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IMPLEMENTATION OF THE NELGLECTED TROPICAL DISEASES PROGRAMME IN GHANA: EVIDENCE FROM TWO DISTRICTS

BY

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THIS THESIS IS SUBMITTED TO THE UNIVERSITY OF GHANA, LEGON IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF MASTER OF PHILOSOPHY (MPHIL) IN HEALTH SERVICES MANAGEMENT DEGREE.

OCTOBER, 2020

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DECLARATION

I do hereby declare that this work is the result of my own research and has not been presented by anyone for any academic award in this or any other University. All references used in the work have been duly acknowledged.

I do bear sole responsibility for my shortcomings.

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CERTIFICATION

I hereby certify that this thesis was supervised in accordance with procedures laid down by the University.

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DEDICATION

This thesis is dedicated to my late father Mr. Benjamin Otoo, my mother Mrs. Mabel Ampeh, family, friends and all loved ones.

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I am earnestly grateful to the Lord almighty for life, strength and protection throughout this study. Also, I am indebted to my supervisors, Dr. Francis Adzei and Dr. Nana Nimo Appiah-Agyekum for their timeless dedication during the supervision of this work.

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LIST OF ABBREVIATIONS

CDC – Centre for Disease Control

CDDs – Community Directed Distributors

CFIR – Consolidated Framework for Implementation Research

CHPS – Community-based Health Planning and Services

DALYS – Disability-Adjusted Life Years

DHIMS – District Health Information Management System

ESPEN – Expanded Special Project for Neglected Tropical Diseases

GBD – Global Burden of Disease

GHS – Ghana Health Service

GSFP – Ghana School feeding Programme

LF – Lymphatic Filariasis

MMDA – Metropolitan, Municipal and District Assemblies

NACP – National Aids Control Programme

NMCP – National Malaria Control Programme

NTDP – Neglected Tropical Diseases Programme

NTDS – Neglected Tropical Diseases

PCT – Preventive Chemotherapy

SHEP – School Health Education Programme

STH – Soil Transmitted Helminthiasis

TOT– Training of Trainers

VRA– Volta River Authority

WASH– Water, Sanitation and Hygiene

WHO – World Health Organization

YLL – Years of Life Lost

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ABSTRACT

The importance of health policy implementation cannot be overemphasized in contemporary public health. Neglected tropical diseases have been conceptualized as a wide group of infectious diseases that thrive especially in tropical and subtropical conditions. The negative impact of these diseases on the poor affects their quality of life and make them poorer. Several policies and strategies have been put in place across the world including the neglected tropical diseases programme in Ghana. Though chocked many successes, the programme is continually bedevilled by many challenges thus, preventing the attainment of various objectives. This study seeks to assess the implementation of the neglected tropical diseases programme in Ghana.

A qualitative approach with focus on the case study design was employed to achieve the objectives of the study. Purposeful and snowball sampling were used to identify programme officers. Key informant interviews were conducted at the national, regional and district levels of the Ghana Health Service. Data were thematic analysed and presented.

Findings from the study revealed that determinants that influenced the successful implementation of the NTDs programme include donor support, education and training, partnerships, reliability of the health structure, integrative nature of the programme and management commitment. It further revealed that inadequate resources, dwindling volunteerism, poor social mobilization, weak governmental commitment and weak monitoring were major challenges to implementation. These findings cut across the inner setting and outer settings of the organization.

It is recommended that adequate measures are put in place to address the various challenges at all levels of the programme especially through adequate funding and government support. Also, the determinants of implementation success should be maximized to ensure continual performance. Policy makers should put in place feasible strategies for implementation and efficient stakeholder management systems within the programme.

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CHAPTER ONE
INTRODUCTION

1.1 Chapter Introduction

This beginning chapter provides an overview of policy implementation in light of the Neglected Tropical Diseases as a background. It also presents the problem statement, objectives and research questions, significance of the study, scope of the study and concludes with a brief explanation of the organization of various chapters in the study.

1.2 Background of the Study

Health policy implementation has been a critical issue in the local, national and international discourse, and its importance cannot be overemphasized. The Policy cycle is deemed incomplete without effective implementation of relevant policies and the success of any policy is determined largely by the effectiveness of its implementation (Hudson, Hunter, & Peckham, 2019). Health policy implementation is widely viewed as the process by which governments and other stakeholders put strategies embedded in policies in place to effect changes in the health system (Mugwagwa, Edwards, & de Haan, 2015; Wu, Ramesh, & Howlett, 2015). While innovative policy and strategy formulation is sufficient to champion an organization to success (Bryson, 2018), ensuring that such policies and strategies work to meet set objectives has been seen to be very crucial.

Globally, implementation of strategies has been bedevilled with many challenges. There are reported disparities between policy formulation and implementation among many regions and economies (Hudson et al., 2019; Matulich, Seamon, Roth, & Eppink, 2007). Despite the efforts of health ministries, agencies and bodies to ensure smooth and effective implementation process, reports indicate that majority of plans are not executed as outlined in various documents and do not entirely meet set objectives. This may be due to known and unknown factors that are not sufficiently controlled. Developed countries and economies tend to have

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higher success rates in terms of implementation as compared to developing countries (Imurana, Kilu, & Kofi, 2014; Lomazzi, Borisch, & Laaser, 2014; Makinde, 2005).

Africa, especially Sub-Saharan Africa has witnessed an influx of many policies and strategies in order to strengthen the health systems and fight against certain diseases. However, most of these plans have faced enormous challenges that have rendered them ineffective. Similar to other developing countries, policy implementation in Ghana has also encountered numerous challenges with different levels of complexity (Agyepong et al., 2015; Kwankye & Cofie, 2015). Most of these policies are formulated to target specific disease conditions and strengthening the health systems due to the double burden of infectious and non-infectious diseases encountered by the country. Certain diseases that were of much importance in the past few decades have in recent times received little or no attention due to the receding rates of mortalities and the notion of its effect only among the poor. One of such group of infections are the neglected tropical diseases (Standley, Boyce, Klineberg, Essix, & Katz, 2018).

Neglected tropical diseases (NTDs) have been conceptualized as a wide group of infectious diseases that thrive in tropical and subtropical conditions. It is estimated that about one (1) billion people in the world are affected by one or more NTDs and such predicaments place huge costs on these affected countries every year (WHO & ESPEN, 2018). About seven of the almost twenty (20) prominent NTDS (WHO, 2012a) have similar strategies of single dose of treatment called preventive chemotherapy (PCT). This is usually administered once or twice a year to large group of people in disease-endemic areas through mass drug administration (MDA) (Linehan et al., 2011).

Populations that are highly affected most often live in very poor communities with inadequate resources and poor living conditions. These diseases lead to complications such as physical and cognitive impairments, mother and child morbidity and mortality (Kuper, 2019).

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Due to the increasing burden of NTDs and the re-emergence of diseases, the World Health Organization introduced measures to control, eliminate and eradicate most of the diseases (WHO, 2016). WHO started working with member states in the year 2013 to intensify efforts against NTDs and in 2016, it adopted a resolution to implement appropriate and specific measures to eliminate many and eradicate at least two of the NTDs by the year 2020. This resolution has been the objective of many WHO member countries who have developed the neglected tropical diseases programme (WHO, 2016; WHO & ESPEN, 2018).

The Neglected Tropical Diseases Programme (NTDP) was introduced in 2006 with a team, and office at the national level. However, implementation wholly depends on the health system from the regional to the district level. As part of the programme, a more recent NTDs masterplan (2016-2020) was developed to serve as a guideline to the NTDs programme with the goal to improve on the capacity of the health agencies in order to deliver interventions that will prevent, control, eliminate or eradicate the NTDs by the year 2020. This was designed to cover preventive therapy and case management (GHS, 2016; Mensah et al., 2016).

Since its introduction, implementation has been fairly successful despite some objectives of the programme not fully met. It is reported that policies and strategies do not inherently fail on their own. However, they are subjected to complex systems within the policy context (Hudson et al., 2019). Thus, it is essential to identify these factors within the health system in order to increase effectiveness of the programme. An assessment of the implementation of the programme is needed to identify factors facilitating and hindering the implementation process. Hence this study seeks to assess the implementation of the Neglected Tropical Diseases Programme in Ghana.

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1.3 Problem Statement

The world has witnessed several efforts towards the fight against NTDs over the past decade. This has resulted in the redirection of resources towards NTDs control by health stakeholders (Fitzpatrick, Nwankwo, Lenk, de Vlas, & Bundy, 2017; Mensah et al., 2016; WHO, 2012b). Globally, governments in disease-endemic countries have supported the control of NTDs through programmes that are independent and often vertical with its own planning, funding, drug supply chain, implementation campaign, monitoring, and evaluation (Linehan et al., 2011).

In Ghana, the most prevalent NTDs controlled by preventive chemotherapy over the years include onchocerciasis, lymphatic filariasis (LF), schistosomiasis, soil transmitted helminths (STH) and trachoma (GHS, 2016). These have been placed under the Neglected Tropical Diseases Programme (NTDP). The programme has been instituted and tasked with putting measures in place and implementing relevant interventions to control NTDs in Ghana (GHS, 2016; Mensah et al., 2016). The programme has the vision of "improving the capacity of the Ghana Health Service (GHS) to establish an integrated NTD control programme capable of delivering interventions to prevent, control, eliminate or eradicate the neglected tropical diseases by the year 2020" (GHS, 2016 p: 31).

Globally, WHO has introduced the NTDs masterplan to guide the design and implementation of programmes in endemic countries (WHO, 2012). Subsequently, Ghana adapted the masterplan to aid in the fight against NTDs. The masterplan 2013-2017 was implemented and evaluated with another currently introduced from 2016 to 2020. Despite the concerted efforts, the country was unable to meet all the goals outlined in the plan (GHS, 2016). Hudson et al., (2019) noted that effective implementation in order to meet set objectives has positive impacts on the health system. However, there has been the criticism that documents developed by health sector policy makers are often left on shelves with no or poor implementation (Hudson et al.,

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2019) and some agencies fail to utilize the precious information in strategic plans (Wanjiku, Mwangi, & Mwangi, 2018). Furthermore, claims have it that, organizations in some countries in Africa do not execute strategies according to the plans in the programme and making the strategy effective in the entire country poses more challenges (Joyce & Drumaux, 2014; Wanjiku & Ombui, 2013).

The Neglected Tropical Diseases Programme (NTDP) in Ghana has been implementing the new NTDs masterplan since its introduction in 2016. Many successes have been accomplished over the past decade. However, there still exist a significant burden of neglected tropical diseases across all the regions in Ghana. The Global Burden of Diseases (GBD) study reported that schistosomiasis affects about one (1) million people and remains the second most prevalent human helminth infection in Ghana (IHME, 2018). Studies have evaluated the level of integration of the NTDs programme into the health system of Ghana (Mensah et al., 2016), others have explored the burden of NTDs in the sub-region (Addisu et al., 2019; Hotez, 2019; Molyneux, 2018). Extant literature exists on the ways to accelerate NTDs control (Hotez, Biritwum, Fenwick, Molyneux, & Sachs, 2019; Savioli et al., 2018).

Even though there is an extensive plan to improve the capacity of the Ghana Health Service (GHS) "to establish an integrated NTD control programme capable of delivering interventions to prevent, control, eliminate or eradicate the neglected tropical diseases by the year 2020" (GHS, 2016 p: 31), evidence from Mensah et al., (2016) and Addisu et al., (2019) suggests that the plan is not necessarily used thereby creating a gap between the policy intent and actual implementation. Whereas NTDs plan supports a community-based approach, actual implementation evidence suggests that most forms of implementation are done in top-down manner (GHS, 2016).

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Also, case management programs are fragmented, the true burden of NTDs and data about the availability of services are inaccessible (Krentel et al., 2018; WHO & ESPEN, 2018). Campos and Reich (2019) have suggested that efforts directed at improving performance in the health system must address challenges related to implementation. Though it is important to identify implementation challenges, very few studies have studied the challenges that affect the implementation of the NTDs programme and the factors that contribute to the success or failure of the programme at the level of the major state implementer (Ghana Health Service) with majority being evaluations by funding bodies (USAID, 2018). Little research exists from independent researchers on the issue.

Krentel et al. (2017) and Krentel et al. (2018) have continually reported the need for urgent studies on the challenges of implementation at various levels of healthcare in order to provide holistic ways of addressing such challenges to improve implementation. Hence, this study seeks to assess the implementation of the NTDs programme in Ghana at the level of the state implementing agency (Ghana Health Service).

1.4 Study Objectives

The main objective of the study is to assess the implementation of the neglected tropical diseases programme in Ghana. Specifically, the study seeks:

1. To explore the determinants of implementation success of the NTDs programme in Ghana.
2. To examine the challenges of implementation of the NTDs programme.
3. To explore the role of key stakeholders and their influence on implementation of the NTDs programme.

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1.5 Research Questions

1. What are the determinants of implementation success of the NTD programme in Ghana?
2. What are the implementation challenges of the NTD programme?
3. Who are the key stakeholders and how do they influence implementation of the NTDs programme?

1.6 Significance of the Study

Neglected Tropical Diseases (NTD) cause immense human suffering and death. They pose a devastating obstacle to health for millions of people and remain a serious impediment to poverty reduction and socioeconomic development (WHO, 2019a). Through a coordinated and integrated approach adopted since 2007, control, elimination and even eradication of these diseases have been shown to be feasible. Efforts to combat NTDs crystalized have received various levels of support. However, neglected tropical diseases continue to pose a major public health challenge in many countries including Ghana and a focused effort is still needed to eradicate such diseases. The Expanded Special Project for Elimination of NTDs reported that approximately 10.40million pre-school and school aged children, 4.29 million school aged children and 8.07 million people still needed treatment for intestinal worms, lymphatic filariasis and onchocerciasis respectively (WHO & ESPEN, 2018). Lymphatic filariasis has been endemic in 98 districts and now 118 districts due to redistricting. Schistosomiasis also endemic in all 260 districts (USAID & FHI, 2019).

To ensure the coverage of people left behind on the programme, the factors that are hindering the implementation of strategies and plans have to be identified and solved in order to achieve the very ambitious goals of the WHO. Knowledge of the factors affecting implementation of the NTDs programme will help practitioners to employ a holistic approach to prevention and

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treatment of NTDs. It will help programme managers in the planning and implementation of consequent sections of the programme and guide the design of the next masterplan. The study will further provide insight and bring out other necessary gaps that need to be examined in research.

Finally, results from this study will help policy makers to re-design policies and strategies to overcome such challenges in order to achieve the objectives of eradication.

1.7 Scope of the Study

The study covers the Neglected Tropical Diseases Programme in Ghana only. The study assessed the programme at the national, regional and district levels of implementation. It was purely assessed at the level of implementers within the Ghana Health Service.

1.8 Organization of the Study

The study is organized into five (5) chapters. The introductory chapter of the study covered the background, problem statement, objectives, research questions and significance of the study. Chapter two (2) reviewed relevant literature in relation to programme implementation and neglected tropical diseases. This chapter also discussed relevant theories in the context of the research topic. Chapter three (3) focused on the methods employed to address the research questions. The fourth (4th) chapter reported findings of the study and discussion of the findings in line with existing literature. The concluding chapter five (5) presented a summary of findings, conclusions, recommendations and implications of the study results.

1.9 Chapter Conclusion

This chapter provided a general introduction to the study through a background that sheds light on programme implementation considering the neglected tropical diseases programme. It also provided the statement of the problem, objectives of the study, research questions, rationale for

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the study the scope of the study. It finally presented an overview of the arrangement of subsequent chapters of the study.

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CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

This chapter reviews empirical literature on the study topic. The literature reviews evidence on the concept of implementation, factors affecting policy implementation, overview of neglected tropical diseases and the NTDs programme and brief description of the common neglected tropical diseases in Ghana. Literature is further reviewed on the factors that influence policy implementation and the barriers to policy and programme implementation. The chapter concludes with a theoretical framework for the study.

2.2 The Concept of Implementation

The concept of implementation varies across several sectors and takes different forms pertaining to the culture and geographical location. Pressman and Wildavsky (1984) defines implementation as a process of active interaction between the goal setting and actions directed towards the achievement of the goals. Similarly, implementation has been defined to involve the translation of goals or objectives into action (Khan, 2016). A study by Peters, Adam, Alonge, Agyepong, and Tran (2013) emphasizes that, context is essential in implementation. Contexts of implementation include but not limited to social, political, legal, economic and physical environment and is highly influenced by interactions among stakeholders and institutional culture. Implementation has its origin from several disciplines and research traditions.

To further support the concept of implementation, Mazmanian and Sabatier (1989) have explained implementation concisely to mean the carrying out of a basic decision. These decisions are usually included in statutes and can also take the form of essential executive orders or court ruling. Implementation in a broad sense requires that objectives and outcomes

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satisfy certain requirements which is further explained that what is implemented is an objective and involves the process of effecting an outcome (Wildavsky & Majone, 1979).

Whiles studies refer to implementation as a process of making use of inputs such as financial, information, materials, technical, human resources to produce outputs in terms of goods and services (Egonmwan, 2009), other scholars have explained implementation as a link between intentions by several stakeholders including government and the ultimate impact or result. Consequently, it also involves how political figures effectively carry out plans and policies (Wu et al., 2015). Similarly, implementation was highlighted to reflect the application of documented policies by state agencies and structures to achieve objectives (Simon, 2015). Stewart, Hedge, and Lester (2007) indicated that implementation forms part of the policy process where all key resources are combined to effectively drive policies in order to achieve objectives. They consequently referred to implementation to involve process, output and outcomes.

Further stressing the diversity in definition, policy implementation has also been conceptualized as a complex process that is aimed at change where decisions made by state authorities are translated into programmes for better social outcomes (DeGroff & Cargo, 2009).

2.3 Approaches to Policy Implementation

There exist numerous approaches to implementation in literature and there is no consensus on the single best implementation approach. However, among the dominant ones are the early models of top-down and bottom-up approaches. This section focuses on reviewing literature on the two early approaches: top-down and bottom-up.

2.3.1 Top-Down Approach

Policy researchers have espoused that, an essential factor to ensure effective implementation of policies and programmes lays to a large extent on the potential to draw a clear causal link

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between the objectives and the strategies devised to attain them (Pressman & Wildavsky, 1984).

The top-down approach to implementation is of the view that the degree to which strategies are put into action solely rests in the authoritative decisions of central and top decision makers. It revolves around the assumption that the implementation cycle begins with clear objectives that are guided from the top hierarchy and disseminated in a linear trend downwards (Matland, 1995; Nakamura, 1987). Pülzl and Treib (2017) noted that this approach basically follows a prescriptive mechanism that sees implementation as the output of some key decisions.

According to Sabatier and Mazmanian (1979), in order for implementation of a policy to be effective, some key conditions should be sufficiently met. Hence, they devised a list six conditions which include:

- Setting and defining clear and logically consistent goals,
- Establishing an appropriate causal theory,
- Putting in place a structure to guide and enhance implementer,
- Appointing skilful and very committed officials to lead implementation,
- Courting the support of policy makers and interest groups,
- Ensuring there are no changes in the social and economic conditions that will affect political support.

Hence the top-down approach concludes that so far as these conditions are fully met, the policy implementation should be successful.

Various studies have raised criticisms and supported the top-down approach to implementation. Matland (1995) noted that one major advantage of this approach rests on its attention on central

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actors and their potential to set unambiguous goals and objectives and to diligently use their powers to influence the implementation process with firm control of variables that may lead to changes. The study added that, this exposes the implementation plan and process to very minimal changes within a specified context. Mazmanian and Sabatier (1981) also added that this approach is in line with some concepts of democracy and reduces the number of actors participating in the process thereby ultimately making evaluation simple and promoting easy accountability.

Criticisms raised about the top-down approach stems around the fact that it gives too much power to just some few actors located at the central level of governance and the gap between the central governance and the street-level bureaucrats remains wide. According to Matland (1995), the approach seems too difficult to achieve in reality since it focuses much on command and control with a separation of policy formation from implementation. Sabatier (1986) also added that, the approach seems to focus too much on few actors to the neglect of the information-rich and strategically placed local actors who may hold the needed knowledge and expertise to solve some problems.

In order to evaluate the effectiveness of implementation, Mazmanian and Sabatier (1989) further reported that, to determine effectiveness of implementation, studies should be oriented to answer four important questions:

- To what extent are the outputs or outcomes of the implementation process consistent with the objectives enunciated in the original statute?
- Were the objectives successfully attained? Over what period?
- What factors affected policy outcomes or caused the goals to be modified?
- How was the policy reformulated over time in the light of experience?

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However, Matland (1995) mentioned that the approach is fraught with unpredictability and irregularities in terms of evaluation of the implementation process.

2.3.2 Bottom-Up Approach

According to Pülzl and Treib (2017), the bottom-up approach was developed to respond to the gaps in explaining policy implementation as captured by the top-down appraoch. Lipsky (2010) noted that in the implementation process, policy formation cannot be separated from implementation. Thereby presenting a different argument as criticised under the top-down approach. This appraoch emphasizes the important roles of the "street-level bureaucrats" from the formulation to the implementation phases. These street level bureaucrats are known as a group of key stakeholders drawn out of major agencies within the communities that share some commonalities such as allocation of resources and benefits within their communities, decision making and roles in the execution of policies (Keiser, 2010). He emphasized that such individuals are drawn from agencies such as educational sector, welfare departments, legal service departments, the health service, social groups and local government officers.

This approach posits that implementation of a policy occurs at two different levels. These are the micro and macro levels of implementation (Matland, 1995). At the macro level, actors at the central level develop broad government programmes which are disseminated to the local authorities at the lower levels. Local stakeholders and authorities at the lower levels with such programmes in mind develop their context specific programmes and lead the implementation process.

In describing the process, Cerna (2013) noted that the bottom-up approach begins by scouting and identifying a group of local actors involved in key decision making at the lower levels. They are further made to determine their aims and objectives within their context likewise the strategies and known contacts to aid in the processes. The approach highlights the way issues

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are identified and policies developed and implemented from the lower levels (bottom) and consequently spread to the top (Barret & Fudge, 1981).

The bottom-up approach has also been reported to have some strengths and weaknesses. Sabatier (1986) was of the view that the bottom-up approach emphasizes on the utilization of local implementation structures, and thus is more effective for assessing the dynamics of local changes. However, it serves as a weakness also by laying too much emphasis on the autonomy of the street level bureaucrats. Since there need to be overhead control by actors who are given power through elections to represent the people.

2.3.3 The Hybrid Model of Implementation

Critics for both top-down and bottom-up approaches have sparked various debates about the combination of both approaches to overcomes their weaknesses. Some scholars have begun to identify the importance in addressing the weaknesses of both top-down and bottom-up approaches and have attempted to synthesize them into a comprehensive explanatory approach. Cerna (2013) reported that the five (5) points outlined by Sabatier and Mazmanian (1979) to enable successful implementation of policies was based on integration of both approaches.

To explain it further, Matland (1995) also combined the bottom-up and top-down approaches which explained the circumstances where each approach would be most useful. In his report, top-down proponents make use of highly positioned bureaucratic actors who influence policy implementation from the central level. He described bureaucrats at the top level as analytical in their scope of work and most often put together data to develop "generalizable policy advice," based on patterns from articulated policy goals and policy outcomes. This concept reduces the number of actors involved and limits change.

According to Matland (1995) bottom-up proponents on the other hand locate and describe the level of policy success in relation to the policy goal. While top-downers clearly explain the

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goal and seek to discover failure or success, bottom-uppers may fiddle with the implementation and encourage a policy that will at least partially achieve its goal. In the form of a policy advice, policy makers and researchers are encouraged to identify the differences in the top-down and bottom-up approaches when dealing with implementation results. Matland (1995) then develops a "structure" for researchers to follow which integrates both approaches. The top-down demonstrates precise and explicit statement of policy objectives and the bottom-up is a precise and explicit statement of local level behaviour in accordance with Elmore (1985).

Mthethwa (2012) reports that contemporary policy support systems are avoiding the single use of bottom-up and top-down approaches to a centrist approach with concentration on triangulating actors from different levels to influence how implementation should be carried out. In this sense, implementation is viewed as a bargaining, exchange and negotiated action. Policy is understood as the outcome of bargaining and negotiation among both top bureaucrats and the street-level bureaucrats.

Jordan (1999:15) noted that in this concept, "policy is considered as dependent upon bargaining process and implementation is seen a part of a continuous process of bargaining and compromising inputs from the top and innovations from the bottom. In the implementation process, policy makers may use components from all or some of the above approaches, whichever suit their purposes for the policy at hand.

2.4 Overview of Neglected Tropical Diseases (NTDs)

The World Health Organization defines Neglected Tropical Diseases as a wide group of infectious diseases that thrive in tropical and subtropical conditions mostly with poor social conditions (WHO, 2013). The Centre for Disease Control (CDC) has also considered neglected tropical diseases to be a group of parasitic and bacterial diseases that cause substantial illness for more than one billion people globally (CDC, 2018). Several concepts have been created

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about NTDs worldwide but with a central idea. It was identified that, the term "neglected diseases" had no simple and single definition (Fitzpatrick et al., 2017; Molyneux, 2010). However, Liese, Rosenberg, and Schratz (2010) noted that, in some jurisdictions, the term "neglected tropical diseases" is modified based on the type of study and plays peculiar roles to promote different agenda. The study further approached the definition of NTDs from two viewpoints. Firstly, NTDs were conceptualized with "neglect" as the core point and has been the widely known concept. In the second instance, NTDs are defined in relation to the key characteristics that are common among the different types and the link they have with poverty. This concept plays a key part of the WHO definition and highlights how the diseases exclusively affect the poor and powerless individuals living in remote areas of low-income countries especially Sub-Saharan Africa (WHO, 2013). Though often endemic mostly in low-and-middle-income countries, NTDs are also found in some high-income countries such as the United States of America and among countries at the Southern parts of Europe. This observation are to a large extent due to the level of poverty, changes in climatic conditions, migration and cross-border economic activities (Klohe et al., 2019).

Comprehensively, NTDs have been defined as a group of chronic, disabling, and disfiguring conditions that occur most commonly in the setting of extreme poverty, especially among the rural poor and disadvantaged urban populations (Hotez et al., 2008; Samuels & Pose, 2013). Molyneux (2013) also noted that, NTDs are seen as diseases that have been abandoned with little or no attention at various levels of healthcare and are seen as normal in certain proportions in poor populations and countries. In some areas of the United States where these diseases occur among a few groups, they are being termed as neglected infections of poverty. Thus, adding to the evidence that poverty plays a crucial role in defining neglected tropical diseases.

The World Health Organization identifies a total of twenty (20) diseases and infections worldwide as neglected and calls for concerted and integrated efforts to fighting these

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infections and meet set targets. Table 1 below indicates the types of neglected tropical diseases as listed by the World Health Organization and their targets (WHO, 2012a).

Table 1: List of NTDs and their WHO targets

NTD	**WHO Target (WHO, 2012)**
Dengue	"…an integrated vector management approach should reduce rates of morbidity by at least 25% and of mortality by 50% by 2020."
Rabies	"Elimination of human rabies transmitted by dogs and dog-to-dog transmission is achievable by 2015 in all endemic areas in Latin America; and by 2020 in all affected countries in WHO's South-East Asia and Western Pacific regions."
Trachoma	"…global elimination goal by 2020…By 2020, all countries will have achieved the UIG and be free from blinding trachoma as a public-health problem, and by 2020, 75% of countries will have been verified as free from blinding trachoma as a public-health problem."
Buruli ulcer	"WHO aims to cure 70% of all cases with antibiotics in all endemic countries by 2020."
Endemic treponematoses	"Elimination of yaws in Africa is feasible by 2020, therefore leading to global eradication"
Leprosy	"Vigorous case finding, and treatment would lead to global interruption of transmission by 2020."
Chagas disease	"A milestone will be reached when peri-domiciliary infestation has been eliminated in Latin America by 2020."
Human African Trypanosomiasis	"…eliminate the disease in 80% of foci by 2015 and achieve elimination in 100% of foci by 2020."
Leishmaniasis	"WHO aims to detect at least 70% of all cases of cutaneous leishmaniasis and treat at least 90% of all detected cases in the Eastern Mediterranean Region

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	by 2015. With sustained efforts on the Indian sub-continent, 100% case-detection and treatment of visceral leishmaniasis is feasible by 2020…"
Cysticercosis	"A validated strategy for the control and elimination of Taenia solium taeniasis/cysticercosis will be available by 2015; and interventions for control and elimination scaled up in selected countries in Africa, Asia and Latin America by 2020."
Dracunculiasis	"Dracunculiasis is now on the verge of eradication."
Echinococcosis	"Pilot projects to validate the effectiveness of echinococcosis/hydatidosis control strategies…by 2015. Scale up of interventions in selected countries in Central Asia, North Africa and Latin America for control and elimination as a public-health problem will be in place by 2020."
Foodborne trematodes	"By 2020, 75% of the at-risk population will have been reached by preventive chemotherapy and morbidity associated with foodborne trematode infections will be under control in 100% of the endemic countries."
Lymphatic filariasis	"By 2020, 100% of all endemic countries will have been verified as free of transmission or will have entered post-intervention surveillance."
Onchocerciasis	"It is currently estimated that, by 2020, 12 African Programme for Onchocerciasis Control countries and 11 ex-control Programme countries may have achieved elimination, out of a total of 31 countries affected…"
Schistosomiasis	"…could be eliminated as a public health problem in multiple countries in Africa by 2020, and globally by 2025."
Soil-transmitted helminthiases	"…75% coverage will be reached in all countries by 2020."

Source: WHO (2012)

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2.5 Global Burden of Neglected Tropical Diseases

Neglected tropical diseases have become a global issue. The Centre for Disease Control reported that, almost all low-income countries in the tropical and subtropical regions in the world have been affected by five or more neglected tropical diseases simultaneously (CDC, 2018; WHO, 2010).

Globally, the peculiar role of poverty in NTDs has been of concern to many countries. Several indices such as morbidity, mortality, Years of Lives Lost (YLL) and Disability-Adjusted Life Years (DALYS) have been used to measure the burden of NTDs across various age groups and races. In the quest to quantify the burden of NTDs, it has been captured that about One (1) billion poor people according to the World Bank criteria are suffering from at least one NTD which further contributes to worsened poverty among such people (Mitra & Mawson, 2017). This accounts for about 3.4% of the global burden of diseases. The Global burden of diseases study has reported that, DALYs lost due to the total burden of all NTDs annually amount to approximately 18.8million (IHME, 2018). Further estimates by the WHO suggest that, an average of 425,000 people (between 350,000 and 500,000) die from different types of NTDs annually. It further added that of the 149 countries and territories that are affected by NTDs, 74% are affected by two or more NTDs and 19% are afflicted by more than six NTDs simultaneously (WHO, 2018).

In Africa, NTDs have been reported in more than thirty (30) countries, with West Africa carrying the highest burden. Countries such as Benin, Cameroon, Ivory Coast and Ghana are estimated to experience about 80% of the burden in the West African sub-region (Ampah et al., 2016; N'krumah et al., 2016).

The most prevalent NTDs in the world have been named as hookworm, schistosomiasis, lymphatic filariasis, onchocerciasis and trachoma. These diseases often result in reduced

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productivity, human disfiguring, and impairment on the growth and development of the children (Hotez et al., 2007). The global burden of neglected diseases continues to evolve as the collection and analysis of the limited epidemiology, morbidity and socio-economic data becomes more available.

The impact of NTDs on individual and economic life cuts across many dimensions. Both the academic and grey literature underscore why NTDs are a global health crisis. The chronic disease caused by the NTDs can result in disfigurement, impaired child development, poor pregnancy outcomes, and reduced productivity (Hotez et al., 2007). NTDs impair childhood growth and intellectual development, disfiguring and stigmatization (WHO, 2010) and have significant costs on the productivity and economies of affected communities (Conteh, Engels, & Molyneux, 2010). Trypanosomiasis (African sleeping sickness) for example, which is transmitted by the tsetse fly, is endemic in regions of Sub-Saharan Africa, covering 36 countries and 60 million people (WHO, 2010). In areas where the disease is endemic or severe, it hinders or prevents the keeping of livestock and denies rural communities' access to their livelihood. Agricultural loss to trypanosomiasis alone is estimated at $4.75 billion and $2.75 billion of lost milk and meat annually (Brun, Don, Jacobs, Wang, & Barrett, 2011; Simarro, Jannin, & Cattand, 2008).

Given the common features they share, NTDs are significant for their geographic and epidemiologic overlap; Leishmania, lymphatic filariasis, schistosomiasis, Chagas disease and blinding trachoma, for example, are all closely associated with poor environmental hygiene and sanitation (Mitra & Mawson, 2017).

2.6 Burden of Neglected Tropical Diseases in Ghana

There are several types of diseases characterized under the umbrella term "Neglected Tropical Diseases". There is a diverse list of neglected tropical diseases which include bacterial,

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parasitic fungal, viral infections and envenoming snakebites (Klohe et al., 2019). Despite the diversities and complexities, twenty (20) main NTDs have been identified and reported by the World Health Organization. These include schistosomiasis, lymphatic filariasis, human African trypanosomiasis, Chagas disease, soil-transmitted helminthiases, dengue, buruli ulcer, rabies, trachoma, leprosy, onchocerciasis, leishmaniasis, taeniasis/cysticercosis, endemic treponematoses (Yaws), food-borne trematodiases, dracunculiasis, echinococcosis, scabies, Mycetoma and chromoblastomycosis and snakebite envenoming in no particular order (Addisu et al., 2019; WHO & ESPEN, 2018). These prioritized NTDs are found in different geographical areas and affect different group of people based on the prevailing environmental, social, economic and cultural conditions. However, in Ghana the NTDs programme focuses on 5 priority diseases (GHS, 2016).

Several districts in Ghana have been reported to have lymphatic filariasis transmission with greater than 1% microfilaria prevalence even after rounds of mass drug administration (de Souza et al., 2020). Otabil et al. (2019) noted that there is still existence of onchocerciasis microfilaria as high as 2.9% and nodule prevalence of 14.3% in supposedly hypo endemic communities in Ghana. Additionally, Tetteh-Quarcoo et al. (2020) in a study conducted in southern Ghana reported a schistosomiasis reinfection rate of 10.4% among school children in endemic areas in Ghana.

2.7 Epidemiology of Common Neglected Tropical Diseases

2.7.1 Schistosomiasis

Schistosomiasis is a water-borne infection caused by trematodes. It is common in poor sanitation areas and acquired through contact with contaminated water which carry the larvae that can penetrate the skin of humans (Feasey, Wansbrough-Jones, Mabey, & Solomon, 2009; Hotez et al., 2014). The Schistosoma infection can lead to a myriad of chronic diseases that

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include bladder and urethral infections that can sometimes lead to cancers, and severe liver complications in some instances. The causative organisms of Schistosomiasis exist in many forms such as Schistosoma haematobium, mansoni, japonica, intercalatum, and guineensis (WHO, 2012a).

One of the commonest parasitic infections that exist at different rates and endemic in about 76 countries is schistosomiasis (King, 2010). In the classification of parasitic infections among humans, schistosomiasis was ranked second after malaria when considered in terms of public health importance and socio-economic burden in the tropics (Koffi et al., 2018). It is estimated that nearly 600 million people suffer from schistosomiasis with 90% in Africa (Hotez, Savioli, & Fenwick, 2012). It is further reported that, more than 90% of the burden in Africa is found in sub-Saharan Africa (Hotez, 2019; Mitra & Mawson, 2017). In several other regions, Schistosoma linked human diseases has successfully reached the phase of control or elimination (Bergquist, Zhou, Rollinson, Reinhard-Rupp, & Klohe, 2017; Sokolow et al., 2016).

In the diagnosis of schistosomiasis, few of the early symptoms include bloody stool, diarrhoea, abdominal pain and discomforts. These symptoms are more common for S. mansoni type infection. However, the presence of these symptoms could be an indicator of other infections and does not specifically indicate a Schistosoma infection (Weerakoon, Gobert, Cai, & McManus, 2015). In order to detect the presence of the parasites, several tests are conducted but the most widely used measures include the eggs count in the human excreta or in an amount of urine through the Kato Katz technique for detecting Schistosoma mansoni (Garcia et al., 2018). The egg count measures are utilized because of the positive relation of egg load to the burden of adult parasites and the severity of the infection (Garcia et al., 2018; Weerakoon et al., 2015). In some instances, chronic complications serve as diagnostic pointers but are unreliable because of their minimal rate of occurrence among infected individuals. they are

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seen in a relatively small number of infected individuals. Other clinical consequences could be detected by the performance of ultrasound techniques which provide a more sensitive and precise measure of changes in the vital organs and co-morbidities during treatment (Ajibola, Gulumbe, Eze, & Obishakin, 2018).

The objectives of Schistosoma control are to decrease to the barest minimum the level of infection among individuals and reduce other pathological complications. The most widely used treatment protocol involves the administration of drugs such as praziquantel in recommended doses according to weight and height (Savioli et al., 2018). In most cases, mass drug administration campaigns are organized to cover vulnerable and susceptible groups. Treatments are supported with social changes such as improvement in access to safe water, adequate sanitation and in some jurisdictions control of Schistosoma carrying snails. The World Health Organization recommends that, high-risk populations and areas such as fisherman and individuals who visit contaminated water bodies often should be an important focus and earmarked for mass drug administration campaigns (Bergquist et al., 2017).

2.7.2 Soil-Transmitted Helminthiasis

The Soil Transmitted Helminthiasis (STH) is an infection caused by nematodes. Sixteen (16) different species of nematodes exist. However, there are four (4) types that are globally common. These include Ascaris lumbricoides (roundworm), Ancylostoma duodenale, Necator americanus (hookworm) and Trichuris trichiura (whipworm). Among the sources of such infections are poor personal hygiene and bad sanitation practices (Bethony et al., 2006). Common modes of transmission include contact with causative agents through improper washing of fruits and vegetables, poorly cooked food and contact with contaminated soil. After introduction of the worms into the human body, they reproduce in the gastrointestinal system and are further released back into the external environment through human activities and fecal

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matter (Feasey et al., 2010). The degree of morbidity caused by soil transmitted helminthiasis primarily depends on the severity of infection. It has been reported to be a cause of reduction in health stock, growth and development of children (WHO, 2010).

More than 1.5 billion people globally are affected by soil transmitted helminthiasis with over 300 million faced with STH related chronic morbidities (Pasaribu, Alam, Sembiring, Pasaribu, & Setiabudi, 2019). Consequences of these morbidities include growth impairment, poor growth and impairment with cognitive development in especially children and some adults (WHO, 2020b). In terms DALYs, the global burden of disease study estimated the burden of STH infection at 1.9 million DALYs in the year 2017 (IHME, 2018). The risks vary among different age groups and with geographical location. Children between the ages of five (5) to fourteen (14) years have been seen to be at a higher risk of ascariasis and trichuriasis infection whiles hookworm infestation is more prevalent among adults thirty (30) to forty-four (44) years old and beyond in some circumstances (Pabalan et al., 2018). In Cote d' Ivoire, the overall prevalence of STH was reported as 19.5% with intensity greater in some sub-regions (Loukouri et al., 2019).

Soil transmitted helminthiasis is diagnosed based on the measure of the number of eggs counted in a gram of human excreta. This procedure is also done similarly as in schistosomiasis through the use of the Kato Katz technique (Ajibola et al., 2018; Khurana & Sethi, 2017). In controlling the infections, the key objective is to protect infected populations from co-morbidities and to control the rate of morbidity by providing the needed treatment to populations at risk (WHO, 2020b). In addition to these, good hygienic practices such as hand washing, and social measures such as the provision of safe water for human activities are very essential in the control of STH (McMichael, 2019)

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Treatment protocols include the administration of albendazole or mebendazole at recommended doses at the individual level. Mass Drug Administrations are recommended in endemic areas preferably biannually to provide coverage (Savioli et al., 2018; WHO, 2020b).

2.7.3 Onchocerciasis

Onchocerciasis with a common name as river blindness is a one of the NTDs caused by a nematode Onchocerca volvulus and transmitted by blackflies. Populations that engage in farming, river laundry and fishing are reported to be the most at risk of a bite from a blackfly (Etya'ale, 2001; WHO, 2014). Key distinguishing features include the emergence of skin lesions and visual impairment. The parasite undergoes several changes in the blackfly and later transmitted to humans through an infected bite. It then undergoes developmental changes in the human body with resultant morbidities such as the skin disease known as the Onchocercal skin disease and eye lesions.

Onchocerciasis is reported to be the world's second leading infectious cause of blindness only after Trachoma. Approximately, 90 million people all over the world are at risk of contracting the disease out of which more about 37 million are estimated to be infected (WHO, 2019b).

Globally, the infection is commonly found in about thirty-seven (37) countries with majority being located in sub-Saharan Africa and the rest across Central, Southern America and Yemen (WHO, 2019b). The infection affects individuals differently according to age and locations. Higher intensities of Onchocerca volvulus infection have been reported in men who are in their late teens and older women and higher in endemic populations (Murdoch, 2018). However, early signs are also seen among children. Despite the reported figures, studies have highlighted that, the figures are by far an underestimation of the true burden of Onchocerciasis (Otabil et al., 2019).

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The symptoms of onchocerciasis often do not manifest early and are sometimes hidden until one to three years after the introduction of the parasite into the human body (Crump, Morel, & Omura, 2012). Evidence suggests that the number of parasites measured are positively correlated with the degree of skin infection experienced (Mduluza, Chisango, Nhidza, & Marume, 2017; WHO, 2014). In order to control the intensity of Onchocerciasis, measures such as insecticide spraying of blackfly breeding sites and mass drug administration has been strongly recommended (Colebunders et al., 2018; WHO, 2019b). However, the West Africa Onchocerciasis Control programme has noted that, the measures are cost-intensive and will span a long term. Treatment protocol includes the administration of Ivermectin in single recommended doses annually (Dadzie, Amazigo, Boatin, & Sékétéli, 2018).

2.7.4 Lymphatic Filariasis

Lymphatic Filariasis which is commonly referred to as elephantiasis is a parasitic disease characterized by filarial nematodes. These nematodes Wuchereria bancrofti, Brugia malayi and Brugia timori have no animal reservoir and are transmitted by the mosquito Anopheles gambiae and Anopheles funestus (WHO, 2020a). The microfilariae go through changes in the mosquito and later transmitted to humans through bites. Upon introduction into the human circulatory system, it undergoes several changes and consequently leads to impaired lymphatic drainage and circulation and causes weak resistance to invading organisms.

Globally, approximately 1.2 billion people which signify 20% of the world's population stand the risk of lymphatic filariasis infection with an estimated 120 million people in over eighty (80) countries already experiencing various degrees of infection and 40 million facing a myriad of disabilities (WHO, 2019b). Lymphatic filariasis has been ranked by the World Health organization as one of the main causes of long-term disability and a significant cause of morbidity (Derua, Kisinza, & Simonsen, 2018; Zeldenryk, Gray, Speare, Gordon, & Melrose,

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2011). Studies suggest that, Lymphatic filariasis is associated with extremely poor living conditions, psychological and social burden in many countries (Gonzales et al., 2019; Minetti et al., 2019; Pi-Bansa et al., 2019).

The major symptoms that characterize lymphatic filariasis include lymphoedema (swelling of the limbs) and hydrocele (swelling of genital organs) (Richards et al., 2011). In order to make an accurate diagnosis, the blood is examined for the presence of LF causing microfilariae (CDC, 2019; Dietrich et al., 2019). The procedure provides a good diagnosis of the infection however; it does not measure the density of the infection. To provide a comprehensive and holistic care, the accurate measurement of complications is needed. It has been recommended by the World Health Organization that, the intensity of clinical manifestations and other complications are measured (WHO, 2019).

The main objective of Lymphatic filariasis control is to significantly reduce the number of microfilariae in humans. This is done through mass drug administration to populations at risk and using insecticide treated nets to reduce the rate and number of infective bites (WHO, 2006; WHO, 2019). The treatment protocol involves the administration of albendazole, ivermectin and diethylcarbamazine. A combination of medications is recommended since adult parasites are not completely eliminated by one medication.

2.7.5 Trachoma

Trachoma is an infectious disease which is a leading cause of preventable blindness worldwide (WHO, 2020c). Trachoma is caused by the Chlamydia bacterium which is transmitted directly through the spread of infected ocular material from one person to another (Hu et al., 2010). The spread of trachoma is by common house flies and through contaminated fingers and fomites. Repeated infection of the ocular surface initiates chronic inflammatory responses that lead to cornea damage and scarring (Feasey et al., 2009).

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Over 1.9 million cases of blindness which translates to about 3.6% of blindness in the world is attributed to trachoma with approximately 142 million people living in endemic areas and are at high risks of blindness due to trachoma (WHO, 2020c). The infection has been an issue of major concern to several regions across the world. The World Health Organization has reported that, trachoma continues to be hyperendemic in about 44 countries across the world with the largest being in Africa, Asia, Middle East, Latin America and Australia (WHO, 2020c).

The trachoma infection has been graded into five main categories which include; Trachomatous Inflammation Follicular (TF); Trachomatous Inflammation Intense (TI); Trachoma Scarring (TS); Trachomatous Trichiasis (TT) and Corneal Opacity (CO). TF and TI are more common in children who act as reservoirs for infection. CO is common among individuals in mid to late adulthood. Blinding trachoma (grades TT and CO) is more common in females than males and this is attributed to the role of women as caretakers of children who are the main reservoirs of infection (Hu et al., 2010; WoldeKidan, Daka, Legesse, Laelago, & Betebo, 2019). The age distribution of different manifestations of trachoma depends on how endemic it is. In areas with hyperendemicity, the active infection is most common in pre-school children and decreases with advancement in age (Cox, Mkocha, Munoz, & West, 2017). In other long-standing endemic regions, conjunctival scarring due to trachoma has been reported to increase with advancement in age (Ramadhani, Derrick, Holland, & Burton, 2016).

In all settings, trachoma is diagnosed by the accurate and thorough clinical examination and assessed with a simple grading scale (Rahman et al., 2014). Prevalence of the two grades of active trachoma TF and TI are used to define where a control programme should be implemented (Harding-Esch et al., 2018). There is evidence, however, that active trachoma does not correctly identify ocular chlamydial infection due to the time lapse between infection and the clinical appearance of active disease and again following a reduction in infection and the disappearance in clinical disease (Last et al., 2014; Ramadhani et al., 2016).

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For a comprehensive control of trachoma, a strategy termed SAFE which means "**S**urgery for trichiasis, distribution of Antibiotics, Facial cleanliness and Environmental improvements" has been recommended across the world (WHO, 2020c). One way to undo the effects of blindness caused by trachoma is through surgery which reverses complications and may improve non-visual symptoms (Mathew, Turner, & Taylor, 2009). Individual level and mass administration of antibiotics (Azithromycin) is carried out among populations at risk of the infection.

Face-washing aims to interrupt transmission by removing infected ocular secretions (Ejere, Alhassan, & Rabiu, 2015). Environmental improvement also aims to break transmission by reducing the breeding sites of the mechanical vector. To achieve the elimination of blinding trachoma it is imperative that each of the four components be addressed within a control programme (Ejere et al., 2015; WHO, 2020d).

2.8 Factors Affecting Implementation

One of the main issues confronting most developing countries are policy and programme implementation. Despite it being a problem in the developing countries, some developed countries also face a lot of challenges in implementation. Relatively, it is argued that, as successful implementation is a challenge in upper income countries, it is more challenging in low-and-middle income countries (Egonmwan, 2009). In these settings, it usually manifests as the issue of widening gap between objectives and outcomes. These widening gaps have been reported to be due to several factors inside and outside the programme environment. Scholars have reported a myriad of factors that affect implementation and the criteria for assessing the success of implementation vary (Ahmed & Dantata, 2016).

Prior studies to identify the factors that influence policy and programme implementation have reported that, implementation is to a large extent influenced by the ideologies, economic situation and political environments of the policy setting (Sabatier & Mazmanian, 1980). It

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however highlighted that, irrespective of the nature of the policy environment, implementation becomes more strenuous and less predictive as the objectives and goals of policies and programmes move across the red-tape of state and non-state implementing organizations (Nakamura & Smallwood, 1980; Sabatier & Mazmanian, 1980).

In addition to these, Walt and Gilson (1994) identified the key role of the content, context and process and actors in implementation. Thus, the contents of a policy or programme such as the objectives, design, mechanisms, guidelines and plan for implementation largely affect the implementation. Likewise, contextual factors such as structure, culture and environmental situation. The article further highlighted the role of individual and group stakeholders and their positions and power play to be essential factors in determining the success of implementation.

A study examining factors affecting policy implementation in Nigeria reported that, among that several intertwined factors, ineffective political governance, over ambitious nature of policies, inadequate manpower, financial resources and individual interests were key problems to implementation (Ugwuanyi & Chukwuemeka, 2013).

2.9 Challenges of Policy Implementation

In the lifetime of program or policy are implementation challenges also kwon as barriers of implementation. These barriers impede the achievement of the policy goal and hinders the delivery of health services. Barriers of implementation can originate from, inadequate financial resources, poor collaboration and coordination among stakeholders responsible for implementation, as well as resistance from key stakeholders, absence of political will or motivation and lack of clarity on formulated strategies (Health Policy Project, 2014)

Makinde (2005) identified critical factors that could hinder effective implementation of policies in developing countries. These factors include communication among all actors, resources available, attitudes of implementers, and the bureaucratic structures that exist within the

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implementation context. It was further explained that inadequate information through miscommunication especially distorted, inconsistent and vague information usually leads to problems in implementing specific policies and programmes. This study further added that the inadequacy of resources especially human and material resources greatly hinders the implementation process and affects the achievement of policy objectives (Makinde, 2005).

Ghenna (2007) also reported on the challenges policy implementers encounter in the process of implementation. It stated that among many other problems, the issue of lack of capacity in terms of staff expertise, skills and knowledge and lack of leadership to serve as a guide, provide direction and motivate people working in all areas of implementation has been noted to hinder the effective implementation.

Similar study by Kojo Sakyi (2008) on implementation of policies in civil reported lack of political support, low institutional and human resource capacity, lack of cooperation and understanding among all partner agencies as factors that hindered implementation of public sector reforms. These could be related to policies, programmes and strategy implementation within the public domain.

Other challenges of implementation reported in literature include the characteristics of the policy as reflected in the framework (Cerna, 2013; Roh, 2012), the bureaucratic structures within the sector (Onyekwelu, Okpalibekwe, & Dike, 2015; Souza, 2016), vague policy objectives (Hudson et al., 2019), lack of political will (Ajulor, 2017) and inadequate resources (Afrizal et al., 2019; Oleribe et al., 2019).

2.10 Stakeholder Analysis in Policy Implementation

The relevance of stakeholders in policy implementation in the health sector cannot be overemphasized. Hence, the continuous engagement of stakeholders in the implementation of developed policies in order to achieve certain objectives in the country ensuring participation

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of citizens (Hutahaean, 2016; Yaro, Arshad, & Salleh, 2017). In the Arena of policy, stakeholders are actors with much interest in the policy being implemented. They can be categorised into consumers, commercial/private, non-profit or for-profit non-governmental organizations, civil society, international donors, national (governors, legislators), public (finance ministry, ministry of health, social security), and labour unions (Varvasovszky & Brugha, 2000). These actors can also be individuals, groups, organizations and institutions (Benedetto, Carboni, & Corinto, 2014). Stakeholder analysis has become the mode of monitoring the power, positions, alliances, influences and interest of all stakeholders on the processes of the policy in addition to evaluating the impact of the stakeholder influence on the achievement of the overall goals of the policy (Benedetto, Carboni, & Corinto, 2014; Varvasovszky & Brugha, 2000). There is the need for stakeholder analysis owing to the fact that different stakeholders perceive policies from different angles depending on the views of the institution, organization, or individual perspective. The evaluation of the WHO NTDs programme report for 2019 emphasizes on the importance of engaging stakeholders in the implementation of the WHO NTD programme (WHO, 2019a).

2.11 The Neglected Tropical Disease Programme/Masterplan

The NTDs programme is a state-led programme to put together measures for the control of all endemic NTDs in Ghana. The programme is under the Public Health Division of the Ghana Health Service with the mission to "contribute to socio-economic development and wealth creation by promoting health, vitality and ensuring access to quality health services for all people living in Ghana" (GHS, 2016: 31).

The programme is divided based on the management approach for each disease. The Preventive Chemotherapy deals with diseases that involve mass administration of drugs (lymphatic filariasis, Onchocerciasis, Trachoma, Schistosomiasis and Soil transmitted Helminthiasis) whiles the Case Management group deals with case search and passive case management.

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The goal of the programme is to "improve on the capacity of the GHS to establish an integrated NTDs programme capable of delivering interventions to prevent, control, eliminate or eradicate the neglected tropical diseases by the year 2020" (GHS, 2016: 31).

In line with the goal of the NTDs programme in Ghana, several specific strategies have been developed as captured in table 2 below:

Table 2: Priorities and goals of the Ghana NTDs programme

Priorities	**Objectives**
Strengthen government ownership, advocacy, coordination and partnerships.	To ensure the capacity of the government of Ghana to effectively and efficiently scale up and deliver all NTDs interventions in Ghana.
	To ensure effective and efficient Inter-country coordinating mechanism for NTD programming, partnerships, and coordination
	To update and align the existing Communication & Advocacy Strategy with the NTDP Financial Sustainability plan
Enhance planning for results, resource mobilization and financial sustainability of national NTD Programme	Operationalize the NTD finance strategy
	To enhance resource mobilization approaches and strategies at national and regional levels for NTD interventions
	Work with Finance Strategy Taskforce to build business cases/proposals to be submitted to identified resource partners.
Scale up access to interventions, treatment and system capacity building	Scale up an integrated preventive chemotherapy, including access to LF, STH, onchocerciasis, schistosomiasis and trachoma interventions
	Scale up integrated case management disease interventions (Yaws, Buruli Ulcer, Rabies,

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	Cutaneous Leishmaniases, HAT, trachoma) and LF morbidly control
	Strengthen integrated vector management and environmental measures for targeted NTDs
	Strengthen capacity at national level for NTD programme management and implementation
Enhance NTD monitoring and evaluation, surveillance and operations research	Enhance monitoring of national NTD programme performance and outcome
	Strengthen surveillance of NTDs and strengthen the response and control of epidemic prone NTDs
	Support operational research, documentation and evidence to guide innovative approaches to NTD programme interventions
	Establish integrated data management system and support impact analyses for NTD as part of the global NTD data management system and plan
	Enhance NTD monitoring and evaluation, surveillance and operations research

Source: (GHS, 2016)

2.12 Theoretical framework

The Consolidated Framework for Implementation Research (CFIR) is a theoretical framework developed to guide the systematic appraisal of implementation at multiple levels in order to identify factors that may influence the implementation and effectiveness of policies and programmes (Damschroder et al., 2009). Since implementation theories are often not exhaustive with regard to these factors, Damschroder et al. (2009) synthesized 19 implementation theories into the Consolidated Framework for Implementation Research. It

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signifies a practical arrangement of factors that are known to influence the implementation process. These factors which are termed “implementation determinants” are categorized under five (5) domains. This cover; the characteristics of the individuals who are implementers, the inner setting of the programme where these individuals work, the implementation process, the state and characteristics of the policy or programme and the outer setting which encompasses the external environment (Damschroder et al., 2009).

According to Birken et al., (2017), determinant frameworks like the CFIR are useful in facilitating the identification of factors that determine to a large extent how readily an intervention is implemented and its sustainability. The CFIR has been applied in several implementation studies especially in studying implementation determinants.

Leeman et al. (2019) studies the factors affecting implementation of evidence-based screening interventions using the CFIR as a framework and reported a multiplicity of implementation determinants such as the priorities for screening which reflects the inner setting and adequate and readily available funds in and outside the organization reflecting the inner and outer setting.

Keith, Crosson, O’Malley, Cromp and Taylor (2017) used the CFIR in a rapid cycle evaluation for a comprehensive and timely understanding of barriers and facilitators. The study produced actionable findings for the improvement of implementation. However, Lewis et al. (2018) has called upon all implementation scientists to progress beyond identifying determinants and examine how and why those determinants influence implementation. Foy et al., (2011) explained that a framework serves as a useful tool examining how and when determinants influence implementation. The application of frameworks to assessing determinants and combining constructs from different behaviour change theories has been widely used (Michie et al., 2005). Damschroder and Lowery (2013) applied the CFIR in studying a weight management programme in hospitals. Connell, McMahon, Harris, Watkins and Eng (2014).

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also employed the constructs of the CFIR in the study of factors that influenced the implementation of a stroke rehabilitation intervention.

Research in other sectors outside healthcare suggests that factors in the outer setting (e.g., contracting practices, consumer demand, and public policy) are central to determining an organization's structures and practices (Daft, 2016). Many frameworks identify the essential roles that outer settings play implementation and scaling-up of programmes (Milat et al., 2015; Moullin et al., 2019). These constructs offer a highly relevant resource for understanding determinants of implementation at the level at all settings (Birken et al., 2017). In a systematic review, Kirk et al., (2016) suggested that, the CFIR should be used for more in-depth studies.

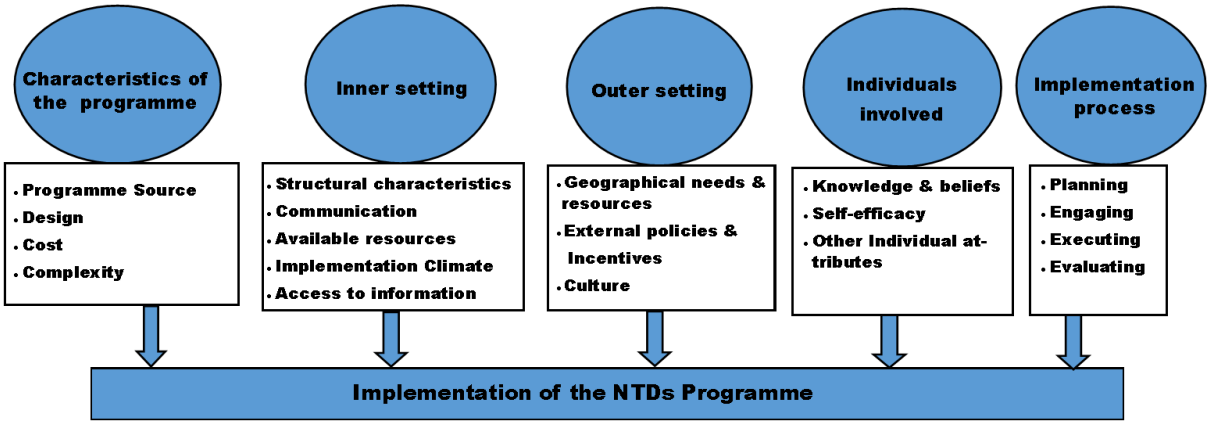

Figure 1: Consolidated Framework for Implementation Research (CFIR)
Adapted from Damschroder et al., (2009)

2.12.1 Explanation and Relation of Constructs to Study

- **Programme characteristics:**

How successful a programme becomes depends to a large extent on its characteristics with a given context. Characteristics of programme may include its complexity (multifaceted or simple). It also includes the source of the programme. Whether the programme is internally or externally developed may affect legitimacy of the programme within the context hence

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influencing implementation (Greenhalgh, Robert, Macfarlane, Bate, & Kyriakidou, 2004; Damschroder et al., 2009). This domain also captures the cost of the intervention, adaptability, trialability and design of the programme. The CFIR further noted that a cost prohibitive programme could be challenging to resource-constraint settings. A convergence of the construct and the theories shows a reflection of ideologies of the institutional theory where norms, assumptions and experiences of the programme and its implementer greatly influences implementation and consequently having effect on effectiveness of policies and programmes.

- **Inner setting**

This domain encompasses the characteristics of the implementing agency, the structures, implementation climate, communication and readiness of the agency to implement the programme (Damschroder et al., 2009). It includes the structural nature of the institution in terms of number of personnel, differentiation of actions, division of labour and the levels of decision making. Size, age, maturity, and degree of specialization also influence implementation. Waltz, Powell, Fernández, Abadie and Damschroder (2019) noted that the context where implementation occurs plays a central role in how it is adopted and spread. The nature and quality of webs of social networks and the nature and quality of formal and informal communications within an organization. Norms, values, and basic assumptions of a given organization and the implementation climate are also inner characteristics that affect implementation and reflect the institutional theory. Other factors considered are leadership commitment, involvement, and accountability of leaders and managers with the implementation, level of resources dedicated for implementation, ease of access to digestible information and knowledge about the intervention and how to incorporate it into work tasks which encompasses the resource dependence theory.

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- **Outer setting**

Damschroder et al., (2009) stated that the economic, political, and social context within which an organisation resides should be considered during implementation (Damschroder et al., 2009). This construct explains the external influences on the programme which includes the needs of the communities or contexts in which implementation occurs as well as barriers and facilitators to meet these needs, the degree of network between the implementing organization and other organizations in the external environment. This includes the social capital of the organization and culture of environment. It added that policies and financial pressures are to a large extent the most important to consider. The Mimetic or competitive pressure to implement a programme, policies and regulations (governmental or other central entity), external mandates, recommendations and guidelines (Mendel, Meredith, Schoenbaum, Sherbourne, & Wells, 2008) reflects institutional theory approaches. The environment also contains rich resources both capital and human which to a large extent influences major activities.

- **Individual characteristics**

This construct explains the attributes of individual implementers that broadly affects implementation. Organizations are fundamentally made of individuals whose behavioural interplay influences the behaviour of the organization including their knowledge and experiences (Greenhalgh & Wieringa, 2011). The CFIR highlights individual identification with the organization and other personal attributes. Individuals' attitudes toward and value placed on the programme, as well as familiarity with facts, truths, and principles related to the programme. Self-efficacy is a significant component in most individual behaviour change theories. It is noted that individuals with high self-efficacy are more likely to make a decision to embrace the programme and exhibit commitment even in the face of obstacles. It also covers how individuals perceive the institution and their relationship and degree of commitment to that institution. These attributes may affect the willingness of officers and volunteers to fully

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engage in implementation efforts (Ajzen, 1991). It is suggested that a programme that is locally developed through engagement of leaders is more likely to succeed (Kilbourne et al., 2013).

- **Implementation process**

This construct explains the strategies and tactics that are adapted to drive implementation. Four main activities of implementation process are captured under this domain. These include; planning, engaging, executing, and reflecting and evaluating. Planning involves an advanced method of behaviour and tasks for implementing a policy or programme and the quality of the methods. The fundamental objective of planning is to design a course of action to promote effective implementation by building local capacity for using the intervention, collectively and individually (Mendel et al., 2008).

Engaging on the other hand involves attracting and involving appropriate individuals in the implementation and use of the programme through a combined strategy of social marketing, education, role modelling and training. Leaders who play both formal and informal roles are identified and engaged. Includes implementation leaders, opinion leaders, volunteers and external change agents. Execution explains accomplishing the implementation according to laid down plans. Execution of an implementation plan may be organic with no obvious or formal planning, which makes execution difficult to assess. Quality of execution may consist of the degree of fidelity of implementation to planned courses of action, intensity (quality and depth) of implementation, timeliness of task completion, and degree of engagement of key involved individuals in the implementation process.

Evaluation considers the application of research methods (quantitative and qualitative) to obtain constructive feedback on the progress and quality of implementation accompanied with regular personal and team debriefing about progress and experience. It is important to differentiate this processual construct from the goals and feedback domain under inner setting.

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Evaluation includes traditional forms of feedback, such as reports, graphs, and qualitative feedback and anecdotal stories of success (Pawson, Greenhalgh, Harvey, & Walshe, 2005). Chung and Choi (2016) noted that a dynamic and interactive implementation process creates divergent and unexpected results. The construct highlights components of the institutional theory and resource dependence theory in its application.

2.13 Chapter Conclusion

This chapter explained various concepts in relation to policy and programme implementation. It further explained the various approaches to implementation and factors that influence the implementation process. Additionally, the idea of neglected tropical diseases was explained and the burden of these diseases globally and in Ghana were examined.

Finally, a theoretical framework adapted from the Consolidated Framework for Implementation research was explained to guide the study.

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CHAPTER THREE
METHODOLOGY

3.1 Introduction

This chapter is designed to highlight on the research methods employed to achieve the study objectives. These include: the study design, study location, sample and sampling procedure, data collection techniques, data analysis, quality assurance and ethical consideration.

3.2 Study Approach

The study employed a qualitative research approach to addressing the research questions. Qualitative approach places priority on people's lived experiences and the meanings they ascribe to such experiences (Miles & Huberman, 1994). This provides a thorough understanding of programs and their implementation across various levels. The qualitative approach was used in this study to enable the researcher to explore and understand implementation as a social phenomenon (Flick, 2018).

The qualitative research approach also provides more in-depth and comprehensive information as data will be gathered through open-ended questions during interviews. This approach gives study participants more room to explain issues about the implementation of the programme and also allow the researcher to explore areas as they are discovered and developed during the interview session. It removes restriction on participants as to where they should focus.

Hence the adoption of the qualitative approach in the study of the implementation of the neglected tropical diseases programme at the three levels of healthcare in Ghana ensured that an in-depth understanding was obtained through a deductive process (Creswell, 2014).

3.3 Study Design

A case study design was employed to study the implementation of the neglected tropical diseases programme under the GHS. A case study is a research design employed to obtain an in-depth understanding of a phenomenon within a context. It investigates and explores issues

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through the lens of a deep contextual analysis and dwell on a limited number of events and how they relate (Yin, 2014). Crowe et al. (2011) also noted that a case study helps in the exploration of a phenomenon and provides detailed information and insight.

According to Yin (2014), case studies are divided into three main categories namely; descriptive, exploratory and explanatory case studies. Descriptive studies are carried out to describe a phenomenon naturally as occurring within the data. Thus, it tends to describe the data as they occur and often in a narrative form. The exploratory case study sets to vividly explore an issue in the data obtained. It creates an opportunity for further enquiry into a phenomenon and usually used as a baseline or pilot study. The explanatory case study sets to examine data obtained at a surface and deep level in order to gain a deeper understanding of a phenomenon.

This study focused on a descriptive case study in order to describe the implementation of the neglected tropical diseases programme within a context in order to create an understanding of the various determinants of implementation, challenges and influence of stakeholders.

3.4 Study Area

The study was conducted at the neglected tropical diseases programme, Greater Accra and Eastern regional health directorates, Ga West municipality in the Greater Accra Region and the Lower Manya Krobo municipality in the Eastern Region of Ghana. These areas were selected conveniently after a scoping review, to reflect peri-urban and rural balance, co-endemicity of two (2) or more neglected tropical diseases, proximity during the peak of the Covid-19 pandemic and restrictions placed in some parts of the country.

The Ga West Municipality is currently one of the 29 Metropolitan, Municipal and District Assemblies (MMDAs) in the Greater Accra Region with its capital being Amasaman (Ghana Statistical Service, 2014). The municipality lies within latitude 50º 481North, 5º 291 North and

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longitudes 0º 81 west and 0º 301 west respectively and occupies a land area of 284.01sq km. The municipality is zoned into six zonal councils namely Pokuase, Mayera, Ofankor, Ayikai Doblo, Kotoku and Amasaman. The population according to the 2010 census was 217,091 with a growth rate of 3.4%. The population is mainly concentrated along the peri-urban areas of the municipality particularly on the border with the Accra Metropolis and Ga East District (Ghana Statistical Service, 2014). The Municipality is divided into five sub-districts, namely Amasaman, Oduman, Kotoku, Pokuase and Ofankor. There are approximately 39 different health facilities made up of government and private facilities that provide curative and preventive health services. The municipality has the co-endemicity of lymphatic filariasis, soil transmitted helminthiasis and schistosomiasis (ESPEN, 2018).

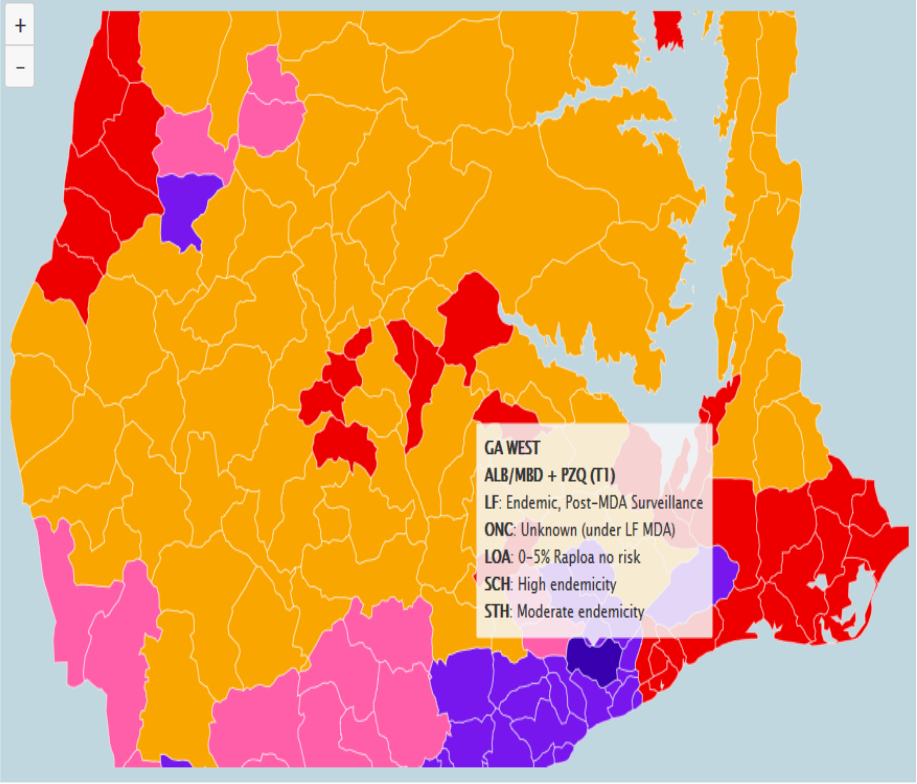

Figure 2: Map showing endemicity of NTDS in Ga West

ESPEN (2018)-Data display of country profiles (Ghana)

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The Manya Krobo Municipality to the north, shares boundaries with Upper Manya Krobo, to the south with Dangme West and Yilo Krobo, to the East, Asuogyaman and to the west, Yilo Krobo Municipality. The municipality covers an area of 304.4 square kilometers, with a population density of 293.2 persons per square kilometer (Ghana Statistical Service, 2014b)**.** The capital of the municipality is Odumase. The 2010 population census estimates the population of Lower Manya Krobo Municipality to be 89,246 which is 3.4% of the total population of the Eastern Region (Ghana Statistical Service, 2014b). The municipality has the co-endemicity of soil transmitted helminthiasis and schistosomiasis (ESPEN, 2018).

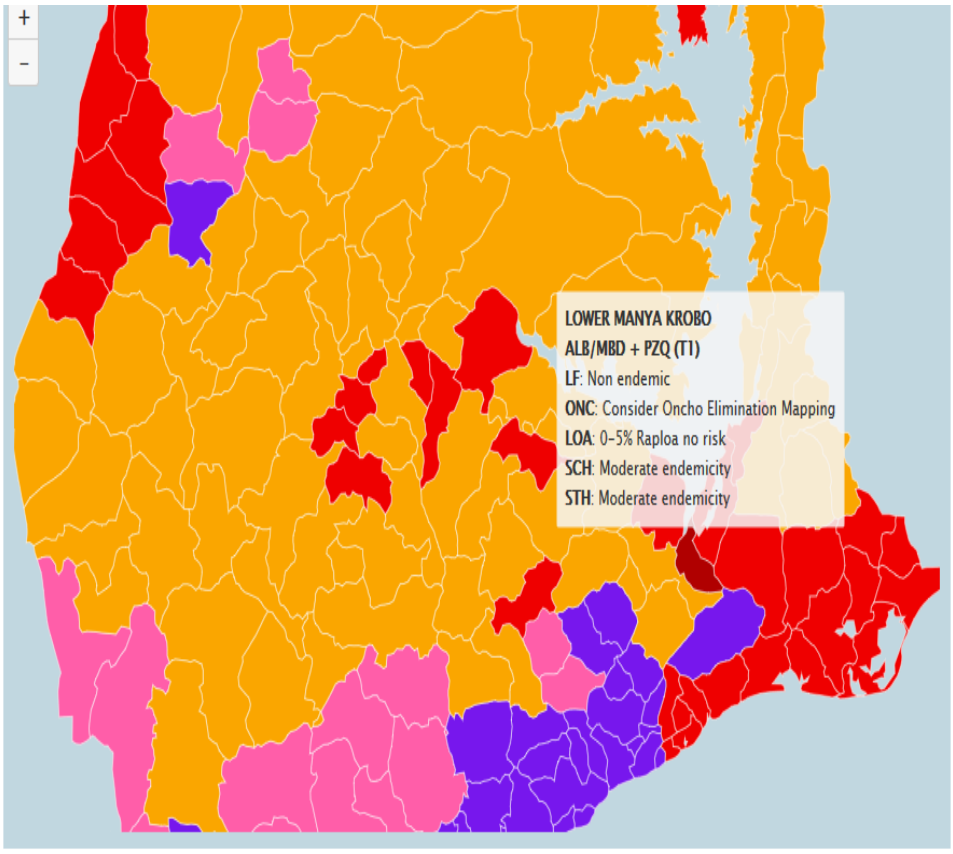

Figure 3: Map showing endemicity of NTDS in Lower Manya Krobo

Source: ESPEN (2018)-Data display of country profiles (Ghana)

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3.5 Study Population

According to Trochim and Donnelly (2001), the population of a study translates to the accumulation of all elements from which samples are drawn. The population covers all items that poses the characteristics the researcher wishes to study.

For the purposes of the study, the study population consists of programme officers, disease control officers and staff of the Ghana Health Service at the national, regional and district levels who play various roles in the implementation of the neglected tropical diseases programme in Ghana.

3.6 Inclusion and Exclusion Criteria

3.6.1 Inclusion Criteria

All programme officers, focal persons and staff directly responsible for the implementation of the NTD programme of the Ghana Health Service national regional and district levels.

3.6.2 Exclusion Criteria

All programme officers and staff of the Ghana Health Service who are not under the NTDs programme or do not carry out any direct activity in the implementation of the programme.

3.7 Sampling Procedure

A combination of purposive and snowballing techniques (non-probability) were employed to recruit participants at the three levels of the Ghana Health Service, who had relevant knowledge and experience in the implementation of the NTDs programme. Respondents were identified from the national NTDs control programme, the Greater Accra and Eastern Regional Health Directorates, Ga West and Lower Manya Krobo district health directorates since the various health directorates are responsible for implementation at the lower levels. Purposive sampling is defined as the selection of participants based on their anticipated richness and relevance of. information in relation to the study's research questions (Yin, 2016).

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Various heads of disease control were purposively sampled after which the heads were made to identify officers who were directly engaged in the implementation of the NTDs programme at the three levels of healthcare through a snowballing technique. These categories of respondents were sampled because they have first-hand information on implementation of the NTDs programme in their respective areas.

In order to obtain non-biased information relevant to the study objectives, a total of 18 participants from the three levels of healthcare in the public health sector were sampled based on their direct participation on the programme till saturation Saunders et al. (2018).

Table 3: Summary of Respondents Interviewed

Organizations/Units	No of participants
National Programme Officers	6
Regional Heads of Disease Control	2
Regional NTDs Focal persons	2
District Heads of Disease Control	2
District NTDs focal persons	2
District Disease Control Officers	4
Total	**18**

Source: Field Data (2020)

3.8 Data Sources

The main source of data was primary data from interviews. However, the review of literature and masterplan of NTDs contributes to secondary information obtained. Primary data for the study was collected from respondents through interviews. The primary data makes available first-hand information on the research area from respondents.

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3.9 Data Collection Instruments

A semi-structured interview guide was designed to collect data from respondents of the study. The interview guide was adapted from the WHO's methodology for evaluation of NTD programme (Asaolu et al., 2008) and checked against available literature to ensure there was no ambiguity. The guide has been applied in a mid-term evaluation in Nigeria (Meredith, Kabatereine, & Tesfazghi, 2016). Semi-structured interview guides enable the interviewer to stay focused while probing further into the objective of the study (Alshenqeeti, 2014). The interview guides were designed to cover the level of health care and the scope of operation of all levels of analysis in this study.

3.10 Data Collection Procedure

A systematic approach was used in the collection of data. An introductory letter was obtained from the department of Public Administration and Health Services Management to the headquarters of the Ghana Health Service where clearance was given, and further letters were written to introduce the researcher to the regional and district structures. Face-to-face key informant interviews were conducted by the researcher who was the interviewer and an assistant who acted as the note taker and recorder. Interviews were started after the study was explained and consent taken from the individual participants. In some few cases, telephone interviews were conducted, where possible.

Interviews were conducted in English at the time, day and venue chosen by the participants and lasted between 30-45 minutes. A tape recorder was used to record proceedings of the interview after taking consent. These recordings were used as references and compared to notes that were taken during the KI interview to clarify issues that were ambiguous. Recordings were then played to respondents immediately to validate the content after the interview, transcribed and typed into Microsoft word document on a computer protected by password.

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3.11 Data Quality Assurance

3.11.1 Research Assistant

To ensure data quality, a research assistant was employed and trained by the researcher in order to assist with data collection and transcription. A 2-day intensive training was organized for the research assistant. The training involved a comprehensive teaching on key concepts and methods regarding the study.

3.11.2 Pretesting

Data collection tools were validated by discussing with other programme officers on vertical health programmes in Ghana who did not fall under the NTDs programme. This was conducted to identify ambiguous and complex questions and ensured that ambiguous questions were modified to enhance clarity on the interview guide.

3.11.3 Credibility and Trustworthiness

According to Maxwell (2009), a qualitative study stands the risk of bias and reactivity. Bias deals with the extent to which values, theories and developed preconceptions may influence the data collection process through to analysis. In addition, reactivity occurs when the researcher has strong influence and greatly affects data gathered. In order to ensure validity, the researcher ensured that data from interviews were transcribed verbatim in order to avoid the use of scanty data.

Credibility pertains to the confidence in the truth of the findings and the right representation of what the data is supposed to represent. Patton (2002) noted that trustworthiness emanates from the systematic processes of collecting and analyzing the data to explain the phenomenon completely and accurately.

In order to ensure credibility and trustworthiness, the study employed the triangulation of data sources, ensured the existence of audit trails in forms such as audio recordings and transcripts,

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clarification of bias through researcher self-reflection and member checking of data and interpretations (Creswell, 2014; Yin, 2014).

3.12 Data Processing and Management

The data gathered from all the interviews were transcribed, typed out and stored in files created on a personal computer with a password protection to prevent access by unauthorized persons. Transcription was done by the researcher and assistant after which transcribed data were compared to reach a consensus on the accuracy of content.

Printed versions of the transcribed data were placed in a safe cabinet under lock and key. All data collected will be kept for a period of five (5) years after which they will be destroyed. Access to all data was available to only the researcher and supervisors for purposes of ensuring confidentiality.

3.13 Data Analysis

Data collected were analyzed explicitly using thematic analysis. Thematic analysis is explained as a method of "identifying, analyzing, and reporting patterns within a data" (Braun & Clarke, 2006 p.6). Thematic data analysis which consists of reduction of data, display of the data and drawing conclusions or verifying data (Miles & Huberman, 1994) was employed during the analysis.

Data reduction involves the process of selecting, focusing, simplifying, abstracting and transforming data as obtained from transcriptions and field notes in order to ensure manageability and intelligibility. Data display is when the data is organized and compressed to ensure easy drawing of conclusions. It enables data extrapolation for discernment of systematic patterns and interrelationships. Drawing conclusions and verification which is the third step involves assessing the analyzed data and their implications for the study questions. It also

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involves ensuring the meanings emerging from the data are tested for plausibility and confirmability (Miles & Huberman, 1994).

Textual data from transcription was read through again after which coding was done and sub-themes and patterns generated with the help of NVivo 11. All themes were generated from the data collected and reported under each objective. All sub-themes generated were checked manually to ensure its meaningfulness to the study.

3.14 Ethical Considerations

All literature and empirical parts of this study were conducted within the norms of ethical research. The study received ethical approval from the Ghana Health Service Ethics and Review Committee (GHS-ERC 065/11/19). Introductory letters were taken from the head of department of Public Administration and Health Service Management and supervisors to authorities of all units involved for authorization before commencing data collection.

The objectives of the study were explained to all participants. All participants who consented were enrolled in the study and interviews conducted per allocated time and standard protocols. Respondents were assured of the study being used for academic purposes only and confidentiality of information. Hence personal details were not indicated on study instruments. Information and voice recordings will be stored on computers with passwords. Access to data will be limited to only the researcher and research supervisors. Identity of participants shall not appear or be mentioned in any report that might come out from this study. Consent forms were given to all participants to be filled and signed prior to the start of the interview. The study did not expose the participants to any known risks. The researcher declares no conflict of interest in the study.

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3.15 Chapter Conclusion

This chapter presented the various methods involved in the entire research process. This included that study design and approach, description of the study area, sampling techniques employed, data collection instruments and procedures. The chapter also explained the methods of data analysis and presentation and the ethical principles followed to arrive at all findings in the study.

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CHAPTER FOUR
PRESENTATION OF FINDINGS AND DISCUSSION

4.1 Introduction

This chapter presents results from the research and methodological processes. The results are presented according to the study objectives and themes generated from the data. The determinants of implementation success and barriers are reported to reflect the constructs of the CFIR in which they fall.

4.2 Determinants of Implementation Success

Findings from the study indicate that factors that determine implementation success of the NTDs programme juxtaposed to the CFIR are donor support and community acceptance reflecting the outer setting, education and training and management commitment and reliable health structure reflecting inner setting, integrative nature of the programme and clear roadmap on NTDs reflecting programme characteristics, programme resources and partnerships and inter-sector collaboration reflecting both outer and inner settings.

4.2.1 Donor Support

Respondents at all levels acknowledged the immense contribution of donors as a major factor driving the success of implementation of the NTDs programme. To explain this, officers noted that all programme support in terms of financial resources and intervention drugs are fully sponsored by external/international donors. Also, most of the technical and field work in relation to NTDs are solely sponsored by donors/agencies. In the CFIR this would be classified as a theme at the level of the outer setting.

> *"We cannot survive without our external donors they are the main supporters of the programme; it is their money and they ensure we have the resources"*
>
> National programme officer (3)

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"I will say one thing that facilitates implementation is the financial support we get from the external people. Without them the programme will not stand"

National programme officer (1)

These donors make available the needed funds to ensure implementation and to a large extent sustainability of the programme. The donor agencies/partners referred to by respondents were identified to include foreign governments, non-governmental organizations, world health agencies, bi-national co-operations and agencies, civil society groups for NTDs and development co-operations. These were highlighted in the comment that;

"Well, the efforts being put in by the donors and partners. I mean the foreign agencies, Non-Governmental Organizations and also UN and WHO. It is what is making a head way in terms of funds and medicines to run the programme"

National programme officer (6)

Despite majority and the main donors being external partners, officers at the lower levels also noted that, donors at their levels sometimes include local agencies who have interests in NTDs and also whose work affects communities where NTDs are endemic. A regional officer noted that:

"Over here, we also have some local people. Like VRA, they contribute to Schistosomiasis control. Well this is because of the Volta river and the communities around it"

Regional Disease Control Officer (3)

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Respondents were unanimous on the benefits of donor support and noted that these support in terms of financial and technical resources were the main drivers of the programme from the national to the district level.

4.2.2 Community Acceptance

Community acceptance and mobilization emerged as a theme across the national, regional and district levels as a key determinant of implementation success as far as the programme was concerned. Programme officers noted that, since the commencement of the programme, the success of community-based activities, mass drug administration and sustainability have heavily depended on the acceptance and commitment of community members and their leaders. In the CFIR this would be classified as a theme at the level of the outer setting.

> *"So, if you say take the medication and they say we won't take it, what else can you do. So, the community accepting and knowing that we have such a challenge and these guys have just come to support us, they owning the programme and leading the way makes the work much easier"*
>
> National Programme Officer (5)

The level of acceptance of a particular community that the diseases exist and requires a concerted effort for control has been a great tool used to advance success in the implementation of the NTDs programme. Respondents added that, acceptance of the programme increases the understanding of beneficiaries in relation to signs and symptoms, diagnostic investigations, preventive measures, case management and impact on individuals and the economy.

> *"It is about the people's acceptability. The willingness of the people at the district and communities to help support. So far their small support is what we are sitting on"*
>
> District NTDs focal person (2)

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On how officers ensured acceptance of the programme in the communities, it was reported that, engagement of the local authorities and their understanding created room for adequate planning and tailoring of activities to the context of the people considering their social determinants of health and needs. It also empowered community members and leaders to build capacity and reorient decision making and implementation towards a bottom-up approach.

> *"we go to the chiefs and opinion leaders. You see, they are the ones the people so trust so when they talk to them that these people are coming, they understand and make our work easy"*
>
> District Head of Disease Control (2)

To support this, an officer shared an account of a team being chased out of a community due to improper community entry, poor information flow and lack of leadership engagement. This was to buttress how vital community acceptance has been to the programme.

> *"I remember a team was going to take samples for onchocerciasis at dawn. They had to be chased out because the people did not know. They were accused of taking blood for rituals. It is like that"*
>
> Regional NTDs focal person (1)

4.2.3 Education and Training

Upon further enquiries about the factors that ensured implementation success, data from respondents at all levels showed that planned and periodic education of beneficiary communities on NTD interventions served as an important determinant of programme success. Due to the vast knowledge gap and lack of awareness of community members on the diseases classified as neglected, constant education helps them understand the causes of diseases, its preventive measures and also helps communities especially affected communities appreciate

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the impact and burden of these diseases. In the CFIR this would be classified as a theme at the level of the inner setting.

> *"…and organizing training for the communities is one of the best strategies. At least it makes them understand what we are doing"*
>
> District NTDs focal person (2)

A programme officer further explained that, the health education also ensures that people are equipped with the requisite knowledge on signs and symptoms of various neglected tropical diseases and preventive measures. Other respondents added that, the education helps in easy case detections and enhancing reporting of changes including complications. Additionally, an officer noted that in some instances, the health education is complimented with counselling sessions. Almost all respondents reported that, training of programme officers, community volunteers and other stakeholders involved has been also very instrumental in ensuring effective implementation. When officers are constantly trained on the programme strategies as well as contemporary methods of managing health programmes, it equips them with adequate knowledge skills on the most appropriate ways of implementation. Also, the training ensures that officers are updated on evidence-based practices as well as learning from other countries who have made major impact.

> *"One thing that has helped us are the trainings we do across the country. We hold different trainings for our staff and volunteers. It is like refresher training"*
>
> National programme officer (5)

> *"… we learn about new activities. The volunteers to learn their part. Because sometimes the volunteers keep changing"*
>
> National programme officer (2)

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It was further noted that, training of programme officers is carried out differently at the various levels of the health system in a cascaded form. Thus, National officers are usually trained by external partners and consultants. Regional level trainings are organized and facilitated by the national programme where knowledge gained from national training is passed on using various methods of teaching and learning. Similarly, focal persons at the district levels are then trained by regional officers on a rolling basis gradually to the community health workers and volunteers.

> *"We do a cascaded training from the national TOT to the regional TOT to district and volunteers training"*
>
> National programme officer (1)

Also, to stress the point of education and training at the district level, a respondent mentioned that training of teachers who also serve as volunteers he had a positive impact under the school health programme and had been one of their success stories.

> *"Right now, hmmm it is our teachers in the school that have made the programme work. And we train them on what they have to do".*
>
> District NTDs focal person (2)

4.2.4 Management Commitment and Support

Respondents reported that the support of management of the national programme, regional and district health directorates have also contributed positively to ensuring effective implementation. They noted that with the structure of the programme, it would have been impossible to implement if management do not show maximum support. Management actions such as prompt decision making, timely signals to sponsors, procurement of necessary logistics and support for the mission and vision of the programme were mentioned. The commitment of

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leadership to positively influencing public health at the local level has played a major role in continuous advocacy and support towards specific objectives.

> *"When it comes to people, I can only say our management are the ones making things work. It is because they are interested in the programme's mission and vision"*
>
> Regional NTD focal person (2)

The constant communication among leadership, administrative support, sharing of knowledge innovation and vision of the management has proved to increase the chances of meeting the programme objectives. Respondents further clarified that their classification of management did not include political figureheads. These were highlighted in the statement of a respondent that;

> *'Sometimes with the decisions our directors in the office take you can see they really want the thing to work. They do everything to make sure things are implemented well"*
>
> District Disease Control Officer (3)

> *"Management, I don't mean the political people, I mean the programme manager and other consultants. They are part of the reasons why implementation is effective"*
>
> National Programme Officer (2)

Also, it was captured that the efforts of management to identify gaps and challenges in intervention implementation itself are a major boost to all officers and motivation for all implementing bodies. They also form action teams and working units to respond to peculiar situations. Respondents noted that the support goes a long way to ensuring that every officer contributes more and has been one of the major driving forces for meeting goals and objectives. In the CFIR this would be classified as a theme at the level of the inner setting.

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4.2.5 Reliable Health Structure

The governance and service delivery structure of the public health sector in Ghana was reported as one of the key elements ensuring effective implementation of the NTDs programme. Respondents reported that organizational structure of the Ghana Health Service which is the state agency under the Ministry of Health responsible for implementation of the NTDs programme has been of immense benefit to the programme. This theme covered both leadership and service delivery structure. In the CFIR this would be classified as a theme at the level of the inner setting.

> *"right, one of the factors I must say is that we have a reliable health structure in the country. It is the two. leadership and service delivery"*
>
> National Programme Officer (5)

The main organizational levels of healthcare mentioned were the national, regional, district and sub-district levels. Respondents noted that the degree of autonomy and oversight given to the above levels ensures that there is adequate decision making and communication through the health structure. It was noted that this structural differentiation birthed the public health division which has special oversight over public health and disease control programmes in the country. This ensured that adequate attention is given to specific vertical and non-vertical public health interventions such as the NTDs programme under the disease control unit.

> *"You see the way we work in Ghana Health Service, there are structures in place for everything. I think that is one thing that has made us achieve most of our success. We just follow the structures"*
>
> National Programme officer (1)

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In order to juxtapose the importance with the mass drug administration, a respondent gave a description that the NTDs programme does not recruit any new people for work. It sends adequate instructions through the health system structure to all regional directorates who further inform their districts of the intended programmes. This ensures preparation for the national teams and also ensures that disease control officers who are familiar with the local settings are engaged to make it effective.

> *"We don't just get up and go. Like we are going to the northern region. The national informs the region for them to also notify the district through letters. a team will be coming to do ABCD kindly give them your support. That is what works"*

National Programme officer (4)

4.2.6 Integrative Nature of the Programme

Upon further analysis of data from the interviews, it was clear from respondents that the integrative nature of the NTDs programme in the country has been a contributing factor to the successes achieved. It was captured that the harmonisation of diseases classified as "neglected" under one umbrella body with same targeted efforts has ensured a cost-effective and more efficient ways of achieving the objectives of control and elimination using little resources. In the CFIR this would be classified as a theme at the level of the programme characteristics.

> *"At first a lot of the diseases were having their own programmes. But now we have a lot under one programme and it is helping since same resources are used to achieve same purpose"*

National Programme Officer (4)

It was stated that the programme by its nature targets multiple diseases through joint similar approaches. In addition to these, some respondents mentioned that the integration has brought

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the opportunity of having a clear and readily available data obtained from the integrated diseases surveillance and report sheets available at all levels and entered into the District Health Information Management System (DHIMS). This was mentioned as a system that reported on all diseases reported within the health system which enhances understanding and appreciation of the burden of disease. To support the vital role the nature of the programme has played, a respondent indicated that;

> *"The level of integration of the programme into the health system is now high. So now we enter our data into the DHIMS. It is there for everyone to access. So now decision making is easier"*
>
> District Head of Disease Control (1)

Respondents added that the integration of activities within the programme into the main stream health services structure has been beneficial to ensuring case identification and management. The engagement of various health facilities from the CHPS level to tertiary levels have ensured that neglected tropical diseases are being identified and managed at all levels of healthcare. It also ensures that more severe cases are effectively referred through the referral system. Some respondents mentioned that, some hospitals have specially trained officers in charge of NTDs who compliment the activities of various disease officers and NTDs control focal persons in the districts.

> *"In the district hospital, we have some health workers who pay special attention to managing some NTDs cases. So, they also help in clinical surveillance"*
>
> District Disease Control Officer (4)

> *"You see at first we let them come to the health directorate when identified. But now even the CHPS centres have been empowered to give programme drugs. They have to go through your community facilities first"*
>
> District NTDs focal person (2)

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4.2.7 Clear Roadmap

The role of a clear roadmap and a plan for the NTDs programme came out as an essential factor for implementation success and was stressed more at the national level. Respondents noted that the existence of a clear policy guideline and strategic plan from the international level led by the World Health Organization through to the country level has greatly directed the actions of the programme and helped in implementation. They noted that it clearly spells out the objectives of the NTDs programmes, and methodologies for achieving such objectives. In the CFIR this would be classified as a theme at the level of the programme characteristics.

> *"Our work is guided by some guidelines that have decided all what we have been doing. WHO has a whole document on NTDs so our public health division also follows that and adapt it to work for the country"*
>
> National Programme Officer (3)

It was further noted from the interviews and documents analysis that, the NTDs masterplan expressly provides a country specific situational analysis and defined disease hotspots for all NTDs in Ghana with implementation plans and strategies.

It also outlines and defines the specific roles and responsibilities of all stakeholders and spells out the strategies for integrations, collaboration and partnership. Participants at the national level added that, in deciding upon yearly goals and intra-programme activities, management draws indebt information from the masterplan to guide decision making. In effect, it was captured that, the presence of these roadmap/masterplan and ensured a sustained effort towards prevention, control and elimination of the NTDs in Ghana. A thorough analysis of the Masterplan for Neglected Tropical Diseases Programme Ghana (2016-2020) revealed that, the document provides strategic direction for the NTDs programme based on financial and geographical accessibility, quality of care, partnerships and equitable distribution of resources

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and efficiency. Further analysis of the document showed the comprehensive nature of the masterplan. Contents included a situational analysis to provide scientific basis for the programme, specific and well written objectives and programme activities with time limitations to enhance monitoring.

Though the document was widely available at the national level, it was emphasized at the regional and district levels that, though being aware of the masterplan and how it controls activities of the programme it was not readily available. They also do not select what specific activities should be implemented at a particular time since that was solely the responsibility of the national programme. However, it served a reference document for all from time to time.

> *"There plan is there, we also draw our yearly plan for NTDs based on what the national sends to us. Sometimes we even draw ours and await their own. It has helped us plan well"*
>
> Regional head of Diseases Control (1)

> *"We have all seen the masterplan but you can't get one now. We draw our own too because it is not all the diseases we have here. We target just the ones here"*
>
> District NTDs focal person (1)

4.2.8 Programme Resources

In the absence some amount of resources, it was noted that it will be impossible for the programme to meet its key deliverables. This was a consensus among all the respondents irrespective of the level of implementation. Results from the interviews indicate that the success of the NTDs programme has been pivotal on the availability of key resources. It was mentioned that without the essential resources, it would be difficult to achieve set objectives. The availability and timeliness of resources was reported at all the levels of implementation as

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a major facilitator of implementation success. In the CFIR this would be classified as a theme at the level of both the inner and outer setting.

> *"Ow even though we do not get all that we want, I think the funding we are getting now has played a major role. Else we won't be doing anything"*
>
> National programme Officer (2)

In breaking down the resources instrumental to implementation so far, financial resource was the most mentioned among all respondents but also mentioned were capital and human resources. Respondents at the national level reported that financing of the programme was mainly from external partners and non-governmental organizations dedicated to the control of NTDs. Their provision of funds to the programme has ensured that the programme is able to meet the costs associated with various processes. This involves procurement of drugs for mass drug administration which is a major activity in the control of diseases. The availability of financial resources has also facilitated the remuneration of community volunteers to motivate them for continuous work.

> *"All activities we have been doing is when they bring the funds. So far, they have been doing well on bringing some money and that one is a big push for us"*
>
> Regional NTDs focal person (2)

Respondents explained that adequately skilled officers have been the backbone effective delivery. The existence of well-trained public health officers and clinical officers such as medical doctors and laboratory scientists on the programme ensures that all aspects of health are covered. Also mentioned are the well-trained community volunteers who were responsible for community outreaches and home services.

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"... even the officers here are one of the reasons things are working. At first officers were not assigned to only NTDs but now our human resource is okay"

National Programme Officer (4)

4.2.9 Partnership/Inter-sector Collaboration

Analysis if data from the interviews identified partnerships and collaborations among various sectors in the country as a factor that ensures continuous and effective implementation of the NTDS programme across the country. It was established that programme managers were aware of factors such as economic situation, social environment, education, politics, income and social position that greatly influences the health and uptake of services at the individual and community level. The collaborations were in the forms of forming committees with representation from all identified sectors within and outside the health setting. In the CFIR this would be classified as a theme at the level of the outer setting.

"The links we have with some other sectors are good. We partner with some of them because we know that politics, position and other things are important especially when doing Mass Drug Administration"

National Programme Officer (4)

Additionally, respondents noted that in order to adequately reduce the burden of the NTDs, it was necessary to engage other stakeholders because health was not being driven by the health sector alone. The programme's collaboration with other sectors such as education, water and sanitation, Metropolitan, Municipal and District Assemblies, state agencies, other vertical diseases control programmes and community leaders ensure that there is sustained awareness and also co-benefits as a result of their duties played individually and together.

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"Our partners in this region help us make things easy and get the programme in line. The Education Ministry helps our school health programme"

Regional Head of Disease Control (1)

These collaborations were present across all national, regional and district levels of implementation although more collaborations were reported at the national level as compared to the lower levels. However, each level developed some form of engagement with particular groups for mutual benefit. Some benefits reported by respondents include enabling officers and volunteers have easy access to target groups, ensuring that adequate resources and information relating to the sanitary causes of diseases were addressed, poverty which was a central issue of NTDs tackled, issues of stigmatization dispelled by community authorities among many others.

One of the major examples shared by respondents at the district level was the programme's partnership with the School Health Education Programme (SHEP) under the Ghana Education Service. This programme was in place to spearhead implementation of beneficial health-educational programmes in the educational sector of Ghana. The NTDs programme collaborates with this unit to carry out its school health and MDA campaign. Respondents noted that, the existence of this partnership makes it easy for obtaining necessary clearance, conducting training and administration of programme drugs to school going children.

Secondly, the collaboration with the Ghana School Feeding Programme (GSFP) has ensured that school children are provided with adequate meals to enhance their nutritional status since these NTDs have negative impacts on the nutrition and intellectual capacity these children. It also ensures that food is made available for children during drug administration periods to prevent side effects from the strength of the drugs.

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"Over here, the SHEP coordinators make things easy for us. Also, they are under the education ministry, and you know that is government. So, they make things easy for us to do"

District NTDs focal person (1)

Other collaborations were with the Ministry of Sanitation and Water Resources and the MMDAs to provide adequate sanitary conditions and safe water to communities in order to tackle water related NTDs such as Lymphatic Filariasis, Soil Transmitted Helminths and Onchocerciasis. This is in line with the endorsement of the WHO that access to safe WASH services are instrumental to the prevention, intensified control, management and elimination of NTDs.

A striking partnership reported by a district officer was one with the traditional and spiritual healers in the communities. This was in place due to the knowledge of the health seeking behaviour of community members. Most of the people with these conditions resort to traditional and spiritual healers as the first contact for cure due to the myths of spirituality as the cause of diseases. Hence this collaboration made it possible for such people to be reported to the various district officers when identified by the traditional healers. However, this partnership though existent has its own challenges.

In addition to these, respondents added the support of local stakeholders such as the community leaders, Volta River Authority, heads of health facilities as forms of collaborations. They ensure that, implementation is smoothly carried out in the respective constituents in order to meet programme objectives.

"It's the collaboration with Ghana Education Service, we don't do things in isolation. We work with them because they make it easy with schools and drugs are involved"

Regional Head of Disease Control (2)

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"you know it is the teachers who do the drug administration when it comes to the administration under the school-based programme"

A District Disease Control Officer (3)

4.3 Challenges of Implementation

The study sought to find out the challenges of implementation of the NTDs programme. Data from interviews juxtaposed with constructs of the CFIR showed that inadequate resources which reflects both inner and outer settings, dwindling volunteerism, poor social mobilization, competing health programmes and weak government/political support reflecting outer settings, and weak monitoring and supervision reflecting implementation process constructs.

4.3.1 Inadequate Resources

Findings from the interviews revealed that though the programme receives funding from key external partners and some local agencies, the inadequacy of the funds and other major resources have generally been a challenge to effective implementation. It was a consensus among all respondents that in addition to the inadequacy in financial resources, other essential materials for work such as vehicles, drugs which as essential in preventive chemotherapy and laboratory investigative materials such testing kits and chemicals. In the CFIR this would be classified as a theme at the level of the inner and outer setting.

"Many a times we face issues of funding in some aspects of our activities. I mean those that we train and so drug administration. I will say it's not the best"

A National Programme Officer (1)

In addition to the inadequacy of funds and materials, the delays in the release of funding and some essential materials from donor partners has also contributed to the inadequacy of resources. Some respondents added that though activities are being sponsored, funds are sometimes not released on time. This causes a problem where some activities are already

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carried out with the minimal budget available before money is made available later in the fiscal year. It was also reported that, one major cause of this problem was the multiple partners sponsoring a particular activity and the differences in their spending periods. Hence, though a budget is drawn with the proposed funds of all supporting agencies, some are released earlier than others hence leaves a deficit in the budgetary allocations.

> *"When they bring the funds, we do the activities. But most times we do not have all the resources we need. We can budget for things but they won't happen because no money"*
>
> District NTDs focal person (1)

> *"we use different sponsors for budget but because they have different spending periods, the monies that come same time. So always the money is not enough"*
>
> National Programme Officer (2)

4.3.2 Dwindling Volunteerism

Respondents on the implementation challenges noted that in order to ensure wide access to service under the programme, the concept of volunteerism was adopted to empower community members to own the programme. However, across all the levels of implementation, respondents reported that the utilization of community volunteers in recent times for programme activities has dwindled. In the CFIR this would be classified as a theme at the level of the outer setting.

> *"Now the volunteerism is going off, so they expect to be paid. But previously when they understood it as volunteering, that time they were even in touch with us"*
>
> District Head of Disease Control (2)

It was explained that as the economy of the country changes, community members who hitherto willingly decided to volunteer to support implementation of the neglected tropical diseases

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programme within their communities start to make greater financial demands. This as reported by some respondents was not in line with the concept of volunteerism. A respondent shared the sentiments of volunteers that in the previous years, volunteers were given some priorities in the communities in addition to small remuneration from the programme. However, such financial demands by volunteers have increased which cannot be afforded by the budgetary allocations of the programme. Also, priorities given to volunteers in communities which include exemption from communal labour, free labour on farms among many others have since been non-existent coupled with the inadequacy of logistics and lack of motivation. Hence the withdrawal of many community members from volunteering in the implementation of the programme.

> *"Now as the name connotes, it supposed to be voluntarism but often in recent times they don't see it as voluntarism again, they see it as a paid job. They are asking for all kinds of things and you can't blame them"*
>
> National Programme Officer (4)

Respondents noted that this poses a great challenge to the programme since in most endemic communities, the formal health service do not have the adequate number of skilled health workers to carry out all activities especially moving from house to house to ensure that everyone is covered.

> *"some who used to volunteer have very low motivation it's because they see it as additional work load for them to perform. In a way they expect some motivation which doesn't come"*
>
> District NTDs Focal Person (1)

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4.3.3 Competing Health Programmes

Further enquiries into the implementation challenges revealed that the presence of other vertically implemented health programmes in the health system was sometimes a challenge to the effective community level implementation of NTDs programme. Some respondents explained that with the existence of programmes such as the National Malaria Control Programme (NMCP), National Aids Control Programme (NACP) which are equally implemented by the same officers at the regional and district levels usually draws more attention and are considered more well-funded programmes. This leads to the neglect of the NTDs programme in most areas until such competing programmes are fully implemented. In the CFIR this would be classified as a theme at the level of the outer setting.

> *"The way NTDs people come, the same way malaria and HIV/AIDS too and we are the same officers, so attention is given to those who have the funds available"*
>
> Regional Head of Disease Control (1)

Respondents added that it is also a contributory factor to the dwindling volunteerism on the neglected tropical diseases programme since other vertical programmes provide higher remuneration packages. Also, community members clearly see the impact of diseases such as malaria and HIV/AIDS more than the subtle impact of diseases termed neglected due to poverty. In terms of amount, a respondent reported that an amount of 100 Ghana cedi was usually given to community-directed distributors (CDDs) who are volunteers for a round of mass drug administration which involves multiple whole week visits whiles other programmes he noted provided more to these volunteers.

> *"…we give about GH₵ 100 for their services but when they compare to what they receive from malaria and HIV which is giving them quite a substantial amount, then they think someone is stealing their money"*
>
> National Programme Officer (2)

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Despite this report, a respondent added that though the other programmes could be competing, usually at the lower levels some funds are diverted from these programmes to the NTDS programme when there is an excess.

4.3.4 Poor Social Mobilization

On enquiries about the challenges of implementation especially in the communities, findings from the interviews captured poor social mobilization and ownership of the programme as a major challenge to effective implementation of the NTDs programme. They noted that across all levels, the synergistic power of all social stakeholders has been poor but poorer in the communities. Some respondents added that the mobilization of the strengths of all groups who are influential in the society was needed in raising awareness and delivering programme related resources and services to identified and affected communities. In the CFIR this would be classified as a theme at the level of the outer setting.

> *"There are some challenges that are operational, with acceptability of the programme in some areas and mobilization"*
>
> National Programme Officer (5)

Respondents reported that this challenge has led to limited awareness on neglected tropical diseases and its impact on affected communities, reduced coverage, poor community ownership and acceptance among some affected communities. Further enquiries on the reasons for poor social mobilization in communities revealed the lack of awareness, poor community engagement and lack of understanding of the burden of NTDs among communities as some reasons for poor social mobilization. A respondent noted;

> *"You see, the issue is that the people are not aware of some NTDs or are not aware how it directly affects them"*
>
> District NTDs focal person (2)

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4.3.5 Weak Governmental/Political Commitment

All respondents at the national, regional and district levels cited the inadequacy of commitment from government as a challenge to implementing strategies under the programme and meeting programme objectives. Though earlier reported that the NTDs programme was under the Ghana Health Service which is fully a government agency, respondents especially at the national level revealed that government support only covered salary of officers on the programme and office space. However, all other activities in relation to implementing the programme do not receive any support from the government and purely runs on donors/partners' support. In the CFIR this would be classified as a theme at the level of the outer setting.

> *"Lack of governmental support. When I say governmental, I want to admit that government takes care of our salaries and infrastructure as in our offices but you can see the financial commitment is not there"*
>
> National Programme Officer (6)

This they reported gives the government and technical officers little influence on the key objectives and implementation plan of the programme. Additionally, respondents noted that the absence of political will was a challenging factor. As compared to other diseases reported in the country, neglected tropical diseases receive very little attention by political powers. Most political parties or governments do not consider NTDs as part of their manifestoes as they do fir other diseases. Hence the further neglect when such political powers are in control of government resources.

> *"If I will add, the way the government has been promising so many things during campaign about other programmes, NTDs does not have that. The big people do not see it as a problem since it does not affect them"*
>
> National Programme Officer (4)

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Enquiries about the reasons for weak political commitment also revealed that the low level of advocacy and less appreciation of the burden of NTDs especially because it thrives among the poor were major reasons why NTDs do not get adequate political attention.

> *"you don't see people advocating like that. Even people don't know how it affects them so they don't even worry"*
>
> National Programme Officer (1)

4.3.6 Weak Monitoring and Supervision

Respondents stressed the importance of effective monitoring and supervision and noted that, it has been a great challenge to implementation of the NTDs programme. It was added that, in relation to reporting on programme activities from the district, regional to national level, there are usually several disparities in submitted reports. This is due to the weak monitoring usually at the lower levels. In the CFIR this would be classified as a theme at the level of the implementation process.

> *"One thing is monitoring and supervision and documentation. They can send you a report that they have covered something you will go and look back and it doesn't tally"*
>
> National Programme Officer (3)

A respondent narrated that, sometimes the number of medications given to the community volunteers do not tally with the numbers captured in the reports. In that instance, national officers would have to go down to the community for head counts. Most often issues such as wrong tallying, diversion of programme drugs into private business and mal-handling of medications are detected. Due to these, the programme is unable to account fully for donations received from partners and also deprives some affected areas of programme drugs due to shortage. A respondent indicated that;

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"You will receive reports and realize there is something fishy. When you go down, then you will see the community volunteers have made mistakes or diverted some drugs. That one we let them prepare all the reports again"

National programme officer (3)

Some respondents added that due to the weak supervision and monitoring, it was difficult to identify efficiently whether the activities were actually being implemented as planned, determine which parts of the programme were deficient and needed redesign. However, they noted that currently monitoring and evaluation on the programme is being improved to ensure effectiveness.

4.4 Stakeholders and their influence on implementation

The study sought to find out the stakeholders involved in implementation of the programme. Results were reported according to stakeholders and their roles and stakeholders and their influence on implementation.

4.4.1 Stakeholders and Roles

The study sought to determine the stakeholders involved in the implementation of the neglected tropical diseases programme in Ghana. The roles, advantages and disadvantages of the identified stakeholders were also explored. Respondents from interviews reported that, there were a myriad of stakeholders who currently playing various roles to ensure the effective implementation of the NTDs programme with the Government of Ghana being the chief stakeholder. Other stakeholders cut across in-country institutions, international agencies, civil society and philanthropic agencies. Though classified as such, they vary and play different roles such as funding, provision of technical and operational support, drugs, surveillance, monitoring and evaluation.

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At the national level of the programme, stakeholders identified include: World Health Organization (WHO), United States Agency for International Development (USAID), Centre for Disease Control (CDC), Sight Savers International, London School of Hygiene and Tropical Medicine (LSHTM), AIM Initiative, Department for International Development, Volta River Authority, Family Health International (FHI 360), World Vision International, Accelerating the Sustainable Control and Elimination of Neglected Tropical Diseases (ASCEND), Philanthropic organizations such as the Bill and Melinda Gates foundations, Civil Society, educational and research institutions and ultimately the Government of Ghana and its Ministries. These stakeholders though having the main aim of fighting NTDs are concentrated on specific diseases with different roles as summarized in table 3.

> *"So, we have so many stakeholders but the major ones I can say are The Government of Ghana is one of the stakeholders. Then we have the USAID, Sight savers, ASCEND, water and sanitation, AIM Initiative"*
>
> National programme officer (6)

At the regional level, major stakeholder identified included the Regional Coordinating Council (RCC), Ghana Education Service, Ministry of Sanitation and Water Resources, Volta River Authority, Civil Society Organizations, and the Regional and Teaching Hospitals. This is summarized in table 4.

> *"The VRA, they have taken the Schistosomiasis unto their chest and they are helping in the control and elimination of the disease. Then RCC and GES. I have to mention the Ministry of Sanitation and Water Resources too"*
>
> Regional NTDs Focal person (1)

District level stakeholders identified include the Metropolitan, Municipal and District Assemblies (MMDAs), District hospitals, Ghana Education Service (GES) and their Parents

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and Teachers Association (PTA), assembly and unit committee members, chiefs, civil society and pressure groups, traditional healers and community volunteer and members. These are summarized in table five (5).

> *"The main people we work with are Ghana Education Service, assembly officers, traditional leaders. Okay and the school's PTA too"*
>
> District NTDs focal person (2)

Table 4: National Level Stakeholders and their Interests

Stakeholders	**Interests**	**Roles**
World Health Organization	In all diseases classified as neglected in Ghana	Provision of policy and technical direction
USAID	Lymphatic Filariasis, Schistosomiasis, Soil Transmitted Helminthiasis	Funding, Policy and technical direction, drug provision, treatments and training
Sight Savers International	River Blindness, Lymphatic Filariasis	Funding, Drug provision and distribution, training volunteers,
AIM Initiative	Lymphatic Filariasis, Leprosy, Buruli Ulcer	Mapping and Surveillance, Management, Advocacy
CDC	In all diseases classified as neglected in Ghana	Provision of policy and technical direction
DFID (ASCEND)	Lymphatic Filariasis, Onchocerciasis, Schistosomiasis, Visceral Leishmaniasis and Trachoma through the Accelerating Sustainable Control and Elimination of Neglected Tropical Diseases (ASCEND) programme	Funding, technical direction, drug provision, treatment and training
Bill and Melinda Gates Foundation	Onchocerciasis, Lymphatic Filariasis, Soil Transmitted Helminthiases, Schistosomiasis, Leprosy	Funding, Advocacy, Mass Drug Administration, Surveillance
Family Health International (FHI 360)	Lymphatic Filariasis, Onchocerciasis, Schistosomiasis, Soil-Transmitted Helminthiasis, Trachoma	Training, supply chain management, monitoring and evaluation

Source: Field Data, 2020

National Level Stakeholders and their Interests continued

Stakeholders	**Interests**	**Roles**
Research Institutions • London School of Hygiene and Tropical Medicine (COUNTDOWN) • School of Public Health (University of Ghana) • Noguchi Memorial Institute of Medical Research • Institute of Health Research (University of Health and Allied Sciences) • Dodowa Health Research Centre	All diseases classified as neglected in Ghana	Operational and technical research. Community education Grants and funds seeking Research into efficacy of programme drugs Community implementation resources
Volta River Authority (VRA)	Schistosomiasis	Funding and technical support
Ministries • Sanitation and Water Resources • Food and Agriculture	Water and soil related NTDs	Ensuring the provision of safe water and enhanced sanitary conditions Community education

Source: Field Data, 2020

Table 5: Regional Level Stakeholders and their Interests and Sources of Power

Stakeholders	**Interests**	**Roles**
Regional Coordinating Council	All diseases endemic in the region	Taking decisions and provision of budgetary allocation for the Health needs of the region
Ghana Education Service	Diseases endemic in region especially of interest in school children	Liaison between programme officers and schools Giving clearance for the engagement of teachers and students
Ministry of Sanitation and Water Resources	Water and sanitation related NTDs	Provision of potable water resources and adequate sanitary conditions in affected communities
Civil Society Organizations	All NTDs endemic in the region	Health education and Advocacy
Regional and Teaching Hospitals.	All NTDs	Health education and Case management
Volta River Authority	Schistosomiasis	Funding and technical support

Source: Field Data, 2020

Table 6: District- Level Stakeholders and their Interests and Sources of Power

Stakeholders	**Interests**	**Roles**
Metropolitan, Municipal and District Assemblies (MMDAs)	All NTDs endemic in the district	Decisions on health and Provision of a conducive implementation environment including sanitary conditions
District hospitals	All NTDs endemic in the district	Provide preventive, curative and supportive care to all clients suffering from various NTDs with the district
Ghana Education Service	Diseases commonly found among school going children	Provides clearance and scrutiny of government school related programmes. Support for training of teachers in drug administration
Assembly and Unit committee members	NTDs endemic within their assembly	Provide local support for community implementers and mediate between staff and the community
Chiefs	NTDs endemic within their jurisdiction	Provide local support for community implementers and mediate between staff and the community
Civil society and pressure groups	Specific NTDs based on their interest or specialization	Advocacy and social mobilization
Traditional healers	All NTDs found within the communities	Provision of care, identification of cases for further reporting to community disease control officers
Community members	NTDs endemic within the communities	Provide support to programme implementers, mobilizing of local resources, educating each other on diseases, identification and reporting of cases within the communities

Source: Field Data, 2020

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4.4.2 Stakeholder Influence on Implementation

As part of the stakeholder analysis, the study further sought to explore how the identified stakeholder influence the implementation process. Respondents across the national, regional, district levels mentioned that, the key determinant of the actions of stakeholders was their interest. Respondents noted that all the stakeholders have peculiar interests that drive their action to support the NTDs programme. As evident from the findings, though there exist a total of twelve (12) NTDs endemic in Ghana and five (5) under preventive chemotherapy, various donor partners show interests in just few of the diseases.

At the national level, respondents reported that even though the programme had a list of priority diseases and an action plan for all activities, donor partners who provide support for key implementation strategies most often determine their interest and priority diseases although some adopt other areas when extra funds are available. The advantage has been mainly the fact that these stakeholders especially the external ones are the main source of funds for the fight against NTDs in Ghana and are the main drivers of programme activities. Some respondents indicated that;

> *"You know partners have their interest. Anybody who comes to support has an interest. So whatever support they give is channeled towards a particular sector. So, if you want to deploy some of these support into some other areas of the programme it becomes a challenge"*
>
> National Programme Officer (2)

> *"They are our backbone, without them NTD programme wouldn't have chocked the successes we have now"*
>
> National Programme Officer (4)

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Regional and District level officers added that stakeholders at their level make implementation easy for them especially in the schools and communities. They also help mobilize some resources at the community level to support the programme. In terms of the school health programme, it was indicated that it would have been difficult if the Ghana Education Service had not come on board as a partner. Others also support in terms of technical and operational decision making for health promotion.

> *"If not for our partnership with GES, it would have been difficult getting their approval and putting teachers together for training"*
>
> District NTD focal person (1)

They reported mainly advantages than disadvantages of the influence of stakeholders on implementation of the programme. For disadvantages, respondents noted that it emanates mainly from the fact that since stakeholders provide funds, they take control of every activity implemented and how it should be done. Programme officers indicated that, since the annual calendars of all stakeholders were different, the programme suffers inappropriateness in the release of funds for activities to be implemented.

> *"They now tell us what to do. The timelines for the activities, if we have our own funding, we will know what to do but money is with them so we implement when it is in"*
>
> National Programme Officer (4)

A respondent narrated that in one agency, funds are released in November whiles others release funds in July though the peak periods for the diseases they support may be in a different month. This leads to a distortion of planned activities. Also, in terms of reporting, it was added that almost all contributing stakeholders have peculiar formats for submission of reports hence officers may need to generate different reports for the same activity in order to sustain funding. This puts extra stress on programme officers and delays in tackling other important issues.

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They however noted that, with the current management of stakeholders, sustainability of the programme would be problematic if they experience external stakeholder withdrawals.

> *"The only disadvantage is when they pull out how will we sustain it. The sustainability is the issue. They bring funds and make us run without thinking about sustainability"*
>
> National Programme Officer (3)

4.5 Relating Results to Theoretical Framework

A review of the findings of the study juxtaposed with the Consolidated Framework for Implementation Research indicates that the determinants of implementation success identified from the study were across the inner setting, outer setting and programme characteristics constructs of the framework. Challenges of Implementation were across the inner setting, outer setting and implementation process constructs with stakeholders in all domains.

Considering the determinants of successful implementation, partnership/inter-sector collaboration, donor support and community acceptance were themes under the outer setting. Integrative nature of the programme and availability of clear roadmap themes were under the programme characteristics. Education and training, management commitment and reliable health structure were in the inner setting and programme resources cut across both outer and inner setting.

Challenges of implementation were summarized under the CFIR as follows. Poor social mobilization, dwindling volunteerism, competing health programmes, weak government and political support were in the outer setting. Weak monitoring and supervision were captured under the process and inadequate resources cut across both inner and outer setting domains.

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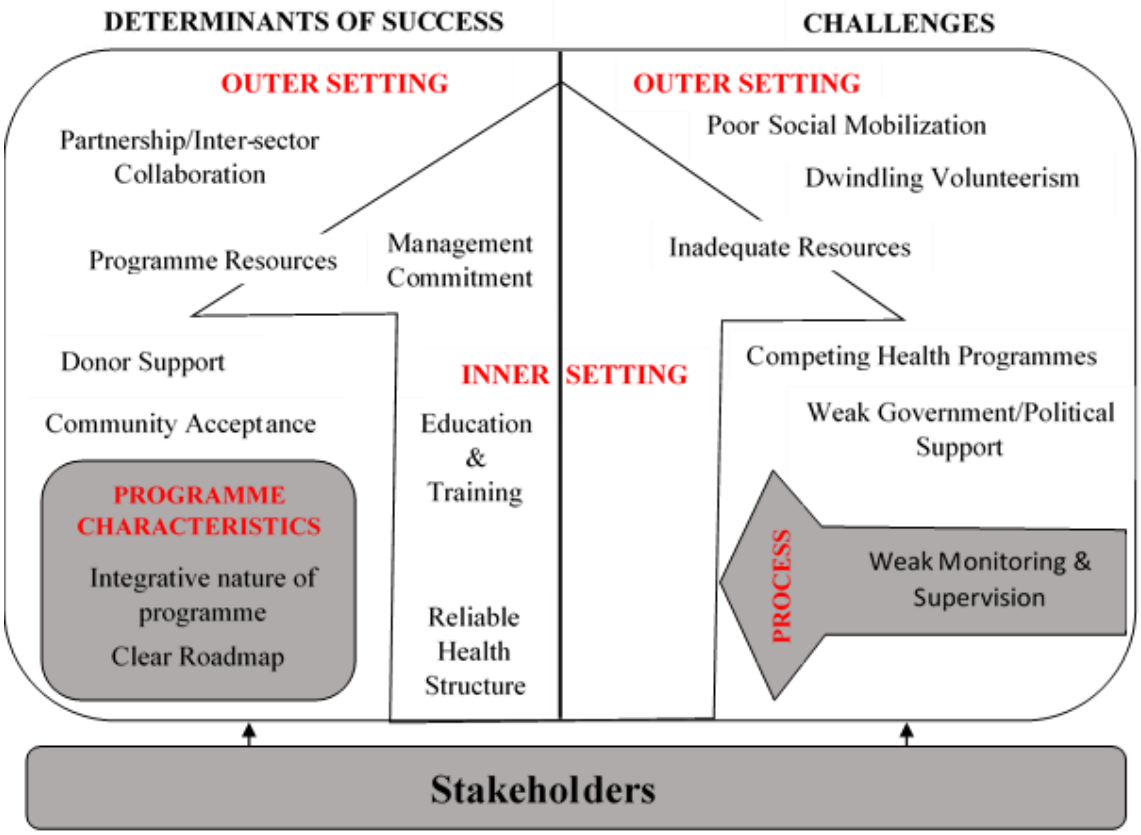

Figure 4: Study Findings in Relation to Theoretical Framework

4.6 Discussion of Findings

Findings of the study are discussed in this section with existing studies in the topic area and presented according to the study objectives.

4.6.1 Determinants of Implementation Success

Findings on the determinants of successful implementation revealed that support from partner and donor agencies, education and training, partnerships and intersectoral collaboration, the structure of the health system, resources available for programme activities, the existence of a clear roadmap for NTDs control and elimination, community acceptance and support form management of the programme were major factors that ensured effective implementation. Similar findings in this study were reported in a systematic review conducted on the factors that ensure effective implementation of mass drug administration in Sub-Saharan Africa

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(Silumbwe et al., 2017). This study reported awareness creation through health education, partnerships and collaborations, integration of the MDA with already existent health programmes and provision of incentives and training as the major facilitators. Other factors which were differently reported were the motivation of community distributors, morbidity management programmes and management of adverse effects (Silumbwe et al., 2017).

A similar scoping review on the implementation of health promotion policies reported collaborative effective local planning and action, effective leadership availability of resources and knowledgeable staff and motivation of community drug distributors (Weiss, Lillefjell, & Magnus, 2016).

Training, availability of resources and effective collaboration were reported in both original researches (Keesara, Juma, Harper, & Newmann, 2018; Watt et al., 2017) and systematic reviews (Addington, Desai, & Wang, (2010) across health policies and programmes implementation.

A study of national clinical programmes in Ireland though showing different contextual features as compared to Ghana reported leadership as the biggest facilitating factor which was in line with management commitment and support in this study and stressed that availability of resources was important but was not within the control of the national clinical programme (Darker, Nicolson, Carroll, & Barry, 2018). This study employed qualitative means of enquiry however, a different study using quantitative methods and the Consolidated Framework for Implementation Research also reported readiness for implementation, organizational culture and implementation climate which though different from findings in this study were within similar constructs under the framework considered (Allen et al., 2020). Complimenting these findings a mixed method study on the implementation of community-based health interventions in Argentina also stressed that inter-sectorial participation as seen in this study

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was key to implementation success in addition to motivation of community leaders and provision of local resources (Belizan et al., 2019).

One major facilitator revealed in this study was the support of donors and partners. Similar theme was reported in a qualitative study on the perspectives of integrated neglected tropical diseases programme. This study noted that the influence of funders was very essential and critical to ensuring the effectiveness of NTD programmes (Means, Jacobson, Mosher, & Walson, 2016). Considering a study in a fellow Sub-Saharan country and out of the health domain, findings from the determinants of successful project implementation in Nigeria revealed top management support, client acceptance and human resources which were similar to those reported in this study (Amade, Ogbonna, & Kaduru, 2012).

Findings from the study also corroborated with other qualitative studies in South Africa on HIV programme. From these studies, standardized training and existence of god organizational structure were noted which are similar to training and education and reliable health structure revealed in this study (Naidoo et al., 2018; Neve et al., 2017).

The importance of leadership support was highlighted in a study out of the health domain. The study considered the factors that determine effective management of public financial management policies and systems. Quantitative results indicated that leadership has a significant effect on effective management of financial management policies especially in the public sector (Kendie, 2018).

An evaluation of all these studies in relation to findings of this study shows that despite the policy, programme or sector, several factors are similar and cut across. However, some factors that facilitate implementation are context specific and are in relation to the activities of a particular programme.

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4.6.2 Challenges of Implementation

It is essential in every policy implementation process to identify possible and existing challenges in order to adequately meet policy objectives. Challenges of implementation reported in this study were the inadequacy of resources, dwindling volunteerism, competing health programmes, poor social mobilization, weak governmental and political commitment and weak monitoring and supervision.

In a recent study by Kweku et al., (2020) on the implementation of the Community Based Health Planning and Services plus (CHPS+) in Ghana, health system challenges such as inadequate funding, lack of essential logistics and lack of community ownership were reported. These findings are in line with the findings of this study. However, their study further reported issues such as lack of proper community entry, distance to CHPS facilities, lack of security and late reporting of cases. Other challenges that were not in line with this study could be due to the further engagement of the community members in the study by Kweku et al., (2020) which was absent in this study. Most implementation studies in Ghana have also reported inadequate funding and inadequacy of logistics as challenges to effective implementation (Banchani & Tenkorang, 2014; Kpobi, Swartz, & Ofori-atta, 2018; Sakyi, Awoonor-williams, & Adzei, 2011). Despite the differences in context and economic growth inadequate funding has been reported in studies in Tanzania (Frumence, Nyamhanga, & Mwangu, 2013) and Argentina (Belizan et al., 2019).

The study by Belizan et al., (2019) corroborates the findings of this study also that lack of political support was a significant barrier to the implementation of community-based health interventions in Argentina. A qualitative study among health care professionals which was similar to this study reported challenges such as poor communication and lack of collaboration which were different from findings in this study (Ijsbrandy, Harten, Gerritsen, & Hermens, 2019).

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In Kelleher, Harrington, Shiely, Perry, and Mchugh, (2017), barriers reported include the lack of clear roles and the complexity in navigating through the multiple dimensions of the programme. However, findings from the NTD programme though multidisciplinary in nature are not in line with the findings of Kelleher et al., (2017). According to Mashora and Dzinamarira, (2019) in a scoping review, literacy issues financial constraints, culture and discomfort about issues of sex were pertinent challenges to implementation. Some of the findings could be due to the concentration of the study on sexual and reproductive health and the sensitive nature of the research area. In terms of dwindling volunteerism, the state of the world's volunteerism report highlighted the positive impact of volunteerism on the achievement of community-based programmes (UNVP, 2018). According to Belina, (2018) and Southby, South, and Bagnall, (2019), some of the causes of the reduction in volunteerism include increasing volunteers expectations and the changes in the way of understanding volunteerism. In Ghana, this could also be attributed to the top-down approach of implementation of the programme.

Several studies that corroborate with findings of this study implies that there are diverse challenges to the successful implementation of programmes within all sectors. Though some of the challenges are evident across, some few challenges are specific to the particular policy and programme as evident in studies considered above. A report on implementation which stressed the fact and summarized possible implementation barriers mentioned that barriers may be rooted in diverse causes which included opposition from major stakeholders. It concisely reported "lack of coordination and collaboration between parties, lack of motivation and political will, conflicts between existing policies, lack of operational guidelines, human and financial resources constraints as some of the challenges that almost all programmes encounter during implementation (Health Po licy Project, 2014).

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4.6.3 Stakeholders' Roles and Influence

The study sought to determine the major stakeholders under the NTDs programme, their interests and influence on the programme. Findings suggested that there were several stakeholders who played major roles to ensure the effective implementation of the NTDs programme by providing most of the funding though the Government of Ghana was the chief stakeholder. Others include in-country institutions, international agencies, civil society, philanthropic agencies and researchers. These stakeholders played diverse roles in funding, provision of technical and operational support, drugs, surveillance, monitoring and evaluation.

Peters, Bhuiya, and Ghaffar, (2017) noted that bringing major stakeholders such as health system managers, policy-makers, health professionals, state and non-state agencies and researchers together is very challenging in implementation. However, identifying and engaging stakeholders was very essential in intersecting research, policy formulation and implementation and management processes.

According to Orem et al., (2013) on a health policy project in Uganda, the main stakeholders identified were civil society organizations. Other supporting stakeholders were the media, parliamentarians, researchers and community members. Roles played include implementation, mobilization and advocacy. Findings of the study though identified other stakeholders were in line with findings of this study indicating that the major supporters of implementation were people out of the government domain.

A qualitative study on donor proliferation in the Ghanaian health system noted that though several donors have participated in the implementation of health policies and programmes as a compliment to government's efforts, it was suggested that the proliferation of donors in the health sector may lead to resistance the coordination of aids due to the tendencies of weakening of recipient's negotiation position and the imposition of new cost. However, harmonization of

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ideas, and ownership had reportedly led to a reduction in costs for the government (Pallas, Nonvignon, Aikins, & Prah, 2014)

In identifying stakeholder involvements, the WHO noted that several definitions exist on classifying stakeholders based on the context in which they are used. They added that, with the involvement of multiple agencies, there are sometimes challenges in distinguishing between stakeholders and other agencies who may not be 'actual stakeholders' considering the full definition of the word but may be working as partners in the intervention. WHO just as in this study identified a myriad of stakeholders that may act as enablers or resisters of implementation (Griffiths, Maggs, & George, 2007).

In relation to the influence of these stakeholders on the effective implementation of the programme, respondents noted that funding was one major advantage of the stakeholders though disadvantages such as control of programme activities, pushing of specific interests which may not be compatible with existent plans, and disparities in period of providing funds and report generation also existed. Similar findings were reported in a study which examined the influence of stakeholders on reproductive health services. The study reported that though several donors have been beneficial to programme implementation, their peculiar agendas have sometimes not been compatible with national objectives and goals, which has caused frustration (Ozvaris, Akin, & Akin, 2004).

Just as evidenced in this study, the 2017 NTDs donor landscape report revealed that support for NTDs are in different areas such as preventive chemotherapy, morbidity management and disability prevention. This explains the differences in interests of stakeholders on the NTD programme. Though the report does not provide an exhaustive list of donors and partners it added that these donors provide direct financial support to the Ministries of Health and Finance

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of beneficiary governments with the level of funding reflecting their level of interest and commitment (USAID & DFID, 2018).

According to Msuya, (2004 p.4), variety of incentives drive stakeholders to provide support and court particular interests. These include "the need for quick results to attract political support from their constituents for additional funding in the future or strategic importance of the recipients at that particular moment".

4.7 Study Limitations

The use of qualitative approach to the study presents a methodological limitation hence generalization cannot be made to other programmes. Also, the researcher encountered financial and time limitations since the study was self-sponsored and was within a limited time frame. This study was limited to the state implementing agency (GHS) without the views of other non-state implementing agencies. Other non-state implementing organizations exist and could provide other perspectives to implementation. However, the Ghana Health Service as the major state implementer could still provide relevant findings.

The study was conducted in only two regions of Ghana. Though reflecting an urban, peri-urban and rural balance, each region differs geographically and could potentially influence issues raised. However, the inclusion of the national programme which oversees all regions could compliment this gap though generalizability may be limited.

Finally, the Covid-19 pandemic was a major limitation since the study population were public health and disease control officers and were deployed to Covid-19 surveillance hence posed some difficulties in availability of respondents.

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CHAPTER FIVE
SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This concluding chapter presents a summary of the study on implementation of the of the neglected tropical diseases programme taking into consideration the determinants of implementation success, challenges of implementation and stakeholder roles and influences.

A summary of the major findings has been presented with respect to the key objectives of the study and conclusions drawn on such. The chapter is concluded with recommendations drawn from the study and implications for research, policy and practice.

5.2 Thesis Overview

Implementation research has been crucial in exploring how policies and programmes are carried out and impeding challenges and successes. The study sought to explore the determinants of implementation success, examine the challenges of implementation, explore the roles of key stakeholder and their influence on the NTDs programme.

The study adopted a qualitative approach with focus on the case study design to achieve its objectives through key informant interviews with officers at the national, regional and district level of the Ghana Health Service NTDs programme. A total of 18 respondents were interviewed from all the levels of the programme. Data analysed thematically and presented according to objectives.

5.3 Summary of Key Findings

In relation to examining the determinants of implementation success of the neglected tropical diseases programme, the study found that funding from all key stakeholders was a major factor in ensuring effective implementation. Other factors identified include education and training of programme officers, community volunteers and members, leadership and inter-sector

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collaboration, resources available, integrative nature of the programme, clear roadmap in the form of a masterplan, community acceptance of various activities and leadership and management commitment to programme ideologies and objectives.

Additionally, the study also sought to explore the challenges faced in the implementation of the programme. The study found that the programme encountered a myriad of challenges from the national to district level. These challenges lead to delays in meeting key programme objectives. Challenges found in the study include inadequacy of resources (both financial and material), dwindling volunteerism, competing health programmes, poor social mobilization, poor governmental support and political commitment and poor monitoring and supervision.

Pertaining to the stakeholders and their influence on implementation of the programme, the study found that there were several stakeholders responsible for different diseases under the programme. These stakeholders include the Government of Ghana through the Ministry of Health and Ghana Health Service, international donors, civil society organizations, state and non-state agencies and community leaders and members. The main influence of stakeholders was the power they had to decide what activities and diseases should be focused on by virtue of their funding prowess. The study further found that stakeholders though posing some disadvantages were of more advantageous to the NTDs programme. Other domains of influence were in regard to reporting on programme activities which poses a lot of challenge to programme managers due to the gross differences in the periods and formats of reporting for same activities.

5.4 Conclusions

The study discovered that all the levels of implementation continually face challenges that cut across the inner setting which deals with the capacity of Ghana Health Service and the NTDs programme having inadequate resources. More challenges are seen within the outer setting to

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include poor support from government and weak political commitment, competition from other programmes, dwindling concept of volunteerism among citizens, poor social mobilization. Finally, weak implementation processes such as weak monitoring and evaluation systems within the programme makes it challenging to adequately monitor progress.

However, it can be concluded that though programme faces challenges, it strongly draws on factors such as the support from donors, partnerships and community acceptance from within its outer setting for success. Also, the commitment of management, education and training and reliable structure of the health service were inner factors that are important to programme success. Finally, the study concludes and provides evidence that external stakeholders have been very influential in the implementation of health programmes in Ghana and participate with various interests alongside enhancing the health of the Ghanaian population.

Therefore, the study concludes that challenges of implementation if not holistically addressed will continue to impede health programme effectiveness. It would also be imperative for government to increase its ownership, draw sustainability plans and manage stakeholders effectively.

5.5 Recommendations

The study highlighted some possible means of addressing challenges of implementation. recommends increased governmental support, improved social mobilization, increasing volunteer remuneration and improved funding and development of sustainability plans as some ways of addressing implementation challenges.

5.5.1 Increased Governmental Support

In order to ensure effective implementation through addressing challenges, respondents recommend that increasing the support from the government and courting political will could help address some challenges of the programme. It was added that, putting issues of NTDs on

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the political policies and ensuring an inclusion of NTDs on all government of Ghana budgetary allocation on health will provide the programme with needed resources to ensure effective implementation.

5.5.2 Improved Social Mobilization and Volunteer Remuneration

It was recommended that social mobilization that involves massive campaigns should be carried out to make communities understand the policy or programme for example mass administration of drugs. It was added that failure to work on social mobilization creates an issue where the targeted population will not see the need to partake in the health programme. Improving social mobilization will also contribute to improving community acceptance and community volunteerism. Due to the heavy reliance on community volunteers and Community Health Workers for the implementation of the programme at the community level, it is also recommended that proposals be made to improve upon the incentives of volunteers. This will go a long way to motivate volunteers, reduce opportunity costs and reduce attrition rates especially to other competing health programmes.

5.5.3 Improved Funding

Implementation of programs are very much dependent on funds throughout the lifespan of the programme. It is recommended that improvement on funding which is needed to purchase programme related materials, train health staffs and community volunteers be tackled as major a way of improving upon implementation of the programme. Additionally, a good coordination of available funds from all partners by the Ghana Health Service is strongly recommended to ensure availability at the planned time.

5.5.4 Development of Sustainability Plan

The study finally recommends that extensive local engagements be made among in-country public and private enterprises to develop sustainability pathways and plans to ensure the

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continuous existence of the programme in light of the increasing risks of donor withdrawal in the near future.

5.6 Implications for Research, Policy and Practice

This study provides baseline data to researchers on the study area and objectives. Further empirical and theoretical studies are encouraged on the implementation of the NTDs programme. Expanding this study to the community level by involving community health workers and volunteers may reveal extra findings that could be beneficial to the study. Also, further research is suggested among other stakeholders such as the external donors, Civil Society Organizations (CSOs) and NGOs involved in the implementation of the programme. Finally, with this study bringing out the challenges, other studies on programme outcomes are recommended.

To policy, findings from the study would serve as an evaluation and contribute to the revisions in the subsequent masterplans of the NTDs programme which would begin from 2021. It also reminds policy makers of the dire importance of sustainability plans in every policy and serve as a precursor for the further development of such sustainability plans. The study suggests to policy makers to take advantage of the strengths of both top-down and bottom-up approaches to implementation.

To practice, findings and recommendations of this study would prompt and guide major implementers especially Ghana Health Service of the possible challenges on the implementation front and how to overcome such challenges to ensure effectiveness. The study also serves as a reminder to all levels of implementation about the possible influences of stakeholders and suggest to implementers to conduct extensive stakeholder analyses before and during the implementation of policies and programmes.

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APPENDICES

APPENDIX 1: INTERVIEW GUIDE FOR PROGRAMME OFFICERS

Note: Same Interview guide was used at all levels with questions tailored towards the three levels.

Questions

1. Please describe what you know about the control of Neglected Tropical Diseases (specify relevant NTDs) in Ghana?

Probes

[Clarify if respondent has knowledge on NTD – some or all of the diseases]

2. In your opinion, what importance does the control of these diseases have within the health system?

[Prompt to determine what other current priorities are – please note 5 top priorities]

3. What are the current efforts, if any, in the control of these diseases within the health system?

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4. What have been the main factors that have helped implementation of the NTDs programme in Ghana?

5. What have been the main Challenges in implementing the NTDs programme?

6. In your opinion, what could be done to improve the implementation of the NTDs programme?

7. Which stakeholders are involved with the control of these diseases and what are their roles?

Note

[by partners, we mean implementing agencies, NGOs, other government agencies or companies]

8. What have been some of the advantages and disadvantages in working with these stakeholders?

[For advantages/disadvantages with partners, anecdotes or experiences mentioned should be noted.]

9. With the resources available to you, what do you believe needs to be done to increase the coverage of the control of these diseases in your country?

10. This interview has been about reviewing progress on control of neglected tropical diseases in your health system. Do you have anything further to add?

[This question is for respondent to have an opportunity to speak further on NTDs and his/her concerns.]

Name of interviewer:

Position held by respondent:

Best description of role:

Date of interview:

Approximate duration of interview:

Other notes/comments:

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APPENDIX II: INFORMATION SHEET

UNIVERSITY OF GHANA BUSINESS SCHOOL
DEPARTMENT OF PUBLIC ADMINISTRATION AND HEALTH SERVICES MANAGEMENT

Title of Study

Implementation of the Neglected Tropical Diseases Programme in Ghana: A Multilevel Case Study

Introduction

I am Desmond Dzidzornu Otoo, a student from the University of Ghana carrying out a study titled "Implementation of the Neglected Tropical Diseases Programme: A Study of selected Districts in Ghana."

You are warmly invited to participate in this study by signing the consent form voluntarily.

Study Procedure

This study will be conducted in the Ga West and Lower Manya Krobo municipalities in Ghana. The methods of obtaining the information are through questionnaires and interviews. Participants will be required to give candid opinions about the implementation of the neglected tropical diseases programme. Interviews are expected to last about 45-60 minutes. This consent form contains information about the research.
We are asking you to read this consent form carefully before you decide to participate in this study. You will also be required to sign it if you agree to be part of the study. In that regard, you will be given a copy of this form to fill. This consent form might have some words that are unfamiliar to you. Please request for us to explain anything you do not understand to you.

Benefits

There are no personal gains in participating in this study. It is expected however, that the findings from this study will contribute to improving implementation of the neglected tropical diseases programme.

Discomforts

In accepting to take part in this study the discomfort that you may experience is mainly your time taken to answer the questions.
Also, if there are any questions you would rather not answer or that you do not feel comfortable answering, please say so and we will stop the interview or move on to the next question as you prefer.

Privacy and Confidentiality

Your participation in this study is voluntary and safe. All data collected is for only research purposes and will be held in confidence. Information will be stored with passwords on electronic media and in safely locked boxes. Access will be limited to only the researcher and research supervisor. Your name and other details of your identity are not needed for the study. However, the information you would provide is going to be identified by a special code and

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would be treated strictly as confidential. We assure you that your name shall not appear or be mentioned in any report that might come out from this study.

Voluntary Participation

Partaking in this study is completely voluntary. You may refuse to answer any question we ask you and you may stop or end the interview at any point in time. You may also withdraw your participation should you decide to after you have consented to participate.

Withdrawal from the Study

You can voluntarily withdraw from participating in this research at any point in time without any adverse reaction from the researcher towards you.

Potential Risks and Benefits

The researcher does not foresee any risks associated with your participation in the research. There will be no direct benefit to respondents.

Recording

The interviews will be recorded. This will allow the researcher to clearly understand the points that are raised in the interview. You can request that the recording be stopped at any time during the interview, either temporarily or permanently as appropriate. The researcher and the research assistants and supervisors will be the only ones who will have access to the recordings. The recordings will be stored in a locked cabinet and will be destroyed 3 months after the study. The recordings will be transcribed for the purposes of analyzing this work. Your name and other information that could be used to identify you will not be included in the type-written version.

Twi, Ga and Krobo language translations will be provided aside the English language. A copy of the Information sheet and Consent form will be given to you after it has been signed or thumb printed to keep.

Compensation

Study participants who consent to be part of this study will not receive any monetary or nonmonetary compensation.

Declaration of conflict of interest

I, the researcher, hereby declare that there is no conflict of interest as far as this research work is concerned.

Who to Contact for Further Clarification/Questions

For study related clarifications,

Desmond Dzidzornu Otoo

0240088558

bddotoo@gmail.com

Ethical issues and participants rights

GHS ERC Administrator

Nana Abena Apatu

0503539896

ethics.research@ghsmail.org

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APPENDIX III: CONSENT FORM

STUDY TITLE: IMPLEMENTATION OF THE NEGLECTED TROPICAL DISEASES PROGRAMME IN GHANA: A MULTILEVEL CASE STUDY

PARTICIPANTS' STATEMENT

I acknowledge that I have read or have had the purpose and contents of the Participants' Information Sheet read and satisfactorily explained to me in a language I understand (English, Ga, Twi, Krobo). I fully understand the contents and any potential implications as well as my right to change my mind (i.e. withdraw from the research) even after I have signed this form.

I voluntarily agree to be part of this research.

Name or Initials of Participant…… ID Code ……..

Participants' Signature ……...OR Thumb Print……

Date: …….

INTERPRETERS' STATEMENT

I interpreted the purpose and contents of the Participants' Information Sheet to the afore named participant to the best of my ability in the (English, Ga, Twi, Krobo) language to his proper understanding.

All questions, appropriate clarifications sort by the participant and answers were also duly interpreted to his/her satisfaction.

Name of Interpreter……

Signature of Interpreter…….. Date: ……

Contact Details

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STATEMENT OF WITNESS

I was present when the purpose and contents of the Participant Information Sheet was read and explained satisfactorily to the participant in the language he/she understood (English, Ga, Twi, Krobo language)

I confirm that he/she was given the opportunity to ask questions/seek clarifications and same were duly answered to his/her satisfaction before voluntarily agreeing to be part of the research.

Name: ……

Signature…….... OR Thumb Print …….....

Date: ……

INVESTIGATOR STATEMENT AND SIGNATURE

I, the undersigned, have explained the details of this consent form to the participant in the language that s/he understands, the purpose of the study, procedures to be followed as well as risks and benefits involved.

I certify that the participant has been given ample time to read and learn about the study. All questions and clarifications raised by the participant have been addressed.

Researcher's name…….

Signature …….

Date…….

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APPENDIX IV: ETHICAL CLEARANCE

GHANA HEALTH SERVICE ETHICS REVIEW COMMITTEE

In case of reply the number and date of this Letter should be quoted

My Ref: GHS/RDD/ERC/Admin/Apr/19/654
Your Ref. No.

Research & Development Division
Ghana Health Service
P. O. Box MB 190
Accra.
GPS Address GA-050-3303
Mob: +233- 50-3539896
Tel: +233-0302681109
Fax + 233-0302685424
Email:ethics.research@ghsmail.org
3rd December, 2019

Otoo Desmond Dzidzornu
University of Ghana Business School
Department of PAHSM
P. O. Box LG 78
Legon

The Ghana Health Service Ethics Review Committee has reviewed and given approval for the implementation of your Study Protocol.

GHS-ERC Number	**GHS-ERC 065/11/19**
Project Title	Implementation of the Neglected Tropical Diseases Programme: A Study of Selected Districts in Ghana
Approval Date	3rd December, 2019
Expiry Date	2nd December, 2020
GHS-ERC Decision	**Approved**

This approval requires the following from the Principal Investigator

- Submission of yearly progress report of the study to the Ethics Review Committee (ERC)
- Renewal of ethical approval if the study lasts for more than 12 months,
- Reporting of all serious adverse events related to this study to the ERC within three days verbally and seven days in writing.
- Submission of a final report **after completion** of the study
- Informing ERC if study cannot be implemented or is discontinued and reasons why
- Informing the ERC and your sponsor (where applicable) before any publication of the research findings.

Please note that any modification of the study without ERC approval of the amendment is invalid.

The ERC may observe or cause to be observed procedures and records of the study during and after implementation.

Kindly quote the protocol identification number in all future correspondence in relation to this approved protocol

SIGNED.....
Dr. Cynthia Bannerman
(GHS-ERC Chairperson)

Cc: The Director, Research & Development Division, Ghana Health Service, Accra

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APPENDIX V: INTRODUCTORY/PERMISSION LETTERS

UNIVERSITY OF GHANA
BUSINESS SCHOOL
DEPARTMENT OF PUBLIC ADMINISTRATION
AND HEALTH SERVICES MANAGEMENT

UGBS
University of Ghana Business School

Ref. No.: *PAHS/26*

20th November, 2019

The Director
Neglected Tropical Diseases Programme
Ghana Health Services
Accra

Dear Sir/Madam,

LETTER OF INTRODUCTION

The bearer of this note, Mr. Desmond Dzidzornu Otoo is a final year student of the University of Ghana Business School, Legon. He is undertaking a course leading to the award of MPhil in Health Services Management. As part of the requirements of the programme, he has chosen to research on the topic: ***"The Implementation of the Neglected Tropical Diseases Programme: A study of selected Districts in Ghana."***

I would be most grateful if you could give him the necessary assistance to facilitate his data collection.

Thanks for your cooperation.

Yours faithfully,

Dr. Francis A. Adzei
Senior Lecturer/Supervisor

COLLEGE OF HUMANITIES
P.O. Box LG 78, Legon, Accra, Ghana • Website: ugbs.ug.edu.gh

University of Ghana http://ugspace.ug.edu.gh

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- Professionalism
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Ref: ERHD/HRM/1054/20
Your Ref: No

Regional Health Directorate
Ghana Health Service
P. O. Box 175
Koforidua, ER
GHANA

9th March, 2020

Email:erhdgeneroffice@gmail.com

THE DEPUTY DIRECTOR PUBLIC HEALTH
REGIONAL HEALTH DIRECTORATE
KOFORIDUA – E/R

THE MUNICIPAL DIRECTOR
MUNICIPAL HEALTH DIRECTORATE
LOWER MANYA KROBO

LETTER OF INTRODUCTION – MR. DESMOND DZIDZORNU

We write to introduce to you the above-named student of the University of Ghana, Legon.

Mr. Dzidzornu is a final year student of the University of Ghana Business School, Legon who is pursuing a programme leading to the award of Mphil in Health Service Management.

As part of requirements to complete his course, he is expected to write thesis on the topic **"Implementation of the Neglected Tropical Diseases Programme".**

The Eastern Regional Health Directorate and Lower Manya Krobo Municipal Health Directorate have been selected as study sites.

You are kindly requested to offer him the needed assistance in his data collection.

Thank you.

DR. (MRS.) ALBERTA A. BIRITWUM-NYARKO
REGIONAL DIRECTOR OF HEALTH SERVICES
EASTERN REGION

University of Ghana http://ugspace.ug.edu.gh

In case of reply the number and date of this letter should be quoted.

My Ref. No. ***GHS/GARHD/007/19***

Your Ref. No.

GHANA HEALTH SERVICE
REGIONAL HEALTH DIRECTORATE
GREATER ACCRA
P. O. BOX 184
ACCRA

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0208140751
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21st February, 2020

THE MUNICIPAL DIRECTOR OF HEALTH SERVICE
GA WEST MUNICIPAL HEALTH DIRECTORATE
AMASAMAN

RE: LETTER OF INTRODUCTION
MR. DESMOND OTOO

This is to introduce to you **Mr. Desmond Otoo** a final year student of the University of Ghana Business School, Legon, who has approval from the Regional Health Directorate to undertake a research on the topic: ***"Implementation of the Neglected Tropical Diseases Programme: A Study of Selected Districts in Ghana"*** in your Facility as per the attached documentation.

You are kindly entreated to provide the needed assistance.

Thank you.

DR. (MRS.) CHARITY SARPONG
REGIONAL DIRECTOR OF HEALTH SERVICE
GREATER ACCRA

DCU

3-3-2020