storage at home. The remaining 77% do not cover their water sources at home. The poor water storage system within households contaminate their water sources as debris often falls in their uncovered waters stored at home . The community does not also boil their contaminated waters before drinking, hence exposes to water and sanitation related diseases.

4.1.3.5 Solid Waste Disposal

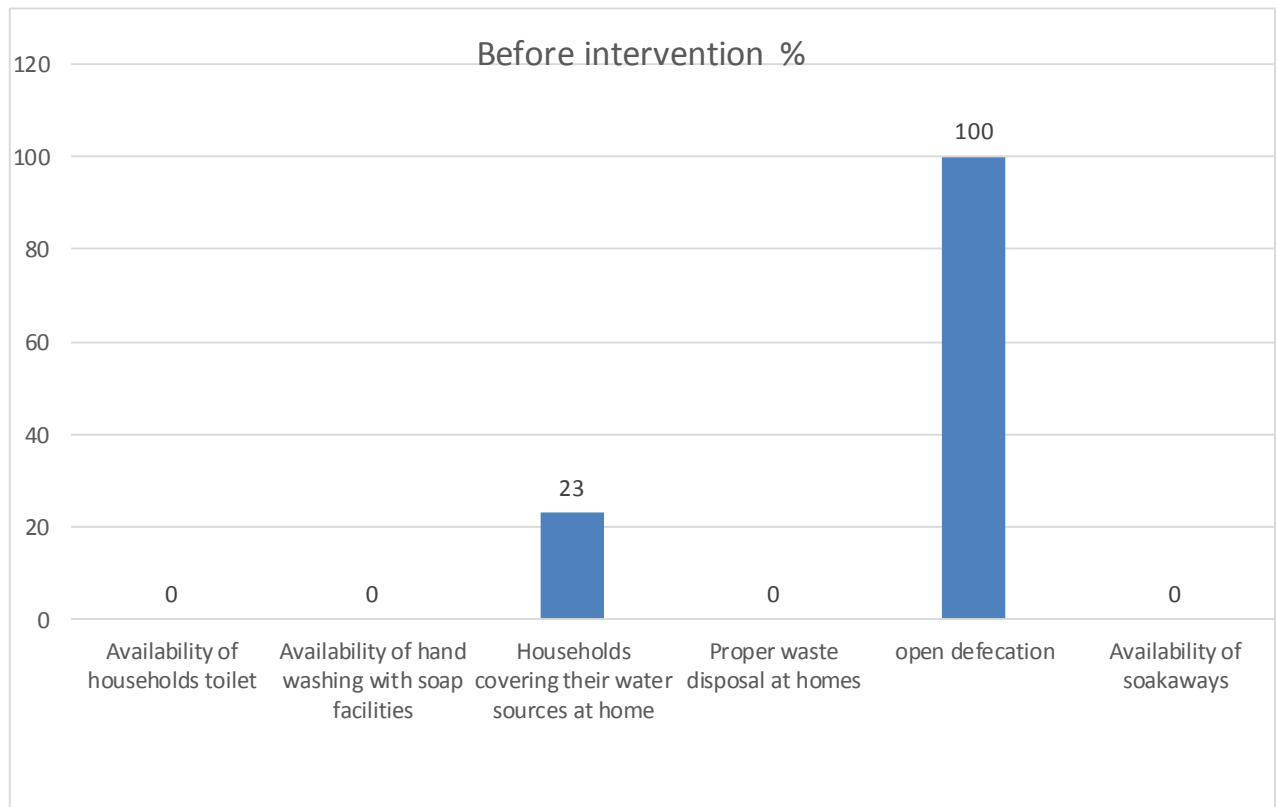
In the survey, it was revealed that Households do dispose their waste indiscriminately and there were stagnant waters behind their bath houses. This practice serves as a breeding place for mosquitoes which resulted in a high prevalence rate of malaria in the community. Though, the community people acknowledge that sensitization programmes on waste management have been carried out in the community by the East Gonja District's Environmental and Sanitation unit, they have not been able to manage their waste disposal. Others blame the government for not providing them with dustbins resulting in their ability to manage the household solid waste properly.



4.1.3.5 Open Defecation Practices

From the pre-intervention results (Figure 4.3, p53), it was clear that the people of Tailorkura lack access to sanitation facilities. As a result, the entire population resorted to the practice of open defecation. The practice of open defecation has been part of the community social life, hence the inhabitants did not really bordered with the consequences. This means, there was little knowledge among the community people on the effects of open defecation. Other causes of open defecation include the availability of vast land around the community, inadequate awareness creation among others.

Figure 4.2: Sanitation Situation before Intervention (Baseline Assessment)



Source: Field Survey, February, 2017





Plate 3. Photo of Community before Project Intervention





Plate 4. Children Practising Hand Washing with Soap

4.2 Post Intervention Results

The results (Figure 4.4, p60) show the sanitation status of Tailor-kura after the facilitator successfully facilitated the community level stakeholders to implement their sanitation action plans.

4.2.1 Status of Water, Sanitation and Hygiene in Tailor-kura

4.2.1.1 Availability of Household Toilets

After implementing CLTS activities in the community, the sanitation situation in Tailor-kura has improved. As shown in the bar chart (figure 4.4, p60), all households in the community owned and used improved household latrines. During the triggering stage, community people gained knowledge on the effects of open defecation on their health and economic lives, and as a result they were challenged to identify the availability of local resources, such as strong wood, grasses and sand, which they used to provide toilet facilities for their households. The availability of the household latrines in the community, according to the resident has contributed significantly in their economic activities.

According to Memunatu Issah, one of the natural leaders interviewed said “Because of the availability of household’s toilets near our houses, we no longer travel far distance to hide and ease ourselves and hence we can easily have time to attend to our business, such as farming, cooking and caring for our households”. In addition, the community people observed that the elderly in the community now attend to “nature calls” with less difficulties since the toilets are very close to the houses. According to the chief of the Tailor-kura, the practice of open defecation is the things of the past, hence the frequent odors that the community used to experience is no more.



4.2.1.2 Availability of Soakways

Before project intervention, there was no soakways constructed in the community. The post monitoring report (appendix C) shows that all households have constructed soakways behind their bath houses. This means, stagnant waters which used to be a challenge in the community serving as mosquitoes breeding places are not available again. It is therefore expected that the rate of malaria occurrence and other sanitation related diseases will reduce and the health and economic lives of the people improved.

4.2.1.3 Availability of Hand Washing with Soap/ash Facilities

Unlike the past where access to hand washing with soap facilities was a challenge, the people of Tailor-kura now have access to hand washing with soap or ash facilities. The communities were educated to construct soap tippy tap in order to promote hand washing with soap/ash practices among the inhabitants. As can be seen in the figure 4.4 (p60), all households (100%) has constructed the hand washing with soap facilities.

Similarly, the community people gained knowledge on the importance of hand washing with soap especially at critical times, such as after going to toilet, before feeding a baby, before cooking, and after cleaning children toilets. As a result, all households now practise good hand washing with soap and ash. The practices are expected to contribute to the reduction of sanitation and hygiene related diseases, such as diarrhoe, cholera and dysentery. In addition, the general economic lives of the people will improve and consequently leads to the reduction of poverty. A sample photos of children practising good hand washing with soap is shown plate 5 in the succeeding page.





Plate 5: Children Practising Good Hand Washing with Soap in Tailor-kura.

4.2.1.4 Open Defecation Practices

The community self-assessment exercise carried out after project interventions revealed that the people, including children are no longer practising open defecation. As mentioned earlier, all households have constructed household latrines and are using them, hence the practice of open defecation has stopped. This means that their water sources which are mostly dams, streams and rivers will no longer be contaminated by faeces, flies as well as domestic animals such as fowls, dogs and goats will not get in touch with faeces and transfer it home to contaminate food.



To ensure sustainability of the intervention, the community people have passed the community's sanitation byelaws that prohibit all households from practising open defecation. If anyone is caught defecating in the open, he is fined to pay amount of twenty-Ghana cedis (GHC20.00) and be force to cover the faeces. Children especially have been assigned to report any body defecating in the open to the appropriate authorities.

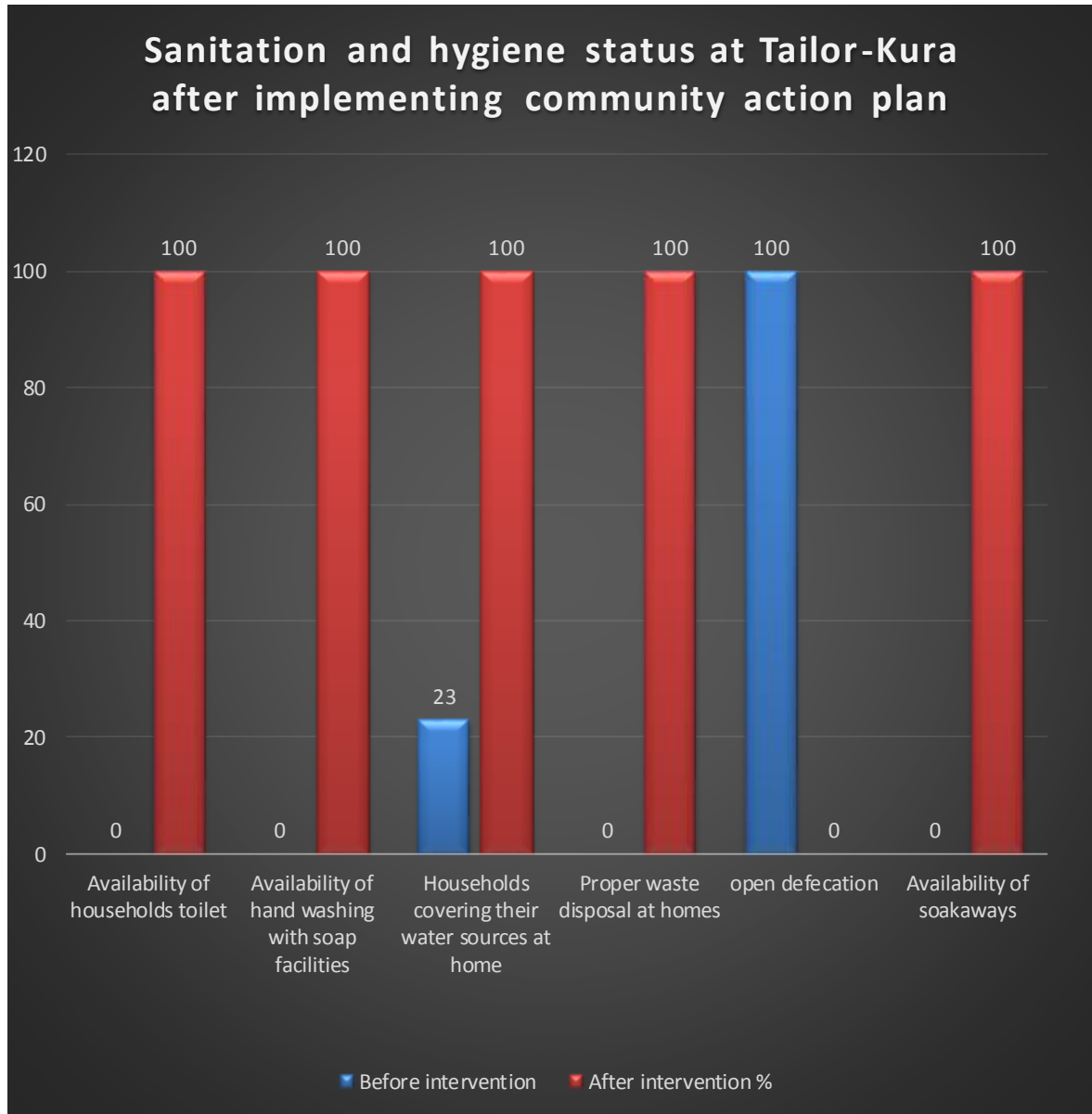
Alternatively, some community youth have also been trained on how to construct simple household latrines, so that in case of breakdown of any toilet facility, the youth can easily be contacted to support in reconstruction.

4.2.1.6 Households Water Transport and Storage

The monitoring reports (Appendix C) and (figure 4.4, p60) further revealed that women also cover their water sources at home. This means debris contaminants will not be falling in their water sources at home, hence the people can be said to have access to improved water sources although this is not the case in the dry season when the community always face severe shortages of drinking water.



Figure 4. 3: Sanitation Status in Tailor-kura before and after Interventions



Source: Monitoring Reports, June, 2017



Plate 5: Community View after Project Interventions

4.2.2 Stakeholder Capacity in WASH Service Provision.

4.2.2.1 Knowledge of Women and Children on Effects of Open Defecation

Before the project intervention, the knowledge of the community people on effects of open defecation especially among women and children was low. The post intervention community assessment results shown that women and children has gained knowledge on the effects of open defecation. This explained why all the community members have unanimously agreed to end open defecation hence their construction of household latrines.

During assessment, community members were able to mention that open defecation causes sicknesses, such as diarrhoea, cholera and dysentery. Other effects identified were waste of time, snake bites, loss of productivity and low standard of living among others.



4.2.2.2 Children Participation in WASH Decision Making

Children participation in WASH decision making in the community has also been enhanced as a result of the project. Children in Tailor –Kura now sing songs on WASH and also serve as watch dogs to those who will violet the law of open defecation free in the community. This means, the project contributed significantly in building the capacity of children in the community.

4.2.2.3 Women Participation in WASH Decision Making

Just like children, the project has also contributed in building the capacity of women especially enhancing their participation in WASH decision making. Before the project intervention, women were often not invited during meetings, but after the project activities were successfully implemented, women are now involved in decision making about issues that affect them.

4.2.2.4 Community Capacity on Latrine Construction and Management

The construction of household latrines was not known to the community people, but after CLTS activities carried out in the community, the youth in the community can now construct household latrines by themselves. The project builds their capacity on how to design and construct simple household latrines using locally available latrines.

4.2.2.5 Enhancement of Community Culture and Social Re-organization

The project has also contributed progressively in building the capacity of the community stakeholders in sanitation and hygiene provision and management. As summarized in Table 4 in the preceding page, the local stakeholders have gained more knowledge on the



causes and effects of poor sanitation, and sanitation and hygiene technologies to be adopted in their future endeavors. The participatory method adopted contributed in deepening the social systems and enhancing co-operation among the people. Although there are three main tribes in Tailor-kura, they peacefully embraced the study together and achieved remarkable results.

Table 4.1: Capacity Strengthening of Community Stakeholders in Sanitation and Hygiene

Issues	Before	After	Remarks
Knowledge of children on effects of open defecation.	poor	improved	Community desirous to end open defecation
Children participation in WASH decision making	poor	improved	Children reported the culprits of open defecation
Women participation in WASH decision making	poor	improved	Women are now part of WASH volunteers groups
Knowledge of women on sanitation issues	poor	improved	Women cover their water sources at home, wash their hands with soap after cleaning their babies, carried out regular households cleaning, among others
Youth involvement in sanitation service provision	passive	active	The youth carried out the digging, built and provided financial support when necessary.



Table 4.1 continued

Community capacity on latrine construction	poor	improved	Local artisans gained knowledge on various latrine models
Deepening of social system	poor	improved	The chieftaincy issues minimized
Enhancement of local culture	active	More active	The researcher used local culture to promote all-inclusiveness.

4.3 Project Successes

The adoption of Community-led Total sanitation (CLTS) strategies has brought about rapid improvement on environmental sanitation and hygiene practices in Tailor-kura. In summary, the following successes have been achieved by the project.

1. Reduction in open defecation in the community due to the increased in the availability of household latrines.
2. Increased in the practice of hand washing with soap at critical times among the people in the community
3. Clean and neat surroundings due to proper disposal of household waste
4. Increased in access to potable water due to proper water transport and storage.
5. Enhanced community social solidarity

4.4 Challenges

The Facilitator encountered the following challenges in his attempt to improve the sanitation and hygiene practices in Tailor –Kura:





1. Inadequate financial resources: The researcher depended on personal financial and logistical resources to be able to carry out the study. These resources were limited hence affected the quality of monitoring in the field. However, since the approach adopted was locally driven, there were some local leaders monitoring progress of work on behalf of the researcher.
2. Lack of communication facilities: The community under study is a rural community without access to communication services, hence the researcher found it difficult to communicate with his family while in the community and vice-versa. Again, the natural leaders' volunteers have to travel long distance to nearby community to give the researcher progress of work.
3. Difficulty in mobilising the community members due to lack of incentive: Initially, the researcher faced a challenge in mobilising the community members, because most of them expected financial returns which was not forthcoming hence their reluctance to participate further. To overcome this, the researcher relied on some key individuals to be able to bring back the backsliders to participate in the exercise.
4. Short duration of the research work: In fact, action research ordinarily should be carried out for longer period such that any conclusion drawn would not be short-lived and can be generalized; but this study period was too short hence limited to Tailor-kura and cannot be totally generalized, unless further piloting in similar communities are carried.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.0 Chapter Overview

This section summarizes the major findings of the project, draw conclusions and make recommendation for further implementation activities. The summary of the findings follows the order in which the project objectives were set. First, the section summarized the sanitation and hygiene situation in the community before the project interventions, and also indicates the local based strategies developed to improved sanitation and hygiene situation. It further summarized the results achieved after implementing the identified local-based strategies, and as well conclude and gave recommendations for improvement and further project activities.

5.1 Summary of Project Findings

5.1.1 Sanitation Status in the Community before the Project

Before this project, the people of Tailor-kura lacked access to sanitation and hygiene facilities. All households in the community lacked basic sanitation facilities, such as household toilets, soakways and hand washing with soap. As a result, all the inhabitants in the community practised open defecation and did not practise hand washing with soap especially after at critical times. These practices have had far reaching implication on the health and economic lives of the people. The pre-intervention analysis showed that the poor sanitation and hygiene brought diseases and sickness, such as diarrhoea, cholera and malaria in the community. These sicknesses sometimes resulted in the death of people in the community especially among children. Similarly, the high disease burden on the people



affects their economic productivity and income level of the people; and this further compounded the poverty situation of the community people. Other effects of poor sanitation and hygiene identified by the study in the community included the discomfort of the people especially the elderly in attending toilet during raining seasons, the availability of reptiles near homes as well as lack of potable water due to open defecations.

5.1.2 Intervention Procedures and Results

The project adopted participatory methods, such as Community –Led Total Sanitation (CLTS) to identified effective community-based strategies for promoting access to sanitation service in the community. The results from the data analysis show that the use of Natural Leaders (NLs), amidst the Community-Based Masons (CBM) is one of the effective methods in promoting sanitation and hygiene in the community. This means Natural leaders alone is a necessary condition but not a sufficient condition for enhancing the provision, maintenance and sustainability of rural sanitation delivery. Also, the used of children as watch dogs and community policing played a significant role in preventing open defecation. The rationale is that children are always at home, reminding everybody including visitors about the community’s visions to end open defecation. They therefore report the culprits to appropriate authorities especially to the monitoring team. This strategy is more effective when community stakeholders passed sanitation byelaws especially to stop open defecation and avoid indiscriminate dumping of waste. Besides, the study further revealed that the sanitation and hygiene promotion will be more effective if all stakeholders, such as men, women and children are part of the inception of the project or programme interventions. This result in division of labour and competition, leading to greater impacts and sustainability challenges could be addressed. The use of local



availability materials, such as wood, ash, gravel sand and cement for the provision of sanitation and hygiene facilities has also been identified as an effective strategy in this research. Also, the thorough study by the researcher on the community's socio-political organisation enabled the researcher to address minor conflicts and misunderstanding that could have affected the realization of the project objectives.

5.3 Results Achieved after Interventions

After facilitating CLTS process in Tailor-Kura and coaching the community stakeholders to implement the identified local based strategies, the sanitation and hygiene situation have improved in the community. The monitoring report (Appendix C) indicates that community members (men, women and children) knowledge on the effects of poor sanitation and hygiene has increased. As a result 100% of the households in the community have constructed household latrines and soakways behind their bath houses. They have also provided hand washing with soap facilities, using empty-cans (Tippytap). Similarly, the practice of open defecation has stopped and all community members now defecate in their latrines and wash their hands with soap especially after visiting toilet. The project results also show that the community social bonds have been enhanced and they cooperatively carried out their economic activities with ease and comfort. In addition, the capacity of women and children has been enhanced since they can now take part in decision making about sanitation in their community. It is expected that this capacity building would be adopted in the other developmental areas of the community.



5.4 Conclusion

Increase sanitation and hygiene services in communities are crucial to the promotion of good health, increase income and economic potentials of communities. As an essential service, the role of every stakeholder is needed in order to achieve a sustainable sanitation and hygiene services. As a result, this project adopted Community-Led Total Sanitation (CLTS) approach to increase access to sanitation and hygiene services at Tailor-kura. The analysis of the results shows that CLTS is an effective strategy to increase community access to improved sanitation and hygiene services. The rationale is that, the approach relied on the use of community resources, both material and human resource in the provision of sanitation facilities without external financial support, except capacity building and technical support. However, effective community entry processes is necessary for the success of the application of the approach. Also, regular monitoring and coaching of community leaders must consciously follow, so as to identify any bottlenecks, such as chieftaincy conflict, neglect of minority tribes and the exclusion of the vulnerable. Without all these observations, the project will yield no intended results, though the approach might be effective. As a result of the successes and the challenges encountered as well as lessons learnt, the following recommendations are given to help sustain and upscale the interventions, as well as to aid in further research and project development purposes.

5.5 Recommendations

Based on the outcomes of the project especially the successes achieved, lessons learnt and the challenges encountered in adopting this approach to increasing access to improved sanitation and hygiene services in Tailor-kura, the underlined recommendations are



therefore made to be adopted in order to ensure sustainability and upscaling of sanitation services in rural communities.

5.5.1. Effective Community Entry and all-Inclusive Community Mobilizations

The rationale behind the successes of this project is grounded on effective community entry processes and inclusive community mobilisation. The project consciously involved all potential community stakeholders during the inception phase through to the implementation and monitoring processes. Therefore, it is recommended that government, researchers and development practitioners who wish to increase access to improved sanitation especially in rural communities should undertake thorough community entry and mobilisation processes before initiating their programmes interventions.

5.5.2. Effective Use of Natural Leaders

The roles of community Natural Leaders in the provision of sanitation and hygiene service is enormous. As a result, policies and strategies should be adopted to enable natural leaders from one community especially, those from the open defecation free communities to support the implementation of sanitation intervention in other adjoining communities. Such strategies may include, among others the formation of Natural Leaders committees and alliances.

5.5.3. Children as Agent of Change

The project also found children to be useful in promoting behavioral change, especially when they are involved from the inceptions of the programme. Separate educational programmes involving the use of drama, music and play should be adopted to raise the



interest of children in sanitation and hygiene activities. Therefore, the project recommends the development practitioners to adopting child friendly tools so as to increase good sanitation and hygiene practices. Also, children can serve as effective watch dogs in curbing open defecation in communities and therefore should coach and be given opportunity to lead in this process.

5.5.4. Promote Communalism in the Community

Communalism has been identified as an important method in achieving total sanitation in communities. Communalism brings about total participation and fastens the pace of project execution. The idea is that there are vulnerable individuals and households in every community, who may not be able to provide the needed resources and energy to construct sanitation facilities. As a result, communal spirit ensures that the wealthier and energetic people in the community support the poor and weak to construct and use sanitation facilities. Based on the findings, it is recommended that development practitioners should spend more of their energy to promote the spirit of “weesm” in their efforts to achieve total sanitation in communities.

5.5.5. Areas for Further Project Activities

One major concern of the community people in their bid to provide household latrines was how the waste will be managed after the manholes are full of human excreta. Therefore, the project is recommending that there should be further implementation of projects on how the dislodging and waste management would be done without polluting community’s water bodies through regular dumping and if possible how the waste can be put to productive use to enhance the economic potential of the community.



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APPENDIX A: DATA COLLECTION INSTRUMENTS

SURVEY QUESTIONNAIRES ON ASSESSING WAYS OF INCREASING ACCESS TO IMPROVED SANITATION AND HYGIENE FACILITIES AT TAILOR-KURA.

This research interview is for academic purpose but aim at increasing access to improved sanitation and hygiene facilities in Tailor-kura. You are assured of confidentiality of any view expressed in relation to this research. I therefore entreat you to provide information as accurate as possible for true results to be obtained. Thank you for your kind co-operation.

1. Demography information

Question Number.....

Name of interviewer.....

Name of interviewee.....

Age of interviewee.....

Gender.....

Occupation.....

Educational level.....

Date of interview.....



Objective 1. Causes and effects of poor sanitation in the community.

Q1. Do you have toilet facilities in your house?

- a. Yes
- b. No

If no, move to Number 2

Q2. Why don't you own a latrine?

- a. Lack of money
- b. Government do not build for us
- c. Toilet is not a priority
- d. I am always busy
- e. I don't know how to make toilet
- f. I have not been told to own one
- g. Any other, indicate

Q3. Is it necessary to own a toilet?

- a. Yes, why
- b. No, why

Q4. Which of these reasons will compel you to own toilet.

- a. Reduce sickness
- b. Privacy and Dignity
- c. Saves money



- d. Enhance productivity
- e. Avoid death
- f. Other, state

Q5. What are some of common illness you often experience in the community?

- a. Malaria
- b. Diarrhoea
- c. Cholera
- d. Snake bite
- e. Waist pains
- f. Other, specify.

Q6. Has someone, organization or government educated your community to construct toilet?

- a. Yes
- b. No

If yes

Q7. Was every member in your community given opportunity to actively participate and decide how to tackle your sanitation challenges?

- a. Yes, who?
- b. No, why?

Q8. Why is your community including you not owing toilet despite the fact that you have been educated about the effects?



Q9. What do you think can be done differently for you and your community to construct your own latrines?

Q10. Do you have hand washing facilities in your house?

a. Yes

b. No

Q11. What are the appropriate time to practice hand washing with soap?

List any three

Q12. How do you normally dispose your household waste.



APPENDIX B: FOCUS GROUP DISCUSSION GUIDE

Survey questionnaires on assessing ways of increasing access to improved sanitation and hygiene facilities at Tailor-kura.

This research interview is for academic purpose but aim at increasing access to improved sanitation and hygiene facilities in Tailor-kura. You are assured of confidentiality of any view expressed in relation to this research. I therefore entreat you to provide information as accurate as possible for true results to be obtained. Thank you for your kind co-operation.

Q1. Why it is that your community has no sanitation and hygiene facilities?

Q2. What benefits do one derived by having improved sanitation and hygiene services?

Q3. What are the negative effects of poor sanitation in our lives?

Q4. Which stakeholders should be involved to increase improved sanitation in your community?

Q5. What should each stakeholder do differently in order for us to improve sanitation in your community?



**APPENDIX C: COMMUNITY SELF-ASSESSMENT AND MONITORING
REPORT**

EAST GONJA DISTRICT

Name of Community: **TAILOR-KURA**

Date of assessment: **27TH MARCH, 2017**

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No.	Indicators	Response		Remarks/number (where appropriate)
		Yes	No	
1.	All households used latrines	yes		-
2.	All community leaders own latrines	yes		All households have constructed simple household toilets.
3.	There are no faeces seen at former defecation places	yes		Community people have stopped defecating in the open.
4	There are no faeces seen in nearby bushes	yes		-
5.	There are no faeces seen in the refuse dump places	yes		-
6.	All latrines holes are covered	yes		Community people do covered their faeces to prevent flies from



				entering.
7.	All children faeces are dropped in the holes	yes		
8.	All anal dropping materials are disposed-off hygienically	yes		They do burn their anal cleaning materials more frequently.
9.	All households have hand washing facilities	yes		Community people constructed tippy tap to promote hand washing with soap.
10.	There is evidence of households washing hands with soap/ash	yes		Community members use ash for washing hands.
11.	There is soap/ash near latrines	yes		
12.	All bath houses have soakways	yes		Soakways have been constructed behind their bath houses to prevent stagnant waters.
13.	Community surroundings are kept neat and tidy	yes		Communities do carry out periodic cleaning.
14.	All households cover their storage water	yes		Community people do cover their

				households' water systems.
15.	Community stakeholders (men, women and children) are active monitoring progress of intervention in the community	yes		Women and children are part of community sanitation groups.

General Commends.....
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